

Mitchell J. Prinstein
Editor

The Portable Mentor

Expert Guide to a Successful Career
in Psychology

Second Edition

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ISBN 978-1-4614-3993-6 ISBN 978-1-4614-3994-3 (eBook)
DOI 10.1007/978-1-4614-3994-3
Springer New York Heidelberg Dordrecht London

Library of Congress Control Number: 2012944177

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Printed on acid-free paper

Springer is part of Springer Science+Business Media (www.springer.com)

*To teachers and trainees in psychology, to
my amazing wife, Tina, and to
Samara, and Max, who are helping me
to learn everything all over again.*

Acknowledgements

With a special debt of gratitude, I wish to acknowledge the hard work, cooperation, and generosity of the contributors to this volume, all of whom are devoted and deeply committed to the training of psychologists.

Most importantly, thanks to my mentors, Annette La Greca and Tony Spirito, whose dedicated and selfless mentorship throughout my training served as inspirational examples, and helped me earn the opportunity to share just a little of what I learned from them in this volume.

Thanks to my family and friends, always.

Preface for the Second Edition

Although graduate training in psychology typically offers students opportunities to develop an extraordinary number of skills and to be exposed to the enormous breadth and history of our field, training on how to develop a successful career in psychology is sometimes more difficult to obtain. Of course, there is no single definition of a “successful” career. There are many ways to make a contribution, and many routes to get to each of these varied destinations. Many of the skills common to these routes are not explicitly discussed within doctoral training. Graduate students and early career psychologists often express a need for additional information on practical career issues, such as how to write a grant, teach a class, publish a research manuscript, apply for a postdoctoral fellowship, balance personal and professional demands, or acquire skills necessary to begin a clinical practice, for instance. Students might acquire some of these skills through interactions with their mentor; however, not all mentors have had experiences with each of these professional tasks.

Ten years ago, the first edition of the *Portable Mentor* was published. With this edition, the *Portable Mentor* offers updated advice and resources on an even wider variety of topics relevant to professional development. As with the first edition, this volume provides graduate students and early career psychologists comprehensive and practical resources on professional development issues in psychology. “Expert” contributors have been selected; each has demonstrated a strong commitment to training in psychology and may serve as the “field’s mentor” in a particular domain of professional development. Thus, with this volume, students have access to the best possible professional development training from the most successful leaders in psychology.

This volume was designed to be comprehensive in scope and practical in use. The book is divided into six sections that cover professional development issues relevant to each stage of early career development in psychology. Chapters review topics relevant to both science- and practice-oriented psychologists, with a specific focus on universal hurdles and professional tasks that are difficult to get information about. Authors have provided bullet-pointed lists, and illustrative examples whenever possible, and lists of additional resources for each topic. Each contributor was asked to provide the kind of specific instruction and suggestions that they would offer their own mentees.

Part I of the book offers two chapters new to this edition of the *Portable Mentor*. These chapters offer input on the decision to apply to graduate school, as well as specific advice on when and how to apply to doctoral programs in psychology. It is unfortunate that undergraduate institutions do not have information on pre-psychology requirements as thorough as for pre-law or pre-med careers. The information in this section helps to fill this void, and also discusses the types of postbaccalaureate positions and experiences that are available to enhance one's application to doctoral programs.

Part II reviews general, overarching issues that apply to graduate students and to young professionals beginning their careers. The book begins with a discussion of the scientist-practitioner model and guiding principles for developing a career that will have maximal impact on our evolving field. Chapters on cultural competence and ethics offer excellent discussions of topics that can serve as a foundation for decisions made throughout a career in psychology. Each of these chapters reviews issues specifically relevant to students and early career psychologists. This section concludes with a review of difficult challenges and helpful suggestions relevant to the balance between personal and professional lives. New to this edition is a chapter specifically focused on balancing the professional and personal demands inherent to work as a psychologist and a parent.

Part III includes chapters pertaining to career development in research and academic domains. Each chapter addresses a task that is crucial to a successful scientific career, but often not discussed explicitly during graduate training. Chapters on research offer specific steps for reviewing scientific literature and disseminating research findings, in both presentation or publication formats. This section also includes a new chapter with instruction for serving as a peer-reviewer on journal submissions, and a chapter with recommendations for preparing and teaching a course on psychology.

Part IV addresses professional development in the practice domain. An introductory chapter reviews opportunities to gain clinical experience at each stage of training, and offers ideas for the competencies that should be obtained following the completion of each clinical experience. This section also includes a chapter with specific strategies for beginning a successful private practice, including considerations for selecting a specific type of practice and business skills that are needed to manage it. In our experience, students most frequently have questions regarding application processes relevant to training hurdles in professional psychology. Three chapters are therefore included with concrete suggestions regarding the internship and licensure application processes, and information regarding board certification (ABPP) in psychology. Because many early career psychologists are also clinical supervisors, this section offers a new chapter on the challenges inherent in becoming a clinical supervisor.

Not all psychologists are involved in professional service, but those who are often cite strong mentorship and excellent role models as leading reasons for their involvement. For this reason, Part V is dedicated to the development of a professional service career, with chapters that help to explain the importance of professional service within psychology. This section begins with a chapter on the roles served by professional organizations in psychology, and

the range of options for students and early career psychologists to become active in these groups, either as members or governance leaders. This section also includes a discussion of advocacy in psychology with specific ideas on how students and young psychologists can become involved with efforts to solicit support for the needs of our field. Two chapters address the promotion of psychology in the media, offering a vision and example for the successful public education of psychology, and specific guidelines to follow when interacting with a media source.

Part VI addresses professional development issues that are most relevant toward the end of formal graduate training. This section begins with a comprehensive discussion of postdoctoral fellowships in psychology, including different types of positions and practical strategies for the postdoc application process. This section also includes a review of the NIH grant application process and funding mechanisms most relevant to early career psychologists. Two chapters addressing employment issues in psychology are also included in this section. One of these chapters reviews the application process for academic positions, and the other reviews recent data regarding employment trends in psychology and among graduates in psychology.

Overall, it is hoped that this second edition continues to serve as a helpful resource for students, early career psychologists, and teachers of psychology. The book is structured to serve as a text in a professional development workshop series and/or a resource volume that psychologists can refer to throughout their careers. To all who are beginning their careers in psychology, good luck!

Chapel Hill, NC, USA

Mitchell J. Prinstein

About the Editor

Mitchell J. Prinstein, Ph.D. is a Bowman and Gordon Gray Distinguished Term Professor and the Director of Clinical Psychology at the University of North Carolina at Chapel Hill. He received his Ph.D. in clinical psychology from the University of Miami and completed his internship and postdoctoral fellowship at the Brown University Clinical Psychology Training Consortium. Mitch's research examines interpersonal models of internalizing symptoms and health risk behaviors among adolescents, with a specific focus on the unique role of peer relationships in the developmental psychopathology of depression and self-injury. He is the PI on several past and active grants from the National Institute of Mental Health, the National Institute of Child and Human Development, and several private foundations. He serves as the Editor for the *Journal of Clinical Child and Adolescent Psychology*, and an editorial board member for several developmental psychopathology journals. Mitch has received several national and university-based awards recognizing his contributions to research (American Psychological Association Society of Clinical Psychology Theodore Blau Early Career Award, Columbia University/Brickell Award for research on suicidality, APA Fellow of the Society of Clinical Child and Adolescent Psychology and the Society of Clinical Psychology), teaching (UNC Chapel Hill Tanner Award for Undergraduate Teaching; Psi Chi Professor of the Year), professional development of graduate students (American Psychological Association of Graduate Students Raymond D. Fowler Award), and undergraduate students (Psychology Club Department Research Mentor Award).

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Roy F. Baumeister, Ph.D. is currently the Eppes Eminent Professor of Psychology and head of the social psychology graduate program at Florida State University. He received his Ph.D. in social psychology from Princeton in 1978 and did a postdoctoral fellowship in sociology at the University of California at Berkeley. He spent over two decades at Case Western Reserve University. He has also worked at the University of Texas, the University of Virginia, the Max-Planck-Institute, the VU Free University of Amsterdam, the University of California at Santa Barbara, and Stanford's Center for Advanced Study in the Behavioral Sciences. Baumeister's research spans multiple topics, including self and identity, self-regulation, interpersonal rejection and the need to belong, sexuality and gender, aggression, self-esteem, meaning, and self-presentation. He has received research grants from the National Institutes of Health and from the Templeton Foundation. He has over 480 publications, including the New York Times bestseller *Willpower: Rediscovering the Greatest Human Strength*. The Institute for Scientific Information lists him among the handful of most cited (most influential) psychologists in the world. He has received lifetime achievement awards from the Society for Personality and Social Psychology and from the International Society for Self and Identity.

Nicholas M. Berens, Ph.D. is an experienced applied researcher and has published and presented in the areas of core behavioral process related to language and development, the merits of the scientist practitioner model, Relational Frame Theory, Precision Teaching, and program evaluation. He has spent the last 10 years researching and developing the Fit Learning system of instruction, which targets areas such as basic classroom readiness, core processing speed, phonemic awareness, reading fluency, reading comprehension, language-based comprehension, basic and advanced mathematics, grammar, expressive writing, logic, problem solving, and Executive Functioning. He and his team have implemented the system with over 600 children ages 3–18 years old, producing much higher rates of academic progress in gifted children and those with problems such as Asperger's Syndrome and a wide variety of learning disabilities. Dr. Berens has served on the boards of the Standard Celeration Society and the Nevada Association for Behavior Analysis.

Casey D. Calhoun, M.A. is a doctoral student in clinical psychology at the University of North Carolina at Chapel Hill. Prior to graduate school, Casey worked in several postbaccalaureate research positions at different universities. He worked as a lead counselor at SUNY-Buffalo for a summer treatment program for children with ADHD, project coordinator at UVA for two studies examining the social behavior and peer relationships of children with ADHD, and project coordinator at UNC for several studies examining peer influence, social stress responses, and best friendship dynamics as predictors of adolescent

depression and risk-taking behavior. Casey's personal research broadly considers the effects of peer relations and social cognition on adjustment in childhood and adolescence. His primary interests include multi-informant discrepancies, the immediate and delayed effects of social rejection on functioning, and social pain models of rejection.

Paula J. Caplan, Ph.D. is a clinical and research psychologist. She received her A.B. with honors from Radcliffe College of Harvard University, and received her M.A. and Ph.D. in psychology from Duke University. She is currently Fellow at the Women and Public Policy Program at the Kennedy School of Government and Associate at the DuBois Institute, both at Harvard University. She has been a Lecturer at Harvard, teaching *Myths of Motherhood; Girls' and Women's Psychological Development over the Lifespan; and Psychology of Sex and Gender*. She is former Full Professor of Applied Psychology and Head of the Centre for Women's Studies in Education at the Ontario Institute for Studies in Education, where she also headed the School Psychology and Community Psychology programs, and former Lecturer in Women's Studies and Assistant Professor of Psychiatry at the University of Toronto. She is the author of 11 books, coeditor of one book, and author of dozens of book chapters and articles in scholarly journals, as well as of numerous articles and essays in popular publications. She has given more than 400 invited addresses and invited workshops and done more than 1,000 media interviews.

Sophie C. Choukas-Bradley, M.A. is a doctoral student in clinical psychology at the University of North Carolina at Chapel Hill. She received her A.B. from Brown University, magna cum laude and with honors in psychology, and her M.A. in clinical psychology from the University of North Carolina. Prior to graduate school, her research focused on the assessment of behavioral changes in children and adolescents at a short-term residential treatment program. In graduate school, her research has focused broadly on adolescents' peer relations and health risk behaviors, including the role of peer status and peer influence in adolescents' sexual behavior, substance use, and weight-related behaviors. Her current research program involves collaborations with researchers in psychology and public health, and focuses on the role of social influences in the development of adolescents' sexual behaviors.

Lindsey L. Cohen, Ph.D. is Associate Professor and Director of Graduate Studies in the Department of Psychology at Georgia State University. Dr. Cohen is an active mentor having supervised three NIH training grantees and currently overseeing a Health and Human Resources training grant, which provides funding for doctoral clinical psychology students to work with disadvantaged populations in pediatric psychology. Dr. Cohen's research in child health psychology focuses on children's acute and chronic pain. Dr. Cohen's research has garnered over \$1,000,000 in grant funding and has produced roughly 80 articles and chapters, over 60 national and international oral presentations, and 150 conference posters to date.

Vicki DiLillo, Ph.D. is an Associate Professor at Ohio Wesleyan University. She is a licensed clinical psychologist with research and clinical expertise in health psychology, with a particular emphasis on cardiovascular behavioral medicine. Dr. DiLillo has advanced clinical training in Motivational Interviewing and publishes and presents regularly about the utility of this intervention for enhancing health behaviors among those at risk for cardiovascular disease. Dr. DiLillo maintains an active research laboratory that incorporates undergraduate collaborators and focuses on the investigation of modifiable risk factors for cardiovascular disease. She is a recipient of the Sherwood Dodge Shankland Award, presented annually to one Ohio Wesleyan faculty member in recognition of teaching excellence. Prior to her current position, Dr. DiLillo was on the faculty of the University of Alabama at Birmingham School of Medicine where she served as a Co-Investigator on a number of NIH-funded clinical trials.

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Rhea K. Farberman, APR is the Executive Director for Public and Member Communications at the American Psychological Association. In her position she directs the association's public affairs and media-relations programs,

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Ellen E. Fitzsimmons-Craft, M.A. is a clinical psychology doctoral student at the University of North Carolina at Chapel Hill who specializes in eating disorders and body image research and treatment. She has received numerous competitive grants, fellowships, and awards throughout her graduate career, including a National Institute of Mental Health (NIMH) Individual National Research Service Award (NRSA) (F31) and an Academy for Eating Disorders (AED) Early Career Investigator Travel Fellowship. Her research on the sociocultural influences on disordered eating has appeared in such journals as *Clinical Psychology Review*, *International Journal of Eating Disorders*, and *Body Image*.

Raymond D. Fowler, Ph.D. served as the Executive Vice President and Chief Executive Officer (CEO) of the American Psychological Association (APA) since 1989, the longest term any APA CEO has served. As CEO, he was responsible for overseeing both the corporate and professional management of the 155,000-member association and for supervising a staff of 500. He received his Ph.D. from Pennsylvania State University in 1957. He now is retired and living in La Jolla, CA.

B. Christopher Frueh, Ph.D. is a clinical psychologist and a tenured Professor of Psychology and Chair of the Social Sciences Division at the University of Hawaii, Hilo, Hawaii. He is also a McNair Scholar and Director of Clinical Research at The Menninger Clinic, Houston, Texas. His research focuses on clinical trials, epidemiology, and mental health services research relevant to the design and implementation of innovative treatments and mental health service improvements. He has over 200 professional publications, and has been Principal Investigator on 14 federally funded research grants, and Co-Investigator or Mentor on 25 others, including funding from NIMH, Agency for Healthcare Quality and Research, Veterans Affairs, and Department of Defense. His career aim is to improve public sector mental healthcare services for trauma survivors with comorbid psychiatric disorders (posttraumatic stress disorder + substance abuse, depression, schizophrenia) via research and training.

Laurie A. Greco, Ph.D. was a tenure-track faculty member for 5 years and is now directing the chronic pain rehabilitation programs at the Chalmer's P. Wylie VA Ambulatory Care Center in Columbus, OH. In collaboration with colleagues and students, Dr. Greco has published more than 20 articles and book chapters; she has given over 80 conference presentations and has conducted 40 workshops and professional trainings at the national and international level.

Karen Guan, B.A. is a postbaccalaureate research coordinator at the University of North Carolina at Chapel Hill. Under the supervision of Dr. Mitch Prinstein, she manages a longitudinal NIMH-funded study of social stress, depression, and self-injury in adolescent girls. Prior to her current position, she attended Swarthmore College, where she majored in Psychology (minors: Music and English) and completed a senior thesis on a depression prevention program for middle school students. Karen's independent research has focused on risk factors and functional impairment in adolescent depression and self-injury. She has presented her research at national conferences and has contributed to manuscripts for peer-reviewed journals. She is currently applying to graduate school in clinical psychology, where she hopes to study the development and dissemination of evidence-based interventions for adolescent mood disorders.

Corey J. Habben, Psy.D. has been highly involved as a psychologist and advocate for the unique issues of early career psychologists. He has written and presented extensively on early career psychologist and student issues and has represented new psychologists in several capacities within the American Psychological Association (APA). He initially led the task force that recommended the establishment of an APA committee for early career psychologists and previously served as one of APA's then-youngest former division presidents. He also coedited the book *Life After Graduate School in Psychology: Insider's Advice From New Psychologists* with Robert Morgan and Tara Kuther. Dr. Habben is currently senior psychologist in the Department of Psychiatry at Walter Reed National Military Medical Center in Bethesda, MD and has worked at Walter Reed since 2002.

Steven C. Hayes, Ph.D. is Nevada Foundation Professor at the Department of Psychology at the University of Nevada. An author of 34 books and over 470 scientific articles, his career has focused on an analysis of the nature of human language and cognition and the application of this to the understanding and alleviation of human suffering. Dr. Hayes has been President of the Association for Contextual Behavioral Science, and of the Association for Behavioral and Cognitive Therapy. He was the first Secretary-Treasurer of the Association for Psychological Science, which he helped form. In 1992 he was listed by the Institute for Scientific Information as the 30th "highest impact" psychologist in the world. His popular book *Get Out of Your Mind and Into Your Life* was featured in *Time Magazine* and for a time was the number one best selling self-help book in the United States. His work has been recognized by several awards including Lifetime Achievement Award from the Association for Behavioral and Cognitive Therapy.

Robert D. Hill, Ph.D., ABPP has been a professor in the Department of Educational Psychology at the University of Utah since 1988. He has served as the Training Director of the APA Accredited Counseling Psychology Doctoral Program at the University of Utah and he was the Chair of the Department of Educational Psychology from 2000 to 2007. Dr. Hill is a licensed psychologist in the State of Utah and received ABPP board certification in Counseling Psychology in 1995. He is currently an ex-officio member of the Board of Trustees of the American Board of Professional Psychology and the Editor of the ABPP Specialist newsletter. Dr. Hill has published extensively on issues of adult lifespan development and is the author of *Positive Aging: A Guide for Mental Health Professionals and Consumers* published in 2005 by WW Norton. In 2003, Dr. Hill was a Fulbright Scholar in residence at Maastricht University in the Netherlands where he studied issues of psychological adaptation to later life among older adults who were part of the Maastricht Longitudinal Aging Study.

Andrea Hussong, Ph.D. is a Professor of Psychology and the Director of the Center for Developmental Science at the University of North Carolina at Chapel Hill. The aims of her program of research are to understand early-emerging developmental pathways leading to substance use and disorder, developmental outcomes among high-risk youth who have parents with addiction disorders, and the use of innovative methods to advance this substantive research agenda. She has served on NIH/CSR grant review panels and Editorial Boards for journals in addictions, clinical psychology and developmental psychology, and is a fellow in the APA and APS. She is the director of a longstanding NICHD predoctoral and postdoctoral training grant and mentors students and junior faculty across the phases of early career development.

Elissa Jelalian, Ph.D. is an Associate Professor of Psychiatry and Human Behavior and Pediatrics at the Warren Alpert Medical School at Brown University. She currently serves as an Associate Director of the Brown Clinical Psychology Training Consortium and is an active faculty mentor on T32s awarded through both NIMH and NHLBI. Dr. Jelalian has been a research and clinical mentor for more than 15 years and has received local and national recognition for her mentoring accomplishments.

Barbara Kamholz, Ph.D. completed her Ph.D. in clinical psychology at the University of Miami in 1998, her internship at the Boston Consortium in Clinical Psychology, and a postdoctoral fellowship at Brown University. In 2000, she returned to VA Boston Healthcare System (VABHS). Dr. Kamholz's clinical and research interests focus on affect-regulation disorders (including depression, posttraumatic stress disorder, and addiction). She has served as Principal Investigator or Co-Investigator for five federally funded grants, and as a mentor for two VA career development awards. In 2005, Dr. Kamholz cofounded the VABHS Mood and Anxiety Disorders Clinic, where she supervises interns, practicum students, and psychiatry residents. Dr. Kamholz is Associate Director for VABHS Outpatient Mental Health Services, which

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Alan D. Katell, Ph.D. earned the Ph.D. in Clinical Psychology at West Virginia University. He is currently Professor of Psychology at Nova Southeastern University in Fort Lauderdale, Florida, where he has served on the faculty for 31 years. He has been the Director of Clinical Training for 20 of those years. His principal areas of interest include eating disorders and associated health psychology issues, compliance enhancement, and coping with physical challenges. He represents Nova Southeastern University on the Council of University Directors of Clinical Psychology, and is a member of APA Divisions 12 and 38. He has also been active in advocacy efforts on behalf of persons with disabilities.

Alan E. Kazdin, Ph.D., ABPP is the John M. Musser Professor of Psychology and Child Psychiatry at Yale University and Director of the Yale Parenting Center, an outpatient treatment service for children and families. At Yale, he has been Chairman of the Psychology Department and Director of the Yale Child Study Center at the School of Medicine. In 2008, he was President of the American Psychological Association. His 680+ publications include 48 books that focus on interventions for children and adolescents, parenting and child rearing, interpersonal violence, and methodology and research design. His awards include Outstanding Lifetime Contributions to Psychology and Distinguished Scientific Award for the Applications of Psychology (American Psychological Association) and the James McKeen Cattell Award (Association for Psychological Science). His work on parenting and child rearing has been featured on NPR, PBS, the BBC, and he has appeared on Good Morning America, ABC News, 20/20, and Dr. Phil.

Jessica L. Kohout, Ph.D. served as a research consultant in Denver, Colorado and subsequently as an associate with a research firm in DC and with the American Psychological Association prior to 1990. Between 1990 and 2011, Dr. Kohout was the director of the Center for Workforce Studies at the American Psychological Association. As well as maintaining chief administrative, supervisory, and budgetary oversight, she authored 18 peer-reviewed articles/chapters, over 60 technical reports/briefs, and gave over 40 presentations at national and regional conferences, workshops, and meetings on the changing demographics, education pipeline, and workforce in psychology and in higher education more generally. Dr. Kohout currently serves as a consultant to Ad Hoc Analytics, LLC in Washington, DC. She has extensive contacts across the higher education community and federal agencies and a broad knowledge of available data and resources. Dr. Kohout received her Ph.D. in 1985 in Sociology from the University of Denver.

C. W. Lejuez, Ph.D. is a professor in the Clinical Psychology Program at the University of Maryland where he is the Founding Director of the Center for Addictions, Personality, and Emotion Research (CAPER). His research is

translational in nature, applying basic psychopathology findings from laboratory settings to the development of novel assessment and treatment strategies in clinical settings. His research spans the clinical domains of addictions, personality pathology, and mood disorders, and he is most interested in the common processes across these conditions. His research has been funded continuously by NIH since 2003, primarily by the National Institute on Drug Abuse (NIDA). He is strongly committed to developing grant-writing skills in trainees and has been the sponsor/cosponsor for over ten NIH-funded individual National Research Service Awards (NRSA) and five minority supplement fellowships. Additionally, he currently codirects an institutional NRSA training grant funded by the NIDA at the intersection of basic science and addictions treatment.

Elizabeth E. Lloyd-Richardson, Ph.D. is an Assistant Professor of Psychology at the University of Massachusetts Dartmouth and an Adjunct Assistant Professor of Psychiatry and Human Behavior at the Warren Alpert Medical School of Brown University. Dr. Lloyd-Richardson is a licensed Clinical Psychologist, trained in the Boulder clinical-researcher model, with specialized training in Health Psychology and adolescent health risk behaviors. She has extensive experience in developing and conducting treatments that promote healthful behaviors in adolescents and young adults, particularly in the areas of weight loss, physical activity, smoking cessation, and non-suicidal self-injury. Dr. Lloyd-Richardson is the recipient of several NIH and foundation research grants and has published over 40 papers and book chapters on these topics. She maintains an active clinical research lab with graduate and undergraduate students, with a particular interest in involving students in meaningful community-based research projects.

Christopher W. Loftis, Ph.D. has more than 15 years of experience in health policy and clinical neuropsychology. As a contractor for the Defense Centers of Excellence for Psychological Health (PH) and Traumatic Brain Injury (TBI), Dr. Loftis managed a team of healthcare professionals to develop and execute a program evaluation framework to improve PH and TBI military programs and procedures. He previously served as Directors of Practice Improvement and State Policy at the National Council for Community Behavioral Healthcare, and as a healthcare analyst at the state and federal levels, including as a APA Congressional Fellow with Senator Ted Kennedy. Dr. Loftis has a doctorate in clinical psychology with a specialization in neuropsychology from the University of Florida and advanced specialty training in pediatric neuropsychology from the Johns Hopkins' Kennedy Krieger Institute. He has been actively engaged in APA, serving as Chair of APAGS and the APA Policy and Planning Board.

Sarah R. Martin, M.A. is a clinical psychology doctoral student at Georgia State University. Sarah earned her Master's degree in Applied Clinical Psychology from Columbia University's Teachers College. Before attending Georgia State University, Sarah was a research associate for the Department of Anesthesiology at the University of California, Irvine where she managed

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Elizabeth Henshaw Musewicz, M.S., LPC is a Licensed Professional Counselor in Pennsylvania, and has 10 years of experience helping children and adolescents, along with their families, cope with anxiety, depression, and the effects of transition and trauma. She has two Masters degrees in clinical psychology, from Loyola College in Maryland and from Philadelphia College of Osteopathic Medicine. She established a private practice in 2004 and now works in both private and group practice settings.

Ted Packard, Ph.D., ABPP is a former President and member of the Board of Trustees of the American Board of Professional Psychology and is a recipient of ABPP’s 2005 Annual Award for Distinguished Service and Contributions to the Profession of Psychology. An Emeritus Professor in the Department of Educational Psychology at the University of Utah, he is also a former President of the Association of State and Provincial Licensing Boards and former Chair of APA’s Committee on Accreditation and APA’s Ethics Committee.

William E. Pate, II, M.A. is a cofounder of Ad Hoc Analytics, a minority- and woman-owned statistical consulting firm, based in Washington, DC, that specializes in program evaluation. Current efforts include federally and state funded projects related to criminal justice, education, and minority issues in higher education. Previously, Mr. Pate was the Assistant Director of the APA Center for Workforce Studies, where he worked for over 10 years. His published work on the psychology workforce and educational pipeline has appeared in *The Counseling Psychologist*, *Journal of Clinical Psychology in Medical Settings*, and *Professional Psychology: Research and Practice*. Mr. Pate holds an M.A. in Industrial-Organizational Psychology.

Kenneth S. Pope, Ph.D., ABPP, a licensed psychologist in independent practice, received graduate degrees from Harvard and Yale. A diplomate in clinical psychology, he has authored or coauthored over 100 articles and chapters in peer-reviewed scientific and professional journals and books. The most recent of his 12 books is *Ethics in Psychotherapy and Counseling: A Practical Guide, fourth edition* (coauthored with Melba J. T. Vasquez). He received the American Psychological Association (APA) Award for Distinguished Contributions to Public Service; the APA Division 42 Presidential Citation “In Recognition of his Voluntary Contributions, his Generosity of Time, the Sharing of his Caring Spirit [and] his Personal Resources”; the APA Division 44 Citation of Appreciation; and the APA Division 12 Award for Distinguished Professional Contributions to Clinical Psychology. A Fellow of the Association for Psychological Science (APS), he provides free psychology resources at kspope.com and free disability resources at kpope.com.

William C. Rando, Ph.D. is Assistant Dean for Student Affairs and Director of the Graduate Teaching Center at Yale University. He has been researching, writing, and practicing in the field of faculty and professional development for over 25 years. His first article, *Graduate teaching assistants' implicit theories of teaching*, published in 1987, laid the foundation for his later work, which focused on new faculty and the relationship between thought and action in the classroom. After completing an M.A and Ph.D. from Northwestern University, he published, *Learning from Students*, with coauthor Lisa Firing-Lenze. In 1995, he became Director of the Academy for the Art of Teaching at Florida International University where he expanded programs for new faculty and graduate teaching assistants. His recent works, published in 2011, 2010, and 2006, are studies of pedagogical innovation in medical education.

Elizabeth K. Reynolds, Ph.D. is a postdoctoral fellow in the Division of Child and Adolescent Psychiatry at Johns Hopkins University School of Medicine. In July 2011, following the completion of her predoctoral internship at the Brown University Clinical Psychology Training Consortium, she received her Ph.D. in clinical psychology from the University of Maryland, College Park. Her research, which has been funded by a NIDA F31 predoctoral fellowship and a NIDA R36, focuses on social-contextual (e.g., peer influence, parental monitoring) and self-regulatory (e.g., impulsivity, distress tolerance) factors associated with the development and maintenance of risk-taking behaviors in youth.

Jennifer M. Rohan, M.A. is an advanced graduate student in the Clinical Pediatric Health Psychology Doctoral Program at the University of Cincinnati and a graduate research assistant in the Center for Adherence Promotion and Self-Management at Cincinnati Children's Hospital Medical Center. Dr. Dennis Drotar is her primary graduate mentor and research supervisor. She has completed mentored manuscript reviews for the *Journal of Pediatric Psychology* and has authored over ten manuscripts that focus on various applications in pediatric chronic illness. Her research interests focus on treatment adherence and self-management in the context of prospective, descriptive, and intervention studies in pediatric chronic illness, as well as, measurement and statistical modeling of treatment adherence and self-management using advanced statistical procedures that can be applied to longitudinal research designs. With respect to clinical applications, she hopes to utilize her work in adherence and self-management to enhance clinical outcomes of youth with a chronic illness.

Leon Rozenblit, J.D., Ph.D. learned most of what he knows about teaching from Bill Rando at the Yale Graduate Teaching Center, where he helped develop and lead workshops on Teaching with Technology. Leon served as Adjunct Professor at the Yale University Department of Psychology where he has taught graduate and undergraduate statistics courses and Intro Psych. Leon is the Founder and President of Prometheus Research, LLC, where he channels his interests in cognitive psychology, statistics, and information technology into providing innovative solutions that help researchers make better use

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Amy F. Sato, Ph.D. graduated from the University of Wisconsin—Milwaukee in 2009 with a Ph.D. in clinical psychology. She completed her predoctoral internship and NIMH T32 postdoctoral fellowship in pediatric psychology at Brown Medical School. She is currently an Assistant Professor in the Department of Psychology at Kent State University, where she enjoys mentoring graduate and undergraduate students in child clinical psychology. She is an active member of the Society of Pediatric Psychology (APA Division 54), where she previously served as the Student Representative to the Executive Committee and currently coordinates student programming for the Diversity Committee. She also previously served as a predoctoral and postdoctoral representative on the Brown Clinical Psychology Training Consortium Diversity Committee. Her research focuses on the etiology, maintenance, and treatment of child health conditions, particularly pediatric overweight. She has published several peer-reviewed articles and book chapters on adjustment to and coping with child health conditions and has presented her research at national and international conferences.

Valerie Simon, Ph.D. is an Associate Professor at Wayne State University in Detroit, Michigan where she holds a joint appointment in the Department of Psychology and the Merrill Palmer Skillman Institute for Children and Families. Informed by a developmental psychopathology framework, Dr. Simon uses a multi-method approach to peer, romantic, and sexual development among youth with interpersonal risk histories (e.g., child maltreatment, interparental conflict) and mental health problems. Current grant-funded projects examine (1) emergent patterns of romantic and sexual behavior among sexually abused youth; (2) individual differences in strategies for processing experiences of child abuse; and (3) barriers to mental health service utilization among families with recently discovered cases of sexual abuse.

Anthony Spirito, Ph.D., ABPP is Professor of Psychiatry and Human Behavior at the Warren Alpert Medical School at Brown University. He has served as a clinical and research supervisor for both predoctoral interns and postdoctoral fellows for 25 years. In the past he has been the Director of Brown's Clinical Psychology Training Consortium as well as PI on Brown's NIAAA T32 Postdoctoral Research Training grant. He is currently the Director of the Division of Clinical Psychology in the Department of Psychiatry and Human Behavior at Brown.

Robert J. Sternberg, Ph.D. is Provost, Senior Vice President, and Regents Professor of Psychology and Education at Oklahoma State University and Honorary Professor of Psychology at Heidelberg University in Germany. Before going to Oklahoma State, he was Dean of Arts and Sciences at Tufts University,

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Joseph E. Trimble, Ph.D., a former Fellow at Harvard University's Radcliffe Institute for Advanced Study, is a Distinguished University Professor in the Center for Cross-Cultural Research, Department of Psychology, at Western Washington University. Throughout his 35-year career, he focused his efforts on promoting psychological and sociocultural mental health research with indigenous populations, especially American Indians and Alaska Natives. He is the editor or author of 19 books and over 130 journal articles and book chapters. Among 20 honors and awards he is recipient of the Distinguished Elder Award from the National Multicultural Conference and Summit, the Janet E. Helms Award for Mentoring and Scholarship in Professional Psychology from Teachers College, Columbia University, a Presidential Citation from the American Psychological Association for his lifelong devotion to multiculturalism, the Henry Tomes Award for Distinguished Contributions to the Advancement of Ethnic Minority Psychology, and the International Lifetime Achievement Award for Multicultural and Diversity Counseling from OISE at the University of Toronto.

Carol Williams-Nickelson, Psy.D. is the Executive Director of the American Medical Student Association (AMSA) and AMSA Foundation, the oldest and largest independent association for physicians-in-training. She formerly was the Associate Executive Director for the American Psychological Association of Graduate Students (APAGS) following several years of serving in various leadership positions within APAGS, including chairing APAGS. Carol received her M.S. and Psy.D. in psychology from Our Lady of the Lake University in San Antonio, Texas, and completed her doctoral internship at the University of Notre Dame Counseling Center. She has held several university faculty appointments, owned and operated a consulting business and health service organization, and has served on multiple nonprofit, university and governmental boards and committees. Carol had dedicated her career to developing leaders within professional associations to enable them to broadly and effectively influence healthcare. Her professional activities have focused on graduate student advocacy and development; training and clinical supervision; legislative advocacy; leadership; professional development; organizational development; self-care; mentoring; and women's issues.

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Part I

Applying to Graduate School

Before You Apply to Graduate Programs in Psychology: Knowing When You're Ready and Gaining Postbaccalaureate Experiences

Casey D. Calhoun and Mitchell J. Prinstein

Do you want to go to graduate school to study psychology? If so, when? These extremely important decisions can be very difficult to consider for undergraduate students who are interested in psychology as a potential focus for their career. Unfortunately, little information is available to guide students through this difficult decision, and even less seems to be available to help students navigate the time between the receipt of their undergraduate degree and the time they decide to apply (i.e., “the postbaccalaureate years”). This chapter focuses on the process of assessing one’s personal interests while maximizing postbaccalaureate learning experiences. First, it is important to think about whether to take “time off” from school before applying. Next, how does one get a “postbacc” research job? Last, how can one use these years most effectively to help inform an application decision? Note: this chapter is likely biased towards research-oriented options; however, most of the information may be relevant to students with more applied interests as well.

Of course, before addressing each of these questions in detail, it is important to remind the reader that no single source of advice should be relied upon exclusively when making such difficult and personal decisions, including the advice in this chapter. Seek out information from people within your field of interest as well as from those who

offer an outside perspective. Keep in mind during this process that opinions can sometimes be highly skewed and informants’ levels of enthusiasm and conviction can unjustly bias your predictions of personal happiness. Collect perspectives, compare them to your own, and make decisions with the acknowledgement of individual differences.

Given that the process of collecting perspectives and developing personal interests can take a substantial amount of time, it is recommended that students initiate the process early to make a well-informed decision about their choice of program and avoid taking multiple years off unnecessarily before applying to grad school. As an undergraduate, it is easy to become consumed by classes and avoid, or miss, additional opportunities to learn. However, time spent investigating the field before graduation will pay off in a more efficient decision-making process.

Should I Take Time “Off”?

You may be “burnt out” after 17 years of schooling. Your parents may be worried that you are “delaying” your career path by taking time away. You may not know what will “look good” on your application. Indeed, many factors may influence your decision regarding the postbacc years and whether to take time away from school before applying to doctoral programs in psychology. Yet, this is a very important decision. Graduate school (and even just the application process to get in) is a long, arduous, difficult endeavor.

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Are You Ready Now?

Some students transition directly from undergraduate schooling to graduate programs and are very pleased with their decision. These well-prepared students have usually spoken with many people, worked in and outside of school to establish their interests, and have a good idea of what to expect in graduate school before applying. In other words, they have worked hard during their time as an undergraduate to develop their resume and determine which program best matches their interests. These students usually have identified an area of research that they are truly passionate about. It is something they could imagine spending every day thinking about for the next 40 years, and they are excited about the opportunity to get started now. They have a clear sense of a few possible careers options post-degree, and they are feeling energetic.

On the other hand, there are also students who make the direct transition from undergraduate to graduate school, and realize that they are not as happy as they had hoped. They often report that they got “wrapped up” in the application process, followed the crowd (i.e., falling in with departmental trends or those of lab mates), or hastily guessed their interests instead of adequately evaluating them. They may have been pressured by parents or scared to enter the “real world.” For these students, graduate school isn’t quite what they expected and/or isn’t quite as enjoyable as they had hoped.

Do You Want to Wait?

At many top graduate programs in psychology, a growing trend is evident. About 50% of short-listed applicants (a higher proportion each year, it seems) have taken a year or more “off” before applying to graduate school. Students who have taken time off to gain research experience also are somewhat overrepresented in the proportion of successful applicants who ultimately gain admission. Taking time off is not required, but it is becoming the norm. Why do students take time off? There are at least three good reasons. First, many students take time off to learn more about

the field. Most students find that as they gain more experience, they generate more questions about the field, their own capabilities, and their own interests. Students interested in applied areas of psychology, for instance, may wish to get more experience working with people within the age range, diagnostic group, or in the setting that they believe they will be interested in.

Second, students take time off hoping to develop increased confidence that they will make the correct decision of graduate program. Taking time off won’t necessarily guarantee that you will make the *correct* decision when applying to graduate school, but it can help you make a *better*, more well-informed decision if you use the time wisely. Third, and perhaps most common, many students take time off to help improve the strength of their application. Indeed, it may be good for students to take time off if their GPA or GRE score is considerably lower than posted averages, and/or if they are applying to research-oriented programs but do not have adequate research experience (and/or do not know their personal research interests). In addition to these main reasons, many students simply take time off because they want to save money for graduate school, they are exhausted from their undergraduate studies, or they have another opportunity that seems too good to pass up (e.g., Teach for America, Peace Corps, etc).

Ultimately, students should realize that their graduate school application can always be improved and that they will never fully gain all of the knowledge that they need before applying. To some extent, the decision to apply eventually will require a leap of faith that is informed by previous experiences. The remainder of this chapter is dedicated towards a discussion of opportunities that are available during the “postbacc” years for students who have decided to take time off before applying to graduate school and would like to use that time most wisely.

What Should I Do During My Time Off?

If you decide that you need to acquire more knowledge and skills, or further explore your personal interests, there are various opportunities

that may help you accomplish these goals. Such opportunities include volunteering, working as a research assistant, and attending national psychology conferences. A brief discussion of each opportunity is offered below.

Volunteer Positions

There are various ways to volunteer in the field of psychology, and the opportunity that someone chooses should depend on their personal goals and intentions for graduate school. Volunteer positions broadly include assisting with psychological research, working with specific populations in the community (e.g., special needs children, at-risk individuals, etc.), or assisting clinicians in their practice (these are more rare). Students interested in pursuing a research-oriented program in graduate school should *primarily* focus on gaining experience in research labs. Doing so will provide opportunity to more thoroughly develop your knowledge of the scientific process and, more specifically, how it applies to psychology (see the “Research Assistant Positions” section below for more details). Students interested in pursuing a more “clinically oriented” program (i.e., programs that focus more on working directly with and/or treating a specific population in the absence of a research training emphasis) may wish to gain experience *primarily* in applied clinical settings. In such clinical positions, volunteers are not expected to become an expert in treating people with psychological difficulties. Instead, they are often asked to provide basic treatment services, serve as advocates, intervene in crisis situations, or simply spend time with individuals afflicted with mental illness. These positions offer excellent opportunity for students to practice their rapport-building skills, begin to understand the life of a person with a mental illness, and develop passion for continuing to work in the field.

The term “primarily” was used above, when referring to the pursuit of research and clinical opportunities, because experience in each area (research and applied) offers invaluable information that supports the scientist–practitioner model of applied psychology. In other words, research-oriented students can become better researchers

by gaining personal experience with the same populations that they plan to research, and clinically oriented students can become better clinicians by incorporating evidence-based methods of assessment and treatment into future practice. Admission committees do not always share this sentiment regarding the importance of acquiring both research and clinical volunteer experiences, but students generally find that each type of experience significantly contributes to the development of their interests and their eventual choice of graduate program.

The unique opportunities of volunteering are often overlooked, but in fact, there are several aspects of volunteer positions that do not necessarily apply to paid positions. These include: availability of positions, time commitment, and evaluation without compensation.

Availability of Positions

The first benefit of volunteer positions is that they are more readily available than paid positions. Students can generally find advertisements for available volunteer positions posted on bulletin boards in the psychology department or on the department’s website. Students may also contact local inpatient and outpatient treatment centers, crisis centers, mental health agencies, research centers, or individual researchers to inquire about volunteer positions. As students begin to narrow their interests, it is commonly found that paid positions offering experience in the particular area of interest are extremely rare and competitive. Additionally, those students who succeed in acquiring a paid position often have a great deal of volunteer experience and accompanying skill sets to reference during their interviews for the positions. In some situations, volunteer positions can even serve as preliminary screening for paid positions.

Time Commitment

Second, a student’s commitment to volunteer positions is more negotiable than time committed to paid positions. Unless you have made a commitment to work in a lab for a specified period of time, you can reassess your interests in the position after a preestablished period of time and choose to stay or move on to a different opportunity.

Your commitment to the position should be clearly stated in the beginning so that if you decide to leave, you do so with early notification and respect for your supervisor. If after a semester, or a few months, you decide that you would like to pursue a different area of psychology, it is highly recommended that you follow your interests. A semester spent in a position deemed uninteresting is a semester that you could have spent testing out a different potential interest. Given that the majority of students want to take off as little time as possible, this can prove to be a more efficient way of determining which area you want to pursue at the graduate level. Along these lines, don't make the mistake of guessing the topics that you will enjoy studying/researching in graduate school; pursue them fervently before applying.

Evaluation Without Compensation

A final benefit to volunteering is the substantial opportunity to stand out and make an impression. Supervisors and graduate school admissions committees are especially taken with someone who is excited and committed to working on a project when no direct compensation is offered. Similarly, the volunteer setting allows you to assess your own motivation about a particular area without the influence of a paycheck. To set yourself apart from other volunteers, it is important demonstrate initiative and go beyond the basic duties of the position. Be sure to demonstrate your commitment to detail, reliability, and knowledge about the particular area of research or clinical work. This will ensure that your performance and enjoyment for the project is being assessed under optimal conditions. Also, be aggressive in your development of skills. Try to master the simple tasks quickly so that you can advance to the more sought-after skills that are often a bit more difficult to acquire. A supervisor will not always explicitly offer such opportunities so sometimes it is necessary for you to ask if more advanced training or tasks are available. Additionally, keep in mind during your volunteer experience that you will most likely ask your supervisor to write a letter of recommendation for applications to other labs, jobs, and/or graduate school. The letter will be much more

impressive if your supervisor can state that you excelled in your position and sought additional learning opportunities.

Research Assistant Positions

A postbaccalaureate research assistant (sometimes referred to as a postbacc, RA, or project coordinator) can refer to an employee or student who assists with one or multiple aspects of a research study. Note that some investigators may use these terms differently to refer to different roles within a similar project (sometimes a project coordinator is a postdoctoral fellow; sometimes an RA is an undergraduate assistant receiving course credit, etc.). Also note that different labs may have different constellations of RAs, PCs, postbaccs, etc. all working together, or in a hierarchical relationship among one another. For clarity in this chapter, we will refer to this kind of a position as an RA.

Finding an RA Position

As implied in the section above, paid RA positions can be more difficult to find and secure. Unfortunately, it is very rare that a study directly related to your area of interest will exist at your university (if so, then great!); it is even more rare that the study's principal investigator will be hiring RAs. Therefore, when looking for a paid position that will help you accomplish your career goals, it is often necessary to broaden your scope and search for positions in different cities and universities. Of course not everyone is willing to move to a different location, and in this situation, you should seek out a local position that is most closely related to your interests. If a paid position is not available in an appealing lab, you can always volunteer in that lab and receive compensation from a different source, which is highly recommended for all of the reasons mentioned earlier.

There are several different methods for locating paid RA positions. Students with less well-defined interests, or those who are intent on staying in a particular geographic region, may want to begin by searching for RA positions on the human resources (HR) websites of universities

and local research centers that they are willing to consider. Generally, HR websites will have a “Jobs” or “Employment” page that allows you to search for jobs specifically relating to research. Such a search is less likely to reveal positions that are a perfect match for a student’s specific interests, but positions in any research lab provide opportunity to become familiar with the scientific process and the general framework of research. Keep in mind that each university may have this type of position “classified” under a very specific job title (e.g., clinical research assistant, research cleric, etc.), and it may not be immediately obvious which types of jobs match the traditional RA position you are likely looking for.

Postbaccalaureate students with more well-defined interests, especially those who may be able and willing to relocate, would likely benefit most from conducting a much geographically broader, yet more content-specific search that begins by determining which researchers are currently conducting research in their line of interest. There are several ways to identify RA jobs; unfortunately, no centralized service is available to locate these coveted positions. However, there are several recommended steps one can take in their search for RA positions.

1. The search should begin by entering your research interests as search parameters in PsycINFO. When reviewing the literature, note the researchers who appear multiple times in recent publications and those who are tied to the present theories relating to their particular area of interest; these are often the researchers who are conducting great research. Use the name list generated in PsycINFO to go a step further and search for personal or lab websites for each of the research faculty; here, the researcher may have the most current information on their ongoing research projects. It is possible that the current projects listed on the researcher’s website will remain highly related to your interests. On the other hand, it is also possible that the researcher is currently working on projects that are not as relevant to your interests. If the researcher does not have a website, or their website does not present information on current projects, it

may be necessary to send a brief, professional email to gather more information about their current research.

2. To find investigators that likely have current funds available to hire an RA, search the NIH REPORTER website. This database will offer a list of active NIH-funded grants by area, name, or even university.
3. Investigators often post job ads on listservs sponsored by the professional society or association most closely aligned to their area of interest. Ask your professors to recommend professional societies that may be important for you to join so that you may subscribe to their listserv, or ask someone who may have extra time to forward you relevant postings from listservs they are on.

Professional Communication

When contacting professors, it is extremely important that students convey professionalism and maturity at all times. Professors often form initial impressions by considering the manner in which a student approaches them, the content of what the student says or writes, the effort the student puts forward, and the student’s excitement for working with them. A professor is much less likely to hire someone who sends an email with multiple spelling errors, grammatical mistakes, or obnoxious font or colors; this demonstrates a lack of effort, a lack of maturity, a lack of competence, or some combination of these factors (none of which are well-suited for the position). Similarly, a professor is not likely to form a favorable impression of a student who is disrespectful or demanding in an email. It often works in your best interest to have someone read through a draft of your emails to ensure their professionalism before you send them to a potential employer.

In short, emails should be polite and concise. Acknowledge that the professor receives many (sometimes hundreds) of emails daily and expect that the professor will likely not respond immediately. With this in mind, keep emails short and to the point. Introduce yourself, briefly express your interest in their research, and ask your question(s). In your self-introduction, state who you are (i.e., name and status) and your collegiate affiliation.

It could also be helpful to mention your ties to previous faculty supervisors that the professor may know. If your previous supervisor has a collegial relationship with the professor you plan to email, you may ask him or her to send the professor a note prefacing your email; this may help to ensure that your email is acknowledged more quickly and that you are given consideration for available positions. Feel free to include your curriculum vitae (or resume) as an attachment to the email but *do not* list all of your accomplishments within the body of your message; if the professor wants to review your accolades and previous experiences, he or she can always review the attachment. After expressing interest in the professor's research, politely ask if they could provide information on their current projects and/or if they may have any available paid RA positions. Avoid asking questions that are clearly answered on the professor's website.

Interviewing for RA Positions

Interviews for RA positions are a great opportunity for a student to practice their interviewing skills for potential grad school interviews. For the interviews, bring your CV (or resume) and be prepared to answer questions about your previous experiences, why you want the position, and your career goals. Importantly, avoid the temptation to overstate your knowledge, and instead, confidently communicate your enthusiasm for the opportunity to learn.

Also, don't forget to assess the supervisor and the position. You could ask questions about the requirements of the position, additional opportunities to excel (see below), time commitments (both regarding weekly hours and start/stop dates for the position), and compensation. Additionally, your intentions should be clearly stated upfront so that there is no confusion later; if you would like a position that offers advanced tasks (after mastering the more basic ones) or independent research projects, make sure that these opportunities exist and that the supervisor is aware of your determination to pursue them. At the conclusion of the interview, be sure to thank the supervisor for spending the time to consider you for the position; it is polite to send a follow-up email conveying your appreciation.

Duties of an RA

The duties of an RA vary greatly based on the requirements of a research study, the responsibility given to you by your supervisor, and your personal efforts to acquire knowledge and skills. RAs duties could include: conducting literature reviews, drafting/submitting IRB applications (i.e., ensuring that your study meets the ethical requirements dictated by your school's Institutional Review Board), administering therapies (i.e., drug or psychological), leading subjects/participants through an experimental or observational protocol, collecting data, managing data, coding data (i.e., transforming observed behaviors, written statements, and other interpretive constructs into quantitative variables), developing coding systems, conducting statistical analyses, and assisting with the dissemination of findings (in posters, presentations, or manuscripts). For research involving human participants, RAs may have the additional responsibilities of recruiting participants, scheduling lab visits, arranging participant compensation, or assisting with measure/survey development. Data collection in human-based research often involves administering surveys or measures, collecting physiological or observational data, or conducting clinical assessments. RAs in animal-based research may have the additional responsibilities of providing animal care and performing medical procedures necessary for their particular field of study. The RA duties mentioned here are certainly not an exhaustive list. The needs, goals, and protocols of every lab are variable and require RAs to perform different, and sometimes exceptionally unique, duties for each project.

While performing your duties as an RA, take note of any aspects of research that are particularly difficult for you. Once you have determined your problem areas, you should *confidently* seek out support. Self-assessment, paired with the ability to ask for help, will be very important as you continue to progress in the field. Additionally, while some of the complexities of research are initially overwhelming, don't let this scare you away! You will find that most research processes follow a written or unwritten (i.e., generally understood) set of guidelines. Once you learn these guidelines, the research process becomes less intimidating.

The same recommendations regarding work ethic and development of personal interests mentioned in the volunteer section apply to RA positions as well. In addition to those recommendations, RAs should work to build their resume, assess their general interest in psychological research, and refine their interests. For research-oriented students who are building their CV, it is highly recommended that students take part in the development, reporting, and presentation or publication of a research project. Presentations mostly include posters or papers presented at national or regional psychology conferences; the formats for these presentations vary by conference (see the “National/Regional Psychology Conferences” section below). Although you may have the fortunate opportunity to assist with the presentation or publication of another person’s research project, you should eventually strive to conduct your own independent research project. For a personal research project, you could analyze archival data (i.e., a preexisting dataset), insert measures into an ongoing research project, or design a study that is solely dedicated to answering your specific research questions. Admission committees of research-oriented graduate programs are especially impressed with students who have demonstrated the ability to undergo the full scientific process, from idea conception to the presentation of findings. In any case, being involved with a presentation or publication is almost always a result of a student’s persistence in pursuing such options.

As an RA, students should ultimately determine if they would like to remain in the world of psychological research or pursue psychology from a different perspective (e.g., policy maker or clinician). If, at some point, you conclude that you have a passion for psychological research and want to pursue it further, the next step is to determine which area of research is most appealing to you. During the application process, your specific research interests and questions will most likely inform your decisions of where to apply and with whom you would like to work. Narrowing one’s interests can be difficult for some students as their interests may be multifaceted and broadly conceived. However, specific

areas of interest can often be found by searching for common themes existing across all potential interests and identifying a general research question, or set of questions, that you would like to attempt to answer in your personal research. Importantly, as an RA, you should not feel obligated to find an interest that perfectly aligns with the goals of the lab that has employed you. In fact, you may realize after testing your interests in a lab that the research on a topic was not as interesting or rewarding as you had hoped. In this case, you should test out other interests and continue working to develop your interests.

National/Regional Psychology Conferences

In addition to the time you may spend engaged in volunteer or paid research assistant positions, another important opportunity during your time “off” is to attend conferences in psychology. The general purpose of psychology conferences is to keep researchers, students, clinicians, and the public current with the field through continuing education, discussion/debate of current topics, and dissemination of recent advances in research. Conferences are recommended for *all* students planning to apply to graduate school as they provide information that is useful for both researchers and clinicians. Further, conferences can positively influence students’ motivation and excitement for becoming an active member of the field. Although conferences focusing on special topics or populations are certainly available (you should ask researchers who specialize in your field of interest which ones they recommend), some excellent conferences that broadly focus on many areas of psychology include APA (American Psychological Association, <http://www.apa.org/>) and APS (Association for Psychological Science, <http://www.psychologicalscience.org/>).

Conferences offer several types of presentations. Poster sessions are generally housed in an auditorium or large room and are organized by topic; many people (30+) present posters during a single session. A poster is simply a condensed summary of a research study that communicates

the general purpose, results, and significance of the study. Symposia are slide-driven presentations that are given by a smaller group of researchers (typically 5–8) who are conducting research on a shared topic; these presentations are more selective and reserved for the presentation of more high-quality studies. Clinical round tables consist of a panel of experts who discuss/debate current issues relevant to a specific topic in psychology. There are other types of presentation formats (which you can view on the conference websites), but these are the ones that are generally the most informative for students.

Students are not necessarily required to be a presenter to attend some conferences; however, others are more restrictive and may only allow certain groups (e.g., members only, presenters, and guests only) to attend. During all conference activities, your attire should be professional. Costs of attendance often include membership (sometimes not required), registration, flight, hotel (can be divided with colleagues/peers), ground transportation, poster printing, meals, and of course, souvenirs.

As with all learning opportunities, your experience at a conference can be much more valuable if you take advantage of everything it has to offer. Some of the opportunities offered by conferences are obvious, but others are more subtle. A few benefits are reviewed below.

Current Information

Obviously, conferences provide current information about the field. The research presentations mostly represent studies that were conducted more recently and are intended for publication (or were just published). Often, the data presented at conferences precede publications, and as such, attendees sometimes receive a “sneak peak” at what will be published in upcoming journals. Equally informative, discussions of current topics give attendees more insight as to the current concerns and directions for clinical work, training programs, career development, legislature related to psychology, and the general information structure of the field (i.e., efficient methods for sharing information). This knowledge will be useful as students determine which area of psychology is appropriate for their interests and preferences.

Further, with knowledge of the current trends in psychology, students will be better prepared to conduct innovative research, or implement more empirically based treatments with a clinical population while in graduate school. Note that many professional associations keep prior conference agendas on their website long after the conference has completed. If you missed a conference, you can still learn a great deal about the field, recent research, and active researchers by reviewing the old conference agendas.

Reputable Presenters

Conference presenters include researchers, clinicians, and/or political figures who have great influence and have significantly contributed to the field. When sitting in on their presentations, students can begin to appreciate the effort and dedication that these individuals have exerted during their time as an active member of the psychological community. Their opinions are often the result of continued (decades-long in some cases) discussions, debates, and personal efforts to improve the science and/or practice of psychology. As a result, attendees receive information that is highly intellectual and thoroughly contemplated. During the experts’ presentations, pay close attention to their programmatic way of thinking about the information that they present. More often than not, success in psychological research is accomplished with studies that smoothly integrate preexisting theories with novel ideas or new perspectives.

Grad School Representatives

At conferences, potential graduate school applicants can observe, meet, and evaluate faculty and students from prospective universities. Upon registering for a conference, you will receive a conference program that includes the schedule of presentations and presenters. Look through the program and identify any faculty and students who can provide you with useful information about each university’s psychology program. Try to attend their presentations so that you can get a feel for their current projects or general lines of interest.

For research-oriented students, who could possibly have one mentor during graduate school, presentations can be especially useful and give

them a feel for their potential mentor's personality, enthusiasm for research, and interactive style; all of which could possibly foreshadow their life as a graduate student under their supervision. If you choose to interact with a potential mentor, be mindful of how you present yourself and what you choose to say. We highly recommend interacting with a prospective mentor if, and only if, you have something important to say, or ask, that is relevant to their presentation or line of research. Remember, this will be your first impression so you want to come across as knowledgeable, confident (not arrogant), and appropriate, both in content and in the timing of your interaction. Regarding the timing of your interaction, it is important to keep in mind that the person may have many people wanting to speak with them. Also, during your conversation, don't feel obligated to announce that you are planning to apply to work with him or her. In fact, you should avoid approaching a potential mentor with the sole intention of stating your plans to apply; instead, your intention should be to gather useful information about the person, their research, or their area of expertise. Announce your plans to apply only when, and if, the timing is appropriate (e.g., the conversation becomes directed towards your interests/status in the field). In conversations with graduate students, it is more appropriate to ask questions about their respective graduate programs and discuss their overall levels of satisfaction. But, again, the primary focus should be to gain information about the grad student's research and the ongoing projects in their lab.

The Language of Science

Whether you are presenting your own research or discussing research with a presenter, you should attempt to develop your scientific language.

This language is difficult to acquire and speak fluently so any opportunity to practice should be welcomed. Developing your scientific discussion skills will increase your credibility both in future research discussions and in graduate school interviews. Importantly, there are several things to avoid when speaking the language of science. First, avoid sounding arrogant and overusing technical jargon. Strive to balance necessary scientific lingo with more common terminology so that you appear knowledgeable but also easily comprehensible. Second, don't overstate your knowledge. Instead, admit your lack of knowledge about a topic, remain confident, and at the same time communicate your enthusiasm for learning new information. Lastly, be positive and nonconfrontational. Bad impressions can easily be made with snide remarks, harsh criticism, and negative outlooks. Acknowledge the need for improvements in the field, but do so with respect for those who have dedicated their lives to the progression of psychology.

Final Remarks

Hopefully the information contained in this chapter will be useful as you determine your career path in the field of psychology. Please acknowledge that the content presented is intended to be more suggestive than directive as every individual's path could and should be unique. Examining your interests, seeking out multiple perspectives, and thoughtfully considering your preferences and abilities during this transitional phase will serve you well in choosing the most appropriate program to suit your interests and career aspirations. Good luck!

Deciding to Apply and Successfully Gaining Admission to Graduate Schools in Psychology

2

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Psychology is the most popular major on a large proportion of college campuses. Many thousands of students apply to graduate schools with hopes of pursuing a career in the science or practice of mental health services. Yet, as compared to other types of graduate programs (e.g., law, medicine), remarkably little information is available to help students determine the career path that offers the best match to their interests. Specific practical advice on how to successfully navigate the application process also is lacking.

This chapter is designed to provide an overview of different types of possible career options in the behavioral sciences and mental health industry. Especially detailed information is provided for the most common option in the world of psychology doctoral programs: the clinical psychology doctoral (Ph.D.) program.

An important disclaimer should be mentioned here. The text in this chapter focuses mostly on our opinions and impressions of the current state of the field and of the application process for psychology graduate programs. In no way should this informal advice be used to replace actual data or specific

information provided by professional organizations in the mental health field, individual doctoral programs, or even advice from other professionals. We feel best prepared to comment on Ph.D. programs in clinical psychology, especially those that subscribe to the scientist–practitioner or clinical science models of training. Our experience is exclusively with the admission processes and training goals of these types of programs, and we cannot speak directly to programs that have adopted distinctly different training models. We also have relatively less experience with training programs in nonclinical subdisciplines of psychology. In many places, we have offered links to websites that can provide more detailed information.

Do You Really Want To Be a Psychologist?

When students ask us for professional development advice regarding graduate school, they usually have already determined that they would like to apply to doctoral programs in psychology. Very often, students are interested in clinical psychology. Indeed, applications to clinical psychology programs often outnumber applications to all other types of psychology doctoral programs combined. At many universities, clinical doctoral programs receive 100–600 applications. Far fewer apply to programs in developmental, social, cognitive, biological, and quantitative psychology programs, roughly in descending order of popularity. This apparent preference for clinical

Excerpts of this chapter are reprinted from “Mitch’s Uncensored Advice for Applying to Graduate School in Clinical Psychology” with permission from Mitch Prinstein, Ph.D.

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psychology often is based on students' general desire to work as a therapist, perhaps in a private practice type of setting (e.g., a home office or group practice). Sometimes, students will state an interest in research. Other times, students might indicate that they are somewhat afraid of statistics and "turned off" by the idea of writing a dissertation.

We would say that these impressions of the field of clinical psychology, and of the training activities included during graduate school, are somewhat accurate, but in some ways quite inaccurate. An accurate and thorough description of the field of clinical psychology is somewhat difficult to articulate because the field is changing quite dramatically and quickly. Nevertheless, we think it is important to briefly reconsider what your career goals are (or at least what you are *not* interested in) before talking about graduate applications and deciding on the type of doctoral program that is the best match. We divide this portion of the chapter into two sections: a discussion of careers that include the option for clinical practice and a discussion of careers that do not involve work as a practitioner.

Careers with a Practice Option

Let us assume that you know that you are interested in gaining training as a practitioner and you are intrigued by the mental health field. There are then at least six different mental health fields and many different graduate degrees available to you to pursue these interests. The differences between these fields and degrees are quite dramatic. Each involves somewhat distinct training expectations and opportunities as well as different types of career activities.

Are you interested in research? Teaching? Practicing (e.g., offering therapy or conducting assessments)? Consulting? Mentoring students? Working with young children? Adolescents? Do you want to work in a hospital? A university? A teaching college? An elementary or secondary school? A business corporation? Who will your colleagues be?

What kind of job stability do you want? What salary? A consistent salary or one based on billable hours?

How many years are you willing to dedicate towards training? Are you willing to move, perhaps several times, in order to complete all aspects of training?

Not sure yet? Keep reading for more details about which options may be a good match.

You can also find resources on the Careers page of the American Psychological Association's website: <http://www.apa.org/careers/resources/guides/careers.aspx>.

We will offer some brief descriptions (and links) to discuss the six fields below. These fields are summarized in Table 2.1.

1. Social Work (Terminal Master's or Doctoral degree)
2. School Psychology (Terminal Master's or Doctoral degree)
3. Master's in General Psychology (note: work as an independent practitioner rarely is possible with this option)
4. Counseling Psychology (Doctoral degree)
5. Child Psychiatry (Medical degree)
6. Clinical Psychology (Doctoral degree)

For doctoral degrees in clinical psychology, we also will offer some comments on the choice between a Ph.D. degree and a Psy.D. degree.

Social Work

What do social workers do? The Master's in Social Work (MSW) is a very versatile degree. Social workers can be involved in many different types of careers and settings. Visit the websites of the National Association of Social Workers (<http://www.naswdc.org/> and <http://www.help-startshere.org/>). As you will see on these websites, the many fields within social work include: *Social Caseworkers* (also known as case managers, work within health and community service settings to coordinate the resources received by individuals and their families), *Medical Social Workers* (work with a variety of patients and their families in health care facilities), *School Social Workers* (work in school settings to provide emotional and structural support to facilitate students'

Table 2.1 Subfields of psychology with a practice component

Subfield	Degrees offered	Brief summary of subfield	Major organizations and websites associated with subfield
Social Work	Master's (MSW), Doctorate (DSW or Ph.D.)	Many roles and settings including casework, social policy and research, community organizing, administration and management, school and private practice	National Association of Social Workers (http://www.naswdc.org/) and http://www.helpstartshere.org/)
School Psychology	Master's, Doctorate (Ph.D. or Psy.D.)	Help children and youth succeed in the school setting academically and emotionally	National Association of School Psychologists (http://www.nasponline.org/)
Counseling Psychology	Doctorate (Ph.D. or Psy.D.)	Assess and treat a variety of populations with life stress and psychological disorders in private practice and counseling centers; less emphasis on severe disorders and research	American Psychological Association, Division 17 (http://www.div17.org/students.html)
Psychiatry	Medical Doctorate (MD)	Assess and treat a variety of populations with psychological disorders, with emphasis on psychotropic medications and the medical model; little emphasis on research	American Psychiatric Association (http://www.psych.org/)
Clinical Psychology	Doctorate (Ph.D. or Psy.D.)	Many roles and settings including assessments and therapy, research, and teaching of psychological disorders	American Psychological Association, Division 12 (http://www.div12.org/)
Industrial and Organizational Psychology	Master's, Doctorate (Ph.D.)	Studies psychology as applied to the workplace, including optimal performance, management, and organizational development	American Psychological Association, Division 14 (http://www.siop.org/)

education), *Clinical Social Workers* (work in mental health care settings to provide therapy and counseling), *Administration and Management* (organize and superintend larger structures that offer social services), *Community Organization* (collaborate with members of the community to address gaps within existing service systems), *Social Policy and Research* (engage in research to identify social issues and develop policies to address those issues).

What is the training like? Although you can obtain a doctorate in social work (DSW or Ph.D.), it is completely possible to be an autonomous, practicing social worker with a Master's degree. With only 2 years of schooling (plus an internship), it also can be a quick way to get into the workforce. Master's programs generally can accept a much higher proportion of applicants for admission than doctoral programs (in either social work or psychology); thus, it is somewhat easier to gain admission if going this route.

School Psychology

What do school psychologists do? The National Association of School Psychologists (NASP; <http://www.nasponline.org/>) has a great website that describes the field, the roles, and the salaries of school psychologists. School psychologists generally are focused on helping children succeed in the school setting, both academically and emotionally. Most work in a school setting. Their work can involve individual consultation with children and families, designing programs to assist teachers with specialized classroom instruction needs, and program development to help train basic skills like anger management and social skills. In these ways, school psychologists are like the ambassadors of psychology in a school setting. When a child is experiencing difficulties, if there is a crisis in the school (e.g., trauma, death), or if administrators are setting a policy that will affect children's educational lives, school psychologists are there to ensure that psychological

well-being is maintained and to help educate other professionals on children's psychological needs or limitations.

Another major task for many school psychologists is to conduct assessments of children's academic and social-emotional functioning. Every child who may be eligible for giftedness placement, or for learning disability (LD) services, needs to be evaluated using standardized assessments. School psychologists typically are the only professionals within the school setting with the training to administer and interpret these types of standardized assessments. LD evaluations in particular have important implications not only for children but also for school policy and funding. Public law mandates that children receive the services they need to obtain an adequate education, and each child meeting LD criteria must have an individualized educational plan developed and evaluated periodically. School psychologists often serve the lead role in this endeavor.

What is the training like? You may have heard that to practice as a psychologist, you must have a doctoral degree. That is true for all fields except school psychology. School psychologists can be hired with a Master's degree (plus a yearlong internship). This may be, in part, because there is a tremendous shortage of school psychologists working in the USA, and the field is reducing barriers to getting new, bright students into the profession! Keep in mind, however, that Master's-level school psychologists are not able to practice autonomously; but they can be hired and even tenured within a public school system (e.g., elementary, middle, or high school).

Master's in General Psychology

What is the master's in general psychology? There are not too many terminal Master's programs in psychology left, but those that exist offer a nice option for students who wish to gain advanced experience in psychology before pursuing a doctoral degree. Each Master's program varies in its training goals. However, many offer graduate coursework and require the completion of a Master's thesis to obtain a degree. Programs typically last 1–2 years.

There are benefits and drawbacks to the terminal Master's degree. The good news is that this is an opportunity for structured education in psychology. The coursework is taught at the graduate level and may even include some specialty work (e.g., training in clinical psychology specifically). The Master's thesis offers an opportunity to learn more about psychological research. Students who did not major in psychology during their undergrad years, had a low GPA in college, or who feel like their interests are not yet well-developed, may find this structured educational opportunity enormously helpful.

Unfortunately, the terminal Master's degree in itself does not offer many career options. It should be noted that many doctoral programs in psychology offer a Master's degree en route to the doctoral degree. Thus, within the 4–6 years of doctoral training, a Master's thesis may be required, and the degree will be granted—somewhat marking the half-way point of doctoral training. The terminal Master's degree is different. Many students in terminal Master's programs go on to a doctoral program. Some of these doctoral programs will credit the time in the terminal Master's program towards the doctoral training requirements (e.g., some courses or the need to write a new thesis may be waived). However, other doctoral programs will not waive requirements; thus, there is the potential for some repetition in training. A final drawback pertains to the cost of training. Many schools will charge tuition for terminal Master's training. In contrast, most Ph.D. doctoral programs in psychology waive tuition and typically offer a stipend. Thus, for students who are certain that they are interested in doctoral training and can gain admission into a Ph.D. program, the terminal Master's may not always be a wise option. However, for other students, this can be a very valuable experience!

Counseling Psychology

What is counseling psychology? The American Psychological Association's Division 17 is specifically focused on Counseling Psychology. This division's website has a section specifically dedicated to students with pertinent information (<http://www.div17.org/students.html>).

A long time ago, a clear distinction between clinical psychology and counseling psychology was offered. The field of clinical psychology was meant to address serious mental illness, such as any of the disorders that might be found in the DSM. In contrast, counseling psychology sometimes was referred to as a field that addressed “normal people with normal problems,” often including vocational counseling.

This distinction remains somewhat true, but the boundaries between clinical and counseling psychology are certainly a bit more blurred. Both require a doctoral degree for independent work. Both are referred to among the public as “therapists” or “psychologists.” And few potential clients discriminate between the fields when selecting a therapist. A great many clinical psychologists primarily offer “counseling” to clients with no obvious DSM symptoms. Counseling psychologists also have substantial contact with individuals who meet criteria for some specific disorders (e.g., depression, anxiety, substance use, and eating disorders, for instance).

Counseling psychologists may work in private practice; they also often work in counseling centers (e.g., College Student Mental Health Services, Community Clinics, Community Mental Health Centers). Some counseling psychologists also work in academia as professors or clinical supervisors in counseling psychology graduate programs. Counseling psychologists also can conduct and interpret assessments.

To a large extent, counseling psychologists and counseling graduate training programs are less heavily involved in research activities than are clinical psychologists. Counseling psychologists also are less likely to work as professors within university departments of psychology or as instructors in undergraduate classes (but they may work in schools or departments of education). As compared to clinical psychologists, counseling psychologists also are less likely to work with severe forms of mental illness, such as autism, schizophrenia, bipolar disorder, etc. See the web link above for more information on counseling psychology, its mission, and training emphases.

What is the training like? Like clinical psychology, counseling psychology requires a doctoral

degree. Doctoral programs typically require 4–6 years to complete in addition to a yearlong internship. A dissertation is required, although the research expectations for this project sometimes are lower as compared to the clinical psychology dissertation. Counseling programs often involve more coursework and practical than clinical psychology programs.

Psychiatry

As you may already be aware, the fields of psychiatry and clinical psychology have some overlap in the types of patients or clients who are seen, the types of services offered, and the types of settings in which members of these professions may work. However, several prominent differences exist between psychiatrists and clinical psychologists; these are briefly outlined here.

First, psychiatry is a medical specialty requiring a medical degree (MD), an internship, and a residency (and sometimes a fellowship as well). In contrast, clinical psychologists obtain a doctorate degree (either Ph.D. or Psy.D.) in clinical psychology and complete an internship and an additional year of supervised clinical experience before obtaining licensure.

Second, psychiatry has traditionally focused on the use of psychotropic medications more than psychosocial treatments (e.g., therapy) to ameliorate mental health symptoms, while the opposite is true for clinical psychology. Many psychiatrists do conduct therapy, although some may use a somewhat different approach that relies on a different theoretical discipline than is emphasized in clinical psychology. Likewise, some states in the USA now are allowing clinical psychologists to obtain prescription authority. Within the next decade, many psychologists may live in regions that will allow them to prescribe medications to their clients. However, psychologists’ training regarding medications will likely be less thorough in scope than the training offered within psychiatry programs.

Third, the majority of clinical psychology training programs adopt a scientist–practitioner or clinical science training model. This model emphasizes both the science and practice of psychology based on the premise that these educational

experiences reciprocally inform one another and are conjointly needed to produce a qualified professional. In contrast, training models in psychiatry typically do not subscribe to scientist–practitioner models; few involve research training or activities.

Clinical Psychology Ph.D. Degree

Many describe the clinical psychology Ph.D. degree as one of the most versatile graduate degrees available. Clinical psychologists with a Ph.D. degree are qualified to work as practicing clinicians, professors in academia conducting research or teaching, consultants, and supervisors to other mental health professionals.

As described above, clinical psychologists often are trained in scientist–practitioner programs (often referred to as the Boulder model of training). However, this model often causes some confusion among students evaluating career options. In a scientist–practitioner model (or the distinct “clinical science” model, see below), students are trained as both researchers and practitioners. In other words, in addition to the research expertise required to complete a Master’s thesis and dissertation, students’ experiences include many “clinical hours” conducting assessments and therapy in a variety of structured, supervised clinical placements to develop practitioner skills. Doctoral Ph.D. programs almost exclusively are located within university departments of psychology that employ clinical psychology professors who themselves are dedicated largely towards research and teaching endeavors. Thus, many clinical psychology Ph.D. students feel that they receive excellent exposure to research experiences during graduate school, and perhaps even implicit pressure to pursue a research-oriented career following graduate studies. Indeed, many graduate programs specifically examine graduate applications for information confirming an interest in research.

Yet, the majority of graduates of clinical psychology Ph.D. programs nevertheless pursue careers that involve primarily practitioner experiences. *This raises a common question regarding the pursuit of a Ph.D. degree in clinical psychology: Is this the best option for you if you are not at all interested in research?*

The short answer is: No. But a longer answer is necessary.

The scientist–practitioner model is based on the idea that clinical psychologists should have expertise in both science and practice. It also is based on the idea that education in both areas is necessary to be fully competent in either. The model suggests that a psychologist who is unable to critically evaluate theories and methods related to practice will be inadequate as a clinician. Similarly, a researcher who has not had exposure to actual clients experiencing psychopathology will be unable to develop and test appropriate hypotheses regarding psychological symptoms or treatment.

An apt analogy may come from a description of graduate training in law. Many who have pursued a law degree state that the curriculum is not specifically designed to teach trial room strategies or jury selection techniques, etc., but rather, that graduate training is meant to help students learn “to think like a lawyer.”

Doctoral Ph.D. training often is based on the idea that students must learn to “think like a psychologist.” This means that students must be extremely comfortable with the scientific method, including the generation of hypotheses, the development of standardized procedures that can be used to evaluate these hypotheses, and the ability to draw appropriate conclusions that may inform future hypotheses. These skills are necessary not only for research endeavors but also when interacting in a therapeutic context. Case conceptualization skills involve a similar set of procedures as described above, and it is this approach that necessitates dual training as a scientist–practitioner during graduate school in clinical psychology. Unlike law school, however, graduate school in clinical psychology involves direct application of coursework learning in real-world situations. Within a year of admission in most programs, clinical psychology graduate students will begin seeing clients, conducting assessments, and offering treatment (all with supervision, of course).

Thus, the reason why many Ph.D. graduate programs emphasize and even select students who are interested in research is because it is believed that research training helps students

develop the critical thinking skills that are needed in any activity as a clinical psychologist.

Having said this, it is important to note that research training is a major emphasis of the graduate curriculum (including a Master's thesis, dissertation, etc.). Students who do not enjoy research or the research process will not be happy graduate students. Students who do not anticipate any openness to the possibility of conducting research in their careers, even if only as a small proportion of their job responsibilities, also may not be a good match for Ph.D. training. It is important to be very honest with yourself at this stage in your professional development. The Ph.D. application process is somewhat arduous, and graduate training can be demanding. It is very important to carefully determine whether this is a good match for you.

The “Clinical Science” Option in Clinical Psychology

Although most doctoral programs in clinical psychology have adopted the “Boulder Model” or “Scientist–Practitioner Model” of training, an increasing number of programs have adopted a philosophy that emphasizes scientific training above clinical practice. Specifically, these programs have a unified commitment emphasizing the promotion, training, and dissemination of clinical psychology as a scientific discipline. Clinical science programs therefore emphasize training in evidence-based treatments (i.e., those that have substantial evidence supporting their efficacy) and offer opportunities for students to gain exceptionally strong training in cutting-edge research methods. Many of the philosophies of the clinical science movement are reflected in the writings of Dr. Dick McFall, which can be found through the website of the Society for a Science of Clinical Psychology (SSCP), in the About the Society section: <http://sites.google.com/site/sscp-website/Home/manifesto-for-a-science-of-clinical-psychology>. Clinical psychology programs that have successfully adopted a clinical science training perspective are members of the Academy of Psychological Clinical Science; a list of these

programs can be found on the Members page of the Academy's website: <http://acadpsychclinical-science.org/index.php?page=members>. The astute student may notice that Academy member programs also are among the most popular in the country, receiving perhaps more applications than non-Academy programs on average. Clinical science programs are believed to produce more graduates who pursue academic careers in clinical psychology and who are more likely to offer evidence-based treatment options to their clients in practice.

Research and Clinical Work in Clinical Psychology

Perhaps you still are unsure whether you are interested in research or you would like to know more about different possibilities for research activity in clinical psychology. This section discusses three clinical psychology subfields that offer distinct opportunities for research and clinical work.

Most clinical psychology programs offer experiences that could be broadly categorized as fitting the subfields of Clinical Child/Adolescent, Clinical Adult, or Clinical Health Psychology (or combinations, such as Child Health Psychology). Some programs have specific “tracks” or “concentrations” in these subfields, and some offer more varied experiences across two or more of these areas in a more generalist training model. A brief description of each is included below.

Clinical Child/Adolescent Psychology

Clinical child/adolescent psychology generally is concerned with psychopathology among youth, such as the types of disorders that are discussed in the DSM. Note: although many refer to the field using the term “clinical child psychology,” research and clinical work usually involves exposure to youth at all developmental levels, including infants, toddlers, school-aged youth, and adolescents. Clinical child/adolescent psychologists may work as practitioners, work in academia as professors, or work in a variety of settings (e.g., universities, medical centers, counseling

centers) in which research, teaching, and/or clinical work is possible.

Examples of clinical child/adolescent psychology research and clinical work: Much of the work done by clinical child/adolescent psychologists can be organized into general themes of psychological symptoms:

Externalizing disorders (e.g., conduct disorder, oppositional defiant disorder, ADHD)

Internalizing disorders (e.g., anxiety, depression)

Mental retardation and pervasive developmental disorders (e.g., autism)

Serious mental illness (e.g., childhood schizophrenia, bipolar disorder)

For each disorder, there are bodies of literature that examine:

- (a) Causes and consequences of symptoms, including (1) the study of individual biological, cognitive, and social factors that may be associated with symptoms and (2) the study of family, peer, school, community, or cultural factors that may affect the onset, presentation, maintenance, or reduction of symptoms.
- (b) Efficacious and effective modes of treatment (i.e., different theoretical orientations), including factors that may modify treatment efficacy, or specific therapist and client behaviors that affect the outcome of therapy.
- (c) Prevention strategies.
- (d) Comorbidity.
- (e) Increasingly, research in this area has integrated findings on biological, neurological, and genetic factors that may interact with psychosocial factors in the course of each disorder.

A good idea is to visit the website for the *Journal of Clinical Child and Adolescent Psychology* (www.jccap.net) or the *Journal of Abnormal Child Psychology* (<http://www.springerlink.com/content/104756/>), or to examine these journals using the PsycInfo tool at your university's website. Read over the titles and abstracts of some recent issues, and you will get a good sense for the kind of research that clinical child/adolescent psychologists do.

Clinical Adult Psychology

Much like clinical child/adolescent psychology, clinical adult psychology also generally is concerned with psychopathology; however, the population of interest typically is above 18 years of age. Psychologists interested in working with the elderly specifically may focus on *geropsychology*. Clinical adult psychologists represent the majority of all clinical psychologists, although interest in the three subfields of clinical psychology has been becoming more evenly distributed in recent years. Like clinical child/adolescent psychologists, clinical adult psychologists may work in a variety of settings (e.g., universities, medical centers, counseling centers) in which research, teaching, and/or clinical work is possible.

Examples of clinical adult psychology research and clinical work: Clinical adult psychologists' work also is often divided by disorder and diagnosis. Perhaps the most common themes of research and clinical work in clinical adult psychology include:

Mood and anxiety disorders (e.g., OCD, phobias, depression)

Axis II (personality) disorders (e.g., borderline, narcissism, antisocial)

Substance use disorders—sometimes included in Clinical Health Psychology

Eating disorders—sometimes included in Clinical Health Psychology

Serious mental illness (e.g., schizophrenia, bipolar disorder)

For each disorder, there are bodies of literature that examine:

- (a) Causes and consequences of symptoms including (1) the study of individual biological, cognitive, social factors that may be associated with symptoms and (2) the study of family, community, or cultural factors that may affect the onset, presentation, maintenance, or reduction of symptoms.
- (b) Different modalities of treatment that may be useful for reducing symptoms in adults, such as individual, group, or couples treatment.
- (c) Efficacious and effective approaches of treatment (i.e., different theoretical orientations),

including factors that may modify treatment efficacy, or specific therapist and client behaviors that affect the outcome of therapy.

- (d) Comorbidity.
- (e) Increasingly, research in this area has integrated findings on biological, neurological, and genetic factors that may interact with psychosocial factors in the course of disorder.

A quick review of the table of contents in the *Journal of Abnormal Psychology* (<http://psycnet.apa.org/journals/abn/>) or the *Journal of Consulting and Clinical Psychology* (<http://psycnet.apa.org/journals/ccp/>) will help to gain a greater sense of the types of research areas that are common in clinical adult psychology. These journals also include articles on clinical child/adolescent psychology and clinical health psychology.

Clinical Health Psychology

Clinical health psychology also is concerned with psychopathology, but with a particular emphasis on symptoms or adjustment that is related to some aspect of physical health. Clinical health psychologists interested in working with youth are referred to as *pediatric psychologists*. Clinical health psychologists tend to work in general hospital settings more often than do other clinical psychologists. However, clinical health psychologists also may open a private practice or work in academia as professors, and both options offer a wide range of areas for research and clinical work. Some examples are discussed below.

Examples of clinical health psychology research and clinical work: Much of the work done in clinical health psychology is associated with one of the following questions:

1. Do individuals with a physical illness (e.g., cancer, HIV) or physiological irregularity (e.g., chromosomal abnormality) experience psychological adjustment difficulties?
2. Can psychological interventions be used to help increase individuals' adherence to medical regimens (e.g., for diabetes, asthma)?
3. Can psychological interventions be used to help reduce health symptoms (e.g., encopresis, pain associated with medical procedures)?

4. What factors are associated with individuals' engagement in health risk or injurious behaviors, such as substance use, sexual risk behaviors, and weight-related behaviors?
5. What is the association between psychological and physical health (e.g., stress, immunity)?

Be sure to check out *Health Psychology* (<http://www.apa.org/pubs/journals/hea/index.aspx>) or the *Journal of Pediatric Psychology* (<http://jpepsy.oxfordjournals.org/>) for some specific examples of work in this area.

The Ph.D. Versus the Psy.D.

A final issue to discuss pertains to two types of doctoral degrees that are available in clinical, counseling, and school psychology. All of the information above describing doctoral training has been focused specifically on the Ph.D. degree. However, a separate option exists for doctoral training. Although we are not experts on this type of degree, we have offered a general description of this option below.

The Psy.D. was developed as a new type of doctoral degree several decades ago in response to some opposition regarding the “Boulder Model” (i.e., scientist–practitioner). Specifically, it was argued by some that the training in science was not necessary to become a practicing clinician, and a new training model largely emphasizing clinical work was developed.

Today many Psy.D. programs are available. Like other doctoral degrees, Psy.D. programs typically take about 4–6 years to complete (plus an internship year). The vast majority of training experiences are clinical in nature as well as some coursework. Some programs require a “dissertation” document; however, this usually is smaller in scope than what is expected in Ph.D. programs.

Many students ask whether Psy.D. programs are less prestigious than Ph.D. programs. Although it is difficult to comment on this specifically, there are some important differences between these programs that should be noted.

As mentioned above, Ph.D. programs are almost exclusively located within university settings, which are not-for-profit institutions. Some

Psy.D. programs, however, are located in for-profit institutions, such as freestanding “Professional Schools of Psychology.” Some of these professional schools have names that include the word “university,” however, upon close inspection, it is evident that such universities have no departments or units other than psychology. While most Ph.D. programs typically waive tuition costs for graduate students and offer assistantships that provide a modest annual stipend (typically between \$12,000 and \$18,000), many Psy.D. programs charge tuition to students, which can cost approximately \$10,000–\$20,000 annually.

There currently are no formal rankings of doctoral programs in clinical psychology that are generally considered to be reliable or valid. However, attempts have been made to document the quality of graduate programs in a variety of ways. For example, since all North American psychologists who wish to obtain a license to practice must take a standardized exam (called the EPPP), one metric for examining the quality of graduate training and graduate admissions may be to compare average scores on the EPPP among graduates of each program. Results from this analysis, conducted over 10 years ago, can be found on the website of the Social Psychology Network, at <http://www.socialpsychology.org/clinrank1997.htm>. These data should be interpreted with caution. In addition, the rates of admission to doctoral programs and the rates of successful placement of graduate students into APA-accredited predoctoral internships can be examined at these sites (<http://www.unc.edu/~mjp1970/Admissions%20Rates.pdf> and <http://www.unc.edu/~mjp1970/Internship%20Outcomes.pdf>) can be examined closely. Across all data, a notable trend is evident. The average EPPP scores, admission rates, and successful internship placement rates from Psy.D. programs are less favorable than from Ph.D. programs.

Overall, the Psy.D. option can be an excellent choice for students who are interested in obtaining a doctoral degree in psychology and have decided that they do not wish to be involved in research—either during graduate training or during their career. However, the Psy.D. option should be exercised cautiously. Some very high

quality programs are available (often those that are at not-for-profit institutions), and excellent training is certainly possible. However, applicants will need to do their homework to thoroughly investigate the adequacy of training if pursuing this type of degree.

The Council of University Directors of Clinical Psychology (CUDCP) has produced a set of guidelines for students who are interested in pursuing clinical psychology careers. This document can be found on the website of the CUDCP, under Graduate Training: http://cudcp.us/files/Reports/CUDCP_2011_Psy_Grad_School_Fact_sheet.pdf.

Careers Focusing Exclusively on Science, Without Practitioner Training

There are many possible graduate pursuits in psychology that do not involve work as a practitioner. Each of these subdisciplines offers rich opportunities for careers in behavioral science as well as policy, prevention, and education. Increasingly, these subdisciplines of psychology have begun to have important influences on many professional fields outside of psychology.

Most undergraduate departments of psychology have one or more faculty who represent subdisciplines within the field, such as social, biological, cognitive, developmental, experimental, quantitative, developmental, or community psychology. Each of these areas can be pursued for a graduate degree (although few community programs remain). Just a few examples of these types of options are offered below. See Table 2.2 for a list of the major scientific subfields of psychology.

What is the training like? For all of these programs discussed in this section, doctoral training is similar to clinical psychology doctoral training in many ways. All involve 4–6 years of training, coursework, a Master’s thesis, and a dissertation. Doctoral training in developmental, social, cognitive, biological, and quantitative programs does not involve any clinical practicum work, and there is no clinical internship year.

Table 2.2 Subfields of psychology focusing exclusively on science (without a practice component)

Subfield	Degrees offered	Brief summary of subfield	Major organizations and websites associated with subfield
General Psychology	Master's	Offers advanced training in general psychology for students who wish to gain more experience prior to pursuing a doctoral degree	N/A—search for individual programs
Developmental Psychology	Doctorate (Ph.D.)	Studies behavior as it changes across the life span (mostly in children and adolescents)	American Psychological Association, Division 7 (http://ecp.fiu.edu/apa/div7/)
Social Psychology	Doctorate (Ph.D.)	Studies social and group influences on individual behavior	American Psychological Association, Division 8 (http://www.spsp.org/)
Behavioral Neuroscience	Doctorate (Ph.D.)	Studies the biology of behavior, including the role of the brain in regulating behavior	American Psychological Association, Division 6 (http://www.apadivisions.org/division-6/index.aspx)
Experimental Psychology	Doctorate (Ph.D.)	Studies many fields of psychology including sensation and perception, learning, conditioning, motivation, and emotion	American Psychological Association, Division 3 (http://www.apa.org/divisions/div3/)
Quantitative Psychology	Doctorate (Ph.D.)	Studies methods, research design, and statistics as applied to all areas of psychology	American Psychological Association, Division 5 (http://www.apa.org/divisions/div5/)
Cognitive Psychology	Doctorate (Ph.D.)	Studies internal mental processes including memory, reasoning, language, information processing, and decision making	Psychonomic Society: http://www.psychonomic.org/ Cognitive Neuroscience Society: http://www.cogneurosociety.org/

Developmental Psychology

What is a developmental psychologist? Developmental psychology is a scientific discipline that is focused specifically on the study of changes in behavior and cognition across the life span. The majority of work done in developmental psychology is on infants, children, and adolescents, although there is some research on emerging adulthood, middle adulthood, and geriatric issues. Developmental psychologists are interested in understanding topics such as cognitive, language, motor, social, emotional, and moral development, focusing both on characterizing the abilities of individuals at different ages as well as on factors that may influence developmental change. Moreover, the field is invested in understanding both intra-individual (i.e., even including neuroscience mechanisms) and inter-individual (i.e., parental, peer, school, community, and cultural) influences on development.

As a scientific field, developmental psychology does not involve clinical practice. However,

many programs do have an emphasis on studies of prevention programs. If this is of interest, it is good to look out for programs emphasizing “applied developmental psychology” and information indicating research on prevention and intervention strategies (e.g., Head Start, Anti-Bullying campaigns). Thus, a developmental psychologist can be involved in research on the development or effectiveness of interventions. However, developmental graduate programs do not offer training to individuals who want to be licensed as a clinician (i.e., who want to conduct clinical assessments or therapy). Thus, these programs are specifically geared towards students with an interest in pursuing a strictly research and/or teaching career, either in a research center or as a professor in an academic position. Developmental psychologists also may work in settings that can affect policy at local, state, or national levels.

Read the table of contents in *Child Development* (<http://www.wiley.com/bw/journal.asp?ref=0009-3920>) or *Developmental Psychology* (<http://>

www.apa.org/pubs/journals/dev/index.aspx) to learn more about this subdiscipline. More information can be found from Division 7 of the APA: <http://ecp.fiu.edu/apa/div7/?a>. The Society for Research on Child Development (www.srcd.org) also offers useful information.

Social Psychology

What is a social psychologist? Many students think that social psychology involves the study of interpersonal relationships; however, this is only part of the story. More accurately, social psychology focuses on the manner in which individuals behave in the context of group influences. This may involve work on peer group influences, prejudice, political messaging, social cognition, attitude formation, and persuasion as well as many other related areas. Social psychologists may be interested in understanding emotion, educational reform, or training and employment issues. Consequently, social psychologists are found almost everywhere in the workforce. Most are in academia. Some are an integral part of corporate America, informing marketing and advertising fields, and structuring employment settings. Social psychologists play an important role in education policy and methods of instruction. The work of social psychologists also influences legal and political contexts. Their work usually involves highly controlled experiments with careful manipulations of study variables, making social psychologists highly valued methodologists as well.

Read the table of contents in the *Journal of Personality and Social Psychology* (<http://psycnet.apa.org/index.cfm?fa=browsePA.volumes&jcode=psp>) to learn more about this subdiscipline. Also, see www.socialpsychology.org for more information on the field.

Quantitative Psychology

What is a quantitative psychologist? If you are interested in statistics, quantitative psychology is for you. As research hypotheses grow increasingly sophisticated, and research designs involve greater volumes of data, across multiple modes of observation, time points, or from multiple informants, new quantitative procedures are needed. Quantitative psychologists develop these

new statistical approaches and help to apply existing statistical approaches to innovative problems. Many quantitative psychologists have their own substantive area of interest—a topic that they study of specific interest to them. In addition to their work exploring these specific hypotheses, quantitative psychologists also design simulations and procedures that can be used more broadly and help set the standard for how all other psychologists can test their hypotheses. There is a great need for quantitative psychologists in the field of psychology, as well as in many other disciplines who are often eager to hire quantitative psychologists in the corporate world, private industry, or government. As compared to the number of career opportunities available for quantitative psychologists, there are relatively few applicants pursuing this area of graduate study.

Read the table of contents in the *Psychological Methods* (<http://www.apa.org/pubs/journals/met/index.aspx>) to learn more about this subdiscipline. Also, see APA Division 5 (<http://www.apa.org/divisions/div5/>).

Cognitive Psychology

What is a cognitive psychologist? Cognitive psychology is a field that addresses learning, perception, memory, language, and other areas of cognitive processing (e.g., organizing information, consolidating information from the senses). Cognitive psychologists often conduct highly controlled experiments to identify how cognitive functions are developed, maintained, and may atrophy as individuals become older or sustain traumatic injuries. Recently, work in cognitive psychology has become more integrated with work in neuroscience, allowing for more in depth exploration of specific brain structures or processes that are implicated in specific cognitive tasks. Read the table of contents in the *Journal of Experimental Psychology* (<http://www.apa.org/pubs/journals/xlm/index.aspx>) or *Cognitive Psychology* (<http://www.journals.elsevier.com/cognitive-psychology/>) to learn more about this subdiscipline. Also, see the Psychonomic Society (<http://www.psychonomic.org/>) or Cognitive Neuroscience Society (<http://www.cogneurosociety.org/>) for more information.

Behavioral Neuroscience

What is a behavioral neuroscientist? Of course, most behavior can be explained by specific brain structures and neurological processes occurring within the brain. Often using animal models to study brain structures and functions, behavioral neuroscientists study behavior at the cellular level! Using controlled experiments, it is possible to understand many different types of behaviors (e.g., how drugs affect the brain, how individual learning, memory, and perception works, what biological substrates are associated with emotion, etc.). Recent work in behavioral neuroscience also takes advantage of imaging technology (e.g., fMRI) to advance this field. Behavioral neuroscience is a terrific area to become a part of—there is an opportunity for substantial integration with related fields, such as chemistry, biology, pharmacology, and psychiatry.

Read the table of contents in the *Journal of Neuroscience* (<http://www.jneurosci.org/>) or *Behavioral Neuroscience* (<http://www.apa.org/pubs/journals/bne/index.aspx>) to learn more about this subdiscipline. Also, see the Society for Neuroscience (www.sfn.org) for more information.

Deciding Where to Apply

Hopefully, you have begun to gain some insight into the type of career you may wish to pursue, and you have considered various possible graduate programs that may be right for you. You may be wondering whether you can apply to more than one type of graduate program.

In short: Yes. Application to different types of graduate programs is somewhat frequent. For example, because admission rates are extremely low for clinical psychology Ph.D. programs, if this type of program is your first choice, it may be a good idea to apply to other types of programs in addition to clinical psychology. For example, you may want to do this if a clinical psychology Ph.D. program is your first choice but your grades and scores are “borderline” according to the admission statistics posted on program websites or if you are not sure your research background is strong enough.

Another reason to do this might be that you have a specific research interest that fits into different types of programs. For example, a student who is interested in health risk behaviors among adolescents could consider programs in clinical child psychology, pediatric psychology, or developmental psychology (or public health).

If you are applying to different types of programs because you are still unsure of what your interests and/or career goals are, you may want to wait a year before launching into the graduate school application process. The process will be much more overwhelming if you begin it unsure of how much you are actually interested in attending the programs you are applying to. You should not apply until you have a sense of whether you are most interested in research or clinical work or both, until you have an idea of the research areas that interest you most, and until you are so excited about the programs you are applying to that you cannot *wait* for the spring to arrive so you can interview and choose a program!

Prior to Applying to Doctoral Ph.D. Programs in Psychology

This next section offers an overview of common issues to consider prior to applying to doctoral Ph.D. programs in psychology.

When to Apply

Some applicants apply to graduate school during their senior year in college. An increasing number of applicants wait for 1–3 years, during which they work as a postbaccalaureate research assistant or in a related position. Neither of these options in itself is likely to determine the outcome of your applications; however, obtaining a “postbacc” position may help you gain needed experience. Apart from CV building, the decision to take time away from school may be a personal decision based on your readiness. Some pros/cons are listed below (also see Chap. 1).

Taking Time Away from School: Pros

- Being a graduate student is a very different experience from being an undergraduate student, and for many people it can be difficult to make this transition with only a summer in between. Graduate school in psychology is not about studying well for tests and maintaining a high GPA. In a doctoral program, you will be working with professors as colleagues. You will likely be responsible for organizing and running large projects. You will be expected to balance these duties with your coursework. You will be expected to actively participate in most of your classes, some of which may have only a handful of students. If you are entering a clinical, counseling, or school psychology program, you will likely begin conducting assessments and/or therapy with real clients very early in your graduate training (possibly within the first year).
- It can be challenging to apply to graduate school while balancing college coursework and perhaps a senior honors thesis. Applying once out of school (especially if working a “9 to 5” job) may allow an applicant more time to complete applications.
- Working in a psychology lab after college may be necessary for admission to a top clinical psychology program if you received little research training as an undergrad.
- Working in a psychology lab or a related organization after college can help you refine your research interests, figure out what you want to study in graduate school, and figure out which type of graduate program might be best for you.
- Applying to graduate programs after completing all undergraduate coursework and projects allows applicants to discuss their completed undergraduate honors thesis (if applicable) during the application process (e.g., in personal statements and during interviews).
- Working a fulltime job before graduate school may allow applicants to save up money that can be very helpful to have as grad students!
- It is not a good idea to enter graduate school immediately following college “just to get it done.” In the larger scheme of your life, it

probably will not matter if you get your doctoral degree at age 26 or 28, and you will probably not be a happy graduate student if you try to push through graduate school for 4–7 years with the goal of just *finishing*. Graduate school can be a wonderful experience when you are ready for it, but it is definitely a lot of work and a big adjustment. Many current graduate students report that they are happy they took a year or 2 off in between college and graduate school, because they entered graduate school ready and excited for what lay ahead of them.

Taking Time Away from School: Cons

- Some people do not want to lose momentum: They are ready to begin graduate school and have no interest in taking time off in between.
- Trying to find a psychology-related job for the year or 2 in between college and graduate school may be challenging and stressful.
- If you apply to graduate school while still in college, you will be able to consult professors and graduate students in person as you decide which schools to apply to, work on your personal statements, and complete your applications.
- If you apply to graduate school while still in college, you will be able to distribute materials for letters of recommendation in person, pick up transcripts in person, perhaps visit your college’s Writing Center for help with your personal statement, and have access to all the resources a college campus offers.
- It is easier to defer student loans if you remain a full-time student without a break in between.
- If you go straight through from college to graduate school, you will finish grad school earlier; if you graduate from college at age 22, you could have your Ph.D. by age 27. This is very appealing to many people.

Obtaining Research Experience

Perhaps the single most important thing you can do to improve your chances of graduate school

admission is to obtain research experience. However, note that research experiences can vary considerably. As an undergraduate student, you may have opportunities to become involved in a faculty member's lab and to engage in a variety of possible tasks. It is quite common for undergraduate students to assist with data entry, library research, data coding, data collection—perhaps involving interactions with research participants, or other tasks that may be specific to the type of research you are interested in (e.g., computer programming, creation of study materials or stimuli, statistical analysis).

What is the best research experience to get? No single type of research experience is necessarily better than another (although some are admittedly tedious, perhaps). More important is that your research experience helps you to accomplish three goals. First, it is important for you to become exposed to the research process to determine whether you enjoy this type of work. You will undoubtedly observe that research is very time consuming, detail-oriented, meticulous endeavor that may take months or even years before achieving results. Research also can be remarkably invigorating, allowing you to examine ideas that are important to you, rigorously test these ideas, and then disseminate your results to the international community of psychologists through conferences or manuscripts! Research is not for everyone, and this exposure may help you to learn whether this is an activity that you want to become thoroughly involved in for many years to come. If you do not find that you have a passion for at least one aspect of the research process, it may be challenging to retain the stamina needed to successfully complete independent research projects as a graduate student.

A second goal of your research experience is to learn about the type of research questions that interest you the most. Assistance on a study related to adolescent girls' depression may help you to learn that you enjoy, or do not enjoy, working with adolescents, examining gender-related issues, or studying internalizing disorders, for instance. Your work on a project examining therapy process variables that increase the efficacy of behavioral treatment of externalizing symptoms

may help you appreciate applied research questions, or increase your desire to study precursors that predict the onset of oppositional behaviors. Importantly, when you apply to graduate programs, it will be necessary for you to have some focus regarding the type of research you would like to conduct.

Third, and perhaps most important, it is essential that your research experience allow you to become educated regarding the scientific questions under investigation. Too many undergraduate students gain research experience that helps to develop specific skills (which is certainly very important!), but not a broader understanding of what the research is about or why it is being conducted.

Offering a scientific contribution to the research project can be difficult and intimidating, however. Some students feel reluctant to offer ideas and input during lab meetings that include mostly graduate students, postdocs, and faculty members. It also may feel somewhat challenging to schedule an individual meeting with your faculty mentor to discuss your ideas. We strongly recommend that you attempt to do so, however, to get the most out of your research experience. A good start is to request some articles that will help you to read a bit about the area under investigation. Then, it is worth spending a few hours on PsycInfo looking for related articles that help you to understand how multiple investigators have thought about the issue you are studying. Then try asking some questions, or offering some opinions and thoughts during a lab discussion. Your ideas do not need to be revolutionary; they should simply help you to understand more of what is going on and indicate your interest and curiosity. For instance, you may want to know: "Why are we measuring variable X this way?" "Is this related to theory Y that is discussed in this article I read?" "I wonder if examining Z would help us to understand the issue better."

Your research experience should help you to "think like a scientist," and even if you are simply entering data, you might be able to observe something that allows you to develop a question about the nature of whatever it is that you are studying (e.g., "Everyone responds with a '1' to this item;

perhaps we are not assessing this well”). Incidentally, demonstrating this ability to your faculty supervisors also will help them write you a letter of recommendation when you apply to graduate school.

As we have discussed, admission to psychology Ph.D. programs is quite competitive. Successful applicants now typically have amassed considerable research experience before applying to doctoral programs. In addition to work in a research lab as a volunteer, or for a semester of course credit, other options include the completion of an honors thesis, or taking a full-time research assistant position for 1–2 years following the completion of the undergraduate degree. The honors thesis is a particularly excellent opportunity to gain research experience; the thesis helps you to develop and demonstrate independent research skills by developing and testing your own hypothesis. The thesis also helps you to gain substantial exposure to a faculty member who can provide mentorship on your thesis and later write you a letter of recommendation. A full-time research assistant position also can be a terrific opportunity. In this role, you will develop advanced knowledge and skill in the detailed procedures required to conduct an investigation, to work closely with a faculty member, and often to supervise undergraduate research volunteers. While neither the honors thesis nor the research assistant position is *required* for entry into graduate school, a remarkably high proportion of successful applicants to top Ph.D. programs do have one or both of these experiences.

Obtaining Clinical Experience

Many students ask whether they need to obtain clinical experience to gain entry into doctoral Ph.D. programs in clinical, counseling, or school psychology. In our opinion, the short answer is, “No.”

Clinical experience allows you to gain exposure to populations who are experiencing psychological symptoms. For this reason, it can be a good experience, and perhaps one that you should have before embarking on a clinical career. This experience also will help you learn to develop

rapport with individuals of different ages and in different settings. Some clinical experiences occur in excellent treatment facilities (or in treatment/research summer camps for youth with psychopathology), and these particularly can be excellent experiences.

However, since your role during this clinical placement will not be that of a true clinician, the skills you develop are not necessarily going to increase the attractiveness of your application significantly. In other words, you will learn all you need to know about clinical work during graduate school, so these experiences are not needed to demonstrate any specific expertise. If you believe this experience will help you determine your interests and career choice, then it is a terrific idea. If you have already decided to apply to clinical Ph.D. programs, and you have a choice between a research and clinical experience, then choose research, research, research. For counseling or school psychology programs, research experience may be less essential.

Applying to Doctoral Ph.D. Programs in Psychology

Table 2.3 offers a sample timeline to help accomplish the many tasks that are required when applying to doctoral programs in psychology. This section offers a few considerations for several of these steps.

Selecting Potential Schools and Mentors

For most graduate programs in psychology, you will be working with a primary research advisor, becoming immersed in various projects in his/her lab. In most cases, the match between you and your advisor is even more important than the characteristics of the overall program. It is important that this person’s research *thrills you*, because you will be working with him/her on that research for 4–6 years! Keep in mind that if you do not have research experience in a potential advisor’s area of

Table 2.3 Monthly tasks for successfully managing the graduate school application process

Prior to August of the year you are applying (as early as possible to reduce stress during the fall months)	
• Obtain research experience	
• Choose type(s) of programs to apply to	
• Study for and take the General GRE	
Send score reports to schools you are most interested in at this point	
Keep track of which schools are sent these scores; as score reports are sent following each test, some schools may not receive both your General and Psychology scores, so it will be necessary to send another score report after you have taken both tests	
• (If necessary) Study for and take the Psychology GRE	
Send score reports to schools you are most interested in at this point	
Keep track of which schools are sent these scores (see above)	
August	
• Research schools and advisors (begin Excel spreadsheet to organize)	
• Read sample personal statements	
• Create a draft of your CV	
Ask for comments from mentors, Career Center, etc.	
September	
• If not listed on their website, contact potential advisors to see if they will be taking students	
• Finalize list of schools to apply to	
• Create an organizational system for applications using Excel	
Obtain and file paper copies of all application materials for reference	
• Ask professors to write your letters of recommendation	
Include a copy of CV, list of schools, and deadlines	
Ask for their preferences (e.g., whether they want to submit materials online or through the mail; when they would like to receive reminder emails)	
If sending paper rather than online letters, provide recommenders with prestamped, pre-addressed envelopes, and be sure it is clear which envelope goes with which school	
• Brainstorm and write first draft of personal statement	
October	
• Ask for comments from mentors, Career Center, etc. on personal statement draft	
• Order remaining GRE score reports	
• Order transcripts	
• Write drafts of supplemental essays	
Ask for comments from mentors, Career Center, etc.	
• Begin filling out application forms online	
November	
• Final draft of personal statement and supplemental essays	
• Complete application forms for all Dec. 1 deadline schools	
If mailing forms, make sure to mail several weeks in advance	
Check to make sure all materials have been received	
• Check with recommenders about letters	
• Last chance to take the Psychology GRE	
Order remaining GRE score reports	
December	
• Complete application forms for remaining schools (if mailing forms, make sure to mail several weeks in advance)	
Check to make sure all materials have been received	
• Thank everyone who helped you with the application process	
• Breathe a sigh of relief and enjoy the holidays!	

(continued)

Table 2.3 (continued)

January, February, March
<ul style="list-style-type: none"> • Receive interview offers (phone interviews and official visits)
<ul style="list-style-type: none"> • Prepare for interviews: <ul style="list-style-type: none"> Look up work by potential advisors Make lists of questions for potential advisors and current graduate students
<ul style="list-style-type: none"> • Go to interviews: <ul style="list-style-type: none"> Dress professionally Ask lots of questions Be gracious towards everyone you meet
February, March, April
<ul style="list-style-type: none"> • Thank people who interviewed you and reiterate your interest in the program • Hear back from schools after interviews <ul style="list-style-type: none"> If multiple offers, narrow down as quickly as possible
April
<ul style="list-style-type: none"> • Make your decision!

expertise, you will need to be able to explain clearly in your personal statement how your interests have led you to apply to work with this person and why you think you are a good match for the lab.

This reflects a general issue related to your decisions on how to select graduate programs. You probably are already aware that at the next stage of your career, your graduate school experience will be evaluated not simply based on the reputation of your Ph.D. program but also on the reputation of your mentor and your productivity with that mentor during graduate school. This is different than the undergraduate application experience which can be discussed in terms of various ranking systems of university reputations (e.g., US News and World Report). Remember, rankings are not generally considered to be very reliable for Ph.D. psychology programs (at best, one might use existing graduate ranking systems to identify programs in the top quartile, second quartile, etc., but rankings more specific than that are somewhat arbitrary). Ph.D. programs in clinical psychology sometimes are located within universities with excellent reputations for undergraduate training but sometimes not. Similarly, the best possible mentor to study a particular area of research sometimes will be located at a graduate program generally regarded to be of high quality but sometimes not. Thus, your application decisions may reflect an interest in a

program, a mentor, or both. Your personal statement should reflect these interests.

You can learn a lot about a potential advisor through online searches. Here are some specific things to look for while deciding whether to apply to work with a psychology professor:

- How many publications does he/she have? If there are many, then it may be more likely that you will have an opportunity to earn authorship on many publications during your time in graduate school.
- Are the publications in good journals? (You can ask a graduate student or professor for help in determining this). Both quantity and quality of publications will be important when people evaluate your research productivity later in your career.
- Are the graduate students in this person's lab also authors on the publications?
- Is this person an assistant, associate, or full professor? People differ in their opinions about whether it is better to work with a young professor or a tenured professor. Assistant professors need to produce high-quality research and high-quality publications in order to get tenure, which will likely have benefits for their graduate students' productivity and CVs. On the other hand, assistant professors are less likely to have job stability and connections in the field than tenured professors, and they may have less energy to focus on their

graduate students' careers, as compared to tenured professors who are no longer struggling to build their own careers and reputations. However, yet another factor to consider is that very senior faculty members may not be as actively involved in new research projects as professors earlier in their careers.

When creating your school list, we recommend that you place the greatest weight on the research match between you and your potential advisor and on the general sense you get of the quality of the person's research, their reputation, and (for newer professors) their potential. When considering the research match between you and a potential advisor, you can learn a great deal about their research interests by searching for their journal articles on PsycInfo or Google Scholar. However, it is also important to try to figure out what potential advisors are *currently* studying, because often several years will elapse between when someone conducts research and when a journal article with the results is published. The professor's current research interests and projects may appear on their website, or you can email them to express your interest in their work and to ask what they are currently studying (we will discuss later whether and when to email potential advisors).

In addition to your specific advisor, the strength of the overall program is also extremely important. Characteristics to consider in choosing a program are its reputation in the field (your undergraduate psychology advisor or another psychology faculty member is probably the best person to talk to about this; as discussed previously, program rankings only provide a vague idea of training quality), the strength of the research training, and (if applicable) the strength of the clinical training.

To find specific schools and advisors, you can try the following search methods:

- You can ask psychology faculty members at your undergraduate college who the best researchers are in the areas you are interested in.
- You can do PsycInfo searches for your areas of interest, then search for the article authors to see where they teach and the types of programs they are affiliated with (e.g., clinical, developmental).

- Although specific rankings of graduate programs should be interpreted cautiously, they can give you a broad idea of which "quartile" a program likely belongs to. You can use the US News and World Report rankings as a jumping off point for finding programs you might want to apply to. (Note that clinical psychology is listed under the Health programs category, while other psychology Ph.D. programs are listed under Psychology.) Also, check www.socialpsychology.org for other program ranking lists. These ranking lists contain links to the schools' program websites, and you can follow these links to read about the programs and to review their faculty members. On most program websites, you can see brief summaries of faculty members' research interests, and many websites include links to faculty members' own webpages.

If you are looking at clinical psychology Ph.D. programs, pay attention to the program statistics posted on their websites. All APA-accredited psychology doctoral programs (i.e., clinical, counseling, and school psychology only) are required to report statistics such as average GRE scores and GPAs, acceptance rates, and average time it takes students to get through the program. Be wary of programs that do not have a high completion rate; it may be a bad sign if many students are not finishing the program. Also, a less understood but very informative statistic is the match rate—the percentage of students who were placed in one of their top-choice internship sites after completing their coursework and dissertation. Most top quality programs have average match rates (across 5 years) of at least 75%.

The General GRE

GRE scores are used as an important marker of potential success in graduate school. As with GPA, the higher the score the better. The General exam is quite similar to the SAT, and students on average score a bit higher on the GRE as compared to the SAT (thanks to a quality undergraduate education!).

Percentile scores are often evaluated more closely than the standardized scores. The program websites mentioned above include data regarding the averages and ranges of GRE scores for admitted students. Also, APA offers a book with information on every program, as well as data regarding admission criteria, called *Graduate Study in Psychology*. In practice, we believe most all students' verbal and quantitative scores each exceed the 75th percentile; however, *significant deviation* in these scores is allowed when considering cultural and language limitations of the GRE. The more competitive the program (i.e., the smaller the ratio between accepted applicants and total applications), the higher the GRE score that is needed to gain admission.

Many suggest that it is best to take the GRE the summer before you apply, if at all possible. The General GRE can be taken virtually any day of the year, but it is necessary to sign up months in advance in most cases because spots fill up. Some advantages of doing so include:

- Time to take the test again if you do poorly (all of your scores will be sent to the schools, not just your best scores, but many schools will only be interested in your best scores).
- You will know what your scores are when creating your school list. As previously mentioned, all APA-accredited psychology doctoral programs are required to publish their students' average GRE scores and GPAs online, so if you are interested in these areas of psychology, this can help you assess where you stand relative to students who were accepted.
- You can make sure your schools get your scores in time.

The Psychology GRE

The Psychology GRE used to be relatively unimportant to most doctoral programs in psychology. However, this may be changing as the Psychology GRE may be used to help fulfill competencies required within the doctoral training sequence for clinical, counseling, and school psychology programs. In addition, a minority of doctoral

programs place very high priority on the psychology GRE during the admissions process.

The psychology GRE is very different from the General GRE. The psychology GRE straightforwardly assesses your knowledge of the subfields of psychology. There are fewer strategies and “tricks” you can learn for this test; you simply have to learn the material. If you are a psychology major, you likely will already have learned most of the relevant material but will need to re-familiarize yourself with it, and there may be areas of psychology to which you have had less exposure. If you were *not* a psychology major, you will have to learn more new material. Also, if you were not a psychology major, your score on this test will be more important than for psychology majors; for non-psychology majors, the score demonstrates to admission committees whether you have the appropriate background knowledge that psychology majors should have learned during college.

The Psychology GRE is only offered on a few specific days per year, and you should be sure to sign up as far in advance as possible to be sure to get a spot at a convenient test center. If you can, take the test in April of the year when you will be applying. Applicants who take both the General and Psychology GRE during the fall months when they also are working on applications (i.e., September, October, November, December) will likely find the application process far more stressful.

Contacting Potential Mentors

With the advent of email, students more commonly began to write potential mentors to inquire whether applicants would be accepted in the lab this year and/or to generally express an interest in the graduate program. This is a terrific idea, and many mentors will be very appreciative of such emails.

However, it is important to remember that some mentors may receive a large number of emails from applicants during high peak months of the application process. Therefore, it is important to be patient and forgiving when waiting for a response from faculty. It also is often a good

idea to carefully review information available on the program and the faculty member's websites, as answers to some of your questions may be available online. Most faculty will be happy to answer your questions and correspond when possible. Be aware, however, that such correspondence is certainly not necessary and often plays little to no role in your admissions outcome.

If you do email professors, make sure your emails are professional, are not overly wordy, contain no typos, and do not include questions that are answered on the program's website.

If you email a professor to ask if he/she is taking students because the info is not on the website, and if he/she does not respond, you can contact the program administrative assistant or you can go ahead and apply. Some faculty members do not know if they will accept students until later in the year; they may be waiting to hear about funding, or they may want to see the applicant pool before deciding whether or not they want to interview people.

Keep in mind when you write to and/or talk on the phone with program administrative assistants that they often play a *huge* role in the application process. In some programs, it is the administrative assistant who first reviews all applications and decides which ones will be passed on to faculty. If you are rude or condescending in your email or phone contact with an administrative assistant, the director of the program will probably hear about it.

Letters of Recommendation

Most schools ask for three letters of recommendation. At least two should be from people with doctoral degrees in psychology. The people whom you ask to write your letters should know you well as a student. At least one of your letter writers should be able to comment on your research skills and experiences as well. It sometimes may make sense to include four letters, but please keep in mind that doing so requires more reading for bleary-eyed application reviewers, and an extra letter does not gain you any extra credit.

Letters of recommendation are extremely important, so choose your recommenders wisely. These letters are the tools potential mentors will use to decide whether you would be a good person to have in the lab for 4–6 years; this is not trivial decision. A bad or even a lukewarm letter of recommendation can definitely ruin your chances of admission. Potential advisors will not be impressed by letters that offer “faint praise”; your letters should come from people who know you very well and who will be able to offer very detailed and enthusiastic comments and praise about your strengths as a student, research assistant, and lab member.

It is a good idea to send your letter writers the full list of schools to which you are applying as soon as it is finalized. Depending on your relationship with each letter writer and how organized they seem, it may be a good idea to send reminders about upcoming deadlines as they approach (but refrain from send an annoying number of reminders!). It also may be helpful to give each of your letter writers a copy of your Curriculum Vitae (CV) or résumé, depending on how well they know you.

No matter how or when you are asking someone to write you a letter of recommendation, remember that they are doing you a big favor. Your goal should be to make your letter writers' job as smooth and easy as possible. Make sure to ask exactly how they would like you to send them the materials. Many professors are willing to submit recommendation materials online (and many programs now highly encourage or even require this), but some professors prefer to submit the materials offline (i.e., printing the letters and sending them through the mail). From your perspective, it will be much easier and simpler if your letter writers submit their materials online, but you should respect their preferences, unless you are applying to a program that *requires* that materials be submitted online.

The Personal Statement

The vast majority of personal statements follow an identical format. First, a brief anecdote is

offered describing a watershed moment in which the applicant fully realized their interest in psychology. Next, a brief section describes the applicants' enthusiasm for one or more psychology undergraduate courses. Research experiences then are described in succession. For each experience, the title and principal investigator of the project are listed, followed by a list of the applicant's responsibilities and tasks on the project. The statement often ends with a brief paragraph describing research interests, career interests, admiration of the graduate program, and perhaps the name of a specific potential mentor or two.

This type of personal statement is fine. It accomplishes many of the main objectives that the personal statement is meant to serve. It indeed is important to clearly state research experiences, to express enthusiasm for and a match to a specific aspect of the graduate program, and to articulate clear research and career goals. It also often is a good idea to identify a potential mentor.

Yet, this type of statement is not quite as effective as it may be, in part because so very many statements appear to be remarkably similar to one another. We believe that the statements that truly distinguish themselves are those that demonstrate evidence of the potential to become an independent investigator. As a graduate student, you will be expected to progressively develop research skills that will establish you as an independent scholar. To the extent that it is possible to convey this within the personal statement, you may be able to make your potential to excel as a graduate student very clear to the reader.

Listing research experiences, principal investigators, and project responsibilities can accomplish an important goal. Often, your experiences will reflect exposure to a project with goals that are particularly relevant to the potential mentor's own research, a large, impressive project, or an undergraduate mentor who is known for producing excellent training experience among their students. This can indeed be very helpful to your application in that it expresses a great foundation on which to build during graduate training. If your potential graduate mentor is familiar with your undergraduate mentor's work and reputation, you may benefit from positive assumptions

and attributions made about you and your undergraduate work.

Conveying an accounting of your various responsibilities on research projects also can be useful to help describe your readiness to assist in ongoing projects in your graduate mentor's lab. You may even possess a particular skill that is lacking and needed in the lab; thus, you will be a particularly strong asset to your new environment.

Graduate mentors may differ in their selection criteria. Many are extremely excited to have an enthusiastic and experienced applicant join the lab. Others may be mostly concerned with your academic ability and interest in their research, knowing that they can train you to complete whatever tasks are needed in their lab. However, all graduate mentors likely are invested also in seeing you succeed as an independent scholar. Thus, we believe an applicant "can't go wrong" by going a step beyond this common format and clearly conveying an aptitude for independent research.

Perhaps more important than a list of prior research experiences and responsibilities is a brief description of *what you learned* from each of these research experiences. What was the project about? What were the hypotheses that interested you the most? Are you familiar with any of the literature that is related to the research project? How did your experience in this research project help shape your interests?

In other words, the personal statement should not simply restate your CV or résumé, but rather should help the admissions committee understand what is "between the lines" of your CV/résumé. A description of your responsibilities might indicate that you "coded and entered data using SPSS on a project examining autism." But in addition to this information, you might also indicate that "the project was designed to examine the efficacy of IBT treatment," and that you were "particularly excited by the opportunity to examine different treatment approaches in an applied research setting," or that you "observed that children's intellectual ability notably changed the presentation of PDD symptoms," leading to your "strong interest in studying Asperger's disorder."

As you can see, the inclusion of these statements is perhaps somewhat subtle. However, we believe it can be quite helpful for the admissions committee to “see how you think,” understand the motivations behind your research interests, and also help convey your knowledge of the literature or theories involved in your past work. The applicants who do this successfully have personal statements that appear qualitatively different and often are more successful.

Should I Mention a Specific Mentor?

Short answer: Yes. But keep in mind that programs vary considerably on how graduate students are selected. Some programs allow each faculty member to make unilateral decisions regarding graduate admissions. Thus, your application is really meant to convince a single person to admit you, and your potential match with that person will be evaluated directly. Other programs make group-based decisions to varying degrees. It still may be important to express a match to a specific mentor, but your general match with the program, and perhaps with other potential mentors, also will be evaluated.

When listing the name of a specific potential mentor, this statement should be accompanied by a discussion of why you want to work with this professor, what you specifically hope to study with this person in graduate school, and how your background and interests make you a great match for this person’s lab. Some professors will do a search for applications that contain their name and then read those personal statements. It can also be a good idea to name a second professor whose research interests you, but if that person studies something completely different from the first person you mentioned, this will suggest that you have not focused your research interests. For example, if you say you are interested in the research of a professor who studies adult anxiety disorders, and at the end of the essay you state that you are also interested in the work of a professor who studies childhood externalizing disorders, these two professors might question your commitment to their specific areas of research. You want to convince the person reading your essay that he/she is the best match for your

research interests and that you are the applicant who can offer the best contributions to his/her lab. To do this successfully, it is important to create a clear picture of how your interests developed. Many people make the mistake in these essays of talking about their general interest in psychology, then their coursework, then their lab work, then their specific research interests, in discrete paragraphs with no clear “arc” showing how all these experiences are linked.

Some applicants apply to work with a professor whose research interests are quite different from those the applicant has studied in the past. For example, perhaps you are interested in studying ADHD in grad school, but as an undergrad you studied substance use. If this is the case, your job in the personal statement is to clearly explain why you would nevertheless be a good match for this lab. The person reading your personal statement may be reading essays from dozens of other applicants who have worked for 2 or more years in an ADHD lab, so you will need to convince this professor that there are other excellent reasons to offer you an interview. Think about the aspects of your training that have prepared you for research in ADHD and that have more broadly prepared you for success as a graduate student. Put yourself in the shoes of the potential future advisor reading dozens of essays, and then critically read your own essay from the perspective of this specific professor, asking yourself: *Would I want to offer this applicant an interview?*

After Applications Are Submitted

How the Admissions Process Works

Admission into psychology doctoral Ph.D. programs is highly competitive. Admission to clinical programs is perhaps more competitive than any other type of graduate program, including law, medicine, etc. For many clinical programs, approximately 2–5% of applicants (often about 3–8 out of 150–350) are admitted. Every graduate program in psychology differs in their evaluation and admission procedures, but most all programs use some type of multiple hurdle system

that evaluates applicants in several stages based on different sets of criteria. These hurdles and criteria are discussed below.

Educational Background

Typically, the evaluation of applications begins with a review of basic educational credentials. Sometimes this stage of the evaluation process is conducted by the university's graduate school, or an administrative assistant, rather than a psychology faculty member. Thus, the review is fairly brief, blunt, and admittedly imperfect. Factors evaluated include the quality of the undergraduate institution, the undergraduate GPA, and the GRE scores.

At this stage, you likely already have selected, and perhaps are close to graduating from, your undergraduate institution. There is little you can do to change that now.

Which GPA? Students often ask whether their overall GPA or their psychology (major) GPA will be evaluated. In our experience, the overall GPA is given far more weight than the psychology GPA. In many cases, however, undergraduate students began school with hopes of pursuing a premed curriculum, then, after several low grades, switch career aspirations. In such cases, an applicant's overall GPA may suffer from these few low grades. In this situation (particularly if this has been noted somewhere in the application; most appropriately by a professor writing a letter of recommendation), the evaluator may briefly glance at the transcript to see if a single outlier grade or two is contributing to a low overall GPA. To be frank, however, we believe that even in this situation evaluators will focus only on the overall cumulative GPA. For clinical Ph.D. programs, it is extremely rare for students to be admitted with a GPA below 3.0. The vast majority of admitted students have a GPA above 3.4 or 3.5. As noted above, you can visit the website of almost any accredited clinical, counseling, or school psychology program to obtain GPA averages and ranges from the last few classes of admitted students (look for links that indicate "performance and outcome data"). A link to data for all programs in clinical psychology can be found on the website of the CUDCP: <http://cudcp.us/address/>

[univlinks.php](#). These data are not available for other types of doctoral programs in psychology.

Students sometimes ask whether specific undergraduate courses might increase or decrease the likelihood of admission. In reality, transcripts are infrequently scrutinized, particularly for psychology majors. Because the psychology major typically includes a similar set of classes in most all undergraduate institutions (e.g., research methods, statistics), it often seems unnecessary to examine the course choices of every applicant. You will not get into graduate school simply because you took 1–2 advanced or difficult courses, and you will not be denied admission simply because you took Advanced Basket weaving as an elective.

What if I didn't major in psychology? The vast majority of admitted students have majored in psychology. But a significant minority have not. Applicants who have not majored in psychology likely need to have even more research experience to demonstrate a familiarity with the field. The Psychology GRE score also may be more heavily weighted for these applicants.

General Match to Program Values and Training Experiences

Students who make it past the first hurdle of application evaluation (anywhere between 20 and 50% of applicants do) next are evaluated to determine a general match to the overall program values and possible training experiences. There are three main reasons why an application would not make it past this hurdle:

- (A) The students' career interests simply do not reflect the values of the program. Perhaps most commonly, an applicant applies to a program that emphasizes research training, yet expresses no interest in research and/or has no research experience. Or, conversely, it may be that a student with an exclusive interest in research applies to a clinical program that emphasizes clinical training. Or, a student may express an interest in a specific theoretical orientation that is not emphasized by the graduate program.
- (B) The student expresses an interest in an activity (e.g., studying schizophrenia) that simply is

unavailable. This may be for one of four common reasons:

1. First, it may be that this training experience never has been offered in the program, and the application appears to have been submitted merely due to the reputation or location of the program.
2. Second, it may be that the activity was directed by a faculty member who has since retired or left the university. It is essential that you check the website regularly for each program to which you apply.
3. Third, it may be that the faculty member providing this activity is still in residence, but will not be accepting a student this year.
4. Fourth, the faculty member is in residence and accepting students, but has changed research interests recently.

Regarding points (3) and (4) above, please see information above regarding suggested strategies for contacting potential faculty mentors before the application process.

- (C) The application contains information that is widely inappropriate and unprofessional. Applicants who disclose their own psychopathology, for example, are often “screened out” at this stage.

Specific Match to a Mentor and Research Program

At this stage during the admissions process, each faculty mentor who is accepting students usually offers input regarding 5–20 applicants who have excellent educational credentials and are a general match to the program. At some programs this is referred to as the “short list.” This stage of the admissions procedure becomes remarkably difficult for the faculty member and/or admissions committee. Quite frankly, there are many extremely well-qualified applicants, and by this stage of the process, it often is apparent that any one of the short list members would do quite well in graduate school. Similarly, many faculty feel that they would likely be happy with any of these highly talented applicants.

Yet, decisions nevertheless need to be made, and the types of factors that go into admission

decisions at this point can be inconsistent or even unpredictable. In other words, students who make it to the short list and then the interviewing stage should not feel personally offended if later denied admission. This is truly a difficult process.

Despite some of the idiosyncrasies and serendipity involved in this stage of the process, there are some clear factors that still can make a difference in your fate, including the personal statement described in the previous section and the interview, described below.

The Interview

Waiting to receive interview offers from schools can be a very stressful, anxious time for applicants. Interview offers may come by email or phone. For clinical psychology, they may come in early January or mid-February or anytime in between. In some rare cases they might arrive earlier or later. They might come at any time of day. In some doctoral psychology programs, an invitation for a campus visit means that you have been accepted, and the visit will be a chance to recruit you. In others, including almost all Ph.D. programs in clinical psychology, the interview occurs before final admission decisions have been made.

Note that it is becoming increasingly common for professors to have phone interviews with their top applicants prior to offering invitations for in-person interviews. Sometimes professors who want to conduct phone interviews will email their applicants in advance to schedule a phone date. However, other professors may call you unexpectedly to have a spontaneous phone interview.

At most universities that conduct in-person interviews prior to admission decisions, about 3–6 applicants are invited for an interview for every one admissions slot available. Suddenly, the odds are looking much better for you! The 100–600 applications received by some doctoral level psychology graduate programs have been narrowed to just a few dozen, and for the lab you are most interested in, just a small handful of applicants will be coming for an interview. However, referring to this next stage of the

process as an “interview” incorrectly portrays the experience as a process in which faculty are exclusively selecting students. In reality, a large proportion of interview-invited applicants have more than one site to visit, which means that students are evaluating and selecting programs as much as vice versa. You have a lot of “power” in this situation, and you will need to gather a lot of information to make one of the most important professional decisions of your life.

Scheduling the Interviews

One of the first questions that arises when applicants begin hearing about interviews pertains to inevitable dilemmas in scheduling. Most interviews occur in the months of January, February, and March. With just a few possible weekends to organize a day for applicant interviews, it is quite likely that you will experience a scheduling conflict between two schools that have extended invitations. Sadly, there is no easy solution to this dilemma. Some schools may offer multiple dates for you to visit, others will not. Sometimes you can arrange your own informal visit on a date that is convenient for you; however, the depth of information and number of people who will meet you likely will be reduced as compared to the experience you would have on the formal “Interview Day.” In some cases, you may learn of an impending conflict between a site that has offered you an interview and another site that has not yet, but might soon extend an invitation for the same date. It is perfectly appropriate to call a site and ask when their interview dates may be, but of course, do not assume that you will be getting an interview, and be sure not to sound presumptuous in your request for info.

When dealing with such scheduling conflicts, please be extremely sensitive to the difficulties involved for the program in coordinating a large interview day for its applicants. A tremendous amount of planning and expense is dedicated to these days; be sure to request exceptions only with great care and consideration for how much work is involved among your hosts. Also, if wrestling with a scheduling conflict, make sure your

communication with a program clearly expresses your interest level in the site accurately. If you must cancel, rearrange, or decline an interview invitation, be sure that the faculty understand whether this is a reflection of your interest in their program. In other words, let them know you remain interested and this was an unavoidable consequence of your busy travel schedule (if that is true).

Thanks to modern technology, sometimes it is possible to be at two places at once. For instance, if you request early morning interviews at one site, you may be able to schedule late afternoon interviews at another by Skype or phone. Although this is certainly not a perfect solution and could require some flexibility and understanding among your sites, it may be a workable solution in today’s technology age that helps to resolve a conflict. If a site invited you for an interview, they know that you are a strong applicant and should not be surprised to learn that you have gotten other interview offers as well.

What Will Happen During These Interviews?

Most applicants return from interviews quite surprised at how little they were interviewed! In other words, most expect to be asked many questions, but in fact, find that they are doing most of the asking during these visits. This is an extremely important reality that will help you prepare for the interview in a way that is different from what you may have expected.

No faculty member will quiz you on statistics, the details of their own recent publications, or the names of historical figures in psychology. Preparing for the interview should not feel like studying for a Psychology midterm. Rather, you should create a list of many questions that you would like to ask while on the interview. In fact, we would suggest that you never run out of questions! Asking questions is a great way to get answers, but for interviewing purposes, it also is a terrific way to convey that you know what you are getting into, you understand what graduate training will involve, you are enthusiastic about this

opportunity, and you are conscientious enough to have done your homework about the program and its training opportunities.

But how do you know what type of questions to ask? Unfortunately, most all graduate programs in clinical psychology sound very similar on paper and on the web. It is hard to get a sense of the factors on which programs vary until you have visited a few. This will not be a problem when you arrive at your fourth interview, but how will you know what to ask on your initial interviews?

One recommendation is to download the program handbook from 2 to 3 graduate programs; it does not matter if they are programs you applied to. Any handbooks will do. Skim through them, and you will start to notice differences. Some may mention multiple practicum opportunities; others will have a standardized training sequence. Some may give students many choices in coursework; others may provide more structure in students' schedules. Some programs offer teaching and research assistantships (TAs and RAs); others may offer fellowships too. Some may have a Comprehensive exam, a Qualifying exam, an Area Paper, or none. Some may require students to complete a Master's thesis; others do not. As you look through handbooks, you may notice a few factors that are especially important to you, and this will give you some ideas of what things to ask when meeting with faculty and graduate students.

Questions to Ask Potential Advisors

- What is your mentoring style?
- How does one earn authorship in this lab?
- How do students select research topics for their own thesis/dissertation, and what role do you play in this process?
- What role do you see me having in this lab if I come here? Is there a grant on which I could work?
- Are there opportunities for summer funding?
- What opportunities are there to get involved in research collaborations with other labs?
- To what extent can my interests as a student be incorporated into the broader interests of your

lab vs. how much would I be expected to carry out an existing line of research?

- What supports exist in the department for students wishing to write their own grants?
- What are the current projects in this lab, and in what directions do you expect the lab research to go over the next 5 years?
- How many classes are typically offered to graduate students in (statistics, methods, therapeutic techniques, etc.) each semester/year?
- (For clinical, counseling, and school programs) What practicum opportunities are offered?
- Do most students finish their dissertation before internship or during the internship year?
- What types of statistical consultation are available on campus?
- What type of collaboration (if any) occurs among the clinical faculty (or between the clinical and other faculty if a student has a strong interest in another area)?
- Is it possible and/or typical for students to work with more than one faculty member? How does this work?
- (For clinical, counseling, and school programs) What type of internship placements do students get?
- What types of jobs have graduating students from the program received in the past few years?

Questions to Ask Other Students

- Is it possible to live comfortably on the stipend salary in this town?
- What areas are best for grad students to live?
- Timeline questions: What are the expectations and norms for completion of various program milestones—e.g., Master's, Comps, dissertation?
- What are faculty/student relations like? What's the general climate of the clinical division and the department as a whole?
- What is it like to work with [advisor you are applying to work with]? (e.g., how often does your advisor meet with you? Do you feel like your advisor is either unavailable or a micromanager?)

- (If single and interested in starting a relationship during graduate school) What is life like here for single students? Is this an easy place to meet other young people?
- (If LGBTQ) What is the scene here for LGBTQ individuals? How supportive is the community?
- (If minority) What kinds of resources/supports are available to minority students at this university/program?
- How competitive vs. cooperative are grad students in this program?
- To what extent does the training in this program focus on students' development as researchers vs. clinicians vs. teachers?
- What sorts of teaching opportunities exist here for graduate students? Is there training for new teachers as part of the program?
- Is funding guaranteed for the time I am here? For how long is it guaranteed?

Talking About Research

Perhaps most important, your “interviews” for clinical psychology Ph.D. programs will include reciprocal discussions regarding mutual research interests. Because this is such an important part of the interview process, this section offers some special suggestions and tips.

First, Do Your Homework

When you initially applied to graduate programs, you likely looked for faculty mentors with whom you shared some research interests. Admittedly, in many cases, your match with that faculty member may have been based on a fairly broad understanding of their work (i.e., from a sentence or two on their webpage) and a fairly large range of your own interests. Now that you have been selected for an interview, it is expected that your interests will have matured and narrowed somewhat. Also, it is somewhat expected that your knowledge of this professor's work has become more thorough and informed. Luckily, there are some very easy tools available to help you do this.

You likely will begin your investigation into a faculty member's research interests by looking at

their website and downloading recent abstracts and articles from PsycInfo. This remains a terrific approach for learning about the faculty member's work. In addition to reading about the most common themes in their work, as well as understanding the methods they typically use in research (e.g., observational studies, clinical trials, questionnaire-based data collection), be sure also to note whether they seem to be publishing at a reasonable rate (this can vary from 0 to 20 publications within a single year, with a range of 1–5 being quite common) and whether they are publishing with their students as coauthors (or even first authors). This may give you some insight as to whether there will be publication opportunities while you are working together and whether you will be given a chance to collaborate on these publications.

Keep in mind, however, that PsycInfo and many faculty members' websites may give you somewhat “old” information. PsycInfo lists articles currently “in print,” which means they were written at least 1 year ago, about a study that may have started many years before then. If the faculty member does not keep their website current, the information listed here also may not reflect recent work.

One solution to help you learn about ongoing research is NIH Reporter (formerly CRISP; see <http://projectreporter.nih.gov/reporter.cfm>). If the faculty member has a current grant funded by NIH, you can find out all kinds of terrific information about their current work from this site. Do a search by name, and you can read an abstract of their grant, read recent publications, and even get a sense of how much more time this grant will last. This will give you a great idea of exactly what the faculty member is working on and what project you may be involved in should you attend this school. If the faculty member has a grant funded by a private foundation, you may be able to find similar information from the foundation's website.

If the faculty member listed any publications on his/her website or CV as being “in press” in a specific journal, be sure to check that journal's website. Many journals currently preview an “in press” article online for months before it is

“in print.” This will give you an opportunity to read about research that has recently been accepted for publication.

As you read through the faculty member’s publications and descriptions of the lab’s current projects, read “actively.” Rather than thinking of this person as a “perfect” researcher who is studying exactly what you want to study, try to think about the ideas you might be able to bring to the lab, and take notes! Some faculty members will be interested during the interview in hearing *your* ideas for research (some may ask you to brainstorm on the spot), and most will be interested in seeing how you think about research. Importantly, any research ideas you propose during the interview should fit with the general research interests of the lab. (For example, if you are interviewing with a faculty member who specializes in ADHD in young boys, you might ask whether she has considered studying gender differences in ADHD; you would probably not want to discuss your interest in eating disorders in adolescent girls [unless the researcher has demonstrated a broad range of interests]).

Second, Speak Up!

During your visit, you will receive an overwhelming amount of information about ongoing research. Every faculty member and current graduate student will have much to say about their current work and upcoming projects. To succeed during this interview process, make sure you talk about your own research experience and interests in detail—at least inasmuch as it helps you demonstrate how you are a match to this lab. Although some of this information was written in your personal statement, some of the people you meet may not have had access to this statement or may not have read it very recently. In addition, you may be able to share more details in a manner that helps to more thoroughly explain your experiences. This is important, particularly when considering what the interview process is like for the faculty member.

From the faculty perspective, the Interview Day can be quite confusing and difficult. Faculty members rarely describe their admission decisions as easy. Rather, most agree that there are an

overwhelming number of outstanding students, that the students who arrive for any given Interview Day all are quite likely to be very successful, and that the decision of how to rank-order these uniformly excellent candidates is painstaking, frustrating, and even sometimes idiosyncratic. In short, faculty would like a student who (1) they generally get along with; someone who will be pleasant to interact with nearly every day for the next 5 years, and then quite frequently for the rest of their careers; (2) someone with initiative, who will be as passionate and committed to the research in the lab as they are, and who will be invested in the research outcomes you are working on together; and (3) someone who is intellectually stimulating—who will bring great ideas to the table, expand the lab in creative and innovative directions, and augment the caliber of intellectual discussions within research meetings.

This may sound intimidating, but if you express your interests, ideas, and enthusiasm, your natural talents will shine through. If a faculty member describes research you have read about, share your opinions or ideas (e.g., “Have you ever thought of studying X within that framework?” “Why did you decide to use this/that approach?” “How do you think this connects with the X theory?” “I’m interested in seeing how that idea may work differently in X population”). It is common for applicants to feel like everyone else in the room is qualified to be there, but they secretly are the imposter who got invited to the interview due to some computer malfunction. Do not believe this! You have been invited because your experience is exemplary, you have much to contribute, and several faculty members wrote glowing letters about your potential. Be sure to speak your mind, and you will help to show the faculty member and graduate students that you can be a terrific member of their lab!

Third, Be Specific: Maybe

When discussing their approach to admissions, some faculty indicate that they prefer a “blank slate” (i.e., someone who can be taught from scratch and will be shaped mostly by their experiences in the graduate lab). More commonly, however, faculty are looking for someone who may

arrive on campus with their own ideas, experiences, and emerging areas of expertise. This is a tricky balance that you will want to think about before you attend an interview. If you are open to literally anything the faculty member offers as a potential research topic, you may not seem “ready” for graduate school. Some may say that you are more interested in gaining admission than actually doing the work once you get there. On the other hand, if you seem overly fixed on a certain topic or method, despite what you hear during the Interview Day, then some may feel that you are not a match to the research lab or that you are not interested in integrating old with new experiences.

This is a very personal issue, in that there is no “wrong” answer or approach to the interview process. If you indeed are universally interested in all experiences, then it is certainly preferable to be honest about that, rather than portray your interests inaccurately. Conversely, if you are strongly committed to a specific topic, then you should hold out for experiences that will help you grow in your desired direction. Keep in mind that a “balance” probably is a good approach to match with most potential faculty members. Before you attend an interview, therefore, consider what research topics you are most interested in and which are less crucial for your graduate training. Think about what you are most strongly committed to, and how you will represent your research interests when asked. It is quite common for you to be asked what your future career goals may be, what you do or do not like about the research process, and what your research interests are (you may want to plan a 2–4 min response for this one). Most important, think about the research that excites you the most, and use the Interview Day to determine whether you think you can get that research done at the place you are visiting.

Other Interviews

You will not be talking extensively about research in all of your interview meetings. In fact, this may occur mostly with your potential mentor (i.e., the person you requested to work with); yet, there will be other interviews scheduled during

the day with other faculty and students. Some of these other people may have divergent research interests from your own, and you are not necessarily expected to be knowledgeable about all of their work. What, then, will you talk about?

The purpose of these interviews often is two-fold. First, the program would like to get to know you better to determine whether you are a good match to their overall ideology and “vibe.” Are you competitive or collaborative? Do you seem very research-oriented or clinically focused? Do you seem interested in this program?

Second, these interviews are meant to give you a chance to learn as much as you can about the program and your advisor. Be sure to ask lots of questions to help you learn exactly what it would be like to spend the next 4–5 years in this new environment. When meeting with students, be sure to ask very direct questions about your potential mentor and her/his availability, style, and expectations. Students will give you the most direct and helpful information. Make sure to maximize this opportunity to get information!

Other Factors

A few other issues to keep in mind during the Interview season:

1. Interviews can be exhausting. You may have a day of “chain” interviewing—i.e., each meeting may end with an introduction to your next interviewer, or you may have only a very brief break between each meeting. For most people, it is difficult to be “on” for many hours in a row, and if you need to excuse yourself to use the restroom, take some notes, process the information you just heard, or eat a PowerBar on the run, it is perfectly OK to do so. You may want to plan for this in advance.
2. Bring along a nice leather folio that you can carry around with you during the interview day. This will give you something to do with your hands. Fill the folio with a few copies of your CV (occasionally, someone may ask for a copy), some notes on the faculty members’ research, and your list of many questions.

It is perfectly appropriate to open your folder and remind yourself of a few questions in the middle of an interview. No one expects you to have everything memorized. It is also fine to jot a note or two down while talking. As long as you are able to engage in a comfortable, socially skilled conversation while you do so, feel free to refer to this folder throughout the interview day, if you think it will help you stay focused and sharp.

3. *Everyone you speak to is part of the admissions process.* The faculty, the students, the staff, all will be part of your graduate program environment and all have valuable information to share with the admissions committee. And they will!
4. If the Interview Day includes an informal time for students and faculty to socialize, take the opportunity to talk with faculty members who may not have been on your schedule. Ideally you will end up at a program where you have a good rapport with many faculty members including your primary advisor; these other faculty members will likely be your professors in classes, they may serve on your Master's and dissertation committees, and you may collaborate with them on research projects. Additionally, many faculty members will have a say in your admissions decision, and if they remember your being a friendly, intelligent, and interesting person, it can help your chances.
5. At many graduate programs, applicants may be invited to an informal reception hosted by graduate students. Although it may look just like a party you attended in college, it is not. Grossly inappropriate behavior at this party will reflect poorly on you and will likely hurt your chances of admission.
6. Most programs will offer the opportunity to stay with a graduate student during your visit to their site. This is a terrific way to get to learn about the program and get to know a student well, but it is not mandatory that you stay with a student. If you do stay with a student in his/her home, remember that anything you tell that student may be reported back to the admissions committee.
7. Thank you notes are not required, and certainly it will make no difference if they are sent by email, snail mail, handwritten, typeset, etc. Most commonly, students send a thank you email to a few of the people they met with during the Interview Day to express gratitude for their visit and to express their level of interest in the site. Although it is not required, it is a good idea to send a thank you note of some sort to the faculty member you are applying to work with and to the student you stayed with (if applicable), and to reiterate how much you enjoyed your visit and how interested you are in the program.
8. Keep in mind that you are not only interviewing for a graduate school position but also creating a professional network. The faculty and students you meet on interview day are the experts in your area of research who will likely be your reviewers when you submit articles and grants, your colleagues and collaborators in future symposia or projects, your search committee when you apply for jobs or postdoctoral positions, and perhaps even your letter writers when you are reviewed for promotion. This realization has several implications. First, of course, make sure you act as professionally and graciously as you can throughout the application process. Second, be considerate if you find yourself in a position of declining an offer or interview. In other words, do not "burn bridges." If writing a note to decline an opportunity, be sure you express your gratitude and continuing interest in their work more broadly. You may decide that this lab or person's research is not the best match for your graduate training, but your paths may indeed cross again.
9. Once you have completed your interview, the waiting begins. In many cases, it will take several weeks until you hear an admissions decision. In some cases, this may mean that the department has not made a final decision (i.e., although your potential mentor may have selected someone, their decision has not yet been ratified by the program, department, or graduate school). In other cases, it may

mean that you are not the first-choice candidate; however, many applicants successfully gain offers from programs that had initially offered a slot to someone else. Remember—almost all applicants invited to an interview are excellent, and the final decision is usually very difficult for faculty. They often are equally happy with several interviewees and simply have to choose an order in which to extend admissions offers.

10. Lastly, once interviews have been completed, you will hopefully start to receive offers of admission. A few tips: (1) You should never, ever feel pressured to make a final decision before April 15. No program or individual should tell you otherwise. (2) Do not officially accept any offer until you have received the details of the offer in writing (by

email or mail). There is no fine print to be worried about, but it is still important to be sure that your offer is guaranteed before you start declining other opportunities. (3) If you do hold multiple offers, it is your responsibility to try to narrow your options as quickly as possible. In other words, try not to hold more than two offers at any one time. Someone out there who is just as nervous about this process as you were is still waiting on an offer and cannot hear the good news until you have made your decision. If you can narrow your choices down to two and release any additional offers you may be holding, it will help the system move smoothly for everyone else.

That's it! Good luck to everyone in the application and admissions process!

Part II

Beginning Your Career

The Whys and Hows of the Scientific Path in Applied Psychology

3

Steven C. Hayes and Nicholas M. Berens

If the average applied psychology student is asked confidentially why they are pursuing a career in their field, the most likely answer is “to help people.” Although this answer is such a cliché that it sometimes causes graduate admissions committee members to wrinkle their noses, in fact it is perfectly appropriate. The ultimate purpose of applied psychology is to alleviate human suffering and promote human health and happiness. Unfortunately, good will does not necessarily imply good outcomes. If mere intentionality were enough, there would never have been a reason for psychology in the first place, since human beings have always desired a happy life and shown compassion for others. It is not enough for psychology students to *want* to help: one must also know *how* to help.

In most areas of human skill and competence, “know how” comes in two forms, and psychology is no exception. Sometimes knowledge is acquired by actually doing a task, perhaps with guidance and shaping from others and with a great deal of trial and error. This approach is especially helpful when the outcomes of action are immediate, clear, and limited to a specific range of events. Motor skills such as walking or

shooting a basketball are actions of that kind. The baby trying to learn to walk, stands and then falls—on average over 200 times before the skill of walking is acquired. The basketball goes through the hoop or it does not, providing just the feedback needed—even experienced players will shoot hundreds of times a day to keep this skills sharp. In areas such as these, “practice makes perfect,” or at least adequate.

Sometimes, however, knowledge is best acquired in part through verbal rules. This approach is especially helpful when a task is complex and the outcomes are probabilistic, delayed, subtle, and multifaceted. You could never learn to send a rocket to the moon or to build a skyscraper through direct experience. For rule-based learning to be effective, however, the rules themselves have to be carefully tested and systematized. One of the greatest inventions of human beings the last 2,000 years has been the development of the scientific method as a means of generating and testing rules that work. Human “know how” has advanced most quickly in areas that are most directly touched by science, as a glance around almost any modern living room will confirm.

The problem faced by students of applied psychology is that the desire to be of help immediately pushes in the direction of “learning by doing” even though often the situations applied psychologists face do not produce outcomes that are immediate, clear, or occur within a known range of options. Consider parents who want to know how to raise their children. There are times that poor advice can seem to produce good

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immediate outcomes at the expense of long-term success. For example, telling children they are doing wonderfully, no matter what, may feel good initially but the children may grow up with a sense of entitlement and a poor understanding of how hard work is need to succeed. Similarly, a clinician in psychotherapy can do an infinite numbers of things. The immediate results are a weak guide to the acquisition of real clinical know how because effects can be delayed, probabilistic, subtle, and multifaceted.

All of this would be admitted by everyone were it not for two things. First, some aspects of the clinical situation *are* and *need to be* responsive to directed shaping and trial and error learning. Experience alone may teach clinicians how to behave in the role of a helper, for example. As the role is acquired, the confidence of clinicians will almost always increase, because the clinician “knows what to do.” Some of this kind of learning is truly important, such as learning to relate to another person in a genuine way, but trial and error does not necessarily lead to an increase in the ability to actually produce desired clinical outcomes. That brings us to the second feature of the situation that can capture students in professional psychology. Clients change for many reasons and what practitioners cannot see, without specific attempts to do so, is what would have happened if the practitioner had done something different. Many medical practices (e.g., blood letting, mud packs) survived for centuries due to the judgmental bias produced by this process. Many problems wax and wane regardless of intervention and some features of professional interventions are reassuring and helpful almost regardless of the specifics. Thus, with experience most practitioners feel not only confident but also competent, because generally it appears that good outcomes are being achieved.

Despite that subjective sense, in virtually every area in which it has been tested over the last 50 years—at least since the famous clinical psychologist Paul Meehl formulated this issue clearly in 1955—when clinical judgment is pitted against statistical prediction, statistical prediction does a better job (Grove & Lloyd, 2006). Yet even when faced with clear clinical failures, practitioners are

most likely to rely on clinical judgment to determine what to do next (Stewart & Chambless, 2008). This suggests that it can be psychologically difficult to integrate the rules that emerge from research, with the ongoing effort to be of help to others. Part of the problem is that science can suggest courses of action that are not personally preferred, which takes considerable psychological flexibility to overcome (Varra, Hayes, Roget, & Fisher, 2008). Part of the problem is that science can fail to provide clear paths ahead at times, when practical needs demand immediate action.

In one sense, scientist–practitioners are simply those who have deliberately stepped into the ambiguity that lies between the two kinds of “know how,” and between the urgency of helping others and the sometimes slow pace of scientific knowledge. Fortunately, due to the past efforts of others, in most areas of applied psychology this is a road with some comforts. There is considerable evidence that the use of empirically supported procedures increases positive outcomes (Baker, McFall, & Shoham, 2009; Ollendick & Davis, 2004). When agencies convert to the use of such methods, client outcomes are better (Cukrowicz et al., 2005) and improvements are more long lasting (Cukrowicz et al., 2011). Even staff turnover appears to be reduced (Aarons, Sommerfeld, Hecht, Silovsky, & Chaffin, 2009).

But in other ways this is a road with difficulties. Mere adherence to treatment manuals, for example, does not necessarily guarantee good outcomes (Shadish, Matt, Navarro, & Phillips, 2000) and the important work of learning how to use scientifically supported methods in more flexible ways to fit individual needs is still in its infancy (Kendall & Beidas, 2007). It is important to know the specific processes of change that account for the effects of these methods, but that is often not clear (La Greca, Silverman, & Lochman, 2009). There is considerable evidence that relationship factors are key to many clinical outcomes (Norcross & Wampold, 2011), but there is still very limited evidence of the specific methods that alter these factors while maintaining their relationship to outcomes (Creed & Kendall, 2005).

For the applied researcher, what drives an interest in research is often the possibility of doing a greater amount of good for a larger number of people than could be reached directly, through the production of scientifically filtered know how that will be used by others. Unfortunately, this dream is surprisingly hard actually to realize. It is difficult to produce research that will be consumed by others and that will make a difference in applied work. For the practitioner, a reliance on scientifically based procedures will not fully remove the tension between clinical experience and scientific forms of knowing, because virtually no technologies exist that are fully curative, and only a fraction of clients will respond fully and adequately based on what is now known.

This chapter is for students who are considering taking “the scientific path” in their applied careers. We will discuss how to be effective within the scientist–practitioner model, whether in the clinic or in the research laboratory. We will briefly examine its history, and then will consider how to produce and consume research in a way that makes a difference.

History of the Scientist–Practitioner Model

From the early inceptions of applied psychology, science and practice were thought of by many as inseparable. This is exemplified by Lightner Witmer’s claim that:

The pure and the applied sciences advance in a single front. What retards the progress of one, retards the progress of the other; what fosters one, fosters the other. But in the final analysis the progress of psychology, as of every other science, will be determined by the value and amount of its contributions to the advancement of the human race (Witmer, 1907/1996, p. 249).

This vision began to be formalized in 1947 (Shakow et al., 1947) when the American Psychological Association adopted as standard policy the idea that professional psychology graduate students would be trained as both scientists and practitioners. In August 1948, a

collection of professionals representing the spectrum of behavioral health care providers met in Boulder, Colorado with the intent of defining the content of graduate training in clinical psychology. One important outcome of this 2 weeklong conference was the unanimous recommendation for the adoption of the scientist–practitioner model of training. At the onset of the conference not all attendees were in agreement on this issue. Some doubted that a true realization of this model was even possible. Nevertheless, there were at least five general reasons for the unanimous decision.

The first reason was the understanding that specialization in one area versus the other tended to produce a narrowness of thinking, thus necessitating the need for training programs that promoted flexibility in thinking and action. It was believed that such flexibility could be established when “...persons within the same general field specialize in different aspects, as inevitably happens, cross-fertilization and breadth of approach are likely to characterize such a profession” (Raimy, 1950, p. 81).

The second reason for the unanimous decision was the belief that training in both practice and research could begin to circumvent the lack of useful scientific information regarding effective practice that was then available. It was hoped that research conducted by those interested in practice would yield information useful in the guidance of applied decisions.

The third reason for the adoption of the scientist–practitioner model was the generally held belief that there would be no problem finding students capable of fulfilling the prescribed training. The final two reasons why the model was ultimately adopted is the cooperative potential for the merger of these two roles. It was believed that a scientist who held at hand many clinical questions would be able to set forth a research agenda adequate for answering these questions, and could expect economic support for research agendas that could be funded by clinical endeavors.

Despite the vision from the Boulder Conference, its earnest implementation was still very much in question. The sentiment was exemplified by Raimy (1950):

Too often, however, clinical psychologists have been trained in rigorous thinking about nonclinical subject matter and clinical problems have been dismissed as lacking in “scientific respectability.” As a result, many clinicians have been unable to bridge the gap between their formal training and scientific thinking on the one hand, and the demands of practice on the other. As time passes and their skills become more satisfying to themselves and to others, the task of thinking systematically and impartially becomes more difficult (p. 86).

The scientist–practitioner model was revisited in conference form quite frequently in the years that followed. While these conferences tended to reaffirm the belief in the strength of the model, they also revealed an undercurrent of dissatisfaction and disillusionment with the model as it was applied in practice. The scientist–practitioner split feared by the original participants in the Boulder Conference gradually became more and more of a reality. In 1961 a report was published by the Joint Commission on Mental Health voiced concerns regarding this split. In 1965 a conference was held in Chicago where the participants displayed open disgruntlement about the process of adopting and applying the model (Hoch, Ross, & Winder, 1966).

The late 1960s and 1970s brought a profound change in the degree of support for the scientist–practitioner model. Professional schools were created at first within the University setting and then in free-standing form (Peterson, 1968, 1976). The Vail Conference went far beyond previous conferences in explicitly endorsing the creation of doctor of psychology degrees and downplaying the scientist–practitioner model as the appropriate model for professional training in psychology (Korman, 1976). The federal government, however, began to fund well-controlled and large-scale psychosocial research studies, providing a growing impetus for the creation of a research base relevant to practice.

The 1980s and 1990s saw contradictory trends. The split of the American Psychological Society (now the Association for Psychological Science) from the American Psychological Association, a process largely led by scientist–practitioners, reflected the growing discontent of scientist–practitioners in professional psychology disconnected

from science (Hayes, 1987). Professional schools, few of which adopted a scientist–practitioner model, proliferated but began to run into economic problems as the managed care revolution undermined the dominance of psychology as a form of independent practice (Hayes, Follette, Dawes, & Grady, 1995). The federal government began to actively promote evidence-based practice, though a wide variety of funded initiatives in dissemination, diffusion, and research/practice collaboration. Research-based clinical practice guidelines began to appear (Hayes & Gregg, 2001), and the field of psychology began to launch formal efforts to summarize a maturing clinical research literature, such as the Division 12 initiative in developing a list of empirically supported treatments (Chambless et al., 1996). An outgrowth of APS, the Academy of Psychological Clinical Science (APCS), began with a 1994 conference on “Psychological Science in the 21st Century.” In 1995, the APCS was formally established and began recognizing doctoral and internship programs that advocate science-based clinical training.

In the 2000s, the movement toward “evidence-based practice” began to take hold in psychology (Goodheart, 2011) but the definition of “evidence” that was considerably broadened to give equal weight to the personal experiences of the clinician and to scientific evidence. The penetration of formal scientific evidence into psychological practice continued to be slow (Nathan, 2000; Stewart & Chambless, 2007), which began to receive national publicity. For example, *Newsweek* ran a story under the title “Ignoring the Evidence: Why do psychologists reject science?” (Begley, 2009). Practical concerns also began to be raised about the dominance of the individual psychotherapy model in comparison to web- and phone-based interventions, self-help approaches, and media-based methods (Kazdin & Blasé, 2011; see also the special issue of *Perspectives on Psychological Science* (Vol. 6, #5)). Treatment guidelines (e.g., Hayes, Follette, Dawes, & Grady, 1995) began to be embraced even by leaders of mainstream psychology (Goodheart, 2011). Finally, more science-based organizations took stronger steps to accredit training programs that emphasize a “clinical

scientist” model and to advocate for these values in the public arena. In 2007 the APCS formally launched the Psychological Clinical Science Accreditation System; as of 2011 about a dozen doctoral programs are accredited.

At present, professional psychology is more diverse than ever. A substantial body of evidence about what practices work best is now available, and governmental bodies are turning to that evidence for guidance in policy with growing frequency (see, e.g., the *National Registry of Evidence-Based Programs and Practices* maintained by the Substance Abuse and Mental Health Services Administration in the US Department of Health and Human Services (<http://www.nrepp.samhsa.gov/>)). At the same time, professional training programs that eschew the importance of science to day-to-day professional practice continue to grow as well.

The student of applied psychology needs to think through these issues and consider their implications for professional values. Professionals of tomorrow will face considerable pressures to adopt evidence-based practices. We would argue that this can be a good thing, if psychological professionals embrace their role in the future world of scientifically based professional psychology. Doing so requires learning how to do research that will inform practice, how to assimilate the research evidence as it emerges, and how to empiricize practice itself. It is to those topics that we now turn.

Doing Research That Makes a Difference

The vast majority of psychological research makes little impact. The medium number of citations for published psychological research approaches zero (Schaffer, 2004) and most psychology faculty and researchers are little known outside of their immediate circle of students and colleagues. From this situation we can conclude the following: If a psychology student does what usually comes to mind in psychological research based on the typical research models, he or she will make only a limited impact, since that is

precisely what others have done who have come to that end. A more unusual approach is needed to do research that makes a difference.

Making a difference in psychological research can be facilitated by clarity about (a) the nature of science and (b) the information needs of practitioners.

The Nature of Science

Science is a rule-generating enterprise that has as its goal the development of increasingly organized statements of relations among events that allow analytic goals to be met with precision, scope, and depth and based on verifiable experience. There are two key aspects to this definition. First, the product of science is verbal rules based on experiences that can be shared with others. Agreements about scientific method within particular research paradigms tell us how and when certain things can be said: for example, conclusions can be reached when adequate controls are in place, or when adequate statistical analyses have been done. A great deal of emphasis is placed on these issues in psychology education (e.g., issues of “internal validity” and “scientific method”) and we have little additional to offer in this chapter on those topics.

Second, these rules have five specific properties of importance: organization, analytic utility, precision, scope, and depth. Scientific products can be useful even when they are not organized (e.g., when a specific fact is discovered that is of considerable importance), but the ultimate goal is to organize these verbal products over time. That is why theories and models are so central to mature sciences.

The verbal products of science are meant to be useful in accomplishing analytic ends. These ends vary from domain to domain and from paradigm to paradigm. In applied psychology, however, the most important analytic ends are implied by the practical goal of the field itself, namely, the prediction and influence of psychological events of practical importance. Not all research practices are equal in producing particular analytic ends. For example, understanding or

prediction are of little utility in actually *influencing* target phenomena if the important components of the theory cannot be manipulated directly. For that reason, it helps to start with the end goal and work backward to the scientific practices that could reach that goal. We will do so shortly by considering the research needs of practitioners.

Finally, we want theories that apply in highly specified ways to given phenomena (i.e., they are precise), apply to a broad range of phenomena (i.e., they have scope), and are coherent across different levels of analysis in science, such as across biology and psychology (i.e., they have depth). Of these, the easiest to achieve is precision, and perhaps for this reason the most emphasis in the early days of clinical science was the development of manuals and technical descriptions that are precise and replicable. Perhaps the hardest dimension to achieve, however, is scope and, as we will argue in a moment, that is the property most missing in our current approaches to applied psychology.

The Knowledge Needed by Practitioners

Over 30 years ago, Gordon Paul eloquently summarized the empirical question that arises for the practitioner: “what treatment, by whom, is most effective for this individual with that specific problem, and under which set of circumstances does that come about” (Paul, 1969). Clients have unique needs and unique problems. For that reason, practitioners need scientific knowledge that tells them what to do to be effective with the specific people with who they work. It must explain how to change things that are accessible to the practitioner so that better outcomes are obtained. Practitioners also need scientifically established know how that is broadly applicable to the practical situation, and can be learned and flexibly applied with a reasonable amount of effort and in a fashion that is respectful of their professional role.

Clinical manuals have been a major step forward in developing scientific knowledge that can focus on things the clinician can manipulate

directly in the practical situation, but not enough work has gone into how to the development manuals that are easy to master and capable of being flexibly applied to clients with unique combinations of needs (Kendall & Beidas, 2007). With the proliferation of empirically supported manuals, more needs to be done to come up with processes that can allow the field to synthesize and distill down the essence of disparate technologies, and combined essential features of various technologies into coherent treatment plans for individuals with mixed needs.

One way that can be done is through models and theories. It is often said that practitioners avoid theory and philosophy in favor of actual clinical techniques, but an examination of popular psychology books read by practitioners shows that this is false. Practitioners need knowledge with scope, because they often face novel situations with unusual combinations of features. Popular books take advantage of this need by presenting fairly simplified models, often ones that can be expressed in a few acronyms, that claim to have broad applicability.

Broad models and theories are needed in the practice environment because they provide a basis for the use of knowledge when confronted with a new problem or situation and suggest how to develop new kind of practical techniques. In addition, because teaching based purely on techniques can become disorganized and incoherent as techniques proliferate, theory and models make scientific knowledge more teachable.

Book publishers, workshop organizers, and others in a position to know how practitioners usually react often cringe if researchers try to get too theoretical, but this makes sense given the kind of theories often promulgated by researchers, which are typically complicated, narrow, limited, and arcane. Worse, many theories do not tell clinicians what to do because they do not focus primarily on how to change external variables. Clinical theory is not an end in itself, and thus should not be concerned primarily about “understanding” separated from prediction and influence, nor primarily with the unobservable or unmanipulable.

To be practically useful, psychological theories and models must also be progressive, meaning

that they evolve over time to raise new, interesting, and empirically productive questions that generate coherent data. It is especially useful if the model can be developed and modified to fit a variety of applied and basic issues. They also need to be as simple as possible in the sense that both they are easy to learn and they simplify complexity where that can be done.

Finally, to be truly useful applied research must fit the practical and personal realities of the practice environment. It does no good to create technologies that no one will pay for, that are too complicated for systems of care to adopt, that do not connect with the personal experiences of practitioners, that are focused on methods of delivery that cannot be mounted, or that focus on targets of change that are not of importance. For that reason, applied psychology researchers must be intimately aware of what is happening in the world of practice (e.g., what is managed care, how are practitioners paid, what problems are most costly to systems of care, and so on).

Research of Importance

Putting all of these factors together, applied research programs that make a difference tend to *reach the practitioner with a combination of both a technology and an underlying theory or model that is progressive, simplifying, fits with the practical realities of applied work, and is learnable, flexible, appealing, effective, broadly applicable, and important*. This is a challenging formula, because it demands a wide range of skills from psychological researchers who hope to make an applied impact. Anyone can create a treatment and try to test it. Anyone can develop a narrow “model” and examine a few empirical implications. What is more difficult is figuring out how to develop broadly applicable models that are conceptually simple and interesting and that have clear and unexpected technological implications. Doing so requires living in both worlds: science and practice. The need for this breadth of focus also helps make sense of the need for broad knowledge of psychological science that is often pursued in more scientifically based clinical programs.

The Practical Role of the Scientist–Practitioner

In the practical environment, the scientist–practitioner is an individual who performs three primary roles. First, the scientist–practitioner is a consumer of research, able to identify, acquire, and apply empirically supported treatments and assessments to those in need. This requires well-developed practical skills, but it also requires substantial empirical skills. The purpose of this consumption is to put empirically based procedures into actual practice.

Second, the scientist–practitioner evaluates his or her own program and practices. The modern day scientist–practitioner “...must not only be a superb clinician capable of supervising interventions, and intervening directly on difficult cases, but must also be intimately familiar with the process of evaluating the effectiveness of interventions... and must adapt the scientific method to practical settings...” (Hayes, Barlow, & Nelson-Gray, 1999, p. 1). This requires knowledge of time series or “single case” research designs, clinical replications series, and effectiveness research approaches, among others. Additive model group research methods, which use existing programs as a kind of baseline and thus raise far fewer ethical issues than group research protocols with no treatment control groups, are also gaining in popularity in applied settings.

Third, the scientist–practitioner reports advances to applied and scientific communities, contributing both to greater understanding of applied problems and to the evolution of effective systems of care. In today’s landscape, a wide variety of contributions are possible from practical sites.

For example, clinical replications series and open effectiveness trials in applied settings are highly valued in the empirical clinical literature (e.g., Persons, Bostrom, & Bertagbolli, 1999; Watkins et al., 2011). Clinical replication series are large collections of single case experimental designs and empirical case studies using well-defined treatment approaches and intensive measurement. Their purpose is to determine rates of successes and failures, and factors that contribute to these outcomes, in a defined patient group.

These kinds of contributions are essential to the overall goal of developing scientific know how that will help alleviate human suffering. Clinical replication series provide an excellent example. For clinical research to be useful to practitioners, it must be known what kinds of client are most likely to respond to what kinds of treatments in the real world setting. Indeed, sometimes methods that succeed in highly controlled efficacy trials, fail in effectiveness trials when real world issues are factored in (e.g., Hallfors et al., 2006). This question cannot be adequately answered purely based on data from major research centers because the number and variety of clients needed to address such questions is much too large. Only practitioners have the client flow and practical interest that formal clinical replication series demand.

The Scientist–Practitioner in Organized Healthcare Delivery Systems

The combination of roles embraced by scientist–practitioners given them a special place in the healthcare marketplace as organized systems of care become more dominant. No one else is better prepared to help triage clients into efficient methods of intervention, to train and supervise others in the delivery of cost effective and empirically based approaches, to deliver these approaches themselves, to work with complicated or unresponsive cases to learn how to innovate new approaches, and to evaluate these delivery systems. Unfortunately, with some exceptions psychologists have largely resisted cooperation with organized systems of care, so the contributions to be made by scientist–practitioners have been more limited (Cummings, 2006; McFall, 2006).

Looking Ahead

The history of science suggests that, in the long run, society will ultimately embrace scientific knowing over know how that emerges from trial and error whenever substantial scientific evidence exists. That has happened in architectural and structural design, public health, physical medicine, food safety, and myriad other areas,

presumably because scientific know how is a better guide to effective practices. The same shift is beginning to occur in mental health and substance abuse areas. But while progress has been made in the identification of techniques that are effective with specific problems it is clear that we still have a long way to go. Today’s students will help decide how fast the transition to an empirically based professional will be.

If the trends seen in other fields are a good guide, ultimately applied psychology will be required to adopt an evidence-based model. In the present day, however, professional trends continue to pull the field in both directions. Some in the practice leadership (e.g., Fox, 2000) have argued against embracing the movement toward empirically supported treatments, preferring instead the adoption of new forms of professional training (e.g., pharmacotherapy training).

Meanwhile, changes in the field itself make the scientist–practitioner model more viable. For example, the skills needed to add value to organized behavioral healthcare delivery systems are precisely those emphasized by the scientist–practitioner model. The scientist–practitioner model may yet provide the common ground upon which psychology as discipline relevant to human suffering will flourish. Students of professional psychology will have a large role in determining how these struggles for identity will ultimately work themselves out. The scientific path is not an easy one for applied psychology students to take, but for the sake of suffering humanity, it seems to be the one worth taking.

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Advancing Understanding of Cultural Competence, Cultural Sensitivity, and the Effects of Cultural Incompetence

Joseph E. Trimble

If we are to achieve a richer culture, rich in contrasting values, we must recognize the whole gamut of human potentialities, and so weave a less arbitrary social fabric, one in which each diverse human gift will find a fitting place

(Mead, 1935, p. 218).

The Western conception of the person as a bounded, unique, more or less integrated motivational and cognitive universe, a dynamic center of awareness, emotion, judgment, and action, organized into a distinctive whole and set contrastively—both against other such wholes and against social and natural background—is however incorrigible it may seem to us, a rather peculiar idea within the context of the world's cultures

(Geertz, 1973, p. 34).

The two quotations from the well-known cultural anthropologists capture a portion of the themes inherent in what it means when one chooses to study and work with people from different cultural and ethnic groups. In her quote the esteemed anthropologist, Margaret Mead, draws attention to the vast differences one finds in cultural units across the world and in those differences one finds a trove of gifts the differences provide; the quote and its rich implications and meanings have merit in fostering and promoting cultural or multicultural competence and sensitivity. However, as Clifford Geertz reminds us, the meaning of culture is elusive when reflected against what most people in numerous countries think about the construct. Put another way, how culture is construed in one ethnocultural popu-

lation may be quite different in other populations suggesting that the seemingly elusive construct is not commonly understood.

Up to about 1970, psychologists were not keenly interested in cultural explanations or explorations of human affect, behavior, and cognition. In fact, most psychologists as late as the 1970s firmly believed that “all humans essentially were alike” hence the need to identify and study cultural correlates exceeded what was sufficient to understand the sum total of the conscious and unconscious events that make up an individual’s life. As far back as the 1920s the sociologist William Fielding Ogburn (Mead, 1959) maintained that, “Never look for a psychological explanation unless every effort to find a cultural one has been exhausted” (p. 16). Although many behavioral social scientists might disagree with Ogburn’s contention I take the position that before anyone can begin to apply conventional psychological principles and theories to an ethnic or cultural group, they must understand their unique lifeways and thoughtways.

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Overview

The two quotations serve to set the tone for this chapter on cultural sensitivity and cultural competence. By way of summary, one should strive to find the rich cultural explanations and potentialities that contribute to the multihued fabric of the human condition; to accomplish that we may have to attempt to understand affect, behavior, and cognition before we attempt to apply conventional psychological theory and principles and to do so one will be intellectually, psychologically, and physically challenging. And we can't approach the levels of comprehension as though everyone worldwide shares the same meaning of the cultural concept, they don't.

At first blush, why should anyone be reminded that they must be culturally sensitive and culturally competent when conducting psychological research or providing mental health services for culturally different groups? Moreover, why should psychologists be interested in different cultural groups? "Of course they should," is the obvious reply to both questions. Although the answer to the questions is straightforward, there is considerable anecdotal and empirical evidence to suggest that historically psychologists in the main have not been sensitive to the lifeways and thoughtways of people from different cultural and ethnic groups. Accusations of imperialism, cultural encapsulation, ethnocentrism, parochialism, and, in some circles of dissent, "scientifically racist," run the gamut of criticisms hurled at the field of psychology in the past 3 decades. Guthrie (1976), for example, writing in his strongly worded critique of psychology, *Even the Rate was White*, argues that culture and context were not taken seriously in the history of psychological research. Psychology's preoccupation with tightly controlled experiments through the use of laboratory animals left little room for studies with people in their natural settings. Although the field has expanded its acceptance of various research methods and procedures, the full acceptance of culture and ethnicity into the fabric of psychological inquiry has not yet fully occurred.

Achieving true cultural competence and cultural sensitivity is complex and formidable. Putting

the constructs into action in a research or clinical setting compounds their complexities. However, achieving a state of competence and sensitivity can be accomplished at some level of proficiency to the point where it does not sap our courage and subdue our fears and anxieties. Therefore, the intent of this chapter is to provide a framework for achieving and maintaining cultural competence and cultural sensitivity. To achieve the goal, the chapter is organized along several points where cultural competence and sensitivity are salient and prerequisites for conducting research and providing psychological services. Definitions and guidelines are provided for selected constructs followed by a brief discussion of the terms, ethnicity, ethnic group, and culture. Indeed, when one scans the literature on the topic, one finds a growing pandemonium where consideration must be given to the historical developments of the constructs and what they mean for contemporary research and development. If we cannot come to an agreement on what the constructs mean then we have no business developing scales to measure them (Trimble, 2007). Suggestions are provided for achieving competence as a counselor, clinician, researcher, and at a personal level. Since the achievement of cultural competence and sensitivity requires common skills and psychological perspectives, emphasis will be placed on the research setting. The chapter also focuses on cross-cultural methodological and procedural concerns including gaining entry to the field, cultural measurement equivalence, and collecting data and reporting the findings. Finally, some attention is given to what happens when certain myopic people are culturally incompetent and the tragic costs associated with their decisions and actions.

The ability for anyone to connect with countless people worldwide has expanded dramatically in the past decade made possible by the widespread use of the Internet and electronic social network. Indeed, we are connected to the world and in the prophetic words of the renowned anthropologist, Mead (1970), "we have the means of reaching all of earth's diverse people and we have the concepts that make it possible for us to understand them, and they now share in a worldwide, technologically propagated culture within

which they are able to listen as well as talk to us” (p. xvi). Continuing she adds, “We are approaching a world-wide culture and the possibility of becoming fully citizens of the world ... we have simultaneously available to us for the first time examples of the ways men have lived at every period over the past fifty thousand years. Some fifty thousand years of our history lie spread out before us, accessible, for this brief period in time, to our simultaneous inspection” (p. xv). Awareness of cultural and ethnic similarities and differences is there with the click of a computer keyboard fueling the need to foster and promote an in-depth understanding and sensitivity for the complex variations ethnocultural groups and populations present to us. With the marvelous technological capabilities available to us, most of us have the potential to promptly reach out well beyond North American borders to provide direction, support, and advice in ways not possible a decade ago. In light of the recent developments and intense interest in cultural competence and the general field of multicultural psychology Mead’s words are prophetic.

Culture, Cultural Competence, and Cultural Sensitivity Specifications

Why should any student of psychology or psychologist be interested in and concerned about achieving cultural competence and cultural sensitivity? In spite of conditions to the contrary, psychology has all but ignored the surface and deep level meanings and implications of culture and ethnicity for the past 100 years. It should be pointed out that the prominent early American psychologist, G. Stanley Hall, strongly advised the emerging field of psychology in the early 1990s to pay attention to culture. He maintained that “Students of the soul should be students of the man, and the unanthropological character of American psychology is not only un-American, but scientifically so unnatural that it must be transient” (Hall, 1904, p. 52). Additionally, Hall may have been the first psychologist to coin the phrase, *ethnic psychology* (Hall). For lots of reasons numerous early American psychologists did not heed his stern advice.

Let us examine a few of the factors that may have contributed to psychologists overlooking and ignoring the contribution of culture and ethnicity to the human condition and individual development. First, the mission statement of the American Psychological Association (APA) provides a partial explanation. Simply stated, the APA maintains that the object of the American Psychological Association shall be to advance psychology as a science and profession and as a means of promoting health and human welfare. Until about 30 years ago, the mission appeared to be restricted to a limited population as references to African Americans, Asian Americans, American Indians and Alaska Natives, Hispanics, Pacific Islanders, and Puerto Ricans were almost absent from the psychological literature; in fact, the words *culture* and *ethnic* were rarely used in psychological textbooks. The long absence of culture in the web of psychological inquiry did not go unnoticed. About 40 years ago, ethnic minority and international psychologists began questioning what APA meant about *human* and to whom the vast body of psychological knowledge applied. America’s ethnic minority psychologists and those from other countries as well as a small handful of North American psychologists argued that American psychology was not inclusive of what constitutes the world’s population—they claimed that findings were biased, limited to studies involving college and university students and laboratory animals, and therefore not generalizable to all humans. Comprehensive literature reviews reinforced their accusations and observations (see Bernal, Trimble, Burlew, & Leong, 2002).

Another response to the question concerns the growth of ethnic minority groups in the USA. America never was, and likely will never be a melting pot of different nationalities and ethnic groups for another century or two. Consider the population projections offered by the US Bureau of the Census. By 2050 the US population will reach over 400 million, about 33% larger than in the year 2010 (U.S. Bureau of the Census, 2010). The primary ethnic minority groups specifically, Hispanics, African Americans, Asian Americans, and American Indians and Alaska Natives will constitute almost 50% of the population in 2050. About 57% of the population under the age of 18

and 34% over the age of 65 will be ethnic minorities. Currently, Hispanics number 35.3 million persons, about 12.5% of the US population and are composed of a diversity of races and countries of origin. Projections for the year 2050 suggest that Hispanics will be the largest ethnic group, second only to White Americans, and followed by African Americans (Bernal et al., 2002). The Hispanic or Latino “racial” category appears to be the fastest emerging ethnic or racial population in the USA. In 2010, about 50 million indicated they were from this particular population; the number represents an appreciable increase of 43% compared to the 2000 census. The 2010 US census estimates that African Americans number about 39 million, which is 12.3% increase over the population count for 2000. In 2010, Asian Americans and Pacific Islanders number 14 million and 540,000 in the USA. There are 32 different cultural groups with unique ethnic or national identities, different religions, histories, languages, and traditions that are included within the category of Asian American and Pacific Islander. The most numerous Asian groups in the USA are Filipinos, Chinese, Koreans, Japanese, Vietnamese, and Asian Indians. Moreover, the 2010 Census declared that 2,932,248 citizens are American Indians and Alaska Natives—an 18.4% difference from the 2000 Census, when the figure was 2,475,956.

In the 2010 US Census individuals had the option of marking more than one “race” category, and so were able to declare identification with more than one group. For example, whereas less than 3% of the total US population chose to do so, more than four million individuals who chose to mark multiple categories marked *American Indian and Alaska Native* along with one or more “others.” The *race alone or in combination* count is much higher for this ethnic group than the *race alone* count of 2,932,248. The discrepancy raises the question about which count is more accurate or representative of the *true* Indian population, 2,932,248 or four million. Similar findings occur for the other ethnic groups (see Gallardo, Yeh, Trimble, & Parham, 2012).

The changing demographic context calls into question the relevance of a psychology that

historically has not been inclusive of ethnic and racial groups and that fostered a research agenda that is ethnocentric and bound by time and place. How well prepared will practitioners be in the delivery of quality mental health services to ethnic and language minorities—to conduct research that is culturally resonant with the lifeways and thoughtways of culturally unique populations? The changing demographics will move the field toward the full consideration of diversity in ways that are inclusive and truly reflect diversity of our changing demographic context.

The third response to the question has to do with the concepts of *culture* and *ethnic group* (Trimble, 2007). Within the behavioral and social sciences, the cultural construct is the foundation of research and development in the multicultural field, thus a worthwhile and useful definition should be offered to serve as a channel and guide. Almost everyone, however, seems to know what it means yet it may be easily the most misunderstood construct in the social and behavioral sciences (see Baldwin, Faulkner, Hecht, & Lindsley, 2006; Inglis, 2004; Muller, 2005). Yet, as pointed out by Baldwin et al. (2006), “This debate surrounding the usage of the term ‘culture’ suggests that the term is a sign, an empty vessel waiting for people, both academicians and everyday communicators to fill it with meaning. But as a sign in the traditional semiotic sense, the connection between the signifier (the word ‘culture’) and the signified (what it represents) shifts, making culture a moving target” (p. 29). Lonner and Malpass (1994), for example, indicated there are about 175 definitions of culture that can be found in the social and behavioral science literature; their count is considerably more than the 79 features of culture generated by Murdock, Ford, and Hudson (1971).

Many social and behavioral; scientists generally are comfortable with Brown’s definition of culture that appeared in his 1991 book, *Human Universals*. “Culture,” Brown argues, “consists of the conventional patterns of thought, activity, and artifact that are passed on from generation to generation in a manner that is generally assumed to involve learning rather than specific genetic programming. Besides being transmitted ‘vertically’ from generation to generation, culture may

also be transmitted ‘horizontally’ between individuals and collectivities” (p. 40). With some degree of concordance Geertz (1973) emphasizes that “Culture is a historically transmitted pattern of meanings embodied in symbols, a system of inherited conceptions expressed in symbolic forms by means of which men communicate, perpetuate, and develop their knowledge about and attitudes towards life” (p. 89). But he wisely asks, “What is culture if it is not consensus?” (Geertz, 2000, p. 224).

Culture is transmitted through groups often referred to as racial or ethnic groups. Feagin (1978) defines a racial group as one in which “persons inside or outside the group have decided what is important to single out as inferior or superior, typically on the basis of real or alleged physical characteristics subjectively selected” (p. 7). “An ethnic group,” maintains Feagin (1978) is one “which is socially distinguished or set apart, by others and/or by itself, primarily on the basis of cultural or nationality characteristics” (p. 7).

Within the behavioral and social sciences the cultural construct is the foundation of research and development in the multicultural field, thus a worthwhile and useful definition should be offered to serve as a channel and guide. Almost everyone, however, seems to know what it means yet it may be easily the most misunderstood construct in the social and behavioral sciences. Lonner and Malpass (1994), for example, indicated there are about 175 definitions of culture that can be found in the social and behavioral science literature; their count is considerably more than the 79 features of culture generated by Murdock, Ford, and Hudson (1971). However, Geertz’s (1973) definition provides a path that is reasonably inclusive of all of its elements when he maintained that it “is an historically transmitted pattern of meanings embodied in symbols, a system of inherited conceptions expressed in symbolic forms by means of which men communicate, perpetuate, and develop their knowledge about and attitudes towards life” (p. 89). In offering his definition, Geertz (2000) cautiously reminded us that the trouble is that no one is quite sure what culture is. Not only is it an essentially contested concept... it is fugitive, unsteady, encyclopedic,

and normatively charged, and there are those... who think it vacuous altogether, or even dangerous, and would ban it from the serious discourse of serious persons (p. 11). Geertz (2000) added more to the clarity of culture’s meaning when he queried, “What is culture if it is not consensus?” (p. 224). While people may be able to achieve some consensus on what culture is, in general, the agreement seems to fall apart when scholars attempt to break down its meaning into some reasonably well-defined components.

Unfortunately, use of the construct also breaks down when people rely on it as a label to describe similarities and differences between and among ethnocultural populations. A review of the literature in multicultural counseling, for example, provides ample testament to Geertz’s contention (Pedersen, Draguns, Lonner, & Trimble, 2008; Ponterotto, Casas, Suzuki, & Alexander, 2010). Gone’s (2010) speculations also add credence to the disputation when he asked, “How much ‘culture’ is required, for example, for the culturally competent practice of psychotherapy with the culturally different?” (p. 169). He does not answer the question in his article but at minimum his descriptions and recommendations prod the debate and topic and thus move the question much closer to the core off deep meaning of culture.

Culture, ethnicity, and race are socially constructed abstractions and thus hypothetical constructs. Segall, Dasen, Berry, and Poortinga (1990) for example argue for an ecological approach to culture where the forces are the movers and shapers that shape behaviors hence “it becomes possible to define it as simply the totality of whatever all persons learn from all other persons” (p. 26).

Culture provides complex settings in which affect, behavior, and cognition occur and, therefore, at best may be viewed as overarching moderating variables. All cultures and ethnic groups contain identifiable values, attitudes, beliefs, languages, and corresponding behaviors that are often considerably unique and distinctive. Cultural lifeways and thoughtways emerge as adaptations to peculiar geographic and climatic conditions. Ecological conditions even influence what ethnocultural groups agree to ascribe to

them. Given these considerations, psychologists can no longer ignore culture's contributions to the human condition and the extraordinary variability that spans population distributions. To understand and appreciate a cultural group's contribution to variability we must learn to be culturally competent and sensitive.

Cultural Competence and Cultural Sensitivity Defined

Prior to 1990 there appears to little published interest the concept of cultural competence and what it means to adequately provide and deliver educational, health, and mental health services. A search of the *PsyINFO* database indicates that appreciable interest in cultural competence has increased at significant proportions. For example, from 1990 to 2012 some 1882 "cultural competence" citations are listed in the database. An accelerated increase in citations begins in 2000, as there are some 1,645 listings during that time period to 2012. In the past 2 years there are 370 citations. Betancourt, Green, Carrilli, and Ananeh-Firempong (2003) conducted an extensive review of the existing literature on addressing racial-ethnic health disparities in health and health care and concluded that, "Greater attention is now being placed by government and the private health care industry on cultural competence in light of the overwhelming literature on racial/ethnic disparities in health and health care. Given the strong evidence for sociocultural barriers to care at multiple levels of the health care system, culturally competent care is a key cornerstone in efforts to eliminate racial/ethnic disparities in health and health care" (pp. 299–300).

There are numerous definitions and explanations of the terms, cultural competence and cultural sensitivity; a scan of the various definitions suggests there are variations that almost mirror the variations in the definition for culture and ethnic. At a general level, competence is a state where one is being psychologically and physically adequate and having sufficient knowledge, judgment, skill, or strength. Sensitivity is the capacity of a person to respond psychologically to changes in

his/her interpersonal or social relationships. The component parts of the terms are embedded in definitions and uses of the terms when *cultural* is added. Orlandi (1992) defines cultural competence as "a set of academic and interpersonal skills that allow individuals to increase their understanding and appreciation of cultural differences and similarities within, among, and between groups" (p. vi). He continues by drawing attention to ones "willingness and ability to draw on community-based values, traditions, and customs and to work with knowledgeable persons of and from the community in developing focused interventions, communications, and other supports" (p. vi). The key words in his definition are *skills, understanding, appreciation, willingness, and ability*; perhaps the most salient of these is *willingness* for without a conscious intent and desire the achievement and realization of *cultural competence* is not likely to occur.

Moritsugu (1999) offers a more general definition where he maintains that it is "the knowledge and understanding of a specific culture that enables an individual to effectively communicate and function within that culture. This usually entails details regarding language and metalanguage, values, and customs, symbols and worldviews" (p. 62). The emphasis here is on *knowledge and understanding*.

There are related definitions. Sue, Arendondo, and McDavis (1992) maintain that "cultural competence (or multicultural competence) is generally defined as the development of a counselor's awareness of his or her cultural identity and belief systems and the knowledge and skills to work with diverse populations" (p. 136). Their definition is closely aligned with the standards advocated by the American Counseling Association (Erford, 2009). Franklin (2012) points out that "cultural competence is having awareness of, and a working knowledge of the development and socialization that is the source of people's beliefs, values, and spirituality and informs the way we think about, respond to, and interpret what is meaningful to them. When I think of cultural competence it is integrated with counseling experience, for it is only another element of many skills required in effective counseling" (p. 65).

A few definitions expand the construct to include stages of competence development. Ballenger (1994) identified six stages that include: (1) *cultural destructiveness*. This is the most negative end of the continuum and is represented by attitudes, policies, and practices that are destructive to cultures and to individuals within cultures; (2) *cultural incapacity*. This stage represents systems or individuals with extreme biases, who believe in racial superiority of the dominant group and assume a paternalistic posture toward the *lesser* groups; (3) *cultural blindness*. The beliefs that color our culture make no difference and that all people are the same. Values and behaviors of the dominant culture are presumed to be universally applicable and beneficial. It is also assumed that members of the nondominant culture do not meet the dominant group's cultural expectations because of some cultural deficiency or lack of desire to achieve, rather than the fact that the system works only for the most assimilated; (4) *cultural pre-competence*. This stage occurs when there is an awareness of one's limitations in cross-cultural communication and outreach. However, there is a desire to provide fair and equitable treatment with appropriate cultural sensitivity. There may be a level of frustration because the person does not know exactly what is possible or how to proceed; (5) *cultural competence*. This is the stage represented by the acceptance and respect for differences, continuing self-assessment regarding culture, careful attention to the dynamics of differences, continuous expansion of cultural knowledge and resources, and a variety of adaptations to belief systems, policies and practices; and (6) *cultural proficiency*. This stage occurs when one holds culture in high esteem and seeks to add to their own knowledge by reading, studying, conducting research, and developing new approaches for culturally competent practice. Thus, a sensitive person can progress from a cultural destructiveness stage to a proficient stage of competence by actively engaging in the study and expression of respect for others regardless of their cultural or ethnic background.

In the health care field cultural competence are the characteristics and factors "that describe the set of congruent behaviors, attitudes, skills,

policies, and procedures that are promoted and endorsed to enable caregivers at all levels of the organization to work effectively and efficiently with persons and communities of all cultural backgrounds. An important element of cultural competence is the capacity to overcome structural barriers in health care delivery that sustain health and health care disparities across cultural groups" (Cross, Bazron, Dennis, & Isaacs, 1989).

In recent years especially in the subfields of ethnic minority psychology and multicultural counseling the term, *multiculturalism*, has replaced the term *competence* although the terms often are used synonymously. While the core meanings of *competence* and *sensitivity* are retained, *multiculturalism* is a more inclusive construct as it embraces multiple aspects and facets of what it means to value cultural pluralism. Because of the additive nature of the construct, definitions of *multiculturalism* are lengthy. For example, ten counseling psychologists compiled a 150 page ten chapter monograph dealing with an assortment of topics for the term (Sue et al., 1998). The authors define *multiculturalism* in four parts that encourage the exploration, study, and internalization of cultural pluralism. In related texts, Pope-Davis and Coleman (1997), Pedersen et al. (2008), Ponterotto et al. (2010), and Gallardo et al. (2012) explore the complexities of multicultural counseling competencies; their definitions of the construct extend for several pages and take up a considerable part of their various chapters.

The most comprehensive publication on cultural competence is the edited 29-chapter book by Darla Deardorff titled, "The Sage handbook on intercultural competence" (Deardorff, 2009). The range of topics include identity, morality, assessment, research methods, and the application of intercultural competence skills and techniques in human resources, business, teacher and international education, social work, engineering religious organizations, and health care. A persuasive argument could be put forth that the principles, values, convictions, and applications of intercultural competence transcend all areas of interest and inquiry. Throughout the book one gets the distinct impression that cultural competence often is defined as an array of

lists of competencies. Deardorff (2009) and her colleagues found 44 distinct competency elements that be subcategorized into five domains that include: desired external outcomes, desired internal outcomes, knowledge and comprehension, skills, and requisite attitudes. Given the depth and complexity of intercultural competency it would seem that offering a simplistic short definition would be superficial and perhaps spurious.

Culture and all that it means and implies is explicit and implicit to cultural competence and multiculturalism. Instead of asking whether or not one is culturally competent perhaps it would be better to ask if one is multiculturally competent as this captures the direction of the field and the interest. Interest in the field has accelerated to the point where it is now influencing psychology at all levels. In psychology, for example, Pedersen (1999) emphasizes that multiculturalism is “a new perspective in mainstream psychology complementing the three other major theoretical orientations in psychology; psychodynamic theory, existential-humanistic theory, and cognitive-behavioral theory addressing the needs of culturally diverse client populations” (p. 113).

Becoming Culturally Competent and Sensitive

Whether one is a student of psychology or a practicing psychologist, attainment of cultural competence is not a linear path where one reaches some level of acknowledged proficiency and skill and in the process receives some sort of written verification of the attainment. Attainment of cultural competence and sensitivity is a life long journey that involves considerable self-reflection, a critical examination and study of one’s cultural and ethnic heritage including those factors that influence maturation and enculturation, and a willingness to learn about the intricacies and subtleties of other ethnocultural groups with an open mind coupled with an adventuresome spirit (Magala, 2005). The journey begins with self-exploration and self-reflection. Self-reflection is a journey that is never over if one is faithful to the

conviction that self-understanding never ends as long as one is open to change. Exploring all facets of multiculturalism involve change and flux. In psychology, a critical and thorough examination of the vicissitudes and essential character or constitution of multiculturalism are critical in the areas of mental health services delivery and research. The remainder of the chapter describes various suggestions and directions for achieving cultural competence and sensitivity cast in the framework of multiculturalism.

Self-reflection and Ethnocultural Influences

Achievement of cultural competence begins with an intense interest and willingness to learn about one’s cultural and ethnic background. All of us are a part of and linked to a culturally unique lifestyle; some of us benefit from multiple cultural orientations and influences, as our ancestral lineage may be a mix of relatives representing different nationalities, religious orientations, and ethnocultural groups. Thus, all people exist within a cultural milieu that wittingly and unwittingly influences who, what we are, and what we become. For full and active cultural competence to occur one must know the origins and nature of the factors that influence her or his uniqueness as cultural beings. The search and the eventual knowledge involves learning much more than why certain foods, languages, dress styles, ceremonial and religious celebrations, and music are preferred as it also requires we know the source and nature of our prejudices, attitudes, beliefs, values, mannerisms, gestures, affective styles, and idiosyncratic behaviors. All of these have a cultural base.

The search begins with asking questions of our relatives about our ancestral heritage and punctuating the questions with “why did we do that, or believe, or act that way?” These are daunting questions but no less daunting than the questions the cultural anthropologist, Margaret Mead, asks about Americans. She asks rather pointedly, “What are Americans...how does one become an American ...Why are Americans as they are?”

(1942, p. 80). Answers to these probes are extraordinarily difficult as most Americans rarely if ever reflect on them. Expanding on her questions, and to achieve more specificity, we can replace the noun, *American*, in the questions with such nationalities as Canadian, Mexican, or Australian or with place names such as New York, Toronto, Tijuana, or Sydney or with the names of ethnic groups such as American Indian, African American, Asian American, Mexican American, or Puerto Rican. We can further break down the ethnic group labels into tribe, linguistic group, or region of the world where a variant of the group lives (e.g., Jamaica, Brazil, Japan, Papua, or the Yukon Territory). In all instances, each is a cultural unit or *cultunit* (“cultural bearing unit”) rich with all of those elements that constitute a cultural group and thus rich with deep cultural information for one to explore (see Berry, Poortinga, Segall, & Dasen, 1992, pp. 176–177). What, how, and why therefore are practical beginnings toward achieving understanding of one’s origins and sociocultural influences. A list of sources for developing and achieving *cultural self-empathy* is included at the end of this chapter.

Cultural self-reflection activities and explorations bring the unconscious, often subtle factors to the forefront of our conscious hopefully providing enlightenment and deep-cultural self-empathy (Ridley & Udipi, 2002). Sodowsky, Kuo-Jackson, and Loya (1997) remind us that “through continuous self-focus and deep introspection, counselors (and other psychologists) can become more sensitive to their cultural-self. Such deep-cultural self-empathy or sensitive understanding of one’s cultural-self will, in turn facilitate accurate empathy with clients (and others) who are culturally different” (p. 12).

Achieving Multicultural Competence in Clinical Practice

Before 1976, close to 25 articles and chapters were written on the subject of culture and clinical practice. Now in 2012 and since 1976 over 5,000, books, chapters, and journal articles have been

written expressing a variety of perspectives on the topic ranging from theory to research findings. The accelerated rate of interest and concern generated on the topic in the past 25 years or so is extraordinary but not surprising. The argument and justification for the increased interest rest on the contention that conventional counseling and mental health service delivery approaches are incompatible with the lifeways and thoughtways of ethnocultural groups. Since all thoughts and behaviors are culturally based accurate assessment, meaningful understanding, and culturally appropriate interventions are required for the understanding of each context for counseling to effectively occur.

Multicultural counselors and mental health practitioners assert that one must demonstrate multicultural competence and sensitivity to work with culturally different clients. A seminal paper written for the *Counseling Psychologist* journal by Sue et al. (1982) stimulated interest in this area. The authors present a series of explicit multicultural competencies for clinical practice that since have been modified in various forms. In essence, the central themes of the competency guidelines include: “knowledge about diversity; psychological client-counselor policies; client’s collective culture; client’s religion and beliefs; client’s language; client’s experience with racism; psychologist’s advocacy role; psychologist’s client notes address cultural factors; client’s economic and political conditions; client’s cultural identity; and client variables’ interventions” (Sodowsky et al., 1997, pp. 6–7). Detailed presentations of the guidelines can be found on the following internet sites: http://www.counseling.org/multi_diversity/competencies.htm and <http://www.apa.org/divisions/div45/resources.html>.

Interest in multicultural clinical practice is not uniform and consistent. Some critics see the domain as another example of “political correctness” while others comment that it is a passing fancy and will dwindle in influence in time. Within the field, a few psychologists are challenging the meaning of multiculturalism and the extent to which it truly captures interpersonal dynamics and the influence of race and ethnicity in society. Helms and Richardson (1997) argue the position

that multicultural competence requires a philosophical orientation grounded on the sociopolitical principles of race and enculturation. From their perspective, solely emphasizing development of multicultural competency skills is insufficient, as counselors must be knowledgeable and sensitive to the sociopolitical and historical backgrounds of their clients. From their perspective, multiculturalism “should refer to the integration of dimensions of client cultures into pertinent counseling theories, techniques, and practices with the specific intent of providing clients of all sociodemographic and psychodynamic variations with effective mental health services” (p. 70). Put more succinctly, the authors maintain that counselors should tailor their approaches “to react to each of the various dynamics of clients in a manner that best suits the clients’ mental health needs” (p. 70).

Developing and acquiring multicultural competencies in clinical practice is extraordinarily complicated and engaging, especially if one aspires to work with clients from a myriad of cultural backgrounds and levels of acculturation. It can be difficult, too, when one strives to work with clients from their own ethnic group and assumes they know the depth of their clients’ ethnocultural backgrounds. Becoming multiculturally competent can occur through reading, participating in intensive workshops, attending conference presentations. However, the acquisition of competency skills and knowledge through didactic approaches is incomplete. One must experience a culture in all of its moods and settings to fully understand the potential applicability of counseling skills and techniques within a cultural milieu.

As interest in the field of multicultural practice has grown, counselors and students are asking questions on how one should provide counseling services for culturally different clients, that is, clients who are from ethnocultural groups different from one’s own. In addition and invariably, the inquisitive persons want to know where they can obtain the skills to be multiculturally competent in mental health settings. Even a straightforward answer is complicated, involved, daunting, and conditional.

For the sake of illustration let us focus on the first part of the inquiry. As discussed earlier cultural differences are varied and pervasive. To understand the extent and pervasiveness of culture and the counseling relationship consider the following: (1) the cultural orientation of the counselor and the extent to which he or she is continuously involved in self-focus and deep cultural introspection of their cultural-selves; (2) the culture of the client and the extent to which they are self-aware and involved in the cultural or ethnic group with which they identify if they do at all; (3) the negative assumptions related to the counseling process which may be quite different from the cultural orientation of the counselor and the client; and (4) the culture of the environment in which the counseling occurs (Pedersen et al., 2008). We can roll these four together and find “ourselves working with a client from another culture, on a problem relating to a third culture, in the environment of a fourth culture where each participating culture presents its own demands” (Pedersen et al., p. vii). While extreme, nonetheless the scenario represents the extraordinary complexities associated with providing counseling to culturally unique clients.

Many students and practitioners wonder what counseling styles or theoretical orientations would be most effective and useful with cultural and ethnic clients. Unfortunately, there is no simple, straightforward recommendation here, too. On the one hand, if a practitioner shows evidence of being warm and empathetic, establishes trust and rapport, shows respect for cultural values and beliefs, and expresses flexibility in meeting the client’s expectations, then it would make sense that any style would work. Yet a number of writers in the field suggest that certain styles are likely to be more effective than others, even though there is at this point little empirical evidence to support their claims.

Throughout the writings on the topic of multicultural practice, one theme surfaces repeatedly: Counselors of culturally ethnically different clients must be adaptive and flexible in their personal orientation and use of conventional practice techniques. Commitment to understanding the cultural context and unique cultural characteristics

of clients also is essential. This often requires practitioners to extend their efforts beyond what is typical in a conventional office. Thus, in general, when faced with a culturally different client one should be mindful of the following recommendations offered by Miller (1982): (1) a counselor's personal identification with the culture of a client is hardly sufficient for a thorough understanding of the impact of a cultural lifestyle on a client; (2) a client's personal history contains information that focuses on certain strengths, and this can be useful in promoting positive therapy expectations; (3) practitioners should be aware of their own personal biases and stereotypes about cultural pluralism; (4) practitioners should encourage clients to become active in identifying and learning the various thoughts and behaviors that promote positive growth and development; and (5) the most important yet basic counseling approaches involve empathy, caring, and a sense of the importance of the human potential.

The answer to the second part of the question requires careful study and participation in programs that emphasize multicultural practice education. Indeed, numerous books have been written on the subject and more are becoming available. Similarly, the topic has become a major focal point of professional psychological conferences and meetings. Taken together these are rich sources of information. Unfortunately, not all graduate and professional schools in psychology embrace multiculturalism and thus do not fully endorse multicultural practice guidelines. Avoid these institutions if you aspire to work in the multicultural counseling or clinical fields. Counseling and clinical psychology programs should be accredited primarily by the APA and if they are then one can be assured that culture and ethnicity are included in the curriculum and field and internship experiences. The APA has a cultural competence standard in its accreditation protocol. Fortunately, there is a growing list of institutions where one can receive culturally appropriate and sensitive graduate education in counseling; that was not the case 10 years ago. Currently, the APA provides a list of such institutions through its Office of Ethnic Minority Affairs (see www.apa.org/pi/oema). Among these, the APA selects

specific colleges and universities whose programs demonstrate excellence in the recruitment and retention of ethnic minority to receive the APA Suinn Minority Achievement Award; one of the selection criteria centers on the presence and emphasis of multicultural competence in teaching, practice, and research.

Achieving Multicultural Competence in Research

The standards and criteria for achieving multicultural practice competence and sensitivity also apply to conducting research with ethnocultural groups although the themes and approaches vary to accommodate the methodological rigors attached to the research venture. Both fields require that one gather, interpret, and analyze information however methods and procedures will vary depending on the research question. The practitioner is interested primarily in the client's background and the diagnosis of the presenting problem while the researcher typically is interested in testing hypotheses and components of a theory where something about the sample population's culture is of prime interest. To an extent, the similarities end there as the research venture is filled with numerous theoretical, procedural, and methodological considerations one is not likely to encounter in the multicultural counseling field.

Given the current interest in cross-cultural and ethnic psychology, it would be safe to conclude that more and more studies will be directed to culturally different populations, not only in North America but probably for other nation states, too. Consequently, social scientists face a multitude of theoretical and methodological concerns quite often presented by ethnocultural groups whose cultures are unique in contrast to the dominant groups in North America. Predictably, the ongoing and increasingly significant work of cross-cultural psychologists will be a source for guidance and direction. For example, the official publication of the International Association for Cross-Cultural Psychology (<http://www.iaccp.org/>), the *Journal of Cross-Cultural Psychology*,

is an excellent resource as it now contains over 40 years worth of excellent research findings and commentary on the subject; other journals such as *Cultural Diversity and Ethnic Minority Psychology*, *Journal of Multicultural Counseling and Development*, *Culture and Psychology*, and *Ethos* provide excellent sources of research findings and commentary.

To build one's research cultural competence requires researchers to examine the methodologies of cross-cultural psychologists, cultural and ethnic psychologists, and cultural anthropologists especially those directed to the conduct of field-based research (Trimble & Fisher, 2006). One should be aware that cross-cultural psychology is defined more by methodology than by findings (Berry et al., 1992). Knowledge of the empirical findings in both fields may prove useful but not nearly as useful as the methods. Building research cultural competence requires that researchers place an emphasis on what cross-cultural and cultural and ethnic psychologists refer to as *universals* not universal psychological constructs or similarities in behavior, but universally acceptable methods of generating empirical data. A discussion of universal psychological processes has itself received a good deal of attention and criticism (Jahoda, 1980).

The basic challenge for a field approach to cross-cultural psychology is to identify useful and appropriate *methodological ethics*—research technologies that are both sensitive and appropriate for use in all cultural groups. It would be naive for one to assume that a *methodological ethic* is sufficient to collect data from different cultural folks—other intercultural nuances may exist that could affect data collection and use of results. In an attempt to highlight issues and problems, the remaining sections of the chapter focus on major and selected methodological concerns, the influence of researchers as agents of sociopolitical change, and the ethical and social responsibilities of applied researchers.

In conducting culturally distinct research with ethnocultural groups, the would-be researcher sets a process in motion that of necessity must take into consideration the *ethos* and *eidōs* of the groups in question. Not to do so could lead to an

early death of the project and likely alienate the research team from future work with the community. In turn, as has happened far too often, community members receive further substantiation for their levels of distrust toward research and its progenitors. Lack of cultural sensitivity and awareness of community dynamics sets up a difficult situation and science receives a bad reputation (often much deserved), and the community problem continues to go unsolved.

Anyone who has conducted participatory community-based fieldwork knows it is tough and sometimes dangerous for everyone involved. Yet to gather the information necessary to frame a cultural-specific perspective of a psychological phenomena requires extraordinary patience tempered with well-developed value orientations and research skills. Access to the field to conduct research with ethnocultural populations is becoming more and more difficult and demanding; some would argue it has been difficult and demanding. An intense concern about field-based research is emerging from many people from different ethnocultural communities who are becoming highly vocal about the problems many researchers create for them. Increasingly, communities are becoming concerned about the presence of “outside” researchers; many are intolerant and unforgiving of past research efforts. The once popular and widely used “safari-scholar” approach to research is fading from acceptance and “one stop data mining” by itinerant researchers is no longer acceptable. More than ever, ethnocultural communities demand that research occur in their communities under their direction and control. Researchers should be prepared to collaborate with communities, share results that have practical value, and accept the conditions imposed by the community in gaining access to information and respondents (Trimble & Fisher, 2006).

Margaret Mead reminds us that, “The ethnologist (field-based researcher) cannot march upon a native community like an invading army, for that community is going to be not only a source of labor and food, but also the very stuff of his investigation. He must slip in quietly, lower himself or herself as gently as possible into the placid waters of native life, make the unprecedented arrival of

an inquiring white person as inconspicuous as possible..." (Howard, 1984, p. 117). And, then as Mead suggests in another source, "the way to do fieldwork is never to come up for air until it is all over" (Mead, 1977, p. 136).

One no longer can go quietly into indigenous communities, for example. Community access is regulated, if not directed, by professional ethical standards and guidelines, government requirements for participant informed consent, approval from an institutional review board (IRB) or panel, and indigenous community approval of the research prospectus. Without approval and review, access is almost impossible.

The most important challenge, though, is the responsible conduct of researchers while they are in the field, especially as reflected in the relationship they establish with respondents (Cassell & Jacobs, 1987; Fisher & Wallace, 2000). Unfortunately and regrettably, some researchers take a more self-serving approach in which their needs, aspirations, desires, and wants overshadow those of their host communities; and that approach, likely judged rational and acceptable by the researcher, is the foremost reason for the problems numerous ethnocultural communities continue to experience with outside researchers. Self-serving researchers may believe they can mask their selfish intentions, but they may be deceiving themselves that they will go unnoticed. Goodenough (1980) reminds us, "The principle that underlies problems of ethics is respecting the humanity of others as one would have others respect one's own. But if they do not feel such respect, then no matter how scrupulously they follow the letter of the written codes of professional ethics, or follow the recommended procedures of field (research) manuals, they will betray themselves all along the line in the little things" (p. 52).

"What does it mean to be an ethical person when conducting research with ethnocultural communities?" ask Trimble and Mohatt (2005). Does it mean that one must be a morally decent person who closely adheres to a precise set of values that will not be compromised? Does one consider ethical standards in the context of viewing community-based dilemmas from a principled perspective guided by the fixed rules of

objectivity, reason, and impartiality? Is that approach likely to be acceptable to the community's research partners? Is it possible that one's character and thus moral and ethical standards are incompatible with those likely to exist in the host research community? In addition to the personal challenges, communities also will want to know what kind of person they will be working with in the course of the relationship. If researchers do not closely follow and live by a set of "principled virtuous ethics," such as prudence, integrity, respectfulness, benevolence, and reverence then at some point they slowly alienate their hosts and may be asked to leave.

Ethics requires self-reflection and an ability to recognize and share with others personal values, errors of judgment, and lessons learned along the path toward the respectful and responsible conduct of research. No matter how the topic is expressed, researchers should seriously consider framing their field-based research around the formation and maintenance of responsible relationships. One will soon discover that community members will put the researcher through a sequence of "tests" to assess their level of commitment to working closely with them and to learn about their cultural ways. In effect, a "relational methodology" means that one takes the time to nurture relationships not merely for the sake of expediting the research and gaining acceptance and trust, but because one should care about the welfare and dignity of all people (Trimble & Mohatt, 2006).

Framing ethical principles and guidelines to include "moral considerations" is an indispensable condition for guiding research ventures. An emphasis on the worth of moral reasoning and principles has been the concern of several scholars most notably Clifford Geertz, who insists that, "An assessment of the moral implications of the scientific study of human life which is going to consist of more than elegant sneers or mindless celebrations must begin with an inspection of social scientific research as a variety of moral experiences" (2000, p. 23).

What can one do to minimize cross-cultural conflicts accruing from the researcher-community interface? Fortunately, owing to the growing

body of research in cross-cultural settings, a good deal can be learned from successful efforts. Before one prepares a research plan involving one or more ethnocultural groups, they should be mindful of the *comparability phenomena* as it remains as a daunting and perplexing problem for researchers. *Comparability* or *cultural equivalence* is a methodological problem for cross-cultural researchers because one must decide when and if the intended measures, techniques, procedures, representative of one ethnocultural group are equivalent to the lifeways and thoughtways of another ethnocultural group. Some cross-cultural researchers argue that achieving cultural equivalence is impossible while others argue that one can approach equivalence through use of carefully designed studies (see Berry et al., 1992).

The problem often is referred to as the *Malinowskian Dilemma* where the distinguished cultural anthropologist Bronislaw Malinowski “was most insistent that every culture be understood in its own terms, that every institution be seen as a product of the culture within which it developed. It follows that a cross-cultural comparison of institutions is essentially a false enterprise, for we are comparing incomparables” (Goldschmidt, 1966, p. 12). If we align ourselves with Malinowski’s position we should stay with the study of one culture and not engage in the comparison of one ethnocultural group with another or many others as we run the risk of functional, conceptual, and metric inequivalence. Considerable debate abounds in the literature on the approaches advocated by *cultural psychology* and *cross-cultural psychology*; the former advocates study of one culture alone and the latter studies for comparison purposes.

Describing the Ethnocultural Group

In the design of cultural or ethnic intended research, attention must be given to the manner in which one specifies and describes ethnic and culturally distinct populations. In the cross-cultural literature, studies abound in which researchers purport to be studying such groups as the Japanese, Israeli Jews, Hong Kong Chinese, Canadians, Australian aborigines, Greek Australians, Nigerians—this list

could continue, comprising a multitude of nationalistic and hyphenated ethnic and nationalistic populations. Occasionally, researchers provide greater specificity concerning their respondents in their titles and abstracts by giving reference to a geographic region or city in the USA. Others will distinguish their respondents along urban and rural lines while others, when referring to an American Indian group, will specify the tribe and the location on a reservation where the study occurred; this in itself can present problems as many tribes do not want to be identified in published reports. For a vast majority of the studies in the ethnic minority and cross-cultural literature, descriptions of ethnocultural groups tend to rely on use of broad *ethnic glosses*, superficial, almost vacuous, categories which serve only to separate one group from another (Trimble, 1991; Trimble & Dickson, 2005a).

Use of such *glosses* provides little or no information on the richness and cultural variation within these groups, much less the existence of numerous subgroups characterized by distinct lifeways and thoughtways. Furthermore, use of broad *ethnic glosses* to describe a cultural or ethnic group in a research venture may be poor science. Apart from the fact that such sweeping references to ethnic groups are gross misrepresentations, their use can violate certain tenets concerning external validity, the ability to generalize findings across subgroups within an ethnic category, and erode any likelihood of an accurate and efficient replication of research results.

Use of *ethnic glosses* as subject and respondent descriptions has generated many concerns in recent years (Trimble & Dickson, 2005a). Critics point to the fact that ethnic minority groups—specifically American Indians and Alaska Natives, Asian American, Pacific Islanders, Blacks, and Hispanics, the major ethnic minority groups in the USA—represent varied sociocultural and subgroup categories. American Indians (often Native American), a widely used and abused *ethnic gloss*, actually represent an extremely diverse and complicated ethnic group from well over 500 identifiable tribal units where individual members represent varying degrees of mixtures resulting from

intermarriages and reflect varying acculturative orientations that effect ethnic identity (Trimble & Dickson, 2005b). There are at least 32 distinct Asian American ethnic and cultural groups that can be meaningfully listed under this designation—the differences among and between these groups are extraordinarily complex. Given the diversity of languages, norms, mores, and immigrant status, it is evident that to label these peoples as Asian American implies a homogeneity which is lacking. The Hispanic *ethnic gloss* is a term used to designate those individuals who reside in the USA and whose cultural origins are from Mexico, Puerto Rico, Cuba, and other Latin American countries. Blacks in America are people who can trace the origins of their ancestors to Africa. Black, as a race, is an illusion if one means by it a homogeneous group with common anatomical and psychological characteristics. Moreover, Blacks in America are as culturally heterogeneous as the other three groups as reflected in social class characteristics, progeny from mixed ethnic marriages and American Blacks who are descendants or are originally from the Caribbean Basin (e.g., Bahamas, Dominican Republic, Haiti, and Jamaica) and Central and South America.

In North America an ethnic minority group may be defined as: “(1) subordinate segments of complex state societies; (2) (having) special physical or cultural traits which are held in low esteem by the dominant segments of the society; (3) self-conscious units bound together by the special traits which their members have and by the special disabilities which these brings; (4) (one where) membership is transmitted by a rule of descent which is capable of affiliating succeeding generations even in the absence of readily apparent special cultural or physical traits; and (5) (people who) by choice or necessity tend to marry within the group” (Wayley & Harris, 1958, p. 10). These factors must be taken into consideration when defining research samples and populations.

In selecting ethnic samples for social and behavioral science studies, researchers almost tacitly assume that the respondents share a common understanding of their own ethnicity and

nationalistic identification. It is as though the researcher believes that American Indians, Blacks, and others share some modal characteristic that at one level sets them apart from another comparative sample such as “whites” (Trimble, 1991; Trimble & Dickson, 2005b). The assumption may be invalid. Heath (1978) argues that “categories of people such as those compared under the rubric of ‘ethnic groups’ are often not really meaningful units in any sociocultural sense” and “that the ways in which people define and maintain the ‘social boundaries’ between or among self-identified categories are often far more important and revealing of sociocultural dynamics” (p. 60).

At an individual level, the researcher can use labels to describe one’s ethnic affiliation and thus one’s identity but this approach is incomplete and insufficient to adequately capture the full range of one’s identity. Use of the label, often obtained by having the respondent fill in a list of ethnic categories, is a small part of one’s ethnic identification. One must consider gathering information on natal background, acculturation status, attitudes toward their own and other groups, preferences such as language use, friendship affiliations, music, foods, and participation in cultural and religious events. The variables are closely aligned to the four-part ethnic identification measurement model advocated by Trimble (2000) and related ethnic and racial identification scales (see Trimble, 2005; Trimble, Helms, & Root, 2002).

Ethnic self-identification is a unique psychological construct and “refers to the description of oneself in terms of a critical ethnic attribute; that is, an attribute that defines more than merely describes the ethnic group” (Aboud, 1987, p. 33). If a researcher intends to isolate and discover the extent to which deep-cultural variables influence outcome variables it is imperative that attention be given to the extent to which respondents identify themselves. Thus, cultural and ethnic studies involving nationalistic or ethnocultural groups must provide respondents the opportunity to define themselves in terms that far exceed what is captured by a label or an *ethnic gloss*.

Gaining Entry to the Field and the Community

All researchers should know exactly what kind of relationship they want with their respondents because the nature of that relationship will determine the depth and quality of the information and data. I often refer to this as *relational methodology*. Approaching a community setting as though it was a laboratory where respondents were treated as subjects to be manipulated according to strict scientific principles likely would generate a certain set of results. Psychology's over emphasis on variable control at all levels belies the fact that people live in social contexts and these contexts profoundly influence our actions, thoughts, and feelings. Thus, the laboratory-based findings might be quite different from those where the researcher approached the community as a participant observer and viewed the informants and respondents as collaborators in the research enterprise. In the first scene, respondents may tell you what they believe you want to hear and nothing more. In the second scene, respondents may tell you what they really believe and know more so because they know that they are collaborators in the venture. In this scene, the investigator focuses on the community as the context in which individual behavior occurs. The meaning of one's actions and thoughts are contextual and situational and thus the context and situation become a source of information. The scene and perspective have been referred to as an *Ecology of Lives* approach to field-based research where the emphasis is placed on how lives are lived and influenced by the context in which affect, behavior, and cognition occur (Trickett & Birman, 1989). For the approach to work effectively, the researcher must firmly establish trust and rapport, which will never occur in *one shot* approaches to research as trust and rapport require a long-term commitment to the people and community.

The presence of social scientists in ethnocultural communities, especially certain ethnic minority communities in North America, is cause for considerable suspicion. Even the mere suggestion that one is an academic is enough to spark controversy. Often, this is the case for researchers who share the same ethnicity as

members of the host community. Origins of the suspicions derive from two primary sources: a community's lack of experience with the research process and previous relationships with former researchers.

Many ethnic minority and ethnocultural communities have little or no understanding or appreciation for academic-grounded research. Scientism and all its trimmings often are foreign to the residents. Researchers often are viewed by themselves and community residents as socially and culturally marginal to the society they intend to study. Consequently, "no matter how skilled he is in the native tongue, how nimble in handling strange social relationships, how artistic in performing social and religious rituals, and how attached he is to local beliefs, goals, and values, (the researcher) rarely deludes himself to thinking that many community members really regard him as one of them" (Freilich, 1970, p. 2).

Field-based researchers often stand to be accused as some kind of government agent or interloper. "He is not what he pretends to be and that he is gathering information for some purpose harmful to the community" (Freilich, 1970, p. 3), an outsider looking for a place to establish permanent residence, a missionary sent in to convert the residents, or another social scientist whose prime interest may be to gain prestige and promotion. Because of the recent concern about the presence of researchers, a number of indigenous and aboriginal communities in the USA, Canada, and countries in Central and South America have issued edicts prohibiting and restricting any form of research in their respective communities (see Tierney, 2001).

Most Native American Indian reservation communities in the continental USA require all outside researchers to present a prospectus to the tribal council for review and sanction. If sanctioned, researchers are granted what is equivalent to a solicitor's license that carries with it a number of contingencies that typically include (1) the assignment of a knowledgeable tribal member to monitor all research activities, (2) restrictions on the nature and composition of potential respondents (this restriction makes random sampling almost an impossibility), (3) the right to review

all original and completed research questionnaires, interview schedules, and field notes, (4) the right to review any documents submitted for publication with the understanding that the tribe has the right to reject such documents, and (5) the right to review, comment, and pass judgment on any final reports. Add to these contingencies the procedures for receiving informed consent and protecting the rights of all respondents and one could readily surmise that conducting field research is much more complex than randomly pooling college students in quasi-laboratory settings.

Gaining entry into the field, whether invited by the host culture or not, carries an enormous responsibility. This responsibility not only extends to the residents and respondents but also to the maintenance of one's scientific integrity. More important, the researcher should recognize that mistakes, errors in protocol, and violations of cultural norms, beliefs, and values are not easily forgiven by members of the host and scientific communities. Impetuously and boldly rushing into a community for the sheer sake of advancing one's pet theory and hopefully promoting science is unconscionable, intolerable, and indeed disrespectful.

Before setting foot into a culturally different community for the purposes of conducting research, researchers would do well to heed the recommendations of those who have been there before. After spending some 5 years conducting research on the aging process in numerous ethnic minority communities in the USA, Bengsten, Grigsby, Corry, and Hruby (1977) drew up the following considerations for researchers, as follows:

- Research should be multidisciplinary. If not possible, the solitary researcher should seek the consultation of other social scientists and persons who have some working knowledge of the community in question.
- Conventional laboratory grounded research strategies are not easily translated to field research. The scientific community will be concerned with methodological soundness and the lay community will want to be assured that they are not getting ripped off, that their

collective voices will be heard, and that they will share in monetary remuneration if it is available.

- Because of the number of the community members involved, the potential for conflict is considerable. Bengsten et al. (1977) argue that the conflict between the lay community and professional researchers may demand that strategies for conflict resolution be given consideration equal to that directed toward design criteria and methodological procedures.
- Above all the considerations, field researchers must be prepared to adapt to many changes that could occur in the course of the effort. They must be prepared to revise strategies and tactics to accommodate the changing concerns of community life.

Cultural Equivalence of Research Tools

Field-based researchers typically rely on the use of survey and structured interview formats to collect information. In addition, some researchers make use of case study approaches, meta-analytic procedures, secondary data analytic methods, and, to a very limited extent, quasi-experimental approaches. These research approaches could be referred to as *methodological etics*, for it is assumed that the techniques could be used with any group, regardless of its cultural background.

Methodological etics are akin to what cross-cultural psychologists refer to as *cultural equivalence phenomena* that are consistent across all human beings and all human groups (Trimble, 2010). Berry et al. (1992) argue that essentially three kinds of equivalences can exist: (1) Functional equivalence exists when behaviors emitted by people from different cultures occur in response to similar problems; (2) conceptual equivalence exists when people from different cultures share a common meaning about specific stimuli; and (3) metric equivalence exists when the psychometric properties of one's data obtained from different cultures reveals a comparable pattern. The nature of functional and conceptual equivalences presents real problems for cultural and ethnic researchers as exclusive reliance on *methodological etics* without regard for these concepts could invalidate an entire research venture.

To understand conceptual equivalence, one must recognize that every culture has developed ways of looking at the world that make sense to them. Their worldview, much of which is reflected in the language of the culture, has been shaped by environmental, historical, biological, and other factors that have marked that people's evolution as a unique group. While there may be commonalities in all worldviews, depending to some extent on the proximity of groups, there are also usually areas of significant differences. For instance, many American Indians differ from White people in their view of what constitutes mental illness. For some tribes, mental illness is the result of having in some way transgressed the rules of right living, and until this can be rectified through ceremony, the illness will continue; thus, it is perceived as a spiritual issue whose resolution is in the hands of a medicine person or shaman. This contrasts with the White view that the person has been subjected to a pathological process that can be relieved through medication combined with the individual's efforts to change his or her behavior.

One way to ensure equivalence involves the prudent use of local people as part of the research team. It is important that these people be deeply involved with the planning and that their views be given full consideration. Too often, local people are hired as program staff, but their ideas are not sought and they are not included in planning sessions. Therefore, researchers must be aware that many ethnic minorities interact and communicate with one another in unique ways. In meetings where ideas are being shared and plans are being made, it is common for indigenous tribal people, for example, to withhold their comments until everyone else has spoken. It often happens that meetings are ended before those in attendance have had an opportunity to present their views, and an important source of information is lost.

We now turn our attention to measurement issues and begin with the concept of *metric equivalence*. This concept refers to the possibility that survey and questionnaire items or scales often operate differently across cultures. Another *metric equivalence* problem occurs when the relationship between variables is not the same

across cultures. Although it is often ignored, establishing *metric equivalence* should be a standard task for researchers. It is not enough to identify measures that have been used in other studies to measure a concept under consideration. It must be demonstrated that the selected instrumentation is both valid and reliable for the population on which it will be used. In addition to the usual reliability and validity studies, it is useful to analyze the factor structure of the measures and constructs being used. Besides establishing *metric equivalence*, use of factor structure analysis, item response theory, and Rasch modeling algorithms can help in examining problems that may also exist with functional and conceptual equivalence.

The question is often raised as to whether it is best to use *off-the-shelf* measures or to construct new measures when doing research in a cross-cultural milieu. There is no one answer to this question, given that problems can be encountered with each approach. Unless there is evidence that an existing measure has already worked in the population being evaluated, it is usually necessary to establish reliability and validity with that group. This is not to say, however, that all measures are inherently culturally biased and cannot be used, either in part or in whole, with other populations.

Construction of new items and scales is not a task that should be taken lightly. Many researchers underestimate the difficulty of scale construction, and this difficulty is multiplied when the new scales are applied across cultures. One of the most common errors is not to test the scale before using it for evaluation. Pilot testing is an absolute requirement and should involve a debriefing procedure in which potential subjects can talk about their interpretation of the items.

There is one final set of points to be made in this section. Over the years, researchers working with different cultures have resorted to the use of measurement tools that are based on norms and the testing orientation of those with a Western perspective. All too often, these researchers encounter problems in administration, scoring, and, assuredly, interpretation. Critics abound, though, and a number of cross-cultural researchers

have commented on the cultural inappropriateness of measurement approaches (Irvine & Berry, 1983). Many of us in the field of cross-cultural and ethnic psychology wonder why some investigators, almost blindly and with utmost diligence, continue using conventional measurement and psychometric traditions in cultural and ethnic research.

Here are seven common pitfalls in cross-cultural testing:

- Psychological constructs are viewed as synonymous with locally derivable criteria, which may or may not be consistent with the implied intent of the construct.
- The establishment of several types of equivalence is not considered essential.
- It is assumed that once tests are purged of verbal material, leaving only nonverbal stimuli, they are more *culture-fair*.
- Norms gathered in one culture are used to evaluate the performance of individuals in other cultures.
- People from around the world may have variable and different modes of responding to test items.
- Such testing generally tends to infer deficits based on test score differences.
- Nearly all psychological tests are culturally isomorphic to the West, which can be characterized as sophisticated and test-wise.

Report Writing and Dissemination of Findings

Ordinarily, emphasis on report writing and dissemination of results is not included in articles and books dealing with the conduct of cross-cultural and ethnic research. In recent years, however, many of us have become aware that numerous research studies have had a negative impact on the reputation of ethnocultural communities due in large part to the way in which reports and articles are written and publicized. Applied social research programs, for example, are designed to address social ills; therefore, written descriptions often focus heavily on the negative aspects of communities. When ethnic minority communities are involved, this type of reporting—over time—reinforces negative stereotypes. Consequently many ethnic minority communities especially American

Indian and Alaska Native ones require that they have a right to review the results, how the data will be analyzed, and how the results will be written and disseminated. If the investigator does not agree with the conditions community and tribal sanctions will not be granted.

In the worst case, study results can be blatantly used to denigrate a community. Some years back, a local border town newspaper obtained the results of a survey of alcohol and other drug use that was given on an American Indian reservation in the USA and it sensationalized the results. Although there were no overt racial statements, the intent was clear and the Indian community experienced a great deal of shame. Social problems do exist in ethnic minority communities; however, it is necessary to place them in context, and any research report should reflect that context. For example, alcohol and drug use problems in most American Indian communities largely reflect socioeconomic conditions and are not related to any inherent cultural characteristics. Many American Indians are becoming increasingly impatient with the litany of social ills that are ascribed to them, and a research report that presents a balanced picture will get a much better reception and is more likely to be used. In a word, the report should be written and presented *respectfully*.

Community-based research may have two purposes. At the local level, people need to know whether the research has value for them, that is, is it culturally congruent, well received by the community, and consistent with local values and norms? There is also a need for technical data that support the report's conclusions and may be used to answer more specific questions. These two purposes suggest the need for two types of reports. It often happens that technical reports are never used at the local level because they are too complex and do not respond directly to the need to make decisions. In the absence of a more comprehensible document, the community may be left with the feeling that the research was a wasted effort, and it may develop a negative attitude toward research in general. Thus, a report written in nontechnical language specifically to address the local need is appropriate.

The release and dissemination of a research report often will have to be handled carefully, particularly if the report contains sensitive information. In one sense, this is a question of who owns the data; many American Indian communities will claim they do since they were the ones who provided the information. Given this, the community or its representatives would have the final decision about the dissemination of results. There must also be recognition, however, that the information can be useful in other communities and therefore needs to be published in some form.

Several approaches can be used to reduce controversy over publication. First, negotiations should occur very early in the research process, and some general agreement should be reached. In some cases, even if prior agreement has been reached, there may be some unanticipated results that community people find sensitive and would not like to see publicized. Usually, a compromise can be reached through negotiation, whereby some information may be deleted or left in a report for internal purposes only. It is also useful to allow local people to preview the report to determine whether there are any conclusions that could be more accurately interpreted in light of local culture, values, or beliefs.

Whenever there is concern over report content, the manner in which the report is released can be extremely important. In 1980, a very sensitive report on alcoholism in a Native Alaska village was released to the general media (Manson, 1989). In addition to a number of other serious errors in protocol, the information from the study was presented at a press conference thousands of miles away from the village where the study was conducted. This precluded any participation by local people and allowed the whole situation to be presented out of context. Once again, an Alaska Native community experienced a great deal of shame because the information released implied that nearly all of the Native adults in the community were alcoholic. Although the actual situation was quite different, there was no way to moderate what was presented.

It is wise and prudent to have local people involved in any release of research information,

either in person or through a cover letter signed by an agency representative. This once again demonstrates the need for community people to be intimately involved with any research effort. It not only ensures that the most accurate information is presented, but also precludes the perception that the community is once again the subject of outside research and is not capable of resolving local issues and understanding the implications of the findings.

The Costs Generated by Cultural Incompetence and Insensitivity

While there is a great deal of disagreement about definitions of multicultural competency and cultural competence, there is much more agreement about recognizing instances of multicultural incompetence. The fallout and untoward consequences of cultural incompetence are unprecedented in the annals of the history of humanity; the emotional, psychological, physical, ecological, and economic costs are extraordinary and often beyond comprehension. Advocating and encouraging cultural competency in every aspect of life can reduce the sociological, psychological, organizational, and financial costs of multicultural incompetence.

By most accounts one of the most blatant examples of cultural incompetence in the research field is Tuskegee Syphilis Study carried out in Macon County, Alabama, from 1932 to 1972. Originally titled, the "Tuskegee Study of Untreated Syphilis in the Negro Male," by every ethical standard and principle, it was a shocking and scandalous example of medical research gone wrong. The USA Public Health Service, in trying to learn more about syphilis and justify treatment programs for Blacks, withheld adequate treatment from a group of poor, rural Black men who had the disease, causing needless pain and suffering for the men and their loved ones; the project costs the federal government millions of dollars in research funds. The study involved 600 black men—399 with syphilis and 201 who did not have the disease. Researchers told the men they were being treated for "bad blood," a

local term used to describe several ailments, including syphilis, anemia, and fatigue (Caplan, Edgar, & King, 1992; Jones, 1993; Reverby, 2009). In truth, they did not receive the proper treatment needed to cure their illness. In exchange for taking part in the study, the men received free medical exams, free meals, and burial insurance. Although originally projected to last 6 months, the study actually went on for 40 years.

Knowledge of the study was first published on July 25, 1972 by Jean Heller and appeared in the *Washington Evening Star* and in the *New York Times*; the next day the story was carried in numerous newspapers worldwide and in radio and television newscasts (Jones, 1993; Reverby, 2009). The dreadful story gripped the attention of millions of readers and listeners and led subsequently led to an immediate call for action and explanation from the US Public Health Service. In response to the allegations, the US government established and convened an ad hoc review committee to carefully and closely review and examine the charges and allegations. At the end of the investigation, the committee overwhelmingly concluded that the study was “unethical” and that it must be stopped. The establishment of the National Commission soon followed the committee’s recommendation for the Protection of Human Subjects of Biomedical and Behavioral Research and the first federal regulations establishing national IRBs and standards for the ethical conduct of research. Two years later, the National Association for the Advancement of Colored People (NAACP) filed a class-action lawsuit against the federal agency on behalf of the study participants and their families; the suit was settled out of court for \$10 million. Each participant received \$37,500 in damages; the heirs of the deceased each received \$15,000. Coincidentally, in 1974, the US Congress passed the National Research Act, requiring IRBs to approve all studies involving human subjects in any form of research. On May 16, 1997, then US President Bill Clinton issued a formal apology from the East Room of the White House. Many scholars and civil rights activists wonder why it took so long for the federal government to issue the apology.

The Tuskegee Syphilis Study is one of many instances where scientists have exploited historically oppressed groups presumably to advance an understanding of the human condition (Ibrahim & Cameron, 2005). The outcomes of the Tuskegee study should serve as a warning to those who would abuse participants and deny them their rights that does not appear to have been the case in Macon County, GA.

Summary and Conclusion

The chapter begins with two related quotations concerning the importance of cultural explanations and valuing the breadth, depth, and richness of the lifeways and thoughtways of ethnocultural populations. The quotes from the chapter’s theme that takes us from definitions about cultural competence and cultural sensitivity to conducting research in culturally appropriate and sensitive ways. Mixed in are discussions about self-reflection and learning about one’s cultural self and multicultural counseling and how one can attain competency in this rapidly emerging field of inquiry. Care has been taken in the selection and use of relevant references describing important concepts, techniques, and information related to the overarching chapter theme; the references serve as a tool for the reader to use to explore the depth and richness of the chapter’s topics.

For decades psychology has been selective in the study and characterization of people. Critics argue that most of the early findings generated from psychological researchers occurred in a cultural vacuum and were limited to North America. Heinrich, Heine, and Norenzayan (2010) refer to the large sample pools in psychological research as the WEIRD people (Western, Educated, Industrialized, Rich, and Democratic) and thus the samples are ethnocentric and culturally biased. The more harsh and cynical critics point out that the findings could only be generalized to Whites or Euro-Americans, as they were the major source of researcher’s data. Robert Guthrie’s (1976) small book, *Even the Rate was White*, tells a good part of the reason why early psychology were scientifically racist. Similarly,

beginning in the late 1960s, counseling and clinical psychologists were accused of being *culturally encapsulated* because their theories and approaches were limited to certain ethnocultural groups—ones who valued talking about their problems with professionals with the hope that the problems could be solved or cured. At that time and continuing to the present many international, ethnic minority, and cross-cultural psychologist argued that culture and ethnicity should be central to the psychology rather than an outlier or an object for exotic study.

Cross-cultural, cultural, and ethnic psychologists have discovered that cultural differences make a difference in the way people act, perceive, think, and feel so much so that major theories have to be revised to accommodate the new and contradictory results. Counseling and clinical psychology approaches also have undergone revision and change. Mental health and how one achieves and maintains it vary from one ethnocultural group to another and counselors are discovering that an approach that works for one may not work for another. Culture and all that it and means and represents is challenging psychology but the field, too, is challenging culture in reciprocal ways. Psychologists in the main keep asking us to define what we mean by culture, ethnicity, and the processes and mechanisms that mediate and influence thoughtways and lifeways. Becoming culturally competent and culturally sensitive does not imply that one discard the contributions of past and present social and behavioral scientists and scholars. The challenge for the reader is to recognize that we cannot fully understand the human condition without viewing it from a cross-cultural, culturally specific, and ethnic perspective. What was learned about the human condition in the past can be reframed and tested with a new set of approaches and procedures in contexts not considered in the past. Similarly, we may find that specific thoughtways and lifeways of certain ethnocultural groups may have some extraordinary value for psychology as a whole and thus assist in improving our understanding of humans and the settings we live in.

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Additional Resources

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Kenneth S. Pope

We bring our personal ethics to graduate school and begin to create our professional ethics. We begin to face questions: Are ethics central to who we are and what we do? Do our professional ethics depart from the values that we lived by before entering graduate school? How do we respond when the choice we view as most ethical involves risking or sacrificing a golden opportunity, money, a valued relationship, our job, or reputation? What do we do when ethical choice involves daunting complexity, gray areas, and conflicting values?

Graduate school often presents us with intriguing situations involving the ethics of research and publication, faculty–student interactions, psychological assessment and intervention, and the other aspects of what we do as psychologists. Consider the following scenarios:

- As a research assistant for one of the department’s most respected and influential professors, you compute the inferential statistics on a large data set. The findings are not statistically significant, and the professor’s new theory is not supported. The professor then throws out the data from 20 % of the participants. When you rerun the stats, the tests are significant and the theory is supported. You receive your first authorship credit when the results are published in a prestigious scientific journal and you’re listed as coauthor. The article, however, makes

no mention of the initial tests or excluded participants.

- Your dissertation is on how young children think about their own creativity. You obtain informed consent from the parents or guardians, assuring them that your contact with the child will be limited to only a 1-h session, that the session will be completely confidential, and that when writing up your dissertation and at all other times, you will never provide any information to anyone that would allow identification of any child or family. In each session, the child makes up a story during the first half-hour, then you ask questions about how he or she thought up the theme, characters, plot, and details. One girl, whose father is a famous attorney who has won multimillion dollar judgments in defamation cases, makes up a story about how a little girl is terrified of her father, an attorney, because he comes into her room almost every night and has sex with her. He has told her that if she ever tells anyone their secret, he will stomp her dog to death and that no one would believe her anyway. When you ask her how she thought up the story about the little girl, your research participant says, “Well, she’s almost exactly like me in a lot of ways.” When you ask her what she means, she says she is afraid to talk any more and remains silent until the hour is up.
- You and your best friend are talking about how much you’re both looking forward to graduating next spring. Your friend confides: “I had no idea how I’d ever get my dissertation

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done but luckily I had enough money to hire a consultant to design the study and analyze the data. And I was so relieved to find a good professional author who could write it up for me.”

What do you consider the most ethical response to each situation? If the scenarios involve conflicting values, responsibilities, or loyalties, how do you sort through the conflicts and arrive at a decision about what to do? What are the costs, risks, and possible outcomes of the various approaches you can imagine to each situation? How we work our way through such complex situations not only reflects but also actively shapes our professional ethics and character.

Ethical development is, for most, a career-long process. Ethical development that stops at graduate school can be a little like the professor relying on the same yellowing lecture notes decade after decade, never bothering to update, rethink, or renew.

The rest of this chapter falls into two parts. The first discusses seven steps that seem important to the development of professional ethics:

- Start with what we actually do
- Stay awake, distrust quick answers, and keep questioning
- Know the ethics codes—their similarities and differences—but don’t let them replace critical thinking, professional judgment, and taking personal responsibility
- Know the legal standards but don’t let them replace critical thinking, professional judgment, and taking personal responsibility
- Actively address fallibility to prevent problems
- When looking for ethical missteps, start with ourselves
- Question what seems beyond questioning

The second looks at 16 of the most common ethical fallacies that help us justify unethical behavior.

Developing Professional Ethics

Taking the following steps can be helpful in developing professional ethics that are informed, useful, and practical. Some of the material in this section is adapted from Pope (2010) and Pope and Vasquez (2011).

Start With What We Actually Do

Professional ethics are meaningless unless they fit well with what we actually do. We’re not in a good position to consider the ethical implications of our acts unless we clearly understand what we do as psychologists. Teaching, research, supervision, mentoring, assessment, and intervention are abstractions until we understand what they mean in our day-to-day lives. This is not always easy. In 1947, APA president Carl Rogers appointed David Shakow to chair a committee on defining and teaching psychotherapy. Shakow’s report resulted in the influential Boulder Conference and the “Boulder Model” (i.e., the scientist–practitioner model) of clinical psychology. On August 28, 1949, the recorder for the Boulder task force attempting to define therapy and establish criteria for adequate training wrote the following summary: “We have left therapy as an undefined technique which is applied to unspecified problems with a nonpredictable outcome. For this technique we recommend rigorous training.”

It is important to ask ourselves: Do our own professional ethics fit what we actually do as psychologists? Do they take account of the pressures, conflicting needs, ambiguities, subtleties, gray areas, and other realities we—and our students, supervisees, research participants, therapy clients, and others—face? The ethics codes, standards, and guidelines tend to be abstract so that they can apply to a variety of sometimes very different situations, fact patterns, and contexts. They lack the almost infinite variety of details involved when two or more unique people, each with his or her own cultural contexts and assumptions, each changing over time, meet in a relationship that is always evolving.

Life in the real world tends to be messy, with gray areas, contradictions, blurrings, unknowns, overlaps, complexities, surprises, and rough edges that don’t match up with the clarity, clean corners, and smooth edges we’ve come across in some courses, books, and codes. Do our professional ethics give us some form of reliable guidance or other forms of help when the specifics of a situation throw us into confusion and the texts, codes, authorities, supports, and traditions we’ve drawn on fail us?

Stay Awake, Distrust Quick Answers, and Keep Questioning

However fun and fulfilling psychology can be *at times*, there are also times when it can be daunting, draining, and discouraging. Conflicts with administrators, endless paperwork, urgent needs that go unmet, meetings that make the ice age seem like the blink of an eye, bureaucratic barriers, worry about making ends meet, shortages of resources and support, concerns about the well-being of clients and colleagues, sheer exhaustion, and so much else can overwhelm us, drain us dry, dull our awareness, and lull us into an ethical sleep. To the extent that what we do as psychologists is meaningful and important, our work requires us to remain actively alert, mindful, inquisitive, and aware of the implications of what we are choosing to do and not do.

When we're tired, pressed for time, distracted, or burnt out, we can grow careless or desperate, grabbing the first answer that occurs to us, that we hear from a consultant, or that we read in a book. But a mindful approach to ethics recognizes that ethical alertness is a continuous, active process that involves constant questioning, seeking new information and perspectives, and avoiding premature closure.

Know the Ethics Codes: Their Similarities and Differences—But Don't Let Them Replace Critical Thinking, Professional Judgment, and Taking Personal Responsibility

Understanding relevant codes of ethics is an important step in developing and practicing ethics, but codes cannot replace a thoughtful, informed, creative approach to meeting the ethical challenges of a specific situations. Codes can expand and sharpen our awareness, inform the ways we think through a problem, and provide helpful guidance. Codes can *not* serve as a substitute for thinking, provide an excuse to duck a difficult decision, or remove our personal responsibility for our ethical choices. Developing and practicing ethics never means following codes in a reflexive, thoughtless manner or using codes as a shield against personal responsibility.

Knowing how ethics codes evolved, the values they embody, and the forms they take, and how the resemble and differ from each other can strengthen our own ethical development and practice. The American Psychological Association's (APA) and the Canadian Psychological Association's (CPA) ethics code provide examples.

Founded in 1892, APA saw no need for an ethics code for its first 60 years. APA created its first Committee on Scientific and Professional Ethics (CSPE) in 1938. Without a written code, the committee tried to come up with informal approaches that relied on persuasion to address complaints. Beginning in 1939, the committee spent 8 years considering whether a written code would be helpful. They decided that a written code would be helpful in part because an "unwritten code is tenuous, elusive, and unsatisfactory" ("A Little Recent History," 1952). APA designated Edward Tolman to chair a Committee on Ethical Standards that would develop an ethics code.

The decision was controversial. Some exceptionally prominent members argued that a written code would be a terrible mistake. Calvin Hall, for example, believed that even the best possible code would favor the crooked psychologist. An unethical psychologist would study a written code "to see how much he can get away with... and since any code is bound to be filled with ambiguities and omissions, he can rationalize his unethical conduct" (Hall, 1952, p. 430).

CPSE came up with a revolutionary way to develop a code. The method broke sharply with the traditional methods that had been used by over 500 professional and business associations (Hobbs, 1948). The problem with the traditional methods, according to CPSE, was that they resorted to what Hobbs termed the "armchair approach" (p. 82) in which a committee of those *presumably* most qualified—or at least most well connected—would consider the available codes, critical issues, and scholarly literature; then issue general calls for case studies, comments, suggestions, and other input. The calls would appear in various publications but would not involve sending a call to every individual member of the organization.

Instead of the old methods of general calls for input, CPSE recommended that developing the

ethics code actively put to use the methods of psychological science, specifically empirical survey research. APA would reach out to each member individually, sending each a letter that would ask about the psychologist's personal experiences. This empirically informed method of contacting members individually could establish a direct and explicit connection between the committee and each member that would be more effective than running a general announcement in some APA publications that members might or might not happen to see and would not be personally addressed to the individual. It conveyed how much the committee valued each individual member's views and experiences and the care and seriousness of the committee's attempt to actively draw input from the full diversity of *all* members.

The revolutionary method held other advantages as well. Contacting every member individually and asking for personal experience would give all members, rather than just a relative few, a personal stake in the code. Their views and experiences would constitute the *primary* data from which the code emerged, would serve as a firm foundation, reflecting the association's full diversity, and would actively shape the code by which they would have to live. Nicholas Hobbs described this method of contacting each member as one firmly rooted in the scientific principles and able to produce "a code of ethics truly indigenous to psychology, a code that could be lived" (Hobbs, 1948).

In 1948, every APA member received a letter asking that the psychologist share "experiences in solving ethical problems by describing the specific circumstances in which someone made a decision that was ethically critical" (APA, 1949). The critical incidents led to a draft code, published in *American Psychologist* (APA Committee, 1951a, 1951b, 1951c), consisting of six sections:

- Ethical standards and public responsibility
- Ethical standards in professional relationships
- Ethical standards in client relationships
- Ethical standards in research
- Ethical standards in writing and publishing
- Ethical standards in teaching

After extensive discussion and extensive revision, the first APA ethics code was adopted in 1952 and published in 1953.

New versions of the code appeared in 1959, 1963, 1968, 1977, 1979, 1981, 1990, 1992, 2002, and 2010. The current version includes:

- Introduction
- Preamble
- Five general principles
- Ethical standards

The preamble and general principles, which include beneficence and nonmaleficence, fidelity and responsibility, integrity, justice, and respect for people's rights and dignity, are *aspirational* goals representing the psychology's ethical ideals. The specific ethical standards are *enforceable*.

The code was always to be revised by mailing a survey form to each APA member (Holtzman, 1960, p. 247). Maintaining this unique empirical approach would preserve the stake that all members had in a code, reflect the experiences and values of the full diversity of APA members, and cultivate loyalty to the code. It reflected beliefs about empowerment, management style, group process, and allegiance (e.g., Golann, 1969; Hobbs, 1948; Holtzman, 1960). APA's unique approach was believed (a) to empower all members by involving them meaningfully and individually (through the mailed survey) from the start, (b) benefit from better group or organizational dynamics by creating a psychological sense of community among all members, and (c) produce a better revision. The code and its revisions would be "based upon the day-to-day decisions made by psychologists in the practice of their profession, rather than prescribed by a committee" (Golann, 1969, p. 454). Surveying all members individually was considered essential to maintain an ethics code "close enough to the contemporary scene to win the genuine acceptance of the majority who are most directly affected by its principles" (Holtzman, 1960, p. 250). However, no APA's ethics code revision to date was based on critical incident survey forms sent individually to all APA members.

Formed in 1939, the CPA functioned for two decades without a written ethics code. Still representing only a small number of psychologists

living in diverse parts of a large country, CPA incorporated in 1950 and recognized the need for an explicit code. Deciding that it was unrealistic at that point to bring together a sufficient number of psychologists often enough to think through carefully how a code should be created and then develop the code, CPA decided “to adopt the 1959... APA code for a 3-year trial. This was followed by adoptions (with minor wording changes) of the 1963 and 1977 APA revised codes” (Sinclair & Pettifor, 2001). Dissatisfaction with the APA code grew, and when APA released the 1977 revision, Canadian disagreements with the APA approach to ethics reached the stage of irreconcilable differences (Sinclair, Simon, & Pettifor, 1996). Canadian psychologists viewed the APA ethics code as running “the risk of changing the nature of the professional relationship from a primarily fiduciary contract to a commercial one” (Sinclair et al.).

Sinclair (1998) reported that CPA set four criteria for its first indigenous code:

- Conceptual coherence, which would make it better suited to use in education
- Inclusiveness, so that it would embrace more new areas of psychological practice
- Explicitness, so that it would provide clearer guidelines for what to do when two or more ethical values were in conflict
- Usefulness, so that it would include helpful rules for the ethical decision-making process

Taking an empirical approach, CPA sent 37 ethical dilemmas to its members, inviting them to describe not only what they would do when confronting the dilemmas but also what decision-making steps they followed (Truscott & Crook, 2004). Content analysis revealed that the Canadian psychologists had relied on four basic values, which became the foundation of the new code (Canadian Psychological Association, 1986):

- Respect for the dignity of persons
- Responsible caring
- Integrity in relationships
- Responsibility to society

To meet the four criteria it had defined for the code, CPA created a code that represented “a radical departure from previous codes of ethics in both its underlying philosophy and structure”

(Sinclair, 2011, p. 152). Aspects of the new code included:

First, an overriding theme...was the concept of a discipline or profession having a “contract with society,” in which members of the psychology community strive for excellence in ethical behaviour, not just meeting minimal standards or rules. Second, rather than containing primarily a list of rules to be followed, the *Code* emphasised the importance of ethical decision making.... Several aids to ethical decision making were provided in the Preamble, including a model for ethical decision making, ordering the ethical principles according to the weight each generally should be given when they conflict, differential weighting of the ethical principles to be considered, and a role for personal conscience. Third, all ethical standards, which included both minimum and aspirational standards, were organized around four ethical principles: Respect for the Dignity of Persons, Responsible Caring, Integrity in Relationships, and Responsibility to Society (Sinclair, 2011, pp. 152–153).

The original CPA code (CPA, 1986) was “welcomed both within Canada and beyond its borders” (Pettifor & Sinclair, 2011). Pettifor (2011) notes that the current CPA code receives “continuing international attention and acclaim” (p. 230). The CPA model has influenced a wide variety of subsequent codes (Pope, 2011). For example, Seymour (2011) wrote: “Undoubtedly the most powerful influence on the development of our Code of Ethics for New Zealand Psychologists working in Aotearoa/New Zealand (2002) was the 1991 Canadian Code of Ethics for Psychologists. The working party that developed our new code was directed to produce a code that was modeled on the 1991 Canadian Code of Ethics for Psychologists” (p. 232). Similarly, Hernandez-Guzman (2011) wrote that the Mexican Psychological Society’s ethics code, the *Codigo Etico del Psicologo*, “is based on the experiences and problems faced by Mexican psychologists during their professional practice, with the Canadian Code of Ethics for Psychologists as the main guideline. Today, many universities and professional associations, not only in Mexico but in several Latin American countries, have adopted the *Codigo Etico del Psicologo* as their main decision-making reference concerning ethical issues” (p. 232).

Pettifor (2011) summarized some of the CPA ethics code's most valued contributions:

First, the most valued contribution of the Canadian Code appears to be the formulation of an explicit moral framework or foundation of ethical principles that are defined separately but linked to specific conduct and behaviours. The second theme seems to be the delineation in the Code of a process for value-based decision-making in contrast to an emphasis on complying only with rules about what psychologists must or must not do. It is recognised that rules cannot cover all possible situations, and especially cannot be used to negotiate solutions to dilemmas. The third valued contribution is the emphasis in the Code on positive aspirations rather than on the bottom line for acceptable behaviour. Fourth is the conceptual clarity, user-friendly language, and practical approach, which are thought to enhance the effectiveness of teaching, supervising, and learning ethics and ethical decision-making (pp. 230–231).

Know the Legal Standards But Don't Let Them Replace Critical Thinking, Professional Judgment, and Taking Personal Responsibility

A complex array of constantly evolving legislation, case law, administrative law, and other legal standards governs our work as psychologists. These standards change from jurisdiction to jurisdiction. A psychologist may be required to do something (e.g., breach confidentiality) under certain conditions in one state or province, be forbidden to do it in another, and be allowed but not required to do it in a third. Keeping up with the legal standards in the relevant jurisdiction is essential but as with an ethics code's standards, the law should inform but not replace professional judgment.

Focusing too exclusively on legal standards can blind us to ethical issues, sometimes leading us to mistake what is legal for what is ethical. All too often public figures holding positions of trust resort, when caught doing something ethically wrong, to claim "I broke no law"; "While some may disagree with what I did, all my acts were clearly legal"; or "All of my acts were consistent with controlling legal authority."

Actively Address Fallibility to Prevent Problems

It is a cliché but true: None of us is perfect. Each of us makes mistakes, has limitations, gets things wrong sometimes. All of us have vulnerabilities, shortcomings, and blind spots. The major differences are not so much between those with many imperfections and those with few (or at least those who think they have only a few) but between those who freely acknowledge—to themselves and others—how their own flaws and weaknesses affect their work and those who look down on others as inferior versions of themselves.

It's easy to make pro forma admissions of "I might be wrong but..." and remain passive in the face of what we know or suspect are the barriers between us and our best work. It is something else entirely to question ourselves constantly, actively; to ask "What if I'm wrong about this?"; "Are there facts, fallacies, contexts, unintended consequences, or perspectives I'm overlooking?"; "Is there more creative, positive, effective, comprehensive way to address this ethical challenge?" This approach can prevent countless problems.

When Looking for Ethical Missteps, Start with Ourselves

It is so easy to spot the ethical blunders of others. Even while reading this sentence, we might find our minds drifting to times we spotted—or thought we spotted—a colleague's ethical carelessness, questionable behavior, or intentional wrongdoing. We miss a wildly waving red flag if we don't recognize something amiss when our critical gaze remains exclusively outward. We need to spend at least as much time and energy questioning our own behavior as we question what others do.

Question What Seems Beyond Questioning

All of us have certain tightly held beliefs. We throw away chances to learn, grow, and discover if we

don't loosen our grip on these beliefs enough to take a fresh look, engage in critical thinking, and pursue creative questioning. It is relatively easy to explore areas of uncertainty, minor concern, or little consequence. The challenge is to question our most cherished and "unquestionable" assumptions, those beliefs that are most central, those principles that form the core of our ethics. Following this open questioning can lead us into areas that are confusing, (temporarily) disorienting, and sometimes frightening. It can take us through ideas that are politically incorrect or what tends to be more uncomfortable for many of us—"psychologically incorrect" (Pope, Sonne, & Greene, 2006). It can also show us the path toward more ethical behavior.

Avoiding Ethical Fallacies

However well-developed our individual professional ethics, there may be times when the temptation is just too great and we need to justify behaving unethically. The following rationalizations—adapted from those originally suggested by Pope et al. (2006) and by Pope and Vasquez (2011)—can make even hurtful and reprehensible behaviors seem ethical or at least insignificant. All of us, at one time or another, probably have endorsed at least some of them. If an excuse seems absurd, it is likely that we have not yet had a desperate need for it. At some future moment of great stress or exceptional temptation, those absurdities may seem plausible if not downright self-evident.

1. It's not unethical as long as a departmental chair, administrative supervisor, or managed care administrator required or suggested it.
2. It's not unethical as long as the professional or educational association you belong to allows it.
3. It's not unethical if you don't know of any ethics code, legislation, case law, or professional standard that specifically prohibits it. Two basic fallacies are at work here: specific ignorance and specific literalization. "Specific ignorance" means that if you don't know about,

for example, a prohibition against making a custody recommendation without actually meeting with the people involved, then the prohibition doesn't really exist in a way that applies to you. As long as you weren't aware of certain ethical standards in advance, then you cannot be considered ethically accountable for your actions. The fallacy of "specific literalization" allows you declare any act that is not *specifically* mentioned in the formal standards to be ethical. Interestingly, this rule can be called into play even when the psychologist knows in advance about a specific prohibition, if the psychologist also invokes the rule known as "insufficient qualification." Consider, for example, a psychologist who knows that there is an ethical standard prohibiting sexual involvement with a therapy client. The psychologist can call attention to the fact that the sex occurred outside of the consulting room and that the standards made no mention of sex occurring outside the consulting room, or that the psychologist's theoretical orientation is cognitive-behavioral, psychoanalytic, or humanistic, and that the standards do not explicitly mention and therefore presumably are not relevant for his or her specific theoretical orientation.

4. It's not unethical if you know at least three other psychologists who have done the same thing. After all, if there were anything wrong with it, do you really think others would be doing it so openly that you would have heard about it?
5. It's not unethical if none of your students, research participants, supervisees, or therapy clients has ever complained about it. If one or more did complain about it, it is crucial to determine whether they constitute a large representative sample of those you encounter in your work, or are only a few atypical, statistically insignificant outliers.
6. It's not unethical if a student, research participant, supervisee, or therapy client wanted you to do it.
7. It's not unethical as long as the student's/research participant's/supervisee's/therapy

client's condition made them so awful to be around that their behavior evoked (that is to say: *caused*) whatever it was you did, and they must own responsibility for it. Which is not, of course, an admission that you actually did something.

8. It's not unethical if you have a disorder or condition (psychological, medical, or just being tired and cranky) and that disorder or condition can be made to assume responsibility for your choices and behavior.
 9. It's not unethical if you're skilled at using the passive voice and a "looking forward rather than wallowing in the past" approach. If someone discovers that our c.v. proclaims degrees we never actually earned, honors we never actually received, and accomplishments that were not ours, we need only shrug nondefensively, note that apparently mistakes were made and that it is time to move on.
 10. It's not unethical if you're basically a good person and have upheld most of the other ethical standards. This "majority rule" gives you time off (from ethics) for good behavior. This means that all of us can safely ignore a few of the ethical standards as long as we scrupulously observe the other, far more important ones. In tight circumstances, we need observe only a majority of the standards. In a genuine crisis, we need only have observed one of the standards at some time in our lives. Or at least given it serious consideration.
 11. It's not unethical if you don't mean to hurt anybody. If anyone happens to get hurt it was clearly an accident because you didn't intend it, and no one should be held responsible for something that is a chance, accidental happenstance.
 12. It's not unethical if there is no set of peer-reviewed, adequately replicated, universally accepted set of scientific research findings demonstrating, without qualification or doubt, that exactly what you did was the sole cause of harm to the student, supervisee, research participant, or therapy client. Few have articulated this principle with more compelling eloquence than a member of the Texas pesticide regulatory board charged with protecting Texas citizens against undue risks from pesticides. Discussing Chlordane, a chemical used to kill termites, he said, "Sure, it's going to kill a lot of people, but they may be dying of something else anyway."
 13. It's not unethical if it's a one-time-only exception to your customary approach. Really. This is it. Never again. Don't even ask.
 14. It's not unethical if you're an important figure in the field. Many psychologists have defined importance using such criteria as well-known, extensively published, popular with students, popular with granting agencies, holding some appointive or elective office, being rich, having a large practice, having what you think of as a "following" of like-minded people, etc. But many of us find such ill-considered criteria to be far too vulnerable to Type II error. In deciding whether we are an important figure in the field, who, after all, knows us better than ourselves?
 15. It's not unethical if you're really pressed for time. In light of your unbelievable schedule and responsibilities, who after all could really expect you to attend to every little ethical detail?
 16. It's not unethical if we stress the importance of judgment, consistency, and context. For example, it may seem as if a therapist who has submitted hundreds of thousands of dollars' worth of bogus insurance claims for patients he never saw might have behaved "unethically." However, as attorneys and others representing such professionals often point out: It was simply an error in judgment, completely inconsistent with the high ethics manifest in every other part of the person's life, and insignificant in the context of both the unbelievable good that this person has done and the much-needed good he can continue to do if let off with a token penalty or a good talking-to.
- It is likely that most, if not all of us could extend this list. Our abilities to think creatively and respond ethically to even the most daunting challenges seem mirrored by the strategies available to rationalize even the most unethical approaches.

Conclusion

Developing and practicing ethics requires an active, mindful approach that continues from graduate school throughout our careers. The psychologist who remains unaware of the constantly evolving ethical and legal standards, fails to engage in critical self-examination, and stops actively seeking to do better resembles—in light of the possible consequences of ethical missteps—the driver who dozes at the wheel. A human endeavor that focuses on humans in all their infinite variety, psychology never runs short of ethical challenges that are complex, filled with gray areas and conflicting values, and lacking clear, easy, or definitive answers. Meeting these challenges is an inescapable responsibility that falls to each of us.

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Additional Resources

Online Resources

Ethics Codes & Professional Guidelines. Over 120 links to complete copies of codes, standards, and guidelines addressing: (a) specific areas of practice (e.g., online psychotherapy, forensic, rehabilitation, neuropsychology, school psychology, group therapy, body work, hypnotherapy,

employee assistance, pastoral counseling, biofeedback, custody evaluations, diminished capacity assessments, end-of-life decisions); (b) specific aspects of practice (e.g., supervision, managed care, duty to protect, record keeping, email communication with patients); (c) specific theoretical orientations (e.g., Feminist Therapy Institute, Christian Association for Psychological Studies, Canadian Psychoanalytic Society); and (d) different professions (e.g., psychologists, psychiatrists, social workers, counselors). <http://bit.ly/ethcodes>.

US & Canadian Psychology Laws, Continuing Ed Requirements, Licensing Boards, Etc. Includes for each US state and Canadian province: (a) contact information (e.g., phone and address) for the psychology licensing; (b) a link to each psychology board's home page if the board has a web site; (c) a link to the psychology licensing law or rules and regulations regulating the practice of psychology if these are available on the web; (c) a link to information about applying for licensure and to application forms if these are available online; and a link to that state or province's continuing education requirements if this information is available online. <http://bit.ly/licensinglawsandboards>.

Informed Consent Requirements, Sample Forms, & Articles. <http://bit.ly/informedconsent>.

Boundaries in Therapy: Standards of Care, References, & Resources. Five major sections: (1) excerpts from ethics codes addressing boundary issues; (2) quotes and information from articles, books, and studies addressing boundary issues; (3) widely used decision-making guides; (4) full-text articles; and (5) links to related resources. <http://bit.ly/ethicsandboundaries>.

Therapist's Guide to Creating a Professional Will. <http://bit.ly/professionalwill>.

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Paula J. Caplan

Even the most experienced psychologists have trouble balancing paid work and family, whether their work is in academia or clinical practice, so undergraduates, graduate students, and interns have no reason to feel incompetent and inadequate if they have trouble doing the balancing act. We feel we are shortchanging our loved ones when we spend time on our studies or work, and we feel we are being insufficiently productive as students or workers because of spending time meeting family responsibilities—and even more when we notice that we are actually having fun with our partners, parents, or children. Spending any time meeting our other needs, such as going for a swim or reading a book of poetry or just sitting quietly and thinking, often makes us feel we are shirking both of our other sets of duties. This is the case for people of both sexes but is more common for women and for men who are not white, heterosexual, able-bodied, or doing what is considered to be “mainstream” work (Caplan, 1994).

It is even more pressing to be aware of the balancing difficulties and to find ways to deal with them when we consider the increasing proportions of women among students and faculty in psychology, as well as in the profession

outside of academia (Enns, 1997; Snyder, McDermott, Leibowitz, & Cheavens, 2000). For example, according to an American Psychological Association report (Kohout & Wicherski, 2010) based on the association’s 2008–2009 study of graduate departments of psychology, women represent 46% of full-time faculty in traditional academic settings and 45% of full-time faculty in professional schools for psychologists; and according to Gehlmann, Wicherski, and Kohout (1995), the percentage of women among full-time faculty in graduate departments of psychology in the USA was only 22% in 1984. Furthermore, in 1984 racialized people and members of ethnic minority faculty accounted for about 6% of all full-time faculty, and that number had increased to 13% in 2008–2009 (Gehlmann et al., 1995; Kohout & Wicherski, 2010), but although Canadian staffing patterns were similar with respect to sex distribution, racialized people and members of ethnic minorities represented only 3% of their Canadian full-time faculty in graduate programs of psychology (Kohout & Wicherski). On their own, these percentages suggest the special pressures that come from being in the minority as a faculty member or, as a graduate student who is a woman or a member of a racialized group or ethnic minority, from seeing few people from one’s own group assignments on the faculty. But what makes the pressures and membership in devalued groups even more clear is the following: women in the USA currently represent 75% of students in doctoral programs in psychology and 77% of those

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enrolled in master's programs in psychology, and those numbers have been steadily increasing for many years (Hart, Wicherski, & Kohout, 2010). The 31% of first-year enrollees who are members of racialized or ethnic minority groups also represent a steady increase, and a similar pattern is seen in Canada (although racialized people and members of ethnic minority groups account for only 8% of first-year psychology graduate students there: Kohout & Wicherski, 2009). The fact that these increases have filled the pipeline with members of marginalized groups who are highly qualified to teach in graduate programs, and yet all of these groups still account for small minorities of psychology faculty in such programs, testifies powerfully to the continued presence of intense bias and oppression in academia (and see Caplan, 1994). It is clear, therefore, that the workplace part of the double load includes the necessity of coping with this bias and oppression.

The Second Wave of the feminist movement beginning in the late 1960s and early 1970s called attention to the difficulty of the balancing act, but social changes to make it easier both for women and for men have been exceedingly slow in coming. Women have been expected to be Superwomen, to balance career and family with ease and aplomb, not complaining, not asking for help and certainly not expecting it from any quarter, and feeling grateful for the opportunity to obtain university degrees and to work as psychologists (Caplan, 2000, 2001). Media stories about "Mr. Moms" or even about men shouldering more of the household and family responsibilities have given a false picture of reality, for recent research shows that women still do far more housework and childcare than do men (Bureau of Labor Statistics, 2010; Pleck, 1997, 1986; Sullivan & Coltrane, 2008). What has been difficult for men has been confronting the conflicting forces: a pull from their families and progressive elements of society to spend more time with them and do more of the caretaking, a push from traditional elements to consider themselves masculine for doing paid work and less than manly when feeding babies or vacuuming carpets at home.

Increasing the burden for parents has been the crazy-making pair of messages our society gives:

1. One is that the welfare of children matters desperately and is overwhelmingly the responsibility of parents, especially mothers (Caplan, 2000).
2. The other is that children's welfare is not important enough for our governments to spend much energy or money on it.

This leaves parents, especially but not exclusively mothers, working frantically and tirelessly to meet all of their children's needs while knowing that that work is shockingly undervalued.

Despite the changed expectations about both women and men, there has been no let-up in pressure, not the pressure on graduate students to do well in courses, the pressure on early- and mid-career faculty to publish and to take on committee work and advising duties, the pressure on clinicians to maintain heavy case loads (in private practice, in order to earn a living, and in hospitals and clinics, in order to be seen as a team player who does one's share of the work), or the pressure on parents to produce perfect children (Caplan, 2000). In fact, if anything, all of these pressures have increased and show little sign of abating. To do good work as a graduate student, a therapist, or a teacher requires focus, concentration, energy, and persistence. Furthermore, being a graduate student can be emotionally draining because you have far less power than the people who grade you and write (might refuse to write) letters of recommendation, as well as because it can be hard to find out when the work you've done on a thesis or dissertation is enough, so time and energy are spent in trying to divine the wishes of your supervisor. Being a conscientious therapist is draining because of the demands placed on one's time, energy, and patience by suffering or difficult clients. Being a good, caring teacher is draining because of the energy and time that go into responding to students' learning, emotional, and mentoring needs and because of the worry about how much publishing will be enough to obtain tenure or promotions. Canadian feminist psychologist Cannie Stark has wisely pointed out that, in jobs in which one is supposed to think creatively, one doesn't just stop thinking—whether about teaching, research, or therapy

patients—just because one arrives back at home, and these thoughts are likely to pop up or continue while one is changing diapers, cooking, or doing other household tasks (Stark-Adamec, 1995). Based on her own research about women in academia, Stark reports that women bring home an average of 71.6 h of workplace work per month, partly because of their love for work but partly because of the enormous numbers of demands to which women have to respond while at work and partly because, unlike some 9-to-5 work, it is never clear when work is done (Stark-Adamec). Stark also reports that at home, women spend more than 102 h a month taking care of household activities assigned to women and, as a result of all of the above, women get an average of only 210 of the 240 h of sleep per month they feel they need. And in 2003, Suzanne Bianchi found that 3 years before that, mothers with paid jobs were actually doing an hour more per week of childcare than were stay-at-home mothers (Porter, 2006).

In the early 1970s, I had my first post-Ph.D. job, a full-time position as a psychologist in a clinic. I spent 40 h a week there and often took work home as well, and at home I had a husband, two biological children, and two stepchildren. I tried to work efficiently in order to make everyone happy. One day, a clinic administrator took me to task because I did not “seem available to the staff.” I replied that I was bewildered, because I always attended every meeting, finished my work on time, and quickly carried out psychological assessments when they were requested by nonpsychologists in the clinic. The reply was, “Well, but, um, you don’t...hang around in the hallways or the coffee room.” I didn’t know whether to laugh or cry at that, but that was the moment I learned that every workplace has unwritten rules that employees and students are supposed to figure out and follow.

What Makes It So Difficult

Standards and expectations make finding the right balance impossible for people of both sexes. For women, the standards are simply unmeetable. At home, you are supposed to do the lion’s share of

the work. As a student or employee, you are supposed to do as much as or even more work than the men; if you do not, you may well be perceived as doing *less* (this has happened to me). And as a student or employee, you will be expected to do not only what is defined as “work” but also the very real work of nurturing, such as listening to troubled people, maintaining a sunny, supportive demeanor. If you fail to do the latter, you risk being disliked because you are insufficiently womanly, but if you *do* the latter, you risk acquiring an image of “motherly person” rather than “good student or worker.” Even today, the two are often considered mutually exclusive. A senior psychologist in a research institution who was married and had four children told me this: She worked diligently until 5:00 every day, and one day as she was leaving the office, a male colleague called out, “Could you help me? My grant application has to be post-marked before midnight tonight, and I need to pick your brain.” Obliging, she spent the next hour trying to help him, and near 6:00 he looked at his watch and said, seriously and judgmentally, “You should be home cooking dinner now!”

For men who are committed to doing their fair share of household work, the standards are somewhat different. In spite of the women’s movement, our society has not yet decided either how much housework and childcare a man *should* do or how much he can do and still be considered a real man (whatever that is) who is presumably doing conscientious work as a student, instructor, researcher, or therapist.

Due to increases in the numbers of women, racialized people, and openly gay, lesbian, and bisexual people among graduate students, faculty, and practitioners in psychology, combined with the increasing preponderance of women on campuses and in the workplace, one might expect these sites to be welcoming for people who are not white, straight, men doing mainstream work. However, women account for the majority of undergraduates, support staff, cleaning and food service staff, and faculty in low-level and part-time positions, and members of other marginalized groups are more commonly found in those positions as well. Harvard University, for instance, continues to have a disturbingly low percentage

of women in tenured positions (Lewin, 2010). The “academic funnel” is the term based on the findings of fewer women as status and salary increase (Caplan, 1994). The university campus was never intended to educate women or hire women faculty (Sheinin, 1987), and many of its organizational and procedural aspects still reflect this. For instance, junior faculty aiming to publish enough to get tenure typically need to do this during the very period in their lives when women are of childbearing age; and early attempts to allow for this, such as programs granting an extra year to apply for tenure because of having a new child, have been of limited use. Reasons they have not been more useful include: the fact that it takes far more than 1 year to care for a baby and young child; the irony that expectations about women’s publishing productivity are often increased because “they’ve had a whole extra year to write,” when during many years starting with the birth or adoption of a child, they spend a great deal of time meeting the child’s needs, not hanging out in libraries and coffeeshops, thinking and writing in an unconflicted state; the tendency of administrators and peers to look down on men who ask for that extra year so they can co-parent; and the criticism and marginalization of people of either sex who use flextime, do workplace tasks at home, or work part-time.

Other reasons the balancing act is so difficult include:

- The rarity with which those at the top in academic and clinical settings have altered values and norms to reflect the extensive documentation from our own field that the “double load” (e.g., Greenglass, 1985, but even more than a decade into the twenty-first century, stories about the absence of such alterations and improvements remain common) occasions enormous stress, even desperation.
- The difficulty of finding women mentors to help show the way, because mentors for both sexes remain too rare—women mentors because they are overburdened by their own balancing attempts within the workplace (e.g., meeting expectations that women will carry the lion’s share of advising about personal problems, and serving on many committees

because without you, they will be all-white and all-male).

- The difficulty of finding male mentors who have made sustained attempts to share equally with women the household and childcare tasks.
- The scarcity of affordable, high-quality daycare.
- The socialization of people of both sexes, for somewhat different reasons, to be reluctant to ask for help.
- The tendency for part-time students to receive less financial aid, even proportional to the percentage of time for which they are enrolled to study.

In addition, many factors make the balancing act more difficult for women, including:

- The tendency for more part-time employees to be women, who are sometimes working part-time by choice, because of their family responsibilities, although they virtually never receive benefits such as health insurance. This is a dramatically increasing concern, since in the mid-1970s part-timers accounted for 22% of undergraduate teachers but in 2005, 48% (Monks, 2009).
- The tendency of students and employees to evaluate female faculty and supervisors more harshly than males (Caplan, 1994; 2000); thus, for instance, women are expected to do more household work but are then criticized for not publishing enough.

Together, the many impediments to finding ways to balance career and family benefit a status quo in which the most powerful people keep the less powerful scrambling, overworking to try to meet the impossible standards for mothers to do virtually all the childrearing on their own (the philosophy in Hilary Clinton’s *It Takes a Village to Raise a Child* remains outside the mainstream) and to keep paid workers striving to produce nonstop (Caplan, 2000).

What Can Help (Can, Not Will)

In Your Head and With Others

Start by realizing this: It is almost certain that you will never feel that you are successfully

balancing family and work. So what can you do? (see Table 6.1). You can assume community or at least commonality. Know that, no matter how calm and secure other people may appear, anyone doing that balancing act is struggling. Long ago, I presented at a conference a paper about what I considered bizarre, unique problems at work that I figured were somehow probably my fault. I was so ashamed that I introduced each example by saying, “One psychologist had the following experience” or “Another psychologist told this story.” I was so astounded to see people sitting up in their chairs and nodding vigorously that by the time I got to the third example, I took a deep breath and said, “Here is what happened to me.” As a teenager, I had the typical adolescent’s belief that my feelings and experiences were weird and probably proof that I was abnormal. Later, I came to understand that any feelings and thoughts I have are invariably shared by at least a few, carefully chosen people. And finally, I realized that I come closest to guessing the truth if I assume that my feelings are virtually universal. My taking the plunge and being the first one to express confusion, fear, or a particular perspective has nearly always elicited sighs of relief from others who had considered themselves strange, stupid, or both. Simply acknowledging feelings of puzzlement and vulnerability can create a community as you speak about them.

Try to find work that you love, an aim whose importance cannot be overestimated:

- Graduate students can choose paper and dissertation topics they find compelling rather than routine, and if they fear that their committees will regard their preferred topics as unacceptable, they can brainstorm with other students or trusted faculty members about ways to design research that is likely to be approved by committee members while retaining their fascination for the students.
- Faculty members can design or modify courses in ways that suit students’ needs but are interesting and enjoyable to teach (e.g., if you’re told your department needs you to teach the introductory developmental psychology course and you find the textbook to be rather dry, you can teach it from a critical thinking perspective).
- After reaching a more secure employment level, such as a tenured position, you can design new courses based on what you most love to read, think, and talk about, then see if they can be added to the list of your department’s course offerings.
- If you are a clinician and have any say over what patients you see, try to refer to other people any prospective patients with whom you are unlikely to make a good, human connection, to be a solid, working “fit.” This is both good practice as a therapist and a way to maximize the interest factor in your work life.

Assume, and help create, community with people from various levels and in various realms—for instance, graduate students connecting with secretaries, faculty with cleaning or food service staff, psychology faculty with faculty from other departments or with psychology professors in other institutions. Breaking through these kinds of class barriers increases opportunities for everyone to present their different perspectives, offer different kinds of useful information about how the department or workplace is really run, and provide support for each other. It also brings members of different groups down or up to human scale, making distance and stereotyping of group members harder to maintain and humanizing the campus and other workplaces.

Related to the above, talk and talk and talk about the obstacles to finding balance between career and family. Know that by bringing up dilemmas and fears in conversation, you will help to free others to do so, but you will also make some people exceedingly uncomfortable, even belligerent. The latter is all the more reason you need to reach out to others, give and receive support (see Caplan, 1994, for specific suggestions).

Guard against blaming or pathologizing yourself if you are not balancing work and family with grace and aplomb. Make a mental note that you’d be unlikely to blame or pathologize others who are having that trouble. Keep coming back to the current systemic ills (see previous section) that make balancing so hard. This, too, is easier, the more you discuss it with other people.

Table 6.1 Strategies that can help balancing career and family

Assume community or at least commonality
Try to find work that you love, an aim whose importance cannot be overestimated
Assume, and help create, community with people from various levels and in various realms
Talk and talk and talk about the obstacles to finding balance between career and family
Guard against blaming or pathologizing yourself
Ask senior people for “clarity” about what is expected of you on the job
Try to clarify with other adults, as well as older children, in your household the way you will distribute household responsibilities, time for work, and leisure time with each other and alone
Keep in mind this apparent paradox: <i>Give yourself permission</i> to take more time to do things in any realm, so that you don't feel so pressured, <i>but</i> aim to do them more quickly than you can imagine doing them once you get started
Never forget that, in an ideal world, changes that make balancing between family and career a task of human scale would come from the top down, through policies <i>initiated, implemented, and evaluated</i> at the highest levels of administration. So maintain the perspective that the people with the greatest power should be doing this work by keeping in mind that no less a body than the American Psychological Association has said that “administrators, especially department chairs and deans, must be held accountable for gender equality and climate in their units. Those who fail to make the corrections necessary for gender equity should be given feedback, and their effectiveness in correcting these problems should be reflected in compensation. If necessary, ineffective administrators should be replaced (APA, 2000, p. 1)”
Create initiatives for change if you want to, or can afford to, take the risks that such initiatives would involve; but if you do this, try to maintain low expectations about the speed and magnitude of change
Begin initiatives for change by choosing strategically which ones are most important to you or seem most doable, first making or finding a list of policies and practices that have been helpful at other universities or workplaces for psychologists
Remember that the best, time-tested antidotes for burnout are ongoing contact with people who share your dilemmas and aims, an ability to remember that every step in a long struggle is important, and a whopping appreciation for irony and sense of humor

Ask senior people for “clarity” about what is expected of you as a student or employee, a crucial practice in light of the power and number of unwritten rules, as mentioned earlier. The relevance of this point to the balancing dilemma is that, in the face of unclear expectations, many of us strive mightily to do far more than is acceptable. Since asking for clarity can make one feel extremely vulnerable, this is another instance in which it can be terrifically helpful to brainstorm with other people, whether in your field or outside of it, about how to word requests or suggestions in ways that reduce that feeling of vulnerability and help you maintain your dignity. It’s often good to include scriptwriting in the brainstorming because, when one is very worried and/or angry, one can get mental blocks, either making one feel paralyzed and completely silenced or making it impossible to think of anything to express other than in the forms of demands, threats, complaints, or intense anger.

Try to clarify with other adults, as well as older children, in your household the way you will distribute household responsibilities; time to do paid work, coursework, or dissertation work; time for fun together; and leisure time on one’s own or with others. Be aware, however, that these advance plans are often jettisoned, due to several factors:

- Most women and men have been subjected to intense social pressures to divide family responsibilities along traditional sex-typed lines.
- The continuing disparity in women’s and men’s salaries helps shape the decision in heterosexual families that, if only one adult will maintain full-time paid work while the children are young or any family member is chronically ill or disabled, it’s the man who will keep his job, because his income will probably be higher than hers would be, so it makes economic sense for the woman to stay home and do the caretaking there.
- Men’s intelligence and achievements are often still likely to be assumed to be greater than those of women.

Keep in mind this apparent paradox: (A) *Give yourself permission* to take more time to do things in any realm, so that you don’t feel so pressured, *but* (B) aim to do them more quickly than you can imagine doing them once you get started. These two suggestions may seem to work at cross-purposes, but in fact they don’t, because both are ways to minimize pressure that comes from the impossible standards imposed on us from all around. This is reflected, for instance, in the raising of the bar in recent years: Workers spend significantly increasing amounts of time at work, hence the constantly heard complaint, “I am *so* busy, never have a moment to myself or to relax with my partner.” To explain part (B) a bit, in more than 20 years of teaching, I have found that students and colleagues tend to overestimate the amount of time many tasks will take...and even assume they are *supposed to* spend unduly extensive periods of time doing such things as writing dissertations or grant proposals. When I suggest to anyone that they try to do such projects in a single day or even 1 h, they initially tell me that that is absurd and impossible. I then explain that, of course, they cannot finish the project in that time, but that they will undoubtedly be amazed by how much they can accomplish if they take seriously the suggestion to finish in a day or an hour. They invariably report back to me that this experiment showed them that they can work much more efficiently than they had realized. I also explain that they will have plenty of time to go over their work and fill in gaps, make alterations, or reorganize the material but that all of that is easier once the most important material and the bulk of the structure are written or sketched out in that short period of time. The other function served by this advice is to remove some of the heavy emotional load that “Writing A Dissertation” or “Writing A Grant Application” tends to carry, a load that significantly impedes the process of completing the task. Once you discover that you *can* do some parts of your work in less time than before without losing its quality, you will know that you don’t have to work constantly under intense time pressure (see A above).

Change from the Top Down...Or from You

Never forget that, in an ideal world, changes that make balancing between family and career a task of human scale would come from the top down, through policies *initiated, implemented, and evaluated* at the highest levels of administration. *You* should not have to make this happen. Top administrators should set a tone of respect for all and warn that reprisals against those who take parental leave or use flextime or job sharing will not be tolerated. Administrators should sponsor seminars for management, other employees, and students about difficulties of the balancing act, and they should set a tone of compassion and support for those who are attempting it. Top administrators should initiate and fund studies of steps their universities or clinics could take to decrease these difficulties, such as pushing for adequate maternity and paternity leave for all. In fact, the authors of an American Psychological Association report hold that “administrators, especially department chairs and deans, must be held accountable for gender equality and climate in their units. Those who fail to make the corrections necessary for gender equity should be given feedback, and their effectiveness in correcting these problems should be reflected in compensation. If necessary, ineffective administrators should be replaced (APA, 2000, p. 1).” Despite this strong statement, however, few colleges and universities have yet taken steps to make this kind of thing happen.

Although change should come from the top, so that those who are already disproportionately burdened and oppressed need not take on the additional, onerous tasks of initiating and campaigning for change, some of you will feel you want to, perhaps can afford to, take risks by creating initiatives for change. Ideally, you would take such action working with your peers and possibly more senior, supportive people. Trying to make change happen can be empowering precisely because it involves taking action rather than waiting passively, hoping needed changes will take place but feeling powerless. One example of such an initiative would be for graduate

students who are becoming increasingly anxious about forthcoming comprehensive examinations to form a group and ask the faculty to make available examples of questions from past comprehensives. They may refuse you, but they may not, and making the request as a group will minimize the risk to each student insofar as that is possible.

If you choose to work for change, expect powerful resistance from those at the top or in middle management, and know that you may suddenly feel even more powerless than before. I cannot emphasize enough how much it helps to be prepared for resistance, setbacks, and even reprisals; it is crucial to consider what risks you may be taking. Similarly, assume that change for the better may come slowly. Of course, if you ask for change, you may be accused of being belligerent, demanding, or—an increased danger in arenas increasingly populated by women—needy, immature, or oppositional. It is important to try to gauge the risk-versus-benefit situation and to make sure you document everything you have done, so that there will be an accurate record in case you are accused of wrongdoing. Furthermore, be aware that change for the worse may come abruptly and unexpectedly, perhaps due to the visibility of your activism, such as a sudden reduction in the number of hours for which an assistant is assigned to you or the announcement that a promised salary increase will not be forthcoming. Awareness of the risks can not only minimize the disappointment you may feel if change comes slowly but also keep you from setting a standard for change that is so high that you don't notice small steps toward your goal along the way.

If you choose to push for changes, begin by choosing strategically which changes are most important to you or seem most doable, first making or finding a list of policies and practices that have been helpful at other universities or workplaces for psychologists (Caplan, 1994, includes such a list, pp. 161–172). Actions can range from being on the lookout for discouragement of cooperative work and encouragement of malicious competitiveness, to establishing study groups for students and support groups at work for people struggling with the double load, to systematic

gathering of questionnaire data in order to identify and document the struggles and wishes of those who are juggling family and career. Other examples of specific actions such as pushing for benefits for part-time workers such as health insurance, reasonable workloads, and clearly specified expectations would be helpful, as would fair and proportional financial aid for part-time students.

Above all, remember that for the major institutions of universities and mental health settings it is simply not a priority to help ease the double load for women or men, and because the struggle for change will be long and exhausting, it will be tempting to give up. As the insightful, caring Dr. Patch Adams has written, the best, time-tested antidotes to burnout are ongoing contact with people who share your dilemmas and aims, an ability to remember that every step in a long struggle is important, and a whopping appreciation for irony and sense of humor. For the humor and humanity, read every word Patch Adams (1998) writes.

Acknowledgements Many thanks to Professors Kathryn Morgan and Sandra Pyke for getting me involved in writing about women in academia in the first place.

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¹Many of these references were published in the 1970s, 1980s, or early 1990s; they are included here because, unfortunately, the issues to which they are addressed and the patterns of data reported therein still apply. Also, please see references in Section A of the Bibliography in Caplan (1994).

Psychologist and Parent: Advice from Professionals in Different Career Tracks

7

Vicki DiLillo, Andrea Hussong,
Barbara Kamholz, and Elizabeth Richardson

Editor's Note

Drs. DiLillo, Hussong, Kamholz, and Lloyd-Richardson are each highly successful as psychologists and as mothers. They each are leaders within their respective fields, award-winners at their institutions and facilities, and admired role models to students. Collectively, they have experience with a wide array of appointments in departments of psychology, psychiatry, in university settings, hospitals, liberal arts settings, and clinical research settings. Over the years, each has navigated transitions through various professional and personal roles. I am very grateful that each agreed to participate in this chapter by sharing their personal reflections on their simultaneous roles as psychologists and parents.

Given that the majority of graduate students in psychology are women, and our society tends to place heightened parental expectations upon

women as compared to men, it is very helpful to hear advice on the dual roles of psychologist and parent from four successful women. Interestingly, the advice they share and experiences they recount are equally applicable to men.

A series of 10 questions, with responses to each from all four psychologists, is presented below.

1. How would you describe your current position? What type of setting are you in? How long have you been in this setting?

Dr. DiLillo

I am a tenured Associate Professor of Psychology at a small liberal arts college in the Midwest. I have been in this position for 7 years. Prior to my current position, I spent about 6 years as an Assistant Professor at an academic medical center in a non-tenure-track position that was 100% extramurally supported. I left my previous position because the political climate was becoming less hospitable to non-physician faculty members.

Dr. Hussong

I am a tenured professor in a psychology department at a research-intensive university; the same department in which I began my academic career 14 years ago.

Dr. Kamholz

Since completing my post-doctoral fellowship a little more than ten years ago, I have worked at one academically affiliated VA Healthcare System. Over the years, my role has changed substantially. Initially, I was fully supported by research dollars (first other people's, and then my

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own) and I “donated” some of my time to the clinical and training missions of the healthcare system. After five years of research salary, I transitioned into a front-line manager role, co-directing a specialty mental health clinic. In that role, the time I could devote to research dropped dramatically, and the majority of my time was spent in clinical care and training. My current position (Associate Director for Outpatient Mental Health Services) is part of the leadership team for a large Mental Health Service that includes approximately 350 Mental Health employees across 3 major medical centers and 6 community-based outpatient clinics. Across these geographic sites, Mental Health includes Inpatient, Residential, and Outpatient Services. My role is primarily administrative, with some time allocated to research, training, and clinical care. I’ve held this position for two and a half years (and was in the role in an “Acting” capacity for approximately 18 months prior to that time).

Dr. Lloyd-Richardson

I am currently in a tenure-track position in the Department of Psychology at masters granting university. I have been in this position nearly three years, coming here from a non-tenured, research faculty position within a medical school/consortium. My university enrolls just under 10,000 students in more than 40 undergraduate and 25 graduate degree programs. Psychology is one of the largest majors on campus, and the department also has three graduate masters programs, with a doctoral program being developed.

2. What are the typical responsibilities for someone in your type of position? How much time is dedicated towards different activities (research, teaching, etc)?

Dr. DiLillo (Liberal Arts College)

Although it varies from school to school, most psychology faculty members in institutions like mine spend the majority of their time in activities related to teaching, including classroom teaching, supervision of independent projects, and advising. In my department, faculty members teach 3 courses per semester, every semester. We do not have TAs or the opportunity to buy out a course with grant funding. We each have about

20–25 advisees as well. A program of productive scholarship is also typically very important to success as a faculty member at a liberal arts college, although activities that constitute “scholarship” may be more flexible than at a Research I university. For example, at my institution extramural funding is highly encouraged, but not mandatory for promotion and/or tenure. Furthermore, publications in high quality peer-reviewed journals are emphasized, but other types of publications (e.g., book chapters, monographs) are seen as respectable as well. In addition to teaching and research, liberal arts faculty members are expected to engage in departmental and university service. At my institution, these opportunities range from service on elected to committees, to appointments on ad hoc committees, to participation in admissions events, and advising of student groups on campus. Depending on the particular service activities in which a faculty member is involved, these responsibilities can be quite time consuming. University-wide, faculty evaluations at my school are based 60% on teaching, 30% on scholarship, and 10% on service. I believe that this breakdown is fairly typical for liberal arts schools. It is relevant to note that, although faculty *evaluations* always assume the 60/30/10 division of effort described above, the *actual* proportion of time spent engaging in these activities may be somewhat different from semester to semester.

Dr. Hussong (Research-Intensive University)

My responsibilities include research, teaching, and service such as serving on committees in the department and university and working with national organizations like the National Institutes of Health. The amount of time I spend on any given activity changes from semester to semester, depending on the commitments I make. On average, I spend more time on research and mentoring/service activities than traditional classroom teaching or clinical supervision at this point in my career. For example, when I was an assistant professor before I had children, I probably averaged 60 hours a week in the office during the academic year, taught 4 classes during the year, and spent probably 40–60% of my time on teaching, mentoring, and training activities, 30–40% on

research, and the remainder on service. Last year and 6 years post-kid, I used grant funding to buy-out of some of my teaching commitments and taught one course, directed two research projects, mentored three graduate students, and served as the Director for Undergraduate Studies. I probably averaged 40 hours a week in the office during the academic year and spent 10% of my time on teaching, 50% of research, and 40% on service.

Dr. Kamholz (Academically Affiliated VA)

One of the things that I enjoy about my position is that there's not much in the way of a "typical" week. The vast majority of my time (at least 70%) is spent on administrative duties. My administrative role includes many different responsibilities, from the development and implementation of broadly sweeping initiatives that improve the care of Veterans to mundane details that leave me wondering why I spent over 20 years in school! Most interesting and satisfying are the former (which comprises probably half my time) and includes projects such as – surveying Outpatient Mental Health Services to evaluate clinician practice patterns, evaluate the extent to which they are evidence-based, and develop and implement processes to enhance evidence-based psychotherapy practices; developing systemized processes to facilitate transitions in care from Inpatient to Outpatient Mental Health Services; and centralizing and overseeing key processes that inform Veterans' evaluations for benefits. Of course, all such projects involve the efforts and collaboration of many people and departments in the VA. Working with smart, creative, dedicated professionals is another favorite aspect of my position. In addition to large projects, other administrative responsibilities include overseeing specific programs within Outpatient Mental Health Services (e.g., Clinical Neuropsychology, Suicide Prevention), developing resource requests to procure new (or backfill existing) positions, contributing to decisions about allocation of clinical resources, staff workload, and clinical duties, completing annual employee performance appraisals, serving on hospital committees (e.g., Suicide Prevention, Space), and participating in recruitment, interviewing, and hiring of new Mental Health staff.

In addition to my administrative role, I spend time on research (approximately 5–10% of my time), academics and training (about 5% time), and a small clinical caseload (less than 5% time). In those capacities, I have the opportunity to collaborate on research (though not really the time to be a Principal Investigator anymore), supervise psychiatry residents and psychology interns, lecture to medical students, mentor interns, and post-doctoral fellows, and see a few patients. I value these opportunities to collaborate with interesting, knowledgeable colleagues and trainees. But my many opportunities mean that time management is always a challenge, and I'm chronically just a little (or more) behind where I want to be. (My former self judges me harshly on this point. My husband recently joked that my epitaph should read, "It's later than I thought." More on this later).

Dr. Lloyd-Richardson (Masters Granting University)

My responsibilities are three-fold: teaching, scholarship, and service. A typical teaching load is three courses per semester, with course releases provided for grant-funded research and supervision of master's students. While there is no documented requirement of grant funding for tenure and promotion, there is a clear expectation that faculty will seek and obtain grant funding. In addition, there is an expectation that faculty will continue steady work on research efforts, including submitting manuscripts for review and publication. We are also expected to contribute our professional services to the university and broader local community. Currently (speaking as a pre-tenure candidate), I contribute approximately 40% of my time to teaching, 50% to research, and 10% to service. Last year, I used grant funding to buy-out of teaching two courses, taught four courses, supervised two graduate students on their masters thesis projects and two undergraduate students on their honors thesis projects, and managed two grant-funded research projects of my own. Wherever possible, I strive for efficiency and work to combine my work in these three areas, for instance, incorporating service-learning research projects into many of my courses and

submitting a grant application designed to explore service-learning as an efficacious mode of learning for college students.

3. May I ask, how old are your children, and how did your transition to motherhood correspond to the timing of career milestones (e.g., promotion, etc.)?

Dr. DiLillo (Liberal Arts College)

My son is now five and was born at the end of my second year in this position. Because of my previous faculty position, I was considered for tenure and promotion early. As a consequence, I was tenured at the end of my third year (my son was almost one) and was promoted the following year. (As an aside, promotion and tenure are not linked at my institution, which is quite unusual.) Although I would have preferred to be a bit more established in my position before starting a family, I was also very aware of the risks and potential complications I could encounter if I waited significantly longer (I was in my mid-30s at the time). I knew that the timing of my pregnancy could be stressful in relation to the tenure and promotion process, but I don't think that there ever is an ideal or particularly low stress (ha!) time to have a child. Considering all the factors, the timing of this decision made sense for my family and me. Though it made for some additional work-related stress, the decision did not appear to affect my tenure and promotion process.

Dr. Hussong (Research-Intensive University)

More than one graduate student has complimented me on the seemingly impeccable timing of my entry into motherhood vis-à-vis my career trajectory. But like many career development stories, things are not always what they seem. Three years into my tenure-track position, my husband and I decided that we were ready to have children. It took another three before those children emerged, one year after I was granted tenure. I now have twin girls, fond of saying that they are 6 and $\frac{3}{4}$ years old. The three years in between our decision to have children and our having children were challenging, but I am thankful for them. They are a reminder to be open to the opportunities around me and to hold in check my strivings for control over things that I do not control. I have

to credit one of my students for summing this up when we talk on this subject. She writes about academic motherhood, "you can't plan for it and there really is no 'perfect time' to have kids, but your job and lifestyle will allow for it whenever it happens."

Dr. Kamholz (Academically Affiliated VA)

I have one child, who just turned three. We welcomed her to our family while I was in the "Acting" version of my current role, and I officially accepted my current position when she was six months old. The transition to motherhood while in this new role was a little tricky. My administrative role is far more public than my previous one. The rookie mistakes that I made at the office (partly due to learning the ropes, partly due to sleep deprivation) were more noticeable and frankly embarrassing than they might have been under different circumstances. In addition, as a new mother, it's challenging to be questioning oneself on both the work and home front simultaneously.

On the positive side, I felt lucky to be navigating an enormous transition at home under what felt like very safe circumstances at work. I had been with this VA for over eight years (plus my internship year prior to that) and was a known entity. Although the challenges of my promotion were certainly present, in general I didn't feel like I had to prove myself. My colleagues and supervisors knew me well, and could readily contextualize bags under my eyes or word-finding difficulties. The institution in which I work is a family-friendly one, which also contributed to my feeling broadly supported. I was (and remain) grateful for that, and also for not being brand new to my career or this particular work place when I became a mother. Though there are obvious biological risks associated with having a family in your 30s or 40s, I felt the professional benefit of having done so. (An important note on this: I did not postpone having a family to focus on my career. It was a happy coincidence that I was in a more established place professionally when I wanted to start my family).

Dr. Lloyd-Richardson (Masters Granting University)

Of course, talking about my children is sheer delight! My children are now 7, 5, and 3 years

old. And yes, there is strong correspondence to their ages and my career milestones. I was a junior faculty member at the medical school when I became pregnant with my oldest. I am extremely lucky to have had healthy pregnancies that allowed me to accomplish a great deal at work. Indeed, I found myself working on preparing a career development award up until the final hours of my first pregnancy...oh, the things we do! Thankfully, receipt of that award allowed me five years to devote to my own research agenda. It was during this time that I also had my second child. Upon finding out that I was pregnant with a third, I realized that, while I enjoyed the setting I was in and the people that I worked with, I found it hard personally to imagine dividing my attention between the care my young children need (and deserve) and devoting the necessary and significant amount of time to my work (not to forget the two-hour daily commute which ate into my work and family time). These issues became the catalyst for my searching for a meaningful, satisfying academic career that would not deprive me of the time I wanted to spend caring for my young children. I began applying for area Psychology department-based positions and happily accepted my current position while on maternity leave.

4. Many women in graduate school wonder what type of position will best allow them to balance work and personal lives. What aspects of the type of position you are in facilitate a balance of work and personal demands?

Dr. DiLillo (Liberal Arts College)

I think the aspect of my job that most facilitates balance is the significant control I have over my activities and day-to-day schedule. This control allows me some flexibility in terms of scheduling classes so that I can take my son to daycare in the morning, take him to a doctor's appointment, or chaperone the occasional field trip. I work as many hours and as intensely as I did when I was employed at an academic medical center, but the increased control and flexibility I currently have translate into less stress and an overall higher quality of life. Unfortunately, it also translates into a significantly reduced salary; liberal arts colleges often do not pay as well as some other

types of academic institutions. I also have significant flexibility during the summer months. While faculty members at my institution are on 9-month contracts, most of the psychology faculty spend a significant amount of time in the office during summer months on research activities that are difficult to accomplish during the school year when classes are in session. However, the summer atmosphere is quite relaxed, and the absence of teaching responsibilities enhances flexibility, which in turn facilitates my balance between work and home responsibilities.

An additional factor that greatly facilitated my transition to motherhood was my institution's generous maternity leave policy. As a rule, new mothers are granted a one semester *paid* maternity leave during which they are free from all regular faculty responsibilities, including teaching, advising, and service activities. Research activities are a little trickier to manage given that it may not be feasible or desirable to truly hit the pause button on a program of research for an entire semester. I had the good fortune of giving birth to my son at the beginning of the summer and took maternity leave the following fall. As a result, I was able to spend about 7 months at home with him before returning to work full time. It's notable that both departmental and institutional support for this policy are quite strong; I was assured that I was in fact expected to take maternity leave. In my experience and observation, this type of maternity leave policy eases the adjustment to parenthood and ultimately enhances productivity upon return to full-time work.

Dr. Hussong (Research-Intensive University)

In the introduction to *Mama PhD*, you will find the following veracious words written by Elrana Evans and Caroline Grant. "Balance, as every working mother knows, is not a static state, perfectly still like an old-fashioned scale. The dancer in arabesque or the yogi in vrksasana are both perfectly balanced, every muscle aware or engaged. Their bodies are vibrantly alive as they continually assess and shift their poses, working and changing to hold a position that gives the illusion of stillness. This version of balance, this constant, alert, focused negotiation, is the life-

long process of mothers in the academy, and everywhere – working out as we go along how to be whole people.”

Their words strike a cord with me as I’ve long viewed home-work balance as a striving, rather than a state-of-being. I have never in my conversations with professional women heard one say, “Yep, got it, don’t touch anything. It’s balanced.” Much like Ester Thelen’s dynamic system in which learning to walk is described as controlled falling, for me, there isn’t a clear moment when I’ve got it. However, on the whole, across the semesters, contexts, pauses, and challenges, I enjoy my experience of a life that includes both an academic career and a family with children. My own personal definition of balance then is that enjoyment.

I believe that academic positions are highly flexible and compatible with parenthood for many, though not all, individuals. True, there are really many versions of the academic position, and I have been fortunate to work in a supportive environment. To come clean, I also made my transition to motherhood post-tenure. But even pre-tenure, the 9-month academic appointment offers flexibility, relative to many other positions, in how to define the job and when to work those hours. Last year, I had hellish Tuesdays and Wednesdays so that I could pick my daughters up after-school on Fridays and spend a couple of hours every other week in the kindergarten classroom Thursday mornings. Where did I grab the other hours to keep up with the work? I went in extra early on Mondays and three nights a week did a couple of hours in the evening. I also explicitly took off a couple of nights a week to make sure I didn’t burn out. I limit my commitments to try to make the workload, on average, match what I can put into it, and I am honest with my colleagues in what I can’t do. Every semester the schedule flexes to meet my work and family needs. And that, well, is pretty cool – when it works.

When I left my twin four month olds at home to go back to work regularly, I decided that there must be a reason for doing so and I set out to define what that reason was for me. Growing up in a working class family where jobs were abundant, careers were scant, and stay-at-home mothers the rule, I was prepared to work hard for this

balance but had no idea where to look. I was surprised when I realized that the academy had one important advantage for me. Namely, I could create the job that would hold my interest, a job that I would like most of the time and even love some of the time. And, over my career, the nature of the job has evolved along with my interests and skills. This flexibility of the position has been an incredible benefit for me in terms of creating a job that I like enough to make going into work something I enjoy. This is a key ingredient to me in juggling the responsibilities of the Mama PhD life.

Dr. Kamholz (Academically Affiliated VA)

In my experience, there are two key factors that influence how one can balance work and personal demands – who you work with, and how hard you work.

Who You Work With: Most of my career choices have been determined not by what I would be doing, but by whom I would be doing it with. The people you work with (both at the institutional level, and at the level of daily interactions) are critical in determining your level of career satisfaction and the extent to which you are able to balance work and personal demands. In the years that I have been at this VA, there have been many personal demands (mine and other people’s) that encroach on work life. This is true whether you have children or not (elderly parents, ill family members, unfortunate events, all these messy parts of life impinge on work). Carefully evaluating the institutional climate, and the perspectives of the colleagues and supervisors with whom you work directly, is critical to assessing how challenging it may be to balance work and personal demands.

How Hard You Work: Institutions and supervisors (at least good ones) reward employees who work hard and contribute to the mission(s) of the institution. They are more inclined to be flexible and accommodate personal needs if you work hard, are a team player, and have a good attitude. Work hard and make yourself valuable, and you’ll have more latitude to balance your work and personal demands in ways that work for you.

My goal as an employee is to manage my personal demands in a way that honors my values

and the high priority I place on my personal responsibilities, while performing my job to the best of my ability. My goal as a manager is to help other employees do the same in their lives. To my mind, this is simply the right thing to do. From a business perspective, it's also the smart thing to do – happy employees are productive employees.

Dr. Lloyd-Richardson (Masters Granting University)

While there are significant work demands in the position I am in, there are many aspects of the position that allow for an attempt at balancing work and personal lives. I say “attempt” only because I have come to the conclusion that there is never truly a balance of these two forces, as each passing day, varying responsibilities and personal moods have significant impact on the notion of “balance.” I find it important to allow myself freedom and flexibility and to not put too much emphasis on balance as an ultimate goal. After all, “balance” assumes that we have more control over our environments than I think we actually do! To that end, my current position does allow me great flexibility with which to achieve expectations for excellent teaching and research productivity. Aside from my being expected to teach my courses and hold regular office hours, nearly half of what I do can be accomplished in my home office, during the early morning or wee hours of the night. It is up to me. And as long as I plan accordingly, I can usually fit in an occasional morning as a preschool parent-helper or an afternoon watching a Little League game. The other significant benefit to the type of position I have is the flexibility during the summer months. These months allow for work on writing and research, provide a welcomed break from teaching, and allow for many opportunities to spend time with my family.

5. What challenges might someone in your type of position experience when balancing work and personal demands?

Dr. DiLillo (Liberal Arts College)

The professional life of a faculty member at a liberal arts college is not confined to the classroom, and it is important to be actively involved in multiple aspects of the campus community.

Consequently, many work-related activities take place outside the confines of a typical 9 to 5 workday. For example, I regularly participate in evening faculty meetings, admissions events, departmental activities, and functions related to student organizations across campus. This assortment of activities sometimes complicates child-care arrangements and makes it difficult to plan for quality time at home.

Another issue that poses a challenge to my attempts at balance is the fact that many aspects of academic work have no clearly defined end or limits. Of course, this can be said of many other types of work (including stay-at-home parenting) as well. While certain activities do terminate at a semester's end, most (research, lecture preparation, advising, committee work...) are ongoing. As a result, the work can easily expand to fill whatever time I allow. This characteristic of academic work, combined with the fact that technology makes me highly accessible to students at almost any hour of the day, can make it more difficult than I would like to keep some degree of separation between work and family life. I consistently strive to set reasonable limits for myself at work (and at home) to avoid burnout while maintaining both high productivity and sanity.

Dr. Hussong (Research-Intensive University)

In my opinion, many of the challenges that academic mothers face are common to working mothers everywhere and simply revolve around not having enough hours in the day for managing the lab and the household, writing the manuscript and the grocery list, and consulting the statistician and the babysitter. I am certainly more likely to be late on deadlines than I was pre-kid. I am a less reliable committee member because I sometimes stay home with sick kids. And I have to work hard to keep my own values and goals in the front of my mind when they do not coincide with those of the workplace. I also am not the go-to person when someone cannot cover carpool in the afternoon. I did not sit on the sidelines cheering at every ice skating lesson. And I did have more than one late phone call from a hotel room where the tiny voice on the other end said, “When are you coming home mommy?”

Other challenges that await the academic mother may differ from pre-tenure to post-tenure status. Clearly there are different pressures that academicians feel pre- and post-tenure, and perhaps even more so if they are mothers. The pre-tenure academic job holds performance to an external standard, requires a certain level of productivity, and provides the challenge of doing many things for the first time and at the same time. These factors mean that pre-tenure positions often feel less flexible and perhaps more overwhelming than post-tenure positions. Then there is perhaps the more demanding part of the job, defining and meeting our own standards and figuring out how to deal with external feedback when those standards clash with those of the academy. This second part of the job does not change post-tenure for most of us and indeed begins far before that first tenure-track position.

This relates to the wise question of one of my graduate students, which is “This seems easier said than done. What are the consequences?” Those consequences are, indeed, the external feedback. Will you have a bigger impact on the field, contribute more to science, provide more effective training to more trainees, and gain promotion and salary increases faster if you work more hours? Sure. If the quality of your work is maintained, then more hours is met with more rewards. But this doesn’t mean that you are satisfied with your choice. It is a matter of individual difference. What the consequences are of making choices to follow your own standards depends on your environment, how much you can let go of those external consequences, and the extent to which you can reward yourself for meeting your own expectations. One of the unexpected secrets of academic motherhood, for me, was the fulfilled prophecy of one of my dear friends who said, “It’s not really an issue for me because ever since I had children, my priorities shifted in ways that I couldn’t predict before. I don’t care if my tenure clock moves a year or two later or my publication count has a dip.” Yes, indeed easier said than done. Then again, many of the most worthwhile things are.

But I’d be remiss if I didn’t address one of the core challenges of an academic position – the

unending and seemingly limitless bounds of the work an academician does. When am I done writing the talk, preparing the course, advising the student? How many talks, courses, and students do I take on? Because it can be difficult to know exactly when we are done, it is vital that we work hard to avoid over-committing at work or at home. This relates to one of the most important skills to master as academic mothers; that is, saying “No.” I often hear from my junior colleagues that they believe that they cannot say no to requests to contribute to their departments or fields because they fear for their tenure. I am not sure that this fear is always well-placed and I strongly encourage women to check out that belief with senior colleagues before they pile on the commitments. But again learning to set those boundaries, to uncommit to commitments that turned out to be something else, and to leave work aside to play are all challenges for any working mother, and perhaps even more so for the academic mother.

Dr. Kamholz (Academically affiliated VA)

I don’t know that there are unique challenges to my position in this regard. Unless you are completely myopic, whether you are a man or a woman, you will face similar challenges in finding balance. There are a finite number of hours in the day, and infinite possibilities for how to spend your time – work, family, hobbies, sleep. When I speak with colleagues (whether they are junior, senior, or my contemporaries), the challenges are similar. In my particular case, I may have a critical meeting that I shouldn’t move or miss that limits my ability to address a personal demand in that moment. But I don’t think that’s very different from being a full-time clinician who has a patient coming in, or being a full-time researcher with a grant deadline. There are moments of greater flexibility, and moments that feel very constricted.

It’s incumbent on each of us to identify our professional and personal values and priorities and try to act in ways that are consistent with those. We need to be our own barometers. Of course, our choices will have consequences, and it’s important to understand the currency of your environment (e.g., if publications most strongly

determine promotion and resources, that needs to be a focus). Within practical constraints, prioritize tasks and decide what rate of progress/productivity is reasonable for you. Practical constraints include, for example, funding (if research dollars pay your salary, research productivity needs to be prioritized). My ascent through academic promotion has been significantly slowed by both my professional focus (i.e., a shift from my early position that was fully supported on grant dollars, to a more clinically oriented “hard money” position, to my current administrative role and promotion associated with that role) and my personal choices (e.g., how much time I want to spend with my family).

It’s worth noting that my friends who are full-time moms also lament the challenges of balance – how to find time to pursue other interests and relationships, when parenting can be all-encompassing. Balance is difficult from whichever angle you start.

Dr. Lloyd-Richardson (Masters Granting University)

Of course, the down side to the arrangement I describe above is that work is never fully completed and is too easily accessible. It’s always available at the touch of a few iphone clicks and takes true willpower to be mindful to tasks at hand and to minimize multi-tasking. My experience has been that students easily learn which faculty are more available and eager to help and can often take advantage of your generosity, if you let them. It is also difficult for those not in academic positions to understand the amount of time that is needed to do a thorough job of preparing for classes, grading, collecting and analyzing research data, writing manuscripts, and the endless meetings that are needed to guide students, plan studies, etc... No matter how many times I explain this to family members, they have a difficult time understanding. And while most university-based positions are based on a nine-month salaried contract, do not envision how svelte and tan you will be from heading to the beach for three months! In my experience, summer months have proven a good time to catch up on research and writing projects that have fallen behind during the helter skelter months of the academic year.

6. What are common misconceptions about your type of position?

Dr. DiLillo (Liberal Arts College)

Many people erroneously think that a job at a liberal arts college is less demanding or less time consuming than other types of academic positions. I’ve heard more than one graduate student comment, usually in the throes of qualifying exams or the hundredth revision of a manuscript, that someday they want a “cushy” liberal arts job. They seem to believe that the only responsibilities of a liberal arts faculty member are teaching classes and keeping office hours. In reality, of course, formal classroom teaching is only one of a wide range of responsibilities (some of which I mentioned above) in the academic life of a liberal arts faculty member.

Another misconception I’ve heard expressed is that faculty positions at liberal arts colleges do not require any particular preparation and are quite easy to obtain. In my experience, a successful candidate for a job at a liberal arts college has, in addition to a productive program of research involving undergraduates, significant teaching experience with evidence of teaching excellence (e.g., a teaching award). In other words, I don’t think it would be accurate to view a job at a liberal arts college as an easy “fall back” position or a safe bet.

Dr. Hussong (Research-Intensive University)

Often when I speak with graduate students about career planning, they offer the unintentional dig, “Oh, I don’t want a position like yours. I want to have a life. I want to have a family and to see my children.” Now where does this idea come from that I don’t have a life or ever see my children? Is the kindergarten teacher always correcting backward d’s that look like b’s? Is the professor always preparing lectures, writing manuscripts, and advising students? No and no. So, first, beware the cognitive distortion of overgeneralization. Just because this is all you see me do, do not assume that this is all that I do. I just don’t often talk at the lab meeting about the tooth fairy pouches the girls and I made over the weekend when one of my daughters

lost her first tooth. Okay, sometimes, but not often. Life is much more focused on doing what I need to do in the moment for me now than it was pre-kid. And those moments occur both at work and at home.

Second, I often hear this unintended dig from female graduate students who cannot yet picture themselves as either a professor or a mother, so the idea of doing both at the same time is overwhelming. But hold on! Can you imagine explaining to your six-year-old self what you would be able to pull off in the short-span of one semester of graduate school? Tying shoes is not even on the radar anymore. Remember, although some women take on both roles at the same time, most take on one and then the other. The path to doing both together is often more gradual. This is akin to the third year student who declares her graduate career a failure because she isn't achieving at the same level as her mentor, a senior full professor. Well, of course that mentor was not achieving at that level either when he or she was a third year student. In some respects, understanding what that dance of home-work balance is like is better achieved by the experience than by any preparation that I can offer. So, my advice is to stay open to possibilities, trust that you will adjust to the circumstances in which you place yourself, and know that you will have more information when you need it.

Dr. Kamholz (Academically affiliated VA)

Many people assume that there's not flexibility in a VA system. In the broadest sense, large federal organizations do lack the ability to quickly and nimbly shift to accommodate individual needs. However, my experience is that this is also quite variable depending on the specific organization within which one works and on one's type of position within the organization. Different VA facilities have different cultures (including the extent to which they value work-life balance), and this influences interpretation and implementation of policies. In addition, the VA has multiple missions – clinical care, research, and teaching. Professionals most heavily involved in direct clinical care may have the least flexibility because patient schedules dictate those of the clinicians.

There seems to be more obvious flexibility in the research, teaching, and administrative arenas. That said, the issues of who you work with and how hard you work have a huge influence on this, irrespective of your type of position.

Dr. Lloyd-Richardson (Masters Granting University)

When I moved to my current position, I was told by a few in administration that my eight years in the medical school and the work that I had done there counted for very little on the road to tenure. It was at that time that I realized that medical schools and universities may not always speak the same language. Each of these institutions thinks “the grass is always greener on the other side.” Medical school staff may envision university professors as teaching an occasional class and then having hours on end to discuss theory with completely engrossed students, failing to consider the amount of time it takes to teach a large course, or advise 40 students (yes, I am responsible for advising 40 students on their course selection, career considerations, and how to get along with dorm roommates!). University faculty, on the other hand, imagine medical school-based research psychologists as devoting all of their time to the creative and exciting process of writing grant applications and fail to consider the near daily struggle to maintain soft-money funding, balancing clinical case loads with research responsibilities. The truth be told, there is much more to both, with neither position being easily completed in a standard 50-hour work week.

7. What do you think we need to do as a field to help support a healthy work-home balance, particularly for women?

Dr. DiLillo (Liberal Arts College)

I believe that some of the most important things we can do are to encourage conversation about the topic and support creative solutions to foster work-home balance such as high quality on site childcare, flextime, job sharing, and reasonable maternity/paternity leave policies.

Dr. Hussong (Research-Intensive University)
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Dr. Kamholz (Academically Affiliated VA)

I don't think there are easy answers to this question, and I think we need to be cautious about focusing only on women. Men's role demands and conflicts are more and more complex, as relationships are structured with ever-increasing equity. Multiple demands exist, whether they involve caring for children, aging parents, or ill spouses.

I think it makes sense for institutions and supervisors to look for opportunities to facilitate work-home balance in employees (again, aside from being nice, this is good business). Examples can include shifting work schedules (e.g., a work day that goes from 7 am to 3 pm, which can allow for picking children up from school, or addressing other responsibilities), or telecommuting (with the appropriate child or elder care in place to allow for productivity). We need to think creatively about what accommodations can be made, while meeting the needs of stakeholders (e.g., patients, universities, whoever). I would imagine that the solutions are going to be person-specific and individualized, at least at first. As such, individuals who work hard, contribute to the mission(s) of the institution, and make themselves valuable are likely to be the most obvious beneficiaries of accommodations and flexibility.

Dr. Lloyd-Richardson (Masters Granting University)

We know that women have long outnumbered men in psychology graduate programs and that this gender divide reverses and broadens the higher up the career ladder towards the "glass ceiling." While I am unaware of statistics specific to psychology, within the "hard" sciences (e.g., STEM: Science, Technology, Engineering, Mathematics), adolescent boys outnumber girls 10 to 1. Much research has looked into the causes of this. I would wager a guess that many of the female graduate students in psychology end up moving forward in clinical venues, rather than solely research/science ones. Why is this? Does it have to do with ease of fitting in a family life? And what can we do to promote gender equity in psychological research and science?

8. What should early career women ask about, and look out for, when searching for their first job?

Dr. DiLillo (Liberal Arts College)

I would suggest looking for an environment where a healthy work-life balance is modeled.

Since most interviews last a couple of days, you might get a sense of the general atmosphere by listening to what current employees talk about during some of the less formal interactions. For example, does anyone mention family, hobbies, or children? Is information about activities outside of work volunteered? Additionally, if I were applying to a college or university, I would seek out the institution's faculty handbook (which can frequently be found online) to investigate the family leave policy. I might also investigate whether there are institution-affiliated childcare facilities on campus.

Dr. Hussong (Research-Intensive University)

Often, students making the transition of applying from undergraduate to graduate school have to change their criteria for selecting programs from university rankings to person-environment fit. In my experience, those individuals who are most satisfied with their graduate training are the ones who chose their institution because it offered what they wanted, rather than what someone else wanted or because of the reputation of the institution. This is harder than it seems, of course, because you first have to know what you want. What type of environment best fits you?

The same challenge presents itself in looking for the first job. Knowing how important it is for you to work in a women- or family-friendly environment, relative to other criteria for job selection, is a personal decision. Your goal is to optimize the fit between what you want and the opportunities and demands of the work environment. That said, there are a variety of guides that help women think about what is important to consider in identifying work settings that are woman- and/or family-friendly. Without reviewing those here, let me highlight just a few questions you might ask to make this assessment:

- Do you see women in positions of authority in the department (tenured full professors, area

heads, chairs, deans)? Are there supportive role models?

- What is the history of women getting tenure in the department? Is that any different for women who are also mothers?
- Are there a lot of demands on your time at night or that require travel that are non-negotiable or that would negatively impact you if you chose not to attend?
- Do any of the faculty members ever bring their children into work for a few hours in a pinch? How do other faculty members respond when that happens?
- What are maternity and paternity leave policies? Is there an option to delay the tenure clock because of maternity leave or extended family leave?
- Is there a women's faculty center on campus to support the development of female faculty?

And where do you get the information? Read the personnel documents that lay out employment policies (e.g., leave, sick time). Talk to women and men in the workplace (students, staff, and faculty). When possible, talk to people who have left this work site to see if any of these issues was part of the reason. You may not always get reliable and valid reports, but I would suspect that the reports would be as good as you might expect to get on most topics you might ask about the worksite.

Dr. Kamholz (Academically Affiliated VA)

As it was explained to me by Dr. Jeffrey Knight (National Center for PTSD, personal communication, October 1997), the degrees of freedom that most strongly influence job searches are typically location, job type/duties, and salary. Dr. Knight maintains that one must identify the most important variable for job choice, as an individual will most likely have to choose one (at least for a first job). The very lucky individual enjoys two out of three. I would tweak Dr. Knight's model to subdivide one variable (that is, dividing job type/duties into structure and content), and add one more factor – the people with whom one works.

Beyond the basics (mentioned above), I think a key aspect of any job is the people you work with (including opportunities for mentorship).

Related to this is the tenor of the institution. Do people talk about their lives outside of work? Have friendships with each other? What is the leadership like (at all levels)? Do they have outside interests, families, hobbies? Those personal and interpersonal characteristics will be mirrored in the organization and in your own position.

Finally, remember that your starting point in an organization will significantly influence the trajectory of your position (and, potentially, career) in terms of both responsibilities and salary.

It is important to ascertain what will be expected of you and what is valued in the system, to best evaluate your likelihood for happiness and success in the position. Be sure to understand opportunities for advancement and salary structure and don't apologize for wanting appropriate compensation for your efforts.

While sorting through everyone's advice, remember there's no easy ticket. Whether you want work-family balance, or whether you want to focus on only one aspect of things and get on the fastest track, you will have to work hard, be flexible, and collaborate if you want to succeed (however, you choose to define success).

Dr. Lloyd-Richardson (Masters Granting University)

During my postdoc years, I realized that all of my friends who had not pursued advanced degrees had thriving personal lives, replete with healthy non-work-related interests (i.e., "hobbies"). My friends pursuing advanced studies, on the other hand, had for so many years given their time, energy, and "down time" over to their studies, their profession. Perhaps necessary at the time, at a certain point, I found myself asking "Is this all there is?" and feeling very one-dimensional. I was well versed in my profession, but limited in my pursuit of other interests. So when is a good time to pursue these other interests that add to the richness of life? There's no better time than the present, I would assert. So when you find yourself looking for that first job, ask questions not only about the work environment, responsibilities, etc..., but ask about what people do for fun. Do they have time for creative outlets or non-work interests? Can they tell you about some great venues around town for music or outdoor

recreation? Or do they indicate that there's little time outside of work? I think that part of being a successful psychologist is being a happy, healthy, balanced individual.

9. You are all extraordinarily successful at what you do. What guidance have you relied on to find such a balance?

Dr. DiLillo (Liberal Arts College)

There are a few things I try to keep in mind as I attempt to work towards a reasonable balance between my work and home lives.

First, I rely heavily on planning, organization, and the maintenance of a schedule. For example, I have learned that I can be particularly productive during the early morning hours when I am the only one awake, and I regularly use this time to make progress on preparations for class, writing projects, etc. I also maintain a master calendar in the kitchen with commitments for both work and home (including "appointments" for fun activities with my family) so that I can keep the timeframes for various goals and activities in mind from day-to-day. This strategy helps me prioritize so that I can use my time most efficiently.

Second, I have to frequently remind myself that, in spite of all the efforts I make to plan effectively and control my schedule, many things happen (often at the last minute) that I cannot even pretend to control...my son gets sick, a critical meeting is called, the babysitter cancels, etc. In my experience, many of these changes result in work-child care conflicts that require significant flexibility, not to mention a sense of humor. Although it certainly does not address all the complications that arise from unanticipated changes, I do try to plan ahead by keeping some toys and snacks at my office, and maintaining a list of students who have expressed an interest in babysitting in the event that my son unexpectedly needs to spend an hour or two with me at work.

Third, I think it's important to discover what helps you manage stress most effectively, whether it's yoga, meditation, or making time to read something other than journal articles. For me, both regular physical activity and active solicitation of social support are key. In particular, I find it helpful to maintain a system of social support involving friends both from within and beyond

academia. I have found that having a range of supportive people in my network facilitates creative problem solving, reciprocal logistic support, and the ability to look at potential stressors from a different, often humorous, angle. Whatever your preferred stress management strategies, don't forget to implement them.

Finally, I often remember what a good friend once told me. She said that isn't really fair to compare yourself now to the "you" you were before having kids in terms of energy, efficiency, productivity, priorities, etc. I use this sentiment as a reminder to strive for realistic expectations of myself both as an academic and as a parent. Could I supervise yet another research project? Sure. Could I spend even more time prepping a lecture? Very likely. Could I produce a handmade Darth Vader costume for my son? Probably. But there isn't enough time in the day to do it all, or to do it all perfectly. It's a matter of discovering what is meaningful and reinforcing for you, what is consistent with your values and work ethic, and what works best for your family. I see that process as a challenging, constantly evolving, and very worthwhile, journey.

Dr. Hussong (Research-Intensive University)

I believe all the sage advice I have to offer has already been said. Nonetheless, here are my thoughts on home-work balance. This balance is a striving, rather than a state-of-being. When we judge it relative to a set of 'oughts', rather than our internal standards, we are bound to feel failure. When we assess it within the moment, rather than over the long haul, we are bound to feel failure. When we focus on our downfalls, rather than our successes, we are bound to feel failure. And when we attribute our life challenges repeatedly to the pressure of "achieving balance," rather than the many other sources of challenge present in our lives, we are bound to feel failure.

So what is my advice? Define your own standards for performance and criteria for judging how you are doing. Think about striving toward balance as a process over time, rather than something to achieve in each day, week, or month. Celebrate your successes, no matter how small the party. And then, there is the wisdom of the others...

Two quotes posted on the walls of the Otter House at the High Desert Museum in Bend Oregon await you outside the cage of Thomas, the river otter. I never thought of myself as identifying with otters before, but after reading these quotes, I see that Thomas gets it. Attributed to Ed Park, the first quote is simply, "If an otter can't have fun doing something, it simply won't do it." As much as possible, work and teach on topics you care about, with people you like being around. Have fun doing your job as much as possible. Do the same thing at home. There is time for this. Not all the day, all the time, but there is indeed time for this.

The other quote is attributed to G. Maxwell and reads "Otters are extremely bad at doing nothing... they are either asleep or entirely absorbed in play or other activity." As contemporary psychologists, we recognize the element of mindfulness in this attitude. Be where you are as much as possible and be absorbed in it. Know when you are working and when you are mothering.

Despite these brave sayings, I do often find myself caught up in the struggle of finding time to make it all work. I look up from packing sandwiches for school the next day as I simultaneously review therapy tapes for clinical supervision at 10 pm on a Tuesday night. For this reason, posted in my living room are two Brian Andreas' prints that partner to comfort me. The first speaks to my sometimes unrealistic standards for parenthood, and reads "She asked me if I had kids & when I did she said make sure you teach them what's right. & I said how will I know? & she nodded & said, good point, just don't teach them any obvious wrong then." The other speaks to the time pressures we all feel, and reads "Everything changed the day she figured out there was exactly enough time for the important things in her life."

For me, family is first. But I remain devoted to my job. Right now, in this part of my career, they feed one another. It is a constant struggle though to remember why I do what I do and to make sure that I am making choices and rewarding myself according to the values and standards that I set for myself. Having a partner who gets it and lives it right along with me is the key to making this work for me.

Dr. Kamholz (Academically Affiliated VA)

In addition to what I've mentioned above, I would add the following:

Buy time – When I was an intern, I took public transportation to the clinic where I worked because there was no parking there. I later learned that the site training director (a mother of young twins) drove and paid the high Boston parking rates every day (saving more than an hour each day, but spending hundreds of dollars each month on parking). When I asked her about it, she told me that her time was worth more than the money it cost her.

I pay for things that save me time – I drop clothes off to get pressed rather than ironing (though this is win-win, as I'm an exceptionally bad at ironing), I pay someone to clean my home, etc. When I have free time, I want to spend it on things that are important to me (and working as I do has afforded me the luxury of spending money to gain flexibility).

Don't be a hero – This is the corollary to buying time. You can't do everything. Get a housekeeper. Share tasks with your partner (more on this below).

Find a great partner – A great partner is just that. In addition to the joys of a good relationship, you can share responsibilities, divide up tasks, and play to each other's strengths. When I feel guilty because my daughter is sick and I need to be at an important meeting, my husband gently reminds me that our daughter has two parents and that nothing dictates I have to be the one who is home. (With that said, I make sure he's not always the one who is home with her!) Whether it's something meaningful like taking care of our daughter, or a mundane detail like picking up the dry cleaning, having a great partner makes everything easier and more fun.

Watch everyone – they will all have something to teach you... how to implement empirically supported treatments in the most palatable and effective manner, how to find the critical mistaken assumption in a research study, how to manage staff, how to lead a meeting, how to motivate patients and employees, how to juggle work and family (or how not to do some of these things).

Collaborate – Whether at the office (or at home), collaboration typically leads to the best (and most efficient) ideas. It also increases your productivity across the board, making you more valuable, and your supervisors/institution more likely to want to accommodate your needs.

Dr. Lloyd-Richardson (Masters Granting University)

Career success requires several ingredients, the first of which is passion. The work that we've chosen to pursue is born out of a need to help make a difference in people's lives. Whether this work involves writing a book or a research grant, teaching classes, working with clients, or supervising trainees, passion is key to the success of these activities. We all know this at some level. But, more importantly, how do we "balance" the passion we feel for our work with the passion we feel for our family? How do we practically speaking make this happen during the work week? This is the real challenge.

Career success also requires hard work. I would be lying to you if I said otherwise. The truly successful professionals in our fields are largely open about the long hours they put behind their efforts, as well as the discipline necessary to maintain a consistent work ethic. Figuring out how to fit in the consistent hard work needed for a successful career is perhaps the most challenging piece of balancing work and home lives.

A final trait worth mentioning that is associated with career success is the ability to handle frustration and failure. Many of us have heard this advice with respect to rejection of scholarly articles or research grants. But have you considered your ability to handle frustration and failure with respect to balancing career and family? Life has a way of twisting and turning, whether related to career or family. I encourage you to learn to trust yourself and to listen to what feels right when it comes to making decisions involving your career and family. Don't be afraid to change course when you feel you're heading in the wrong direction, as you'll often find that some doors may close, but many others will open for you. Trust your instincts!

10. What would you say to women entering the field who think that a clinically oriented (or other non-academic/scientific position) may offer more flexibility in balancing personal and professional demands?

Dr. DiLillo (Liberal Arts College)

I think that it very much depends on the specific position and the person who's in it. In my opinion, both clinically oriented and more traditional academic career tracks can facilitate – or hinder – a healthy work-life balance. In my experience, the specific environment and demands of a particular position are more important in this respect than whether the job is clinically focused or not. Of course, individual preferences, talents, and personality interact with aspects of a particular job to ultimately determine whether it will be a good match for any one individual.

Dr. Hussong (Research-Intensive University)

It's all a matter of fit. I immensely admire my colleagues who do this work. For me, the demands of full-time clinical work are very challenging and personally draining. The energy that I expend in doing this work seems to tap the same reservoir that I use to nurture those around me, including my children. Academic work, however, seems to fuel my creativity and bring energy into my life that I can take home and share with my family. This is the best of times, naturally, but something that I value in my academic position. Others, I realize, would find the open-ended nature of academics endlessly draining. Figuring out who you are and what you want to do is the core developmental task of graduate training. The question of how those things mesh with the rest of life is just another piece of the puzzle.

Dr. Kamholz (Academically Affiliated VA)

My experience has been the opposite. With few exceptions, it's more difficult (with potentially more-problematic outcomes) to cancel or shift patients around (especially on short notice) than to reorganize administrative or research tasks.

Dr. Lloyd-Richardson (Masters Granting University)

As others have commented, this is a matter of goodness of fit with a particular position, at a

particular time in your life. Women – and men – will obviously want to consider whether that position will allow them the flexibility to enjoy their families, personal time, etc.... It's also important to be realistic about the amount of work that will need to be completed in order to earn a desired salary. I think it's important to

consider ALL of the options available to you, whether clinical, academic, or administrative. The perspectives offered here in this article are diverse and honest. I hope they will help to raise questions and flag concerns as grad students consider their next career steps.

Part III

Your Research/Academic Career

Roy F. Baumeister

Literature reviews occupy an important corner of the world of scientific activity, yet most scientists do not receive training in how to write them. In the early days of psychological research, many people did their research based on intuitions and personal insights, and one did not have to spend much time in background reading simply because there was not much to read. As our field's knowledge base expands month by month, however, it becomes increasingly important to be able to master the amount of information already published. New ideas increasingly have to build on previously published works.

In many cases, psychologists can now test their theories without collecting data at all—they can simply rely on works already published. Many literature reviews represent empirical tests of hypotheses. There is already so much published information that you can probably find some information on almost any broad question about human behavior. To be sure, collecting new data will continue to represent the vital core of scientific activity, but literature reviews will be an increasingly important and common part of scientific activity.

Literature reviews are special for a couple reasons. First, they combine results of many different studies and that gives them power and value that no single study can have. The results of any one study might be tainted by experi-

menter bias, random fluctuations in the data, methodological errors, and other such problems. Hence it is always risky to draw too firm a conclusion based on a single study. In contrast, literature reviews often combine data from dozens or even hundreds of studies. When so many findings point toward the same conclusion, one can have high confidence in the correctness of that conclusion. It is unlikely that many different studies will yield similar results because of experimenter bias or other such problems.

Second, literature reviews permit researchers to address broad questions. Researchers may start with broad questions like “Does money bring happiness?” or “Are religious people healthier than others?” or “Are men more ambitious than women?” But a single investigation is limited to its sample, procedures, and measures, and so it will not usually permit the researcher to furnish a strong answer. For example, happiness can be measured in many different ways, and even money could be assessed in terms of salary, wealth, savings, or change in any of the above, and so unless one study has used all the different possible measures, it cannot justify a broad conclusion. In contrast, a literature review can draw on studies that used all different methods and measures, and so a sweeping conclusion can be justified.

To put this another way: The research journals are full of findings that are less than fully interpreted. Reviewers will not usually allow the author of a single investigation to draw sweeping conclusions that go beyond the limitations of sample and procedure. Literature reviewers can

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however make such broad conclusions and interpretations. For people who are interested in grand ideas and broad questions, literature reviews constitute an excellent and exciting means of addressing them.

Narrative and Meta-analytic Reviews

There are two different strategies for reviewing literature, and these are called narrative review and meta-analysis. Narrative review approaches are more traditional, and indeed almost all literature reviews prior to 1980 used them. They consist of providing qualitative descriptions of the results of many previous studies. Meta-analysis, in contrast, is a newer approach that uses a quantitative method of combining the results of previous studies.

Although there is some tension between the users of the two methods, and some experts who favor meta-analysis disdain narrative approaches as obsolete, my opinion is that the two methods serve different goals and therefore both have a valuable place in science.

Meta-analysis is the preferred method for combining the results of many studies that use comparable methods to address the same question. In contrast, narrative reviews are more useful for combining results from studies that may use very different methods and procedures and that address different questions. For example, if you wanted to combine the results of many studies on gender differences in domestic violence you would certainly use meta-analysis. Gender always means the same thing, and domestic violence is measured in a few rather standard ways, and so it is appropriate to combine the results of many studies to determine what the result is. Thus, Archer (2000) did precisely that and was able to conclude that women are more likely than men to initiate physical violence toward a spouse or dating partner, as well as showing the difference across many studies is quite a small one.

In contrast, narrative reviews can be useful for combining quite different kinds of evidence to formulate a broad theoretical formulation. Baumeister and Leary (1995) reviewed very

diverse literatures in order to conclude that a “need to belong” is one of the most pervasive and powerful human motivations. To make their case, they sought to show that the need to belong is involved in a wide range of very different patterns of behavior, including thought processes, emotional reactions, forming and breaking off relationships, physical and mental health, and lifelong happiness.

In addition, most empirical articles and dissertations contain some review of relevant previous literature and these are typically narrative. They are used to set up the hypotheses for the present study by linking the various steps in the theoretical argument to previous findings.

Thus, the first step in writing a literature review is to decide what kind of review to write. If you are looking at many different studies on the same hypothesis, meta-analysis is generally better than narrative. If the goal of your review is to formulate a new theory that will link together diverse strands of work, then you may favor a narrative method instead. Put another way, meta-analysis is the better method when it is viable, but there many things meta-analysis cannot do, and in those cases narrative reviews can be quite valuable.

Regardless of which method, it is also important to be thoughtful and open-minded when conducting reviews. Recently, there have been several cases in which published meta-analyses yielded conflicting, incompatible conclusions (see, for example, Blackhart, Nelson, Knowles, & Baumeister, 2009). These episodes have led some to begin to question whether meta-analyses live up to their reputation for being able to provide definitive conclusions (see discussion by Baumeister, DeWall, & Vohs, 2009). That meta-analyses have flaws does not mean that narrative reviews are inherently better, and if anything they may be more susceptible to misleading conclusions or fallacies. There are no perfect methods in social science.

Searching the Literature

Regardless of what kind of literature review you plan to write, a first step is finding the evidence.

The research literature in psychology has been expanding rapidly for several decades, and each month hundreds or even thousands of new articles are published, and so the task of finding everything you want can be formidable. If you intend to write a good literature review, you should strive to be as thorough as possible. You will lose credibility if the people who read your literature review can say, “Hey, you forgot to include such-and-such a study.”

Recent advances in computer indexing have greatly expanded the literature reviewer’s ability to search large databases for every potentially relevant article. These are becoming ever easier to use. With only a few instructions, you can learn to conduct such searches. Typically they will give you a (long) list of abstracts of articles that refer to whatever key words you type into the computer. You can restrict the search not only by topic but also by time (e.g., you might request only the publications from the last 10 years), by journal, and by other factors as well. Still, the odds are you will end up skimming a long list of abstracts to identify the articles relevant to your cause.

You should keep notes of how you run the computer searches, because you should report your search method in the manuscript itself. Indicate what database(s) you searched, what keywords you entered, and how you restricted the search. The purpose is to let the reader know how you got the information that you are summarizing in your paper.

For some topics, computerized searches are not helpful, because the topic has not been specified. For example, Baumeister (2000) reviewed diverse literatures to formulate and test a hypothesis about female erotic plasticity (i.e., the degree to which the sex drive is affected by social, cultural, and situational factors). Because erotic plasticity was a new theory and a new concept, that article relied on reinterpreting studies that were conducted to test quite different ideas. Using “erotic plasticity” as a term to search a database would have yielded nothing, and a broader term such as “sexual desire” would have yielded many irrelevant findings. In such cases, reviewers must fall back on older methods of finding sources. The obligation to be careful and thorough remains strong, however.

One valuable method of searching the literature without computerized aids is to find the most relevant journals and examine every article they published. In some fields there are prominent journals that are devoted to a topic and are likely to contain most of the relevant articles (as well as many irrelevant ones). For example, to do the paper on erotic plasticity I began with the *Journal of Sex Research*, and in an earlier paper on suicide (Baumeister, 1990) I could rely on *Suicide and Life-Threatening Behavior*. Typically I begin with the most recent years, on the assumption that new articles will contain references to important older works. A good strategy is to read every abstract in the journal. (An abstract is a short summary of the article, and nearly all research journals have these for every article, so it is often possible to cover a lot of ground in fairly short time, just by reading these summaries.) If the abstract shows that the work is relevant to what you are doing then you read the article itself. Otherwise you move on.

When reading the article, it is important to pay special attention to sources that it cites, especially ones that lie outside the journal you are studying. Make a list of other sources to look up. Don’t be discouraged if your list soon grows long, for many articles will turn out to be not all that relevant, whereas everything you do find (that is relevant) will strengthen your paper.

Meta-analysis

There are standard procedures for conducting a meta-analysis, and if you plan on using that method you may want to work with someone who is already an expert or consult one of the published sources as a guide. Helpful works include Wolf (1986), Hedges and Olkin (1985), Rosenthal (1983, 1991), Cooper and Hedges (1994), and Cooper (1990).

In general, meta-analysis works by converting the findings of many different studies into a common measure that can be used to combine them. Typically you translate your independent variable into two categories or experimental conditions. For example, you might want to compare men against women. Then you look at the difference

between them in each study. The standard way of expressing this difference is in standard deviation units. That is, you take the average for men, subtract the average for women (to produce the difference), and divide the result by the size of the standard deviation. (You may have to compute an average standard deviation, if the paper gives separate standard deviations for men and for women.) This is called d . You will therefore have a d for every study, and indeed in some cases you will have several d s for each study.

Be sure that you always subtract in the same direction and preserve the sign of the difference. Thus, if you subtract the women's mean from the men's mean, then a positive number signifies that men scored higher, whereas a negative number indicates that women scored higher—which is something quite different. In many cases, you can get all the information you need from the tables published in the article. If the article does not publish standard deviations along with the means, you can sometimes estimate them from the other statistics that are reported, but for this you should get a statistical expert (at least a professor) to help you.

From there, it is a short step to get an overall result. You compute an average d across all the different studies, simply by averaging all the d values you have obtained. (Again, be sure to preserve the positive and negative values, so that these may cancel each other out when you add them together.)

The combined (average) value of d sums up the results of all the studies you have included. You can establish whether it is significantly different from zero and also how large it is. By convention (Cohen, 1977), a d of about 0.3 is a small effect, 0.5 is medium, and 0.8 or more is large.

Meta-analysis can be made more complex and more theoretically interesting if you sort the studies by important factors. To do this, you code each study when you look at it and then see how d varies with your codings. For example, Oliver and Hyde (1993) conducted a meta-analysis of gender differences in sexual behavior, and they coded their findings by the year in which the study was published. In this way, they could look at changes across time. For example, they found

that gender differences in many variables (such as support for the double standard of sexual morality) were larger in older articles and smaller in new ones, indicating that men and women had become more similar over time.

Narrative Reviews

Even if you do not use a meta-analysis, it is important to make an effort to be thorough and balanced and to indicate how all the information you present fits together. In contrast to meta-analysis, narrative reviewing has not elicited many books or papers to explain the procedures, although some useful tips have been furnished by Bem (1995) and Baumeister and Leary (1997).

One particular benefit of a narrative review is that it can integrate results from very different methods and procedures. When you try to evaluate all the information you have found, you should give some thought to how many different research methods pointed toward the same conclusion. To illustrate: five studies that led to the same conclusion from different methods are quite convincing, as compared to five studies that found the same result using the same method. To be sure, having five studies get the same result with the same method is somewhat good, and such a pattern shows that an effect is reliable and can be obtained repeatedly (perhaps by different researchers). It is however possible that that method contains a hidden source of bias or error, and so each study that uses the same method simply repeats the same error, thereby producing a distorted result. In contrast, if five studies with different methods point to the same conclusion, one can have high confidence that the conclusion is not the result of some bias or flaw in any one method. It is also unlikely that the different methods will all lead to the same flawed conclusion because of all different biases. Methodological convergence is therefore a valuable tool for the literature reviewer, and the greater the methodological diversity, the stronger the paper and its conclusions. Hence you should always discuss the methodological diversity of your findings and the implications of its presence or absence.

For example, Baumeister, Catanese, and Vohs (2001) sought to investigate the question of whether men or women have a stronger sex drive. There is no one optimal way of measuring the strength of sex drive, and any one measure might be questioned. Thus, if men report thinking about sex more often than women, this might reflect merely a greater willingness of men to report their sexual thoughts. Accordingly, we came up with almost a dozen different indices of strength of sex drive and then sought evidence of gender differences on all of them. The convergence was decisive: On every measure (desired frequency of sex, frequency and variety of sexual fantasies, frequency of arousal, desired number of sex partners, willingness to forego sex, initiating vs. refusing sex, frequency of sexual thoughts, scope of sacrifices made for sex, and so forth) men exhibited higher sex drives. The point is that only the convergence across multiple methods and measures permitted a strong conclusion. If men had scored higher on some measures and women on others, the conclusion would have been very different. And if the studies had all used the same method, the conclusion would have had to be much more tentative, no matter how many studies there were.

At present, meta-analysis does not have a procedure for integrating methodological diversity into its calculations, and so the five studies with different methods will not score any better than the five studies with the same method. Recognition of methodological diversity is therefore (for the present, at least) a major advantage of the narrative reviewer. In my view, an important challenge for statisticians is to come up with a means of incorporating methodological diversity into meta-analyses.

Hypotheses in Advance?

Most courses in experimental methods insist that researchers should have their hypotheses clearly spelled out before they collect their data. This requirement is made partly to prevent people from “capitalizing on chance.” That is, if someone conducts a large study with many

different measures and conditions, by random chance alone something is likely to turn out to be statistically significant. Researchers call such approaches “fishing expeditions,” because the researcher is like someone who goes fishing and does not know what he is going to catch but will settle for almost anything. Such exploratory studies do have a role in science, but mainly as ways of generating ideas for further research. For a researcher to describe such findings as if they were predicted in advance is therefore misleading, and capitalizing on chance can lead to false conclusions getting published and thereby lowering the value of the knowledge base that all future scientists will use to guide their own work. Some researchers treat the practice of developing hypotheses after the results are known (called “HARKing”—an acronym for Hypothesizing After Results are Known; see Kerr, 1998) as an unethical violation of scientific honesty. By requiring researchers to specify their hypotheses in advance, the field protects itself from these errors.

A literature reviewer does not need to be so scrupulous about having hypotheses in advance, however. First and foremost, the danger of capitalizing on chance is greatly reduced in a literature review as compared to a single study. A single study might by chance produce an odd, misleading result here and there, but a literature review combines the results of many different studies, and it is highly unlikely that a chance result will occur over and over.

Indeed, my view is that literature reviewers should be much more flexible in their thinking than experimentalists. If you have a firm hypothesis and are committed to testing it alone, you may miss valuable and important patterns in the data. Perhaps your initial theory will not be supported, but by working with large numbers of published studies you might find other patterns that make important, valuable contributions to the field. You might realize that your initial hypothesis framed the question wrong.

If anything, strong commitment to an initial hypothesis might create bias in a literature reviewer. A reviewer who is locked into one idea or one way of looking at a phenomenon may end

up imposing his or her rigid ideas onto the data and thereby produce a conclusion that is misleading.

Personally, I think clinging to strong initial ideas reduces much of the fun of literature reviewing. I write literature reviews because they help me learn new things and sometimes create new ideas. An open-minded search for patterns in the literature is much more conducive to this than a rigid hypothesis-testing approach. Let the literature surprise you!

In short, I recommend that literature reviewers try to remain open-minded when reading the literature and be willing to revise their theories substantially. There is no consensus among experts on this issue, and so it is possible that some experts would disagree with my recommendation. Still, my own experiences in writing many literature reviews has found that my initial theories and hypotheses were often quite wrong and in other cases seriously oversimplified. It would be a shame to fail to learn and change one's thinking during the process of reading a large amount of research findings.

The Value of Null Findings

Every laboratory experimenter dreads the "null finding," which is essentially the no-difference conclusion. The null hypothesis is that no difference exists between the control condition and the experimental conditions. Typically researchers are trying to support their theories by finding positive evidence that some differences exist, and so the null hypothesis is the opposite of what they want to find. Usually null findings are considered unworthy of publication, because they are inherently ambiguous. For example, sloppy work or poor measures will produce null findings, and in those cases it would be fallacious to conclude that the researcher's theory was wrong. Hence a null result is very discouraging to the experimenter, because it is a kind of failure, and it is not possible to advance one's career by publishing null results.

The literature reviewer is in a quite different situation, however, and null results can be important. For one thing, it is important for researchers (especially meta-analysts) to include null findings

in their calculations. For example, suppose ten studies found no difference (and weren't published) whereas two studies did find a difference. A meta-analysis that concentrated only on the two successful studies might conclude that there is positive support for the theory, but a meta-analysis that included the ten null findings would probably draw the opposite conclusion. Yet because null findings are generally not published, there is a real danger that literature reviewers will end up only finding the two successful studies.

One solution to this problem is to include theses and dissertations. In recent years, meta-analyses have come under increasing pressure to include unpublished theses and dissertations, simply because these will give some indication of null results. That is, if a professional researcher comes up with null findings, he or she will probably never write them up (because the journals generally refuse to publish them), but dissertations get written even if the study yields null results. The use of dissertations is at best a partial solution to the problem of unpublished null results, but it is a step in the right direction.

What about if the literature review itself produces null results? A literature reviewer is not as vulnerable as an experimenter to the danger of null results. Indeed, a literature review that concludes there is no difference can be published. For example, DePaulo, Charlton, Cooper, Lindsay, and Muhlenbruck (1997) meta-analyzed the results from many studies on people's ability to detect lying and deception in others. In particular, they focused on whether people's objective accuracy was linked to their subjective confidence. In countless courtroom scenes in movies and television, there is a crucial point at which the lawyer points to the defendant and asks the witness "Are you *sure* that this was the person you saw?" DePaulo and her colleagues concluded that the statistical relationship between confidence and accuracy across all the studies in their sample averaged out to a paltry 0.04, which was not significantly different from zero. In plain terms, lawyers should not bother asking witnesses whether they are certain, because their degree of certainty bears no relationship to whether they are right or wrong.

A literature review may also succeed in showing that the totality of existing evidence is inconclusive. Perhaps many of the studies are flawed or confounded, or they point in opposite directions. Such a literature review might conclude that “we simply don’t know yet.” It still performs a valuable service to the field by highlighting the limitations in current knowledge. It can help advance the field by pointing out that an issue that experts have assumed to be settled is in fact unresolved, and so more (and perhaps better) research is needed.

Types of Possible Conclusions

Four possible conclusions can emerge from a literature review. This is far more than from a standard experimental study, which typically can only draw one positive conclusion or else the ambiguous failure to reject the null hypothesis.

The first conclusion is that the theory or hypothesis is correct. After reviewing many different studies and combining the information from them, the reviewer draws a confident conclusion that the idea has been well supported and should be considered true, at least until and unless some strong contradictory evidence emerges from future work.

The second is that the hypothesis is not proven but is currently the best guess. The reviewer says that it would be premature to draw a strong conclusion that the truth has been found, but there is enough quantity and variety of evidence to permit a tentative conclusion. This conclusion says that the burden of proof should be shifted onto anyone who wishes to conclude otherwise, but it is quite conceivable that this will happen. For the time being, the field should proceed as if the theory is correct, even though more research is needed before one can consider the matter settled once and for all. Such conclusions are especially important in matters relevant to psychotherapy or applied psychology, because many practitioners cannot wait around for 25 years until somebody decides that an issue is definitely proven. Therapists have to use the best available evidence to deal with problems

in the immediate present. It may be helpful to them to know the difference between a definite, proven fact and a best guess, but in most cases they may find it necessary to base their work on these conclusions. In other words, a “best guess” is much more useful and helpful for them than the “wait and see” shrug that purists might favor.

The third conclusion is that the available evidence does not permit a confident conclusion (even a best guess) either way. This may arise because there is not enough evidence available or because different studies cancel each other out by coming to opposite conclusions, or because a few pervasive methodological flaws render the evidence unreliable. It is often helpful to the field to be told what it does not know—perhaps especially if people have assumed that some view is strongly supported when it is not. If your literature review draws this conclusion, it is especially important that you spell out the requirements for future researchers who wish to provide more conclusive evidence.

The fourth conclusion is that a hypothesis is false. After reviewing all the available evidence, you find that the theory has consistently failed to gain support. Possibly the evidence points to the opposite theory, or in other cases a meta-analysis may show that there is no difference. In either case, the literature review concludes by saying that a theory should be abandoned and regarded as wrong. A variation on this might be that there was indeed a significant relationship overall, but the effect is so small as to be hardly worth talking about and is unlikely to make much difference in actual behavior.

Common Problems and Errors in Literature Reviews

Because few people receive explicit training in how to conduct a literature review, many end up having to learn it by themselves, often by trial and error. This section summarizes some of the common problems among literature reviews.

Uncertain Purpose

It is important to know what the goal of your literature review is. Many people think, “The goal is just to summarize past work on the topic!” However, a simple summary of previous findings does not generally make much of a contribution, and so that kind of review ends up being difficult to publish.

Ideally, a literature review should have a clear goal of advancing the field’s theoretical understanding of some issue. It may propose a new theory that links together a diverse array of findings. Alternatively, it may evaluate a theory by testing it against the wealth of published work. In both these cases, the article will offer a new, improved understanding of the phenomena. Simply providing a list and summary of findings on some topic is not enough.

Vague Introduction, Poor Organization

The introduction to your literature review should spell out the goals of your review (see previous section). It should also explain the theory carefully and thoroughly. This may seem obvious, but many writers of literature reviews do not follow this plan. Some are tempted to offer only a short introduction that focuses on the importance and interest value of the question. Then they present all the research findings. Only after all the material is described do they begin to offer their own theoretical ideas of what the important patterns and conclusions are. Many writers may feel that this organization accurately reflects how they produced the paper. Often a person will start reading with only a basic curiosity about some phenomenon or a sense that it is important. Then the person accumulates findings, and after they are all in hand the person starts to think about what they mean.

Unfortunately, this style of organization produces a paper that is very difficult to read. Readers need to know where the paper is going. You cannot expect a reader to keep dozens of research findings straight in memory before finding out how they all fit together.

Hence it is important to put all your theorizing in the introduction, even if you actually did construct your theories after you finished reading the literature. You should not mislead the reader by falsely claiming that you had these theories in advance, but the reader needs to have the broad theoretical ideas in mind when reading through the summaries of research findings. Of course, you do not have to offer only one single theory in the Introduction. It is often useful to set up your literature review as a competition between two or more theories. Explain how each of them is reasonable and plausible and indicate how you will look for evidence that will show which of them is correct.

Your presentation of research findings should then be organized on the basis of your theory. For example, if your theory has three steps, you would probably organize your presentation of the research by those three steps. Do not make the mistake of feeling that you have to summarize the literature in the way it has usually been understood or presented. Remember, the goal of your literature review is to achieve a new understanding of some phenomenon, so it is quite appropriate to break free from the conventional ways of thinking about the topic. Developing or evaluating the theory is the purpose of your review, and the way you organize your presentation of findings should reflect and serve that purpose.

Once you have presented all the material, you can then provide a General Discussion section that sums up what you have found. Which aspects of the theory are well supported? Which have been disproven? Which require modification? Which require further evidence? Try to imagine how someone who supported the theory would evaluate the weight of evidence and then imagine how someone who opposed the theory would evaluate the same evidence.

Thus, the plan of the paper is to present the theory first, then the review of findings, and then a discussion of what has been learned. This organization is not all that different from how one writes up an experiment or other empirical report. That is no mere coincidence: Rather, following that organization is an effective way to communicate information with readers.

Not Enough Information

Another common mistake is to fail to provide enough information about the literature you review. Occasionally one makes the opposite mistake, such as by providing excessive detail about some of the studies one covers. But simply because of the constraints of how long a manuscript can be, the more common error is to present too little information.

The most common form of this error is to say what some study concluded without indicating how it reached that conclusion. After all, this is what many researchers do when writing the introductions to their empirical reports. But it is not sufficient for a literature review. An empirical report contributes original data. A literature review relies on its presentation of previous work to justify its conclusions. Hence it is necessary to spell out the nature of that evidence.

In general, a literature review should summarize the specific methods and findings of the studies it cites, rather than just the conclusions. In a narrative review, this is a matter of summarizing how each study was done and what it found. In a meta-analysis, one indicates precisely what kinds of procedures and measures were used. Sometimes this can be done in a large table. One way or another, however, the reader must be told what the substance of the previous investigations was.

In many cases, a sentence or two may be sufficient for summarizing each study. It is not necessary to spend multiple paragraphs on every previous article. But readers should be given sufficient information so that they can make up their own mind as to whether the evidence supports the conclusion.

Failing to Connect to Take-Home Message

When Sternberg (1991) took over as editor of *Psychological Bulletin*, he directed authors to make sure that their manuscript had a “take-home message.” In a sense, his directive conforms to my earlier comments about making sure that your paper has a purpose of developing or evaluating a

theory, rather than just summarizing the current state of knowledge on some topic or other. The take-home message should be stated explicitly in your General Discussion and in your abstract. You can recognize it easily: It is what you would answer when someone asks you what the point of your paper is. If your answer to such a question is along the lines of “There’s a lot of research on attitudes,” or “There are plenty of sex differences,” you should hear an alarm go off, because that is hardly important enough to be worth publishing.

The take-home message may not have been in your mind when you started the project. Indeed, if you remained open-minded as I recommended, you may not have known what the take-home message would be until you completed reading the literature and spent some time rereading your notes and thinking about how they fit together. Still, the take-home message is the capsule value of your paper, and *everything in the paper should refer to it*.

The obligation to make the connections to your take-home theme may seem obvious with the Introduction and General Discussion, but it is also important in your coverage of the research findings. Do not fall into the trap of describing study after study on its own terms, such as by presenting methods and results but without stating the implications for your theory. Readers need to be told explicitly how the various findings fit into the theoretical scheme of your paper and how they contribute to the take-home message. You may do this for individual studies or for groups of studies, but it is not adequate to leave this until the end of the paper.

Be Critical!

Another common mistake is to forget to criticize the research you cover. In psychology and the other social sciences, hardly any methods are perfect. You should indicate their limitations. Again, this is something you can do study by study or in groups of studies, but it needs to be done. One format I have found useful is to organize the presentation of research findings into subsections,

each of which has a single theoretical point to make, and provide a summary critique at the end of each subsection (e.g., Baumeister, 1990). This summary critique can evaluate the group of studies as a whole. Thus, if one study has a problem or shortcoming but another study has reached a similar conclusion but avoided that problem, you do not need to waste space criticizing the problem in the first study—you can point out that the conclusion is not tainted by that problem, insofar as studies have reached the same conclusion without that problem. A summary critique can also evaluate the amount and methodological diversity (i.e., converging evidence) of the evidence.

Forgetting to criticize is especially common among authors who have a favorite theory and are presenting evidence to support it. They might even feel they are undermining their take-home message by criticizing the evidence that supports it. They are wrong, however. The contribution of your paper is that much stronger if you can indicate the weaknesses (as well as the strengths) of the evidence. If the critique means that you have to downgrade your conclusion from a proven fact to a best guess, so be it: All that means is that researchers should continue to study the problem rather than considering the matter settled. Remember, flaws or gaps in the published literature are not your fault—but neglecting to point out flaws or gaps in the literature is your fault. Your role is not that of a lawyer who tries to make the best case for one side of the argument. Rather, your role is to be a judge and jury, skeptically evaluating the evidence for both sides and rendering the fairest judgment possible.

Assuming you want to publish your literature review, it is helpful to consider the perspective of the editor who will decide whether to accept it. Editors do like to have novel theories and interesting ideas presented in their journals. They do not, however, want their journal to have articles that overstate the case for these ideas. Imagine that you are an editor who publishes many articles that are later proven to be wrong because of overzealous statement of unjustified conclusions: You would probably feel ashamed. When you write a literature review, make your case, but be frank about the limitations in the evidence you review.

A related error is the failure to adjust your conclusions based on your critique. I have seen this in particular when an author submitted a paper without any critique of the evidence and then was told by reviewers to add such a critique. Some authors will dutifully furnish the critique, but they then leave the same strong, optimistic conclusions they had in the first place. Before you state that the evidence for or against some theory is “strong” or “clear” or “convincing,” you should evaluate the weight and diversity of that evidence as well as your critique of its flaws, shortcomings, and ambiguities. In other words, look at both the strengths and weaknesses of the literature you have reviewed, and only then decide how strong a conclusion is warranted.

Exceptions and Counterexamples

The normal, everyday thought processes of ordinary people involve selective coverage or selective critique of evidence (e.g., Kunda, 1990; Lord, Ross, & Lepper, 1979). For example, people may recognize evidence contrary to their position but apply stricter critical standards when evaluating it. Writers of literature reviews are subject to similar tendencies, which can bias their results and conclusions. Such biases are especially likely when a conclusion accords with prevailing wisdom or seems politically correct. Hence it is important to guard against these tendencies as much as possible.

One device is the deliberate search for exceptions and counterexamples. Most of your work in putting together a literature review is probably devoted to seeking positive examples that support the pattern or theory you are describing (your take-home message). The approach of looking for confirming examples is however what produces the infamous “confirmation bias,” in which people selectively attend to evidence that supports their conclusion and overlook contrary evidence (e.g., Darley & Gross, 1983). To overcome this bias, you should spend some time late in the project searching for any sort of contrary evidence. That is, once you have your general conclusions in mind and have formulated your take-home

message, stop and ask “Is there any evidence that anyone might interpret as contradicting that conclusion?” You may even be moved to look in some new places for relevant evidence.

Devoting a small section toward the end of your paper to a deliberate search for contrary evidence has several advantages. First, it will help you find such evidence, which might require you to temper or qualify your conclusions. Second, it will make your overall presentation more accurate. Third, it will make it more convincing to readers, because if they see you have exerted yourself to examine both sides of an issue, they will be less likely to assume that your approach was biased or selective.

Fourth, this section may even help you develop a more sophisticated, complex, and interesting (and probably more accurate!) theory. For example, in my literature review on erotic plasticity (Baumeister, 2000), I had reached the general conclusion that female sexuality is more responsive than male sexuality to a variety of social, situational, and cultural factors. A deliberate search for possible exceptions led me to find a handful of findings that pointed in the opposite direction. When I lumped them together, I noticed that they all involved early childhood experiences. Hence I revised my general theory to say that male sexuality seems to go through a period of plasticity during childhood, when environmental influences and experiences can have a significant effect, but starting at adolescence male sexuality remains fairly constant whereas female sexuality continues to respond and develop. Thus, focusing on exceptions helped develop a better and more balanced theory.

Tell Them Where to Go

A good literature review should nearly always contain some statements about what are the priorities for future research. Normally these will occupy a subsection in the General Discussion. By this point you will have presented and criticized the available evidence and then summarized the main conclusions. You have told the reader what segments of the evidence are strong and which ones are weak or ambiguous.

It is therefore not difficult to extend your discussion by saying what you think researchers should focus on during the next decade or so.

Thus, you may conclude that some issues have been resolved and no further research is needed. This is helpful to prospective researchers so that they will not waste their time continuing to prove things that are already well established. On other matters, however, you may conclude that the evidence suffers from serious flaws, and so further work may be directed to try to remedy those problems. You might even suggest what methodological improvements or controls are needed in further work. On yet other aspects of the issue, evidence may be sparse, and so you would call for more studies of the topic.

In my experience, editors nearly always expect a literature review to include some recommendations for empirical research. After all, a literature review is republishing information that has already been published, and so it needs to serve some additional function beyond reporting what has already been done. Helping to guide empirical researchers as to what they should do next is one such valuable service. Indeed, it may help your paper get cited. Researchers may justify their investigation by saying that your review highlighted the need for precisely the kind of study they are doing.

When you have completed a literature review, you are in an unusual position of having a broad grasp of a great deal of information. You may have a perspective that gives you an overview of an entire field of work. No one else has that same perspective unless he or she is willing to do all the reading you have done. Hence it is valuable for you to use that perspective to say what you think should be emphasized in further research. Even though it may seem obvious to you that one question is definitively settled whereas another issue needs plenty of more and better research, it is worth saying so explicitly.

Matters of Style

Your literature review can be more effective if it follows several guidelines for style and presentation. One of these is to be careful and scrupulous

about what you mean when you make a statement followed by a name and date in parentheses. In particular, it is vitally important to maintain a distinction between what someone may have said vs. what someone showed or proved on the basis of strong data. In your literature review, you probably want to cover both what people may have said by way of theorizing and what researchers have shown with empirical findings. Unfortunately, the format for citing someone is the same in both cases. As a literature reviewer, the responsibility falls on you to make the difference clear.

To some extent, this problem of confusing assertion with proof can be minimized if you follow my earlier advice to describe the methods and results of studies (instead of merely their conclusions). I recommend going a step farther, however. When you wish to cite someone's assertion that was in the form of a theory, speculation, casual observation, clinical impression, or the like, say so! Thus, instead of saying "Women are nicer than men (X, 1982)" you should say something along the lines of "X (1982) speculated that women are nicer than men" or "Based on her personal experiences, X (1982) concluded that women are nicer than men." The crucial point is to prevent readers from confusing such a statement with an empirical finding such as "In a carefully controlled study with young adult college students, X (1982) showed that women were nicer than men insofar as the women were more friendly and tolerant toward a newcomer who did not know how to behave."

My suggestion to indicate precisely what a given previous author had done seemingly runs counter to Bem's (1995) injunction that names of researchers should always be in parentheses rather than serving as the grammatical subject of a sentence. Bem recommended that authors should focus on the research findings themselves rather than the researchers. Although I agree with the general attitude behind Bem's comments, I do think there are many circumstances in which it is helpful, even necessary, to take the name outside the parentheses. Indicating that someone said rather than proved something is just one important instance. Another important and obvious one

is when you are discussing disagreements among previous writers or findings. Yet another is when you are summarizing views with which you disagree.

Generally, though, you should avoid letting the names play too prominent a role in your writing. One rule of thumb is never to start a paragraph with a name. When you start with a name, you have effectively neglected any transition, and the reader does not know how the new paragraph fits into your evolving argument. Graduate students who write their first literature reviews are particularly prone to starting paragraphs with names, because they tend to cover the published works one at a time and devote a paragraph to each one. That style of writing is very hard to read, however, because the reader has to figure out what the continuity across paragraphs is and where the line of evidence is supposed to lead. Use the first or last sentence of each paragraph to connect with your take-home message.

Conclusion

The psychology journals contain the diligent efforts, indeed in many cases the life's work, of thousands upon thousands of researchers. This is an immensely valuable stock of information, but it exists in a state of near anarchy and chaos, with articles on the same topic scattered across different journals and different years, while the same issue of one journal will contain pieces that have nothing in common.

To help the field cope with such a mass of unorganized information, literature reviews serve valuable purposes. They bring together the information that is otherwise dispersed in many places. They summarize and integrate many individual findings, permitting much stronger and more confident assertions about which ideas are correct and which are false. They can address broad, integrative questions that single empirical papers cannot. They can propose broad theories and evaluate them against a diverse assortment of work. Literature reviews seem destined to play an ever-increasing role in psychological science, as

experts want to have reliable answers to broad questions and as it becomes ever more difficult to cope with the burgeoning mass of information.

Although this chapter has focused on the difficulties, dangers, and pitfalls of writing literature reviews, let me close by saying a few words about its pleasures. Writing literature reviews can be fun as well as deeply satisfying. They are certainly not for everyone, but for some they are ideal. It is, after all, nice to be able to work with other people's published data rather than always having to struggle with your own! More important, literature reviews permit you to tackle broad questions that have a resonance and intellectual stimulation that goes beyond what can be addressed in a single empirical paper.

From my own perspective, a special appeal of literature reviews is that they allow you to study different questions, and so they increase the breadth and diversity of your thinking. To collect data on a new problem typically requires a new set of skills, and so it is difficult to collect data on very many new topics. (That is why most laboratory-oriented researchers devote their entire careers to a small set of issues and questions.) But to write a literature review on a new topic involves the same set of skills, namely reading and thinking and discerning patterns, or possibly meta-analysis. Once you have mastered how to write a literature review, you can move from one interesting question to another fairly easily, and you are on your way to a very interesting career and life.

Another benefit of literature reviews is that they are often quite influential. The large citation-tracking engines (e.g., Google Scholar or the Institute for Scientific Information) allow researchers to see which of their papers have been included in the Reference sections of other journal articles. Periodically I check what they have on my work, as a way of seeing which papers are being found useful and influential by other scientists. Invariably, my most heavily cited papers are my literature reviews, rather than my reports of experiments. I suspect this is a general pattern, though I cannot prove it. Still, if that is true for you, it helps to realize that literature reviews may be a valuable way to reach a broad audience and

influence the field in a way that is even more powerful than writing up experiments.

As I have said, writing literature reviews is not for everyone. It is activity best suited to people who are good at spotting patterns in large masses of information, who like to write and think (perhaps more than they like to collect and analyze data), who enjoy thinking about broad questions, and who have many different interests.

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Lindsey L. Cohen, Laurie Greco, and Sarah Martin

Reasons for Presenting Research

When you consider submitting your research for a conference presentation, it is wise to weigh the costs and benefits of the endeavor. The benefits include disseminating information to appreciative audiences, such as professors, students, clinicians, teachers, and other professionals interested in new ideas to assist them in their own work. As a personal gain, your audience may provide feedback on your research findings which may be invaluable to you in the development of your research program. Presenting research at conferences also allows for the opportunity to meet potential future advisors, employers, collaborators, and/or colleagues. Conferences are ideal settings for networking and, in fact, many conferences have forums organized for this exact purpose (e.g., job openings listed on a bulletin board and networking luncheons). The costs include the time commitment of writing and constructing the presentation, the potential for rejection from the reviewers, the cost of attending the conference,

the anxiety inherent in formal presentations, and the time and expenses of traveling to the meeting. Although we do believe that the benefits of presenting at conferences outweigh the costs, you should consider the specific pros and cons for you, your research, the specific meeting, and your particular situation before embarking on this experience.

Presentation Venues

There are many different outlets for presenting research findings ranging from departmental colloquia to international conferences. The decision of submitting a proposal to one conference over another should be guided by both practical and professional reasoning. In selecting a conference, you might answer the following questions: Is this the audience to whom I wish to disseminate my findings? Are there other professionals that I would like to meet attending this conference? Are the other presentations of interest to me? Are the philosophies of the association consistent with my perspectives and training needs? Can I afford to travel to this location? Will my institution provide funding for the cost of this conference? Will my presentation be ready in time for the conference? Am I interested in visiting the city that is hosting the conference? Do the dates of the conference interfere with personal or professional obligations? Will this conference provide the opportunity to network with colleagues and friends? Is continuing education credit

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offered? By answering these questions you should be able to pinpoint the conference that is best suited for you and your research.

Types of Presentations

After selecting a conference, you must decide on the *type* of presentation. In general, presentation categories are similar across venues and include poster and oral presentations (e.g., papers, symposia, panel discussions) and workshops. In general, poster presentations are optimal for disseminating preliminary or pilot findings, whereas well-established findings, cutting-edge research, and conceptual/theoretical issues often are reserved for oral presentations and workshops. A call for abstracts or proposals is often distributed by the institution hosting the conference and announces particular topics of interest for presentations. If you are unsure about whether your research is best suited for a poster or oral presentation or workshop, refer to the call for abstracts or proposals and consult with more experienced colleagues. Keynote and invited addresses are other types of conference proceedings typically delivered by esteemed professionals or experts in the field. Realize that not all conferences use the same terminology, especially when comparing conferences across countries. For example, a “workshop” at one conference might be a full-day interactive training session and at another conference it might indicate a briefer oral presentation. The following sections are organized in accord with common formats found in many conferences.

The most common types of conference presentations, poster presentations, symposia, panel discussions, and workshops deserve further discussion. Typically, these scientific presentations follow a consistent format, which is similar to the layout of a research manuscript. For example, first you might introduce the topic, highlight related prior work, outline the purpose and hypotheses of the study, review the methodology, and, lastly, present and discuss salient results and implications (see Drotar, 2000).

Poster Presentations

Poster presentations are the most common medium through which researchers disseminate findings. In this format, researchers summarize their primary aims, results, and conclusions in an easily digestible manner on a poster board. Poster sessions vary in duration, often ranging between 1 and 2 h. Authors typically are present with their posters for the duration of the session to discuss their work with interested colleagues. Poster presentations are relatively less formal and more personal than other presentation formats with the discussion of projects often assuming a conversational quality. That said, it is important to be prepared to answer challenging question about the work. Typically, many posters within a particular theme (e.g., health psychology) are displayed in a large room so that audiences might walk around the room and talk one-to-one with the authors. Thus, poster sessions are particularly well suited at facilitating networking and meeting with researchers working in similar areas.

Pragmatically, conference reviewers accept many more posters for presentations than symposia, panel discussion, and workshops, and thus, the acceptance criteria are typically more lenient. Researchers might choose posters to present findings from small projects or preliminary or pilot results studies. Symposia, panel discussions, and workshops allow for the formal presentation of more ground-breaking findings or of multiple studies.

Research Symposia

Symposia involve the aggregation of several individuals who present on a common topic. Depending on time constraints, 4–6 papers typically are featured, each lasting roughly 20 min, and often representing different viewpoints or facets of a broader topic. For example, a symposium on the etiology of anxiety disorders might be comprised of four separate papers representing the role of familial influences, biological risk factors, peer relationships, and emotional

conditioning on the development of maladaptive anxiety. As a presenter, you might discuss one project or the findings from a few studies. Like a master of ceremonies, the symposia Chair typically organizes the entire symposia by selecting presenters, guiding the topics and style of presentation, and introducing the topic and presenters at the beginning of the symposium. In addition to these duties, the Chair often will present a body of work or a few studies at the beginning of the symposium. In addition to the Chair and presenters, a Discussant can be part of a symposium. The Discussant concludes the symposium by summarizing key findings from each paper, integrating the studies, and making more broad-based conclusions and directions for future research. Although a Discussant is privy to the presenters' papers prior to the symposium in order to prepare the summary comments, he or she will often take notes during the presenters' talks to augment any prepared commentary. Presenters are often researchers of varying levels of experience, while Chairs and Discussants are usually senior investigators. The formal presentation is often followed by a period for audience inquiry and discussion.

Panel Discussions

Panel discussions are similar to research symposia in that several professionals come together to discuss a common topic. Panel discussions, however, generally tend to be less formal and structured and more interactive and animated than symposia. For example, discussants can address each other and interject comments throughout the discussion. Similar to symposia, these presentations involve the discussion of one or more important topics in the field by informed discussants. As with symposia presentations, the Chair typically organizes these semiformal discussions by contacting potential speakers and communicating the discussion topic and their respective roles.

Workshops

Conference workshops typically are often longer (e.g., lasting at least 3 h) and provide more in-depth,

specialized training than symposia and panel discussions. It is not uncommon for workshop presenters to adopt a format similar to a structured seminar, in which mini-curricula are followed. Due to the length and specialized training involved, most workshop presenters enhance their presentations by incorporating interactive (e.g., role-plays) and multimedia (e.g., video clips) components. Workshops often are organized such that the information is geared for beginner, intermediate, or advanced professionals. Often conferences are organized such that participation in workshops must be reserved in advance and there might be additional fees associated with attendance. The cost should be balanced with the opportunity of obtaining unique training in a specialized area. These are most often presented by seasoned professionals; however, more junior presenters with specialized skills/knowledge might conduct a workshop.

The Application Process

After selecting a venue and deciding on a presentation type, the next step is to submit an application to the conference you wish to attend. The application process typically involves submitting a brief abstract (e.g., 200–300 words) describing the primary aims, methods, results, and conclusions of your study. For symposia and other oral presentations, the selection committee might request an outline of your talk, curriculum vitae from all presenters, and a time schedule or presentation agenda. Some conferences might also request information regarding the educational objectives and goals of your presentation. One essential rule is to closely adhere to the directions for submissions to the conference. For example, if there is a word limit for a poster abstract submission, make sure that you do not exceed the number of words. Whereas some reviewers might not notice or mind, others might view it as unprofessional and possibly disrespectful and an easy decision rule to use to reject a submission.

Although the application process itself is straightforward, there are differences in opinion regarding whether and when it is advisable to

submit your research. A commonly asked question is whether a poster or paper can be presented twice. Many would agree that it is acceptable to present the same data twice if the conferences draw different audiences (e.g., regional vs. national conferences). Another issue to consider is when, or at what stage, a project should be submitted for presentation. Submitting research prior to analyzing your data can be risky. It would be unfortunate, for example, to submit prematurely, such as during the data collection phase, only to find that your results are not ready in time for the conference. Although some might be willing to take this risk, remember that it is worse to present low-quality work than not to present at all.

Preparing and Conducting Presentations

Choosing an Appropriate Outfit

Dress codes for conference proceedings typically are not formally instated; however, data suggest that perceptions of graduate student professionalism and competence are influenced by dress (e.g., Gorham, Cohen, & Morris, 1999). Although the appropriateness of certain attire is likely to vary, a good rule of thumb is to err on the side of professionalism. You also might consider the dress of your audience, and dress in an equivalent or more formal fashion. Females, for example, might consider a dress, skirt or pants suit. For males, either a suit or slacks with a dress shirt and tie is recommended. Although there will be people at conferences wearing other styles of dress, students and professionals still early in their careers are best advised to dress professionally. In addition to selecting your outfit, there are several preparatory steps you can take to help ensure a successful presentation.

Preparing for Poster Presentations

The Basics

The first step in preparing a poster is to be cognizant of the specific requirements put forth by the selected venue. For example, very specific

guidelines often are provided, detailing the amount of board space available for each presenter (typically a 4-foot by 6-foot standing board is available). To ensure the poster will fit within the allotted space, it may be helpful to physically lay it out prior to the conference. This also may help to reduce future distress, given that back-to-back poster sessions are the norm; knowing how to arrange the poster in advance obviates the need to do so hurriedly in the few minutes between sessions. If you are using PowerPoint to design your poster, you can adjust the size of your layout to match the conference requirements.

Tips for Poster Construction

The overriding goal for poster presentations is to summarize your study using an easily digestible, reader-friendly format. As you will discover from viewing other posters, there are many different styles to do this. If you have the resources, professional printers can create large glossy posters that are well received. However, cutting large construction paper to use as a mat for laser printed posters pages can also appear quite professional. Regardless of the framing, it is advisable to use consistent formatting (e.g., same style and font size throughout the poster), large font sizes (e.g., at least 20-point font for text and 40-point font for headings), and alignment of graphics and text (Zerwic et al., 2010). Another suggestion for enhancing readability and visual appeal is to use bullets, figures, and tables to illustrate important findings. Generally speaking, brief phrases (as opposed to wordy paragraphs) should be used to summarize pertinent points. It has been suggested to limit horizontal lines to ten or fewer words and avoid using more than four colors (Zerwic et al.). In short, it is important to keep your presentation succinct and avoid overcrowding on pages. Although there are a variety of fonts available and poster boards come in all colors imaginable, it is best to keep the poster professional. In other words, Courier, Arial, or Times New Roman are probably the best fonts to use because they are easy to read and they will not distract or detract from the central message of the poster (i.e., your research). In addition, dark font (e.g., blue, black) on a light background (e.g., yellow, white) is easier to read in brightly lit room, which is the norm for

poster sessions. Be mindful of appropriately acknowledging any funding agencies or other organizations (e.g., universities) on the poster or in the oral presentation slides.

What to Bring

When preparing for a poster presentation, consider which materials might be either necessary or potentially useful to bring. For instance, it is wise to bring tacks with which to mount the poster, as well as other types of adhesives (e.g., glue and double-sided tape). It also is advisable to create handouts summarizing the primary aims and findings and to distribute these to interested colleagues. The number of copies one provides often depends on the size of the conference and the number of individuals attending a particular poster session. We have found that for larger conferences, 50 handouts are a good minimum. In general, handouts are in high demand and supplies are quickly depleted. In which case, you should be equipped with a notepad to obtain the names and addresses of individuals interested in receiving the handout via mail or e-mail.

Critically Evaluate Other Posters

We also recommend critically evaluating other posters at conferences and posters previously used by colleagues. You will notice great variability in poster style and formatting, with some researchers using glossy posters with colored photographs and others using plain white paper and black text. Make mental notes regarding the effective and ineffective presentation of information. What attracted you to certain posters? Which colors stood out and were the most readable? Such informal evaluations likely will be invaluable when making decisions on aspects such as poster formatting, colors, font, and style.

Prepare Your Presentation

Poster session attendees will often approach your poster and ask you to summarize your study, so it is wise to prepare a brief overview of your study (e.g., 2 min). In addition, practice describing any figures or graphs displayed on your poster. Finally, attendees will often ask questions about your study (e.g., “What are the clinical implications?” “What are some limitations to your study?” “What do

you recommend for future studies?”), so it may be helpful to have colleagues review your poster and ask questions. Table 9.4 provides some suggestions as to how to handle difficult questions.

Conducting Poster Presentations

In general, presenting a poster is straightforward—tack the poster to the board at the beginning of the session, stand next to the poster and discuss the details of the project with interested viewers, and remove the poster at the end of the session. However, we have found that a surprisingly high number of presenters do not adequately fulfill these tasks. Arriving to the poster session at least 5 min early will allow you to find your allocated space, unpack your poster, and decide where to mount it on the board. When posters consist of multiple frames, it might be easiest to lie out the boards on the floor prior to beginning to tack it up on the board.

During the poster session, remember this fundamental rule—be present. It is permissible to browse other posters in the same session; however, always arrange for a coauthor or another colleague knowledgeable about the study to man the poster. Another guideline is to be available to answer questions and discuss the project with interested parties. In other words, refrain from reading, chatting with friends, or engaging in other activities that interfere with being available to discuss the study. At the conclusion of the poster session, it is important to quickly remove your poster so subsequent presenters have ample time to set up their posters. Suggestions for preparing and presenting posters are summarized in Table 9.1.

Preparing for Oral Presentations

The Basics

Similar to poster sessions, it is important to be familiar with and adhere to program requirements when preparing for oral presentations. For symposia, this might include sending an outline of your talk to the Chair and Discussant several weeks in advance and staying within a specified

Table 9.1 Suggestions for poster presentations

Constructing your poster	<p>Follow conference guidelines</p> <p>Summarize study using a professional and reader-friendly format (e.g., short phrases, large font size, plain font)</p> <p>Use consistent formatting throughout poster (e.g., same style and font type)</p> <p>Use bullets, graphs, tables, and other visual aides</p> <p>Keep succinct and avoid overcrowding on pages</p>
Deciding what to bring	<p>Tacks to mount poster</p> <p>Adhesives (e.g., glue or double-sided tape)</p> <p>Handouts summarizing primary aims and findings</p> <p>Notepad and pen for addresses</p>
Evaluating other presentations	<p>Observe variability in poster formats</p> <p>Note effective and ineffective presentation styles</p> <p>Incorporate effective aspects into your next presentation</p>
Presenting your poster	<p>Arrive at least 5 min early to set up</p> <p>Be present or arrange for coauthor(s) to man the poster</p> <p>Be available to answer questions</p> <p>Avoid engaging in interfering activities (e.g., reading, talking to friends)</p>

time limit when giving your talk. Although the Chair often will ensure that the talks adhere to the theme and do not excessively overlap, the presenter also can do this via active communication with the Chair, Discussant, and other presenters.

What to Bring

As with poster presentations, it is useful to anticipate and remember to bring necessary and potentially useful materials. For instance, individuals using PowerPoint should bring their slides in paper form in case of equipment failure. Equipment, such as microphones, DVD players, and overhead machines, often are available upon request; it is the presenter's responsibility, however, to reserve equipment in advance.

Critically Evaluate Other Presenters

By carefully observing other presenters, you might learn valuable skills of how to enhance

your presentations. Examine the format of the presentation, the level of detail provided, and the types and quality of audio-visual stimuli. Also try to note the vocal quality (e.g., intonation, pitch, pace, use of filler terms such as “um”), facial characteristics (e.g., smiling, eye contact with audience members), body movements (e.g., pacing, hand gestures), and other subtle aspects that can help or hinder presentations.

Practice, Practice, Practice

In terms of presentation *delivery*, repeated practice is essential for effective preparation (see Williams, 1995). For many people, students and seasoned professionals alike, public speaking can elicit significant levels of distress. Given extensive data supporting the beneficial effects of exposure to feared stimuli (see Wolpe, 1977), repeated rehearsal is bound to produce positive outcomes, including increased comfort, increased familiarity with content, and decreased levels of anxiety. Additionally, practicing will help presenters hone their presentation skills and develop a more effective presentation style. We recommend practicing in front of an “audience” and soliciting feedback regarding both content and presentation style. Solicit feedback on every aspect of your presentation from the way you stand to the content of your talk. It might be helpful to rehearse in front of informed individuals (e.g., mentors, graduate students, research groups) who ask relevant and challenging questions and subsequently provide constructive feedback. Based on this feedback, determine which suggestions should be incorporated and modify your presentation accordingly. As a general rule, practice and hone your presentation to the point that you are prepared to present without any crutches (e.g., notes, overheads, slides).

Be Familiar and Anticipate

As much as possible, try to familiarize yourself with the audience both before and during the actual presentation. By having background information, you can better tailor your talk to meet

Table 9.2 Oral presentations

Preparing for your oral presentation	Adhere to program requirements (e.g., stay within time limit)
	Check on equipment availability
	Reserve necessary equipment (e.g., VCRs, laptop for PowerPoint presentation, overhead machine)
	Bring necessary materials (e.g., PowerPoint slides, overheads, video clips)
Familiarizing yourself with the environment	Be prepared to present without any materials in case of equipment failure
	Conduct informal “audience analysis”—familiarize yourself with audience before and during presentation
	Tailor your talk to meet the professional levels and needs of the audience
Giving your talk	Anticipate room size (e.g., will talk be held in a large auditorium or in a more intimate setting?)
	Dress professionally
	Maintain good posture
	Avoid distracting mannerisms (e.g., pacing and filler words such as “um”)
	Avoid standing in one place or behind a podium
Enhancing your presentation	Maintain eye contact with your audience
	Be vocally energetic and enthusiastic
	Practice, practice, practice!
	Solicit feedback from colleagues and make appropriate modifications
	Observe other presenters; imitate effective presentation styles and incorporate effective modes of delivery
	Use enhancements and audio-visual aids such as video clips, PowerPoint slides, cartoons, or comics
Use humor and illustrative examples (e.g., metaphors, real-life stories, cartoons, comic strips, jokes)	
	Avoid information overload; instead, clearly deliver 2–4 “take-home messages”

the professional levels and needs of those in attendance. It may be particularly helpful to have some knowledge regarding the educational background and general attitudes and interests of the audience (e.g., is the audience comprised of laymen and/or professionals in the field? What are the listeners’ general attitudes towards the topic and towards you as the speaker? Is the audience more interested with practical applications or with design and scientific rigor?). Are you critiquing previous work from authors that may be in the audience? By conducting an informal “audience analysis,” you will be more equipped to adapt your talk to meet the particular needs and interests of the audience.

Similarly, it might be helpful to have some knowledge about key logistical issues, such as room size and availability of equipment. For example, will the presentation take place in a large auditorium-like room or in a more intimate setting with the chairs arranged in a semicircle? If the former is used, will a microphone be available? Is there a podium at the front of the room that might influence where you will stand? Given the dimensions of the room, where should the slide projector be positioned? Although it may be

impossible to answer all such questions, it is a good idea to have a general sense of where the presentation will take place and who will be attending. Suggestions for preparing and conducting oral presentations are summarized in Table 9.2.

Conducting Oral Presentations

Using Audio-Visual Enhancements

One strategy for enhancing oral presentations is to use audio-visual stimuli, such as slides, overheads, video clips, or flip charts (e.g., Hoff, 1988; Wilder, 1994; see Table 9.3). When using visual enhancements, keep it simple, and clearly highlight important points using readable and consistent typeface. Information should be easily assimilated and reader-friendly, which generally means limiting text to a few phrases rather than complete sentences or paragraphs and using sufficiently large font sizes (i.e., 36–48 point font for titles and 24–36 point font for text). In addition, it is a good idea to keep titles to one line and bullet to no more than 2 lines of information. Additionally, color schemes should be relatively subdued and “professional” in

Table 9.3 Using audio-visual enhancements

Examples of audio-visual aides	Slides Overheads Video clips Flip charts Cartoons and comic strips
Tips for using overheads and slides	Test equipment in advance Keep it simple; use to clarify and enhance Avoid going overboard (too much might detract from presentation) Use reader-friendly format (e.g., short phrases, avoid overcrowding) Use bullets rather than sentences Remember <i>One × Six × Six</i> : Only <i>ONE</i> idea per visual; less than <i>SIX</i> bullets per visual; less than <i>SIX</i> words per bullet Highlight important points using readable, consistent typeface Use professional color schemes (e.g., light background, dark text for overheads and dark background, light text for slides) Speak to audience, not to visual aides Stand to the side of your screen to avoid blocking audience’s view Pause as you change slides; practice for smooth transitions Be prepared to present without your overheads/slides
Tips for using videos	Test equipment in advance Preset volume levels and cue video in advance Introduce video clip and announce its length Dim the lights before playing Give a concluding statement following the video Use video clips to illustrate and enhance presentations

appearance. For slide presentations, a dark background and light text might be easier to read. Utilize fonts without serifs (e.g., Arial) as opposed to fonts with serifs (e.g., Times New Roman). See Fig. 9.1 for an example of a poor and good slide for an oral presentation.

Using audio-visual aids, such as video clips, also can contribute substantially to the overall quality and liveliness of a presentation. When incorporating video clips, preset volume levels and cue up the video in advance. We also recommend announcing the length of the video, dimming lights, and giving a concluding statement following the video.

Multimedia equipment and audio-visual aids have the potential to liven up even the most uninspiring presentations; however, caution against becoming overly dependent on *any* medium. Rather, be fully prepared to deliver a high-quality presentation without the use of enhancements. It also might be wise to prepare a solid “back-up plan” in case your original mode of presentation must be abandoned due to equipment failure or some other unforeseen circumstance. Back-up overheads, for example, might rescue a presenter who learns of a broken projector 5 min before presenting.

When using slides and overheads, it is important to avoid “going overboard” with information. Many of us will present research with which we are intimately familiar and invested. With projects that are particularly near and dear (e.g., theses and

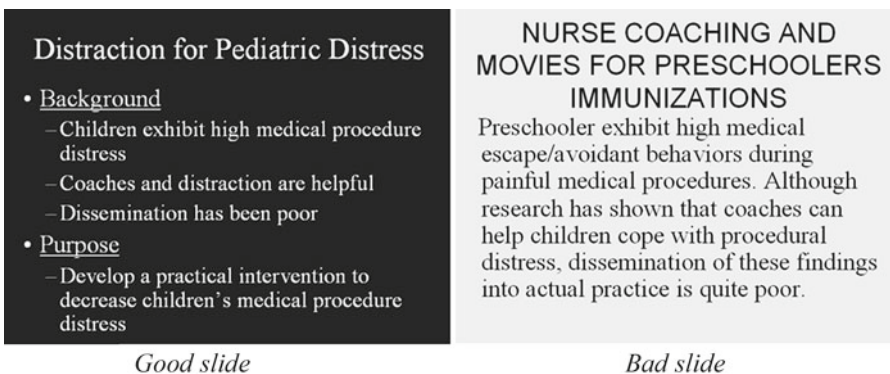


Fig. 9.1 Examples of good and bad oral presentation slides

dissertations), it may be tempting to tell the audience as much as possible. It is not necessary, for example, to describe the intricacies of the data collection procedure and present *every* preplanned and post hoc analysis, along with a multitude of significant and nonsignificant *F*-values and coefficients. Such information overload might bore audience members who are unlikely to care about or remember so many fine-grained details. Instead of committing this common presentation blunder, present key findings in a bulleted, easy-to-read format rather than sentences. To avoid overcrowding of slides and overheads, you might remember the *One × Six × Six* rule of thumb: Only *ONE* idea per visual, less than *SIX* bullets per visual, and less than *SIX* words per bullet (see Fig. 9.1). Also, as a general guideline, the goal of your presentation should be to clearly disseminate a few (e.g., 2–4) “take-home messages” that the audience truly *will* take home!

The length of your oral presentation will vary depending on time restrictions, but there are some general guidelines for how to structure your presentation. Zerwic et al. (2010) proposed a possible structure for research presentations, which should include a title, acknowledgments, background, specific aims, methods, results, conclusions, and future directions sections. Zerwic et al. also recommended how many slides should be allocated to each section with your title, acknowledgments, background, specific aims, conclusions, and future directions sections each taking up one slide with the majority of your slides focusing on the methods and results sections.

In short, remember and hold fast to this basic dictum: Audio-visual aids should be used to *clarify* and *enhance* (Cohen, 1990; Wilder, 1994). Aides that detract, confuse, or bore one’s audience should not be used (soliciting feedback from colleagues and peers will assist in this selection process). Overly colorful and ornate visuals or excessive slide animation, for example, might detract and distract from the content of the presentation. Likewise, visual aids containing superfluous text might encourage audience members to read your slides rather than attend to your presentation. Keeping visuals simple also might prevent another presentation faux pas: reading verbatim from slides.

Using Humor and Examples

The effective use of humor might help “break the ice,” putting you and your audience at ease. There are many ways in which humor can be incorporated into presentations, such as through the use of stories, rich examples, jokes, and cartoons or comic strips. As with other aides, humor should be used in moderation and primarily to enhance a presentation. When using humor, it is important to be natural and brief and to use non-offensive humor related to the subject matter.

Another strategy for spicing up presentations is through the use of stories and examples to illustrate relevant and important points. This can be accomplished in many ways, such as by providing practical and real-life examples or by painting a mental picture for the audience using colorful language (e.g., metaphors, analogies). Metaphorical language, for instance, might facilitate learning (Skinner, 1953) and help audience members to remember pertinent information. Similarly, amusing stories and anecdotes can be used to engage the audience and decrease the “impersonal feel” of more formal presentations. Regardless of whether or how humor is used, remember to do what “works” and feels right. Trying *too hard* to be amusing may come across as contrived and stilted, thus producing the opposite of the intended effect.

Attending to Other Speakers

When presenting research in a group forum (e.g., symposia), it may be beneficial to attend to other speakers, particularly those presenting before you. Being familiar with the content of preceding talks will help to reduce the amount of overlap and repetition between presentations (although, some overlap and repetition might be desirable). You might, for example, describe the similarities and differences across research projects and explain how the current topic and findings relate to earlier presentations. The audience probably will appreciate such integration efforts and have a better understanding of the general topic area.

Answering Questions

Question and answer sessions are commonplace at conferences and provide excellent opportunities for clarifying ambiguous points and interacting with the audience. When addressing inquiries, it is crucial to maintain a professional, non-defensive demeanor. Treat every question as legitimate and well intentioned, even if it comes across as an objection or insult. As a general rule, in large auditoriums it is good to repeat the question so that everyone in the room hears it. If a question is unclear or extremely complicated, it may be wise to pause and organize your thoughts before answering. If necessary, request clarification or ask the questioner to repeat or rephrase the question. It also may be helpful to anticipate and prepare for high-probability questions (Wilder, 1994).

There are several types of difficult questions that can be anticipated, and it is important to know how to handle these situations (Table 9.4). Also, we recommend preparing for a nonresponsive audience. If audience members do not initiate questions, some tactics for preventing long,

uncomfortable silences are to pose commonly asked questions, reference earlier comments, or take an informal survey (e.g., “Please raise your hand if you work clinically with this population”). Even if many questions are generated and lead to stimulating discussions, it is important to adhere to predetermined time limits. End on time and with a strong concluding statement.

Above all, avoid becoming defensive and critical, particularly when answering challenging questions. Irrespective of question quality or questioner intent, avoid making patronizing remarks or answering in a way that makes the questioner feel foolish or incompetent. Try to avoid falling into an exclusive dialogue with one person, which might cause other members of the audience to feel excluded or bored. If possible, offer to meet with questioner and address his or her questions and concerns at the end of the talk. Another suggestion is to avoid engaging in mini-lectures by showcasing accumulated knowledge and expertise in a particular area. Instead, only provide information that is directly relevant to the specific question posed by the audience (Wilder, 1994).

Table 9.4 Handling difficult questions

Type of question	Suggestions
Questions without readily available answers	Admit your unfamiliarity with the question Ask the questioner if he/she has thoughts as to answer Hazard a guess, but back it up with literature and acknowledge that it is a guess Pose an answer to a related question Simply state that the questioner raised an important point and move on to other questions
Irrelevant questions (e.g., “Where were you born?”)	Avoid digressing from the topic Offer to meet with the questioner following the presentation
“Dumb” questions (e.g., “What does ‘hypothesis’ mean?”)	Offer a brief explanation and move on Do not insult the questioner
Politically sensitive questions (e.g., being asked to comment on opposing theoretical viewpoint)	Stick to empirical data and avoid personal attacks
Multiple questions asked simultaneously	Choose either the most pertinent question or the question you would like to answer first (e.g., “I’ll start with your last question”) Ask the questioner to repeat the questions
Offensively worded questions	Avoid becoming defensive Avoid repeating offensive language
Vague questions	Ask for clarification from the questioner Restate the question in more specific terms

Conclusion

There are great benefits to presenting research, both to the presenter and the audience. Before presenting, however, you should consider carefully a number of preliminary issues. For instance, you must decide whether your study is worthy of presentation, where to present it, and what type of presentation to conduct. Once these decisions are made, prepare by practicing your presentation, examining other presentations, and consulting with colleagues. Sufficient preparation should enhance the quality of your presentation and help decrease performance anxiety. We are confident that you will find that a well-executed presentation will prove to be a rewarding and valuable experience for you and your audience.

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Alan E. Kazdin

Publication of research is an essential part of science. Indeed, a key characteristic of science is the accumulation of knowledge. This accumulation depends not only on the completion of research but also on preparation of reports that disseminate the results. Publication can serve other goals as well. Preparing a manuscript for publication helps the investigator to consider the current study in a broader context and chart a course for a series of studies. There are of course many professional and career goals served by publishing one's research. Publication of one's research signals a level of competence and mastery that includes developing an idea, designing, executing and completing the study, analyzing the results, preparing a written report, submitting it for publication, and traversing the peer-review process. This chapter focuses on publishing one's research. The topics include preparing a manuscript, selecting a publication outlet, submitting the manuscript for review, and revising the manuscript as needed for publication.

There are many outlets to communicate the results of one's research. Prominent among these are presentations at professional meetings, chapters in edited books, full-length books, and professional journals. Journal publication, the

focus of this chapter, holds special status because it is the primary outlet for original research. In terms of one's career, journal publication also plays a special role primarily because articles accepted for publication usually have undergone peer review. Acceptance and publication attest to the views of one's peers that there is merit in the work. For any given article, only a few peers (1 editor, 2–3 reviewers) may actually see the manuscript. Multiple publications add to this, and after a few publications, one can assume there is a building consensus about one's work, i.e., others view the contributions as important and worthy of publication.

Preparing a Manuscript for Publication

Writing the Article

A central goal of scientific writing is to convey what was actually done so that the methods and procedures can be replicated. Concrete, specific, operational, objective, and precise are some of the characteristics that describe the writing style. The effort to describe research in concrete and specific ways is critically important. However, the task of the author goes well beyond description.

Preparation of the report for publication involves three interrelated tasks that I refer to as description, explanation, and contextualization. Failure to appreciate or to accomplish these tasks

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serves as a main source of frustration for authors, as their papers traverse the process of manuscript review toward journal publication. *Description* is the most straightforward task and includes providing details of the study. Even though this is an obvious requirement of the report, basic details often are omitted in published articles (e.g., sex, socioeconomic status, and race of the participants; means and standard deviations) (Case & Smith, 2000; Weiss & Weisz, 1990). Omission of basic details can hamper scientific progress. If a later study fails to replicate the findings, it could be because the sample is very different along some dimension or characteristic. Yet, we cannot surmise that without knowing at least basic details of the sample in both studies. If a study does repeat the findings, that is important but is the new finding an extension to a new type of sample? Again, we need basic information in the studies to allow such comparisons.

Explanation is more demanding insofar as this refers to presenting the rationale of several facets of the study. The justification, decision-making process, and the connections between the decisions and the goals of the study move well beyond description. Here the reader of the manuscript has access to the author's decision points. There are numerous decision points pertaining to such matters as selecting the sample, choosing among many options of how to test the idea, selecting the measures, and including various control and comparison groups. The author is obliged to explain why the specific options elected are well suited to the hypotheses or the goals of the study. There is a persuasion feature that operates here. The author of the manuscript is persuaded that the decisions are reasonable ways to address the overriding research question. Now the author must convey that to persuade the reader. In other words, explanation conveys why the procedures, measures, and so on were selected, but that explanation ought to be cogent and persuasive. We do not want the reader to think, "this is an important research question, but why study it that way?" For the many decision points that very reasonable question has to be anticipated and pre-empted.

Finally, *contextualization* moves one step further away from description and addresses how the study fits in the context of other studies and in the knowledge base more generally. This latter facet of the article preparation reflects such lofty notions as scholarship and perspective, because the author places the descriptive and explanatory material into a broader context. Essentially, the author is making the case for the study based on the knowledge base. Relatively vacuous claims (e.g., this is the first study of this or the first study to include this or that control condition or measure) are rarely a strong basis for the study and often means or is interpreted as meaning that the author could not come up with something better. Without context, any "first" is not very important by itself. Indeed, it is easy to be first for a topic that is not very important and has been purposely neglected. We need a more compelling rationale. For example, if this study is done on why people commit suicide, we need the context of why this particular study ought to be done and where in the puzzle of understanding this piece fits. Perhaps prior research omitted some critical control procedure; perhaps there is a special group that has a novel characteristic that reduces (or increases) the likelihood of suicide that would inform the field in unique ways; or perhaps some new twist on a theory or intervention will have clear implications for reducing suicide attempts. These and other such comments convey there is a gap in knowledge, that gap is important, and that gap will be filled in whole or in part by this particular study.

The extent to which description, explanation, and contextualization are accomplished increases the likelihood that the report will be viewed as a publishable article and facilitates integration of the report into the knowledge base. Guidelines are provided later in the chapter to convey these tasks more concretely in the preparation and evaluation of research reports. The guidelines focus on the logic of the study, the interrelations of the different sections, the rationale for specific procedures and analyses, the strengths and limitations, and where the study fits in the knowledge

base. Consider main sections of the manuscript that are prepared for journal publication and how these components can be addressed.¹

Sections of an Article

Title

The title of an article includes the key variables, focus, and population with an economy of words. The special features of the study are included to convey the focus immediately to potential readers. It is critical here to be direct, clear, and concise (e.g., “Memory loss and gains associated with aging” or “Predictors of drug use and abuse among adolescents”). These examples are especially concise. Ordinarily an author is encouraged to fit the title within 10–12 words. The words ought to be selected carefully. Titles occasionally are used to index articles in large databases. Words that are not needed or that say little (e.g., “preliminary findings,” “implications,” “new findings”) might be more judiciously replaced by substantive or content words (e.g., among preschool children, the elderly; consequences for sleep and stress) that permit the article to be indexed more broadly than it otherwise would have been.

Occasionally, comments about the method are included in the title or more commonly in the subtitle. Terms like “a pilot study” or “preliminary report” may have many different meanings, such as the fact that this is an initial or interim report of a larger research program. These words could also be gently preparing readers for some methodological surprises and even tell us not to expect too much from the design. (For example, my dissertation coined the subtitle: “A pre-preliminary, tentative, exploratory pilot study©.”) In some cases, terms are added to the study such as, “A Controlled Investigation,” which moves our expectation in

the other direction, namely, that the present study is somehow well conducted and controlled, and perhaps by implication stands in contrast to other studies in the field (or in the author’s repertoire). Usually words noting that the investigation is controlled are not needed unless this is truly a novel feature of research on the topic.

Occasionally authors are wont to use titles with simple questions, “Is depression really a detriment to health?” or “Is childhood bullying among boys a predictor of domestic violence in adulthood?” In general, it is advisable to avoid “yes, no” questions in the title. Science and findings are often nuanced and findings are likely to be both yes and no, but under very different circumstances or for some subgroups of people but not for others. As an example, consider a hypothetical yes-no question for the title of a study as, “Is cigarette smoking bad for one’s health?” For anyone on the planet, the answer might be a resounding yes. Yet, the yes-no nature of the question makes this a poor choice of title because the answer is likely to depend on either how smoking is defined (e.g., how much smoking—a cigarette a year, a pack after each meal) and how health is defined (e.g., mental, physical, what diseases, disorders). Very familiar is how horrible smoking is for one’s physical health in so many domains (e.g., heart disease, cancer, chronic respiratory disease), but the question in the title can be answered both yes and no. Less familiar is the fact that cigarette smoking reduces the risk for Parkinson’s disease and there are reasonable explanations for that based on brain chemistry and neurotransmitters (Miller & Das, 2007). So the hypothetical title is not very helpful or informative because we can show many circumstances in which yes and no are correct answers. I am not arguing in favor of cigarette smoking. I am advising against titles of empirical articles that have a yes-no question. Few phenomena allow the simplistic thinking the question can reflect.

Abstract

The Abstract is likely to be read by many more people than is the full article. The Abstract will be entered into various databases and be accessible through Internet and on-line library

¹Preparing a manuscript for publication entails several format requirements, such as print style and size, citations of sources, use of abbreviations, structure of tables and figures, and order in which sections of the article appears. These are detailed in the *Publication Manual of the American Psychological Association* (APA, 2010) and are not covered in this chapter.

searches. Many journals list the tables of contents for their issues and provide free access on the Web to abstracts of the articles but charge for the full article. Consequently, the Abstract is the only information that most readers will have about the study. For reviewers of the manuscript and readers of the journal article, the Abstract conveys what the author studied and found. Ambiguity, illogic, and fuzziness here are ominous. Thus, the Title and Abstract are sometimes the only impression or first impression one may have about the study.

Obviously, the purpose of the Abstract is to provide a relatively brief but comprehensive statement of goals, methods, findings, and conclusions of the study. Critical methodological descriptors pertain to the participants and their characteristics, experimental and control groups or conditions, design, and major findings. Often space is quite limited; indeed a word limit (e.g., 150–250 word maximum) may be placed on the Abstract. It is useful to deploy the words to make substantive statements about the characteristics of the study and the findings, rather than to provide general and minimally informative comments. For example, vacuous statements (“Implications of the results were discussed” or “Future directions for research were suggested”) ought to be replaced with more specific comments of what one or two implications and research directions are. (e.g., “The findings suggest that the family and peers might be mobilized to prevent drug abuse among adolescents and that cultural influences play a major role.”) Also, the more specific comments can convey the study’s relevance and interest value beyond what is suggested by the manuscript title or opening comments of the Abstract. I am not going to read very eagerly an article with the vacuous “implications” or “future directions” sentences, but if I am interested in the specific topics mentioned as implications (family, peers, culture), this article is a must for me to read. As authors, we often lament the word restrictions placed on us in the Abstract, but the first task is to make sure we are using the existing allotment with maximum information.

Introduction

The Introduction is designed to convey the overall rationale and objectives. The task of the author is to convey in a crisp and concise fashion why this particular study is needed and the current questions or deficiencies the study is designed to address. The section should not review the literature in a study-by-study fashion, but rather convey issues and evaluative comments that set the stage for the study. Placing the study in the context of what is and is not known (contextualization) and the essential next step in research in the field requires mastery of the pertinent literatures, apart from reasonable communication skills. Ironically, mastery of the literature is needed, so the author knows precisely what to omit from the Introduction. A vast amount of material one has mastered and that is very interesting will need to be omitted because it does not set the stage or convey the precise context for this particular study.

Saying that the study is important (without systematically establishing the context) or noting that no one else has studied this phenomenon (measure or sample) usually are feeble attempts to short-circuit the contextualization of the study. Among the tasks of the Introduction is to lead the reader to the conclusion that the study is important and worthwhile. Telling the reader that it is an attempt at an argument from authority and that is not how science works and might even suggest that author has not done his or her contextualization homework.

It may be relevant to consider limitations of previous work and how those limitations can be overcome. These statements build the critical transition from an existing literature to the present study and the rationale for design improvements or additions in relation to those studies. It is important to emphasize that “fixing limitations” of prior work is not necessarily a strong basis for publishing a study. The author must convey that the limitations of prior work are central to a key building block in theory or the knowledge base. Convey that because of that limitation, we really do not know what we thought we did or that there is a new ambiguity that is important but hidden in prior studies in

light of what was studied and by what means. Alternatively, the study may build along new dimensions to extend the theory and constructs to a broader range of domains of performance, samples, and settings. The rationale for the specific study must be very clearly established. Theory and previous research usually are the proper springboard to convey the importance of the current study.

In general, the Introduction will move from the very general to the specific. The very general refers to the opening of the Introduction that conveys the area, general topic, and significance of a problem. For example, in studies of diagnosis, assessment, treatment, or prevention of clinical dysfunction, the Introduction invariably includes a paragraph to orient the reader about the seriousness, prevalence or incidence, and economic and social costs of the disorder. Reviewers of the manuscript are likely to be specialists in the area of the study and hence know the context very well. Yet, many potential readers would profit from a statement that conveys the significance, interest, and value of the main focus of the study.

After the initial material, the Introduction moves to the issues that underlie this particular study. Here the context that frames the specific hypotheses of the study is provided and reflects theory and research that are the impetus for the investigation. There is an introduction syllogism, as it were, a logic that will lead the reader from previous theory and research to the present study with a direct path. Extended paragraphs that are background without close connections to the hypotheses of the study serve as a common weakness of manuscripts rejected for publication.

The Introduction does not usually permit us to convey all of the information we wish to present. In fact, the limit is usually 2–5 manuscript pages. A reasonable use of this space is in brief paragraphs or implicit sections that describe the nature of the problem, the current status of the literature, the extension to theory and research this study is designed to provide, and how the methods to be used are warranted. The penultimate or final paragraph of the Introduction usually includes a statement of the purpose of the study and the specific hypotheses and predictions. By the time the reader

reaches this paragraph or set of paragraphs, it should be very clear that these hypotheses make sense, are important, and address a critical issue or need in the knowledge base. In short, the Introduction must establish that the study addresses a central issue. To the extent that the author conveys a grasp of the issues in the area and can identify the lacunae that the study is designed to fill greatly improves the quality of the report and the chances of acceptance for journal publication. By the time the readers arrive at the purpose of the study or hypotheses paragraph, they should be nodding enthusiastically and saying to themselves, “This study is really needed, it should have been done years ago, I am so glad this is being done now.”

Method

This section of the paper encompasses several points related to who was studied, why, and how. The section not only describes critical procedures, but also provides the rationale for methodological decisions. Subject selection, recruitment, screening, and other features ought to be covered in detail. Initially, the subjects or clients are described. Why was this sample included and how is this appropriate to the substantive area and question of interest? In some cases, the sample is obviously relevant because participants have the characteristic of interest (e.g., parents accused of child abuse, siblings of children with autism) or are in a setting of interest (e.g., day-care center, wilderness camp). In other cases, samples are included merely because they are available. Such samples, referred to as samples of convenience, may include college students or a clinic population recruited for some other purpose than to test the hypotheses of this study. The rationale for the sample should be provided to convey why *this* sample provides a good test of the hypotheses and whether any special features may be relevant to the conclusions. The issue is whether features of the subject-selection process could restrict the conclusions.

The design is likely to include two or more groups that are treated in a particular fashion. The precise purpose of each group and the procedures to which they are exposed should be clarified.

Control groups should not merely be labeled as such with the idea that the name is informative. The author should convey precisely what the group(s) is designed to control. The author is advised to identify the critical methodological concerns and to convey how these are controlled in the design. Plausible threats to experimental validity that are uncontrolled deserve explicit comment to arrest the reasonable concerns of the reviewers.

Several measures are usually included in the study. Why the *constructs* were selected for study should have been clarified in the Introduction. The specific *measures* and why they were selected to operationalize the constructs should be presented in Method section. Information about the psychometric characteristics of the measures is often highlighted. This information relates directly to the credibility of the results. Apart from individual assessment devices, the rationale for including or omitting areas that might be regarded as crucial (e.g., multiple measures, informants, settings) deserves comment.

Occasionally, ambiguous statements may enter into descriptions of measures. For example, measures may be referred to as “reliable” or “valid” in previous research, as part of the rationale for their use. There are, of course, many different types of reliability and validity. It is important to identify those characteristics of the measure found in prior research that are relevant to the present research. For example, high internal consistency (reliability) in a prior study may not be a strong argument for use of the measure in a longitudinal design where the author cares more about test-retest reliability. Even previous data on test-retest reliability (e.g., over 2 weeks) may not provide a sound basis for repeated testing over annual intervals. The author ought to present information to convey the suitability of the measures for the study. It is unreasonable to expect the measures to have the ideal reliability and validity data that the investigator would like to make a flawless case for use of these measures. Yet, make the case from what psychometric data there are. If data are not available, include some analyses in the study to suggest the measure(s) behave in ways that suggest pertinent forms of reliability or validity.

Results

It is important to convey why specific statistical tests were selected and how these serve the goals of the study. A useful exercise is for the investigator to read that paragraph about hypotheses and predictions from the Introduction and then immediately start reading the Results section. The results ought to speak directly to and flow from that narrative statement in the Introduction.

Analyses often are reported in a rote fashion in which, for example, the main effects are presented and then interactions for each measure. The author presents the analyses in very much the same way as the computer output. Similarly, if several dependent measures are available, a particular set of analyses is automatically run (e.g., omnibus tests of multivariate analyses of variance followed by univariate analyses of variance for individual measures). The tests may not relate to the hypotheses, predictions, or expectations outlined at the beginning of the paper. It is important that the statistical tests be seen and presented as tools to answer questions or enlighten features of those questions and to convey this to the reader. The reader should not be able to legitimately ask, “Why was that statistical test done?” Knowledge of statistics is critical for selecting the analyses to address the hypotheses and conditions met by the data. Yet, as important in the presentation is to convey why a given statistical test or procedure is suitable to test the hypotheses and then again what the results of that test reveal in relation to those hypotheses.

It is often useful to begin the Results by presenting basic descriptors of the data (e.g., means, standard deviations for each group, or condition), so the reader has access to the numbers themselves. The main body of the Results is to test the hypotheses or to evaluate the predictions. Organization of the Results (subheadings) or brief statements of hypotheses before the analyses are often helpful to prompt the author to clarify how the statistical test relates to the substantive questions and to draw connections for the reader.

Several additional or ancillary analyses may be presented to elaborate the primary hypotheses. For example, one might be able to reduce the plausibility that certain biases may have accounted

for group differences based on supplementary or ancillary data analyses. Ancillary analyses may be more exploratory and diffuse than tests of primary hypotheses. Manifold variables can be selected for these analyses (e.g., sex, race, height differences) that are not necessarily conceptually interesting in relation to the goals of the study. The author may wish to present data, data analyses, and findings that were unexpected, were not of initial interest, and were not the focus of the study. The rationale for these excursions and the limitations of interpretation are worth noting. From the standpoint of the reviewer and reader, the results should make clear what the main hypotheses were, how the analyses provide appropriate and pointed tests, and what conclusions can be reached as a result.

Discussion

The Introduction began with a statement of the need for this study and issues or lacunae in theory or research the study was designed to address. The Discussion continues the story line by noting what we know now and how the findings address or fulfill the points noted previously. With the present findings, what puzzle piece has been added to the knowledge base, what new questions or ambiguities were raised, what other substantive areas might be relevant for this line of research, and what new studies are needed? From the standpoint of contextualization, the new studies referred to here are not merely those that overcome methodological limitations of the present study, but rather focus on the substantive next steps for research.

More concretely, the Discussion usually includes paragraphs to provide an overview of the major findings, integration or relation of these findings to theory and prior research, limitations and ambiguities and their implications for interpretation, and future directions. These are implicit rather than formally delineated sections and the author ought to consider the balance of attention to each topic. Usually, the Discussion is completed within 3–5 manuscript pages.

Description and interpretation of the findings can raise a tension between what the author wishes to say about the findings and their mean-

ing vs. what can be said in light of how the study was designed and evaluated. It is in the Discussion that one can see the interplay of the Introduction, Methods, and Results sections. For example, the author might draw conclusions that are not quite appropriate given the method and findings. The Discussion may convey flaws, problems, or questionable methodological decisions within the design that were not previously evident. That is, the reader of the paper can now state that if these are the statements the author wishes to make, the present study (design, measures, or sample) is not well suited. The slight mismatch of interpretative statements in the Discussion and Methods is a common, albeit tacit basis for not considering a study as well conceived and executed. A slightly different study may be required to support the specific statements the author makes in the Discussion. It is important to be precise about what can and cannot be asserted in light of the design and findings.

It is usually to the author's credit to examine potential limitations or sources of ambiguity of the study. A candid, nondefensive, appraisal of the study is very helpful. Here too, contextualization may be helpful because limitations of a study also are related to the body of prior research, what other studies have and have not accomplished, and whether a finding is robust across different methods of investigation. Although it is to the author's credit to acknowledge limitations of the study, there are limits on the extent to which reviewers grant a pardon for true confessions. At some point, the flaw is sufficient to preclude publication, whether or not the author acknowledges it. For example, the authors of the study might note, "A significant limitation of the present study is the absence of a suitable control group. We are aware that this might limit the strength of the conclusions." Awareness here does not strengthen the demonstration itself. A huge limitation in the study is sufficiently damaging so as to preclude drawing valid inferences. It is the investigator's responsibility to convey limitations and to make the case, to the extent reasonable, that they are likely to have a minor effect, are not plausibly related to the nature of the finding, and point to issues that are

logical if not important next steps. All studies have limitations by their very nature, so reasoning about their likely and unlikely impact on the findings is invariably relevant.

At other points, acknowledging potential limitations conveys critical understanding of the issues and guides future work. For example, in explaining the findings, the author may note that although the dependent measures are valid, there are many specific facets of the construct of interest that are not covered. Thus, the results may not extend to different facets of the construct as measured in different ways. Here too it is useful to be specific and to note precisely why other constructs and their measure might show different results. In short, be specific as to why a limitation or point might really make a difference. This latter use of acknowledgment augments the contribution of the study and suggests concrete lines of research.

Questions to Guide Manuscript Preparation

The section-by-section discussion of the content of an article is designed to convey the flow or logic of the study and the interplay of description, explanation, and contextualization. The study ought to have a thematic line throughout and all sections ought to reflect that in a logical way. The thematic line consists of the substantive issues guiding the hypotheses and decisions of the investigator (e.g., with regard to procedures and analyses) that are used to elaborate these hypotheses.

A more concrete and hence perhaps more helpful way of aiding preparation of the manuscript is to consider our task as authors as that of answering many questions. There are questions for the authors to ask themselves or, on the other hand, questions reviewers and consumers of the research are likely to ask as they read the manuscript. These questions ought to be addressed suitably within the manuscript. Table 10.1 presents questions according to the different sections of a manuscript. The questions emphasize the descriptive information,

as well as the rationale for procedures, decisions, and practices in the design and execution. The set of questions is useful as a way of checking to see that many important facets of the study have not been overlooked. As a cautionary note, the questions alert one to the parts rather than the whole; the manuscript in its entirety or as a whole is evaluated to see how the substantive question and methodology interrelate and how decisions regarding subject selection, control conditions, measures, and data analyses relate in a coherent fashion to the guiding question.

Guidelines for Research

In the past several years, there has been increased interest in improving the quality of research by bringing consistencies, by making procedures more transparent, and by requiring more details about the method and results. The impetus has become more salient as collaborations across disciplines have increased and science is more global. There is interest across nations in reaching common standards in relation to the openness of research, access to information, the merit-review process, and ethical issues (e.g., Suresh, 2011).

In many cases methodologies across disciplines are shared. Perhaps the most prominent example is the randomized controlled trial, which is regarded as the gold standard for evaluating interventions. Evaluation of interventions in diverse disciplines (e.g., psychology, education, oncology, cardiology) usually entails investigations in which individuals are assigned randomly to various treatment and control conditions. Some of the guidelines have focused on bringing greater consistency for all the disciplines using such trials.

Several organizations and groups have developed standards for reporting research, and in the process, convey the need to address several facets of the study (e.g., how the sample was identified, how many started in the trial and completed the intervention, statistical power and how parameter estimates were made to

Table 10.1 Major questions to guide journal article preparation**Abstract**

- What are the main purposes of the study?
- Who was studied (sample, sample size, special characteristics)?
- How were participants selected and assigned to conditions?
- To what conditions, if any, were participants exposed?
- What type of design was used?
- What are the main findings and conclusions?
- What are one or two specific implications or future directions of the study?

Introduction

- What is the background and context for the study?
- What in current theory or research makes this study useful, important, or of interest?
- What is different or special about the study in focus, methods, or design to address a need in the area?
- Is the rationale clear regarding the constructs (independent and dependent variables) to be assessed?
- What specifically are the purposes, predictions, or hypotheses?
- Are there ancillary or exploratory goals that can be distinguished as well?

Method*Participants*

- Who are the participants and how many of them are there in this study?
- Why was this sample selected in light of the research goals?
- How was this sample obtained, recruited, and selected?
- What are the subject and demographic characteristics of the sample (e.g., sex, age, ethnicity, race, socioeconomic status)?
- What, if any, inclusion and exclusion criteria were invoked, i.e., selection rules to obtain participants?
- How many of those subjects eligible or recruited actually were selected and participated in the study?
- In light of statistical power considerations, how was the sample size determined?
- Was informed consent solicited? How and from whom (e.g., child and parent), if special populations were used?
- If non-human animal are the participants, what protections were in place to ensure their humane care and adherence to ethical guidelines for their protection?

Design

- What is the design (e.g., group, true-experiment) and how does the design relate to the goals?
- How were participants assigned to groups or conditions?
- How many groups were included in the design?
- How are the groups similar and different?
- If groups are “control” groups, for what is the group intended to control?
- Why are these groups critical to address the questions of interest?

Procedures

- Where was the study conducted (setting)?
- What measures, materials, equipment, or apparatus were used?
- What is the chronological sequence of events to which participants were exposed?
- What intervals elapsed between different aspects of the study (e.g., assessment, exposure to the manipulation, follow-up)?
- If assessments involved novel measures created for this study, what data can be brought to bear regarding pertinent types of reliability and validity?
- What checks were made to ensure that the conditions were carried out as intended?
- What other information does one need to know to understand how participants were treated and what conditions were provided to facilitate replication of this study?

Results

- What are the primary measures and data upon which the hypotheses or predictions depend?
- What analyses are to be used and how specifically do these address the original hypotheses and purposes?
- Are the assumptions of the statistical analyses met?
- If multiple tests are used, what means are provided to control error rates (increased likelihood of finding significant differences in light of using many tests)?
- If more than one group is delineated (e.g., through experimental manipulation or subject selection), are they similar on variables that might otherwise explain the results (e.g., diagnosis, age)?
- Are data missing due to incomplete measures (not filled out completely by the participants) or due to loss of subjects? If so, how are these handled in the data analyses?
- Are there ancillary analyses that might further inform the primary analyses or exploratory analyses that might stimulate further work?

(continued)

Table 10.1 (continued)

Discussion

- What are the major findings of the study?
- Specifically, how do these findings add to research and support, refute, or inform current theory?
- What alternative interpretations, theoretical or methodological, can be placed on the data?
- What limitations or qualifiers are necessary, given methodology and design issues?
- What research follows from the study to move the field forward?
- Specifically, what ought to be done next (e.g., next study, career change of the author)?

More generally

- What were the sources of support (e.g., grants, contracts) for this particular study?
- If there is any real or potentially perceived conflict of interest, what might that be?
- Are you or any coauthors or a funding agency likely to profit from the findings or materials (e.g., drugs, equipment) that are central to the study?

Note: These questions capture many of the domains that ought to be included, but they do not exhaust information that a given topic, type of research, or journal might require. Even so, the questions convey the scope of the challenge in preparing a manuscript for publication

calculate power, and whether participants received the intended intervention). Examples of such standards are the:

- Consolidated Standards of Reporting Trials (CONSORT; Moher, Schulz, & Altman, 2001)
- Transparent Reporting of Evaluations with Nonexperimental Designs (TREND; Des Jarlais et al., 2004)
- Reporting Standards for Research in Psychology (American Psychological Association [APA] Publications and Communications Board, 2008)
- Publication Manual of the APA (Chap. 2, APA, 2010)
- Standards for Reporting on Empirical Social Science Research in American Educational Research Association (AERA) publications (AERA, 2006)

The CONSORT standards, arguably the most familiar, have been adopted by hundreds of professional journals from many disciplines and countries (see www.consort-statement.org/about-consort/supporters/consort-endorsers---journals/). The CONSORT standards and those by APA are useful to consult because they identify domains to address in preparation of a manuscript for publication and expand beyond the questions listed in Table 10.1.

For the questions as well as the various professional guidelines, it is important to convey that they are not just domains to address in the write up of an investigation. The various ques-

tions and points need to be addressed in the design of the study. Thus, the various guidelines have as dual goals improving the reporting of research but in the process prompting the investigator to attend to critical issues before and during the investigation.

Selecting a Journal

Preparation of the manuscript is logical before selecting a journal and submitting the journal for publication. However, investigators occasionally have the journal or a couple of journals in mind before the manuscript is prepared. Journals have different emphases and research with particular sorts of foci (e.g., theory, application), samples (e.g., non-human animals, college students, community samples), settings (laboratory, field), and research designs (cross-sectional, longitudinal, experimental, observational). Consequently, it is not odd for the investigator to plan/hope that a study when completed will be appropriate for a journal he or she targeted well before preparing the manuscript for publication. In my own case, I prefer to see the final or almost final write up to consider what journals might be reasonable outlets for the article. I mention selecting a journal here on the assumption that this logically follows in the sequence of completing a study, preparing the write up, and submitting the article for publication. Selecting a journal is part of the submitting the article.

Several hundred journals are available in the behavioral and social sciences and the resources and potential relevance to your study are easily obtained from the Web (Gunther, 2011; Thomson Reuters, 2011; Thursby, 2011). These sources can be searched by topic and key words in relation to how you view your study (e.g., clinical psychology, candidate for Nobel prize). There are many professional organizations within psychology that have their own publications. The two major professional organizations whose journal programs are widely recognized and emulated are American Psychological Association (2011) and the Association of Psychological Science (2011).

Each of the sources I have noted here provides information about the editorial policy, content area or domain, type of article (e.g., investigations, literature reviews, case studies), guidelines for manuscript preparation, and access to tables of contents of current and past issues. I have emphasized journals in the English language. Psychology is an active discipline internationally and psychological associations in many countries and regions (e.g., European Union, Scandinavia) have many excellent journals as well.

Many criteria are invoked to select a journal to which one will submit a manuscript, including the relevance of the journal in relation to the topic, the prestige value of the journal in an implicit hierarchy of journals in the field, the likelihood of acceptance, the breadth and number of readers or subscribers, and the discipline and audience one wishes to reach (e.g., psychology, psychiatry, medicine, social work, health, education). As for the prestige value, clearly some journals are regarded as more selective than others. For example, some of the APA and APS journals are premier journal outlets in their respective areas (e.g., *Journal of Consulting and Clinical Psychology*, *Clinical Psychological Science*). Yet, journals from other organizations, journals not sponsored by an organization, and journals from other professions or disciplines can be as or more highly regarded. Indeed, in some areas (e.g., behavioral neuroscience), some of the most discriminating and selective publication outlets are not psychology journals (*Science*,

Nature Neuroscience). One can identify the best outlets by familiarity with the literature (e.g., where do the best studies seem to be published) and by chatting with colleagues.

Word of mouth and reputation of a journal often are well recognized and their status within professional organizations is known. There has been an enduring interest in having more objective measures and they are available. The impact of a journal is primary among these measures (Web of Knowledge, 2011) and includes the extent to which articles in a journal are cited by others. Journals with articles that are heavily cited are those with much higher impact. Information is available for journals in virtually all areas of science. Within the social sciences alone, over 2,000 journals are covered.²

Some journals are not very selective and, indeed, have to hustle (e.g., invite, accept many) articles so they can fill their pages. The more obscure and low impact journals may actually be in a little trouble in accepting enough papers. A few journals in psychology charge authors for publishing their papers. So when one's paper is accepted, the author is charged on the basis of how many journal pages the article will require. These outlets do not necessarily take all submissions but they often take most. These journals tend not to be as carefully peer-reviewed and hence publications in such journals are commensurately much less well regarded. Within psychology, career advice is to focus on peer-reviewed and well-regarded journals, leaving aside other issues (e.g., who publishes the journal, whether there are charges). Knowledge of the area of research, journal citation impact, and contact with one's colleagues can readily identify the ideal outlets for one's research.

² An objective quantitative measure of impact has multiple uses for different parties who have interest in the impact of a journal (e.g., libraries making subscription decisions, publisher evaluating the status of a particular journal they have published). Administrators and faculty peers often use impact of the journals in which a colleague publishes as well as how often their work is cited by others among the criteria used for job appointments and promotions in academic rank, and salary adjustments.

The audience one wishes to reach may be a critical and indeed primary consideration in selecting a journal. Who might be interested in this study (beyond blood relatives)? One way to answer this is to consider the Reference section of one's article. Are one or two journals emphasized in the Reference section of the manuscript? If so, one of these journals might be the most appropriate outlet. Citation of the journal on multiple occasions indicates that the journal publishes work on the topic and readers likely to be interested in the topic are also likely to see the article. Also relevant, journals vary markedly in their readership and subscription base. Some journals have relatively few subscribers (e.g., 200–600 up to several thousand), are in relatively few libraries, or are omitted from easily accessed databases. The visibility of one's study and the chance that others will see it are influenced by these considerations. Fortunately, most professional journals have their abstracts included in databases that can be accessed from the Web. This makes even the most obscure study accessible.

Most journals are in print (hard copy) and electronic form, but many are only Web-based and are sometimes referred to as electronic journals or e-journals. This is not the place to discuss that topic except to note often publication on the Web is much faster (less delay in review of the manuscript and acceptance of the manuscript) than is publication in a printed journal. There are still dynamic changes in how journals will be published and disseminated and print versions may be on borrowed time. The central issue for one's career is the extent to which the publication outlet is well regarded by one's peers and the care with which manuscripts are reviewed before they are accepted and published. Electronic vs. printed journal format is not as critical as the quality of the publication. If publication in the journal requires little or no peer review, if most manuscripts are accepted, and if manuscripts are accepted largely as they are (without revision), quality of the research and the value of the publication to one's career may be commensurately reduced.

Manuscript Submission and Review

Overview of the Journal Review Process

Alas, through careful deliberation and 30 min with your coauthor at a Ouija board, you select a journal and are ready to submit it for publication. Before you do, consult the Instructions to Authors written in the journal to make sure you submit the manuscript correctly. Usually manuscripts are submitted through a journal portal, i.e., electronically in which the manuscript file and a letter of submission are uploaded to the journal Web site. In some cases, you may be required to include sentences or paragraphs in the letter you submit that say this study is not being considered elsewhere in another journal, has not been published before, and that you will give the copyright to the publisher if the manuscript is accepted. Processing of the manuscript could be delayed if your letter does not meet the guidelines provided in the journal.

Once the manuscript is submitted, the journal editor usually sends the electronic file to two or more reviewers who are selected because of their knowledge and special expertise in the area of the study or because of familiarity with selected features of the study (e.g., novel methods of data analyses). Reviewers may be selected from the names of authors whose articles you included in your Introduction. Some reviewers are consulting editors who review often for the journal and presumably have a perspective of the type and quality of papers the journal typically publishes; other reviewers are ad hoc reviewers and are selected less regularly than consulting editors. Reviewers are asked to evaluate the manuscript critically and to examine whether or the extent to which:

- The question(s) is important for the field
- The design and methodology are appropriate to the question
- The results are suitably analyzed
- The interpretations follow from the design and findings
- The knowledge yield contributes in an incremental way to what is known already

Typically, reviewers are asked to give a summary recommendation (e.g., reject or accept the manuscript). All recommendations to an editor are advisory and not binding in any way. At the same time, the editor sought experts and usually follows their recommendations. Yet reviewers too must make the case for their comments.

Once the paper is reviewed, the editor evaluates the manuscript and the comments of the reviewers. In some cases, the editor may provide his or her own independent review of the paper; in other cases, he or she may not review the paper at all, but defer to the comments and recommendations of the reviewers. The editor writes the author and notes the editorial decision. Usually, one of three decisions is reached: the manuscript is accepted pending a number of revisions that address points of concern in the reviewers' comments; the manuscript is rejected and will not be considered further by the journal; or the manuscript is rejected but the author is invited to resubmit an extensively revised version of the paper for reconsideration.

The *accept* decision usually means that the overall study was judged to provide important information and was well done. However, reviewers and the editor may have identified several points for further clarification and analysis. The author is asked to revise the paper to address these points. The revised paper would be accepted for publication.

The *reject* decision means that the reviewers and/or editor considered the paper to include flaws in conception, design, or execution or that the research problem, focus, and question did not address a very important issue. For the journals with high rejection rates, papers are usually not rejected because they are flagrantly flawed in design. Rather, the importance of the study, the suitability of the methods for the questions, and specific methodological and design decisions conspire to serve as the basis for the decision.

The *reject-resubmit decision* may be used if several issues emerged that raise questions about the research and the design. In a sense, the study may be viewed as basically sound and important, but many significant questions preclude definitive evaluation. The author may be invited to prepare an extensively revised version that includes fur-

ther procedural details, additional data analyses, and clarification of many decision points pivotal to the findings and conclusions. The revised manuscript may be re-entered into the review process and be evaluated again.

Of the three letters, clearly a rejection letter is the most commonly received. Authors and perhaps new authors in particular are not sufficiently prepared for this feature of the journal publication business.³ Journals often publish their rejection rates, i.e., proportion of submitted manuscripts that are rejected and this figure can be quite high (e.g., 70–90 %). Often the prestige value of the journal is in part based on the high rejection rate. Yet, the rate is ambiguous at best because of self-screening among potential authors. For example, for very prestigious publication outlets (e.g., *Psychological Review*, *Science*) where psychological papers are published, the rejection rates are based on the fact that most authors are not likely to even try that outlet if they have a contribution that falls within the topic and format domain. Rejection rates across journals are not directly comparable. Even so, the rates give the would-be author the approximate odds if one enters the fray.

Although beyond our purpose, the review process deserves passing comment. The entire process of manuscript submission, review, and publication has been heavily lamented, debated, and criticized. The peer-review process has a long history as an effort of quality control over the content and standards of what is published (Spier, 2002). The alternatives to peer review (e.g., no review, judgment by one person such as the editor) have their own liabilities. Many journals invoke procedures where the identity of the authors and the reviewers is masked, i.e., names are not included on the manuscript sent to reviewers or the reviews sent to authors. The goal is to try to limit some of the human factors that can

³Excellent readings are available to prepare the author for the journal review process (*The Trial* by Kafka, *The Myth of Sisyphus* by Camus, and *Inferno* by Dante). Some experiences (e.g., root canal without an anesthetic, income tax audit) also are touted to be helpful because they evoke reactions that mimic those experienced when reading reviews of one manuscript.

operate about responses to a person, name, or other facet and to allow reviewers to be candid in their evaluations without worrying about facing the colleague who will never speak to them again. The peer-review system is far from perfect. The imperfections and biases of peer review, the lack of agreement between reviewers of a given paper, the influence of variables (e.g., prestige value of the author's institution, number of citations of one's prior work within the manuscript) on decisions of reviewers, and the control that reviewers and editors exert over authors have been vigorously discussed (e.g., Bailar & Patterson, 1985; Cicchetti, 1991; Lindsay, 1988; Smith, 2006).

Understanding the review process can be aided by underscoring the one salient characteristic that authors, reviewers, and editors share, to wit, they are all human. This means that they (we) vary widely in skills, expertise, perspectives, sensitivities, motives, and abilities to communicate. Science is an enterprise of people and hence cannot be divorced from subjectivity and judgment. In noting subjectivity in the manuscript review and evaluation process, there is a false implication of arbitrariness and fiat. Quality research often rises to the top and opinions of quality over time are not idiosyncratic. Think of the peer-review process as the home-plate umpire in a baseball game. Any given call (e.g., strike) may be incorrect, arguable, and misguided. And any given pitcher or batter suffers unfairly as a result of that call. As reviewers (the umpires) make the call on your manuscript (rejection, you strike out), you too may have that occasional bad call. But over time, it is unlikely that all manuscripts an author submits receive a misguided call. Pitchers and batters earn their reputations by seeing how they perform over time, across many umpires, and many games. One looks for patterns to emerge, and this can be seen in the publication record of an active researcher.

You Receive the Reviews

Alas, the editorial process is completed (typically within 3 months after manuscript submission) and the reviews are in. You receive an email letter

(or possibly printed letter) from the editor noting whether the paper is accepted for publication and if not whether it might be if suitably revised. It is possible that the letter will say the manuscript is accepted as is (no further changes) and praise you for your brilliance. If this occurs, it is the middle of the night and you are dreaming. Remain in this wonderfully pleasant state as long as you can. When you awake, your spouse or partner reads the printed version of the real email letter and you read one of the three decisions noted previously.

If the manuscript is accepted, usually some changes are needed. These do not raise problems. More often than not, the manuscript is rejected. There are individual differences in how one reacts to this decision. Typically, one feels at least one of these: miffed, misunderstood, frustrated, or angry at the reviewers. Usually one has only the email comments and has limited avenues (e.g., scrutiny of the phrasing and language) for trying to identify who could have possibly rejected the manuscript. If a hard (printed) version of the reviews was sent, one can scrutinize the font style, key words, possible DNA remnants of the reviewers' comments sheets, and molecules on the pages that might reveal pollutants associated with a particular city in the country. To handle a rejection verdict, some authors select one of the very effective psychotherapies or medications for depression; others use coping strategies (e.g., anger management training, stress inoculation therapy) or alternative medicines (e.g., acupuncture, mineral baths, vegan enemas). (I myself use all these routinely with their order balanced in a Hyper-Graeco-Latin Square Design).

The task is to publish one's work. Consequently, it is useful and important to take from the reviews all one can to revise the manuscript. Maladaptive cognitions can harm the process. For example, when reading a review, the author might say, the reviewer misunderstood what I did or did not read this or that critical part. These claims may be true, but the onus is always on the author to make the study, its rationale and procedures, patently clear. A misunderstanding by a reviewer is likely to serve as a preview of the reactions of many other readers of the article. Indeed, most readers may not read with the care and scrutiny of the

reviewers. If the author feels a rejected manuscript can be revised to address the key concerns, by all means write to the editor and explain this in detail and without righteous indignation and affect.

Authors often are frustrated at the reactions of reviewers. In reading the reactions of reviewers, the authors usually recognize and acknowledge the value of providing more details (e.g., further information about the participants or procedures). However, when the requests pertain to explanation and contextualization, authors are more likely to be baffled or defensive. This reaction may be reasonable because much less attention is given to these facets in graduate training. Also, reviewers' comments and editorial decision letters may not be explicit about the need for explanation and contextualization. For example, some of the more general reactions of reviewers are often reflected in comments such as: "Nothing in the manuscript is new," "I fail to see the importance of the study," or "This study has already been done in a much better way by others."⁴ In fact, the characterizations may be true. Authors (e.g., me) often feel like they are victims of reviewers who wore sleep masks when they read the manuscript, did not grasp key points, and have had little exposure to, let alone mastery of, the pertinent literature. Occasionally two or more of these are true.

As often as not, it is the reviewers who might more appropriately give the victim speech. The author has not made the connections among the extant literature and this study and integrated the substantive, methodological, and data-analytic features in a cohesive and thematic way. Reviewers' comments and less than extravagant praise often reflect the extent to which the author has failed to contextualize the study to mitigate these reactions. The lesson for preparing and evaluating research reports is clear. Describing a study does not establish its contribution to the field, no matter how strongly the author feels that the study is a first.

Let us assume that the manuscript was rejected with an invitation to resubmit. As a rule, I try to incorporate as many of the reviewers' and editor's recommendations as possible. My view is that the reviewer may be idiosyncratic, but more likely represents a constituency that might read the article. If I can address several or all issues, clarify procedures that I thought were already perfectly clear, and elaborate a rationale or two, it is advisable to do so. Free advice from reviewers can and ought to be used to one's advantage.

There are likely to be aspects of the reviews one cannot address. Perhaps reviewers provide conflicting recommendations or a manuscript page limit precludes addressing or elaborating a particular point. Even more importantly, perhaps as an author one strongly disagrees with the point. Mention these in the letter to the editor that accompanies the revised manuscript. Explain what revisions were or were not made and why. If there are large revisions that alter the text (few sentences), methods or data analyses, help the editor by noting where the change can be found in the manuscript and even submit an extra copy of the manuscript in which the changes are tracked in some editing/word processing system.

The investigator may receive a rejection letter and decide simply to submit the manuscript as is to another journal. I believe this is generally unwise. If there are fairly detailed reviews, it is to the author's advantage to incorporate key points and often not-so-key points, even if the manuscript is to go to another journal. I have often seen the same manuscript (not mine) rejected from two different journals in which there were no changes after the first rejection. The authors could have greatly improved the likelihood of publication in the second journal but were a bit stubborn about making any revisions. Even if the manuscript were to be accepted as is in the second journal, it is still likely the author missed an opportunity to make improvements after the first set of reviews was provided. In general, try to take all of the recommendations and criticisms from the reviews and convert them to facets that can improve the manuscript. Obstacles to this process may stem from our natural defensive reactions as authors or a negativity bias and the

⁴Thanks to my dissertation committee for letting me quote from their comments.

occasional brutish way in which reviewers convey cogent points. (I remember being highly offended the first two or three times reviewers noted such comments, “the author [me] would not recognize a hypothesis if it fell on his lap” and “the design of this study raises very important issues, such as whether it is too late for the author [me] to consider a career change.” I have come to refer to all of this as the *pier*-review process to underscore how often reviewers have made me want to jump off one).

It is worthwhile and highly rewarding to publish one’s research. The process takes time and persistence. Also, contact with others through the review process can greatly improve one’s work. In my own case, reading the reviews occasionally has stimulated next studies that I carried out. In one case, I befriended a person who was a reviewer of my work earlier in my career. Over time and from following his work, it was very clear that he was behind an influential review although his identity had been masked. Years later over dinner, I mentioned his review in a distant past, the study it generated, and the very interesting results and, of course, expressed my gratitude. His suggestion actually led to a few studies. (His review of my manuscript was not entirely positive, which probably is the main reason I hid in bathroom of the restaurant until he paid the check for dinner.) The lesson is more than getting one’s manuscript published. Reviews can be very educational and it is useful to let the comments sit for a while until the rage over rejection subsides.

The journal review process is not the only way to obtain input on one’s manuscript. I send a penultimate draft of a manuscript to experts in the field whom I do not know. I convey in a letter what I am trying to accomplish and ask if they would provide feedback. I have done this on several occasions and cannot recall any one colleague who has refused to provide comments. The comments are usually detailed and quite constructive and have a different tone from those that emanate from the journal review process. The comments in turn can be used to devise the version that is submitted for publication.

Closing Comments

Designing and completing a study requires many skills. Publication and communication of results of research represent a separate set of skills and most of these skills are not mentioned or detailed in graduate training. I have mentioned three tasks that are involved in preparing a manuscript for journal publication: description, explanation, and contextualization of the study. The writing we are routinely taught in science focuses on description, but the other portions are central as well and determine whether a study not only appears to be important but also in fact actually is. Recommendations were made in what to address and how to incorporate description, explanation, and contextualization within the different sections of a manuscript (e.g., Introduction, Method).

It is often useful to identify a study from one’s own reading that integrates description, explanation, and contextualization. Read this paper for content and they evaluate sections and paragraphs from a higher level of abstraction. What does this paragraph accomplish in leading to the next section, what did the author do to make the case for the study, how did she keep the same story line of the Introduction, Results, and Discussion very clear, and so on. These meta-level questions can help identify a template to better operationalize points I have emphasized. Another way to approach the task of preparing the manuscript is to consider the set of questions that ought to be addressed. Questions were provided to direct the researcher to the types of issues reviewers are likely to ask about a manuscript.

Publication of one’s research has many rewards. Certainly salient among them are generating new knowledge. There is a canvas of ignorance that is still mostly blank and one’s research can paint one stroke. That is hugely rewarding. Added external rewards are often available as well. Fame and fortune are not likely, but one’s publication record can contribute directly to job and job promotion and the opportunity to work with students at all levels and postdoctoral researchers who join in and improve the work by

their ideas. Research also helps one's own thinking that began with conceptualization of the study and an effort to better understand the phenomenon. Writing up the results often helps for extending one's own thinking further and hence is a critical step in the next study or in conceptualization of the topic or area. This is a reciprocal process where we too are influenced by the publications of others and hopefully exert influence with our own publications.

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The experience of reviewing manuscripts for scientific journals is an important one in professional development. Reviewing articles gives trainees familiarity with the peer review process in ways that facilitate their writing. For example, reviewing manuscripts can help students and early career psychologists understand what reviewers and editors look for in a peer-reviewed article and ways to critique and enhance a manuscript based on peer review. Experiences in review can facilitate early career faculty with early entry into and experience being a reviewer for a professional journal. The experience of journal reviews also gives students a broader connection to the field of science in areas of their primary professional interest. At the same time reviewing articles for scientific journals poses a number of difficult challenges (see Hyman, 1995; Drotar, 2000a, 2009a, 2009b, 2009c, 2009d,

2010, 2011; Lovejoy, Revenson, & France, 2011). The purpose of this chapter is to provide an introduction to the review process and give step by step guidance in conducting reviews for scientific journals. Interested readers might wish to read Lovejoy et al.'s (2011) primer for manuscript review, which contains annotated examples of reviews and an editor's decision letter.

How to Get Experience and Mentoring in Reviewing Manuscripts for Scientific Journals

The best way to get mentored experience in journal review is to identify a mentor who reviews regularly for a journal and has time and interest in providing such experience. Journal review mentorship has a number of advantages: Students and early career faculty can be very helpful in providing additional insight and critique concerning manuscript review. Moreover, mentors often enjoy the prospect of collaborating on a review and teaching students about the review process. Benefits of completing mentored manuscript reviews can also extend beyond the manuscript reviews (e.g., pursuing additional collaborations with mentors that could lead to publications, receiving career advice on professional development issues, widening one's professional network, etc.; Wu, Nassau, & Drotar, 2011).

We encourage students to take the initiative in letting their mentors know about their interest in reviewing and mentors to reach out to students to

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help them obtain such experience. Although a graduate mentor is perhaps the most obvious choice, students may also seek mentored review experiences from other mentors or supervisors (e.g., within professional organizations, supervisors outside of a student's graduate program), keeping in mind that mentored reviews can be conducted across geographic distances. In addition, if mentored experience is not available in specific graduate training programs, which is not uncommon, journals such as the *Journal of Pediatric Psychology (JPP)* have a formal program for students and junior faculty to obtain training in the review process from mentors in settings and programs around the country (see Wu et al., 2011 for more information). Although students and junior faculty must balance time spent completing manuscript reviews with their other responsibilities, it may be helpful to complete mentored reviews with more than one mentor in order to gain exposure to different perspectives on manuscript reviews as well as exposure to different review styles.

Overview of the Manuscript Review Process

Role of the Editor

Each manuscript that is submitted to a peer-reviewed journal is assigned to a managing editor who is responsible for the following tasks: (1) selection of reviewers, (2) independent review of manuscript content, (3) integration of both reviewers' comments and feedback from his or her own independent review in order to prepare an editorial decision, and (4) preparation of detailed decision letter to the authors. The decision letter describes the editorial decision; documents the rationale for the decision; and in the case of revise and resubmit editorial verdicts, provides a detailed description of suggested changes, a rationale for why they are necessary and how the changes will enhance the quality of the writing and science of the manuscript.

The managing editor of a manuscript relies heavily on reviewers in order to make an effective editorial decision and give clear feedback to authors concerning the rationale for the editorial decision and/or suggestions to improve the man-

uscript through revision (in the event a revision is requested). Generally, at least 2–3 reviewers are invited for each manuscript. Managing editors identify potential reviewers based on their knowledge of reviewers and key words noted in reviewers' areas of expertise that correspond to the content of the manuscript.

Role of Reviewers in Manuscript Reviews

The primary role of reviewers in the editorial process is to provide an honest, fair, clear, and concise critique concerning the quality of science that is contained in a manuscript submission and the extent to which the science is clearly expressed. Managing editors and authors benefit greatly from reviewers' comments. Arguably, reviewers have a critical role to play in the manuscript process in helping to determine which manuscripts should be published vs. those that should not and in providing feedback to authors to enhance the quality of their published work. To facilitate this task, reviewers should familiarize themselves with the content areas of the journal they are reviewing for, and policies and procedures for reviewers. There are important individual differences in policies, rating forms, and deadlines from journal to journal that reviewers should understand.

It should be noted that given the extraordinary breadth in the content of manuscripts that are submitted to journals, reviewers may be asked to review manuscripts that focus on content areas that are outside of their specific area of expertise, and reviewers should be prepared for such invitations. Reviewers should keep in mind that expertise in evaluating the quality of research design, measurement, and statistical analysis can be as valuable as specific content expertise.

Guidance for Mentored Reviews

Obtain an Orientation to the Review Process

Mentors who agree to work with students or junior faculty mentees to complete one or more mentored

reviews together may benefit from discussing several issues prior to reviewing a manuscript. Students might ask mentors to provide a brief overview of the manuscript review process from their perspective (e.g., the role of reviewers) and any special considerations relevant to the particular journal for which they will be reviewing (JPP Mentoring Policy & Suggestions for Conducting Mentored Reviews, 2009). In preparation for completing a manuscript review, mentees may also want to discuss with mentors the extent to which certain areas of critique should be a focus for the particular journals for which they are reviewing. Mentors may also provide materials for mentees to read (e.g., authors' checklists, guidelines for manuscript reviewing; American Psychological Association Science Student Council, 2007; Sternberg, 2006; Weller, 2001) and discuss common issues that they address in their peer reviews (e.g., description of impact and clinical significance, design and statistical analyses).

To help alleviate mentees' concerns that they may not "catch all the important points" when reviewing a manuscript, it is important to remember that reviewers naturally focus on different issues, and that this is a key reason that manuscripts are reviewed by a mentor–mentee pair as well as several other reviewers. With this in mind, mentees should also be prepared for their mentor to identify areas of concern in manuscripts that had not previously occurred to them. It is these types of learning experiences which can make mentored reviews especially valuable. Ideally, mentors should also be open to discussing these contrasting points in the peer review so that their mentee can benefit from determining when and when not to include minor and major editorial points in the review.

Anticipate Logistical and Communication Issues

In addition, we suggest that mentees and mentors discuss their preferences for logistical issues, such as how they will communicate during the mentored review process (e.g., e-mail, phone, in-person meeting) and how they will create the

mentored review (e.g., mentor and mentee write separate reviews and then merge them after discussion, mentor and mentee discuss key issues and write the review together, etc.). The mentor–mentee might also discuss and anticipate how mentored reviews may change over time for any particular student–mentor pair (Wu et al., 2011). Finally, it is recommended that the mentor–mentee discuss the review by phone or in person to flesh out the process and answer any remaining questions or concerns. This will be most beneficial for the student because there are some issues that cannot be thoroughly discussed in an e-mail.

Common challenges to the mentored review process include the time commitment that is required for reviewing the manuscript, drafting the review, and communicating with their mentor; mentees having less experience with the subject areas of manuscripts; mentor/mentee timeliness; scheduling times to discuss reviews; and working across geographical distances, in some instances. As a result, mentors and mentees are encouraged to discuss these issues before and during the mentored review process, so that each party's expectations are clearly stated and reasonable and that any challenges that arise are promptly addressed (Wu et al., 2011).

Another question that ideally should be addressed early in the mentor–mentee relationship is whether or not the student will complete the mentored review for revise and resubmit papers. We believe that it is beneficial to mentees to be a part of the entire process of manuscript review, including reviewing revised manuscripts during a revise and resubmit process. However, given the time commitment involved in the review and the commitment to the process, it is important for mentees to be aware of when a revise and resubmit manuscript is due so that they can ensure that they are prepared to review and allot the necessary time.

Obtaining Proper Credit for a Mentored Review

We believe that students and junior faculty should obtain proper credit for their collaborative reviews with mentors in the form of acknowledgment by name in the journal's acknowledgement section.

Table 11.1 General strategies for reviewers

<p>Timeliness</p> <p>Provide a timely review that fits with the deadline for the review (if your review will be late for any reason, let the editor, and in the case of mentored reviews, your mentor, know)</p> <p>If you know that you cannot review the manuscript within a specified time, please decline ASAP so that the editor can invite someone else</p>
<p>Structure and content of review</p> <p>Focus your review on key points of significance and contribution to science, methods and design, and clarity and consistency of reporting</p> <p>Organize your review on major points that are critical to address to enhance the contribution of the manuscript vs. minor points (e.g., editorial issues, consistency of presentation)</p> <p>Provide a succinct and clear review</p> <p>Give rationale for your editorial points</p> <p>Where possible, provide explicit suggestions for improving the manuscript and a rationale for these suggestions</p> <p>Give an honest, yet balanced, appraisal of strengths and weaknesses</p> <p>Use a constructive tone</p> <p>Proof your review for clarity, specificity, and tone</p>
<p>Observe ethical guidelines for review (Palermo, 2010)</p> <p>If you have a conflict of interest (e.g., specific relationship with the author that could introduce bias or affect the review), let the editor know</p> <p>Share any ethical concerns you may have about the conduct of the study with the managing editor</p> <p>The content of the manuscript and the review are privileged communication and should not be shared with anyone</p> <p>Destroy and/or delete information from the manuscript and manuscript review after you have submitted the decision</p>

Mentees can also list the review in their curriculum vitae as manuscript review experience. However, the way that many journals online review systems are designed, mentored reviewers can only receive credit if the managing editor is notified that an additional reviewer was involved (Lovejoy et al., 2011) and this information is retained for purposes of acknowledgement.

Specific Guidance for Reviewers

Preparing to Review

Before completing a review, it is very important that reviewers familiarize themselves with policies for reviewers as well as specific editorial policies for the journal for which they will be reviewing. For example, some journals have policies for the reporting of randomized clinical trials (Stinson, McGrath, & Yamada, 2003), for studies of measurement development (Holmbeck & Devine, 2009), and for reporting of results such as confidence intervals (Cumming & Finch, 2008) and effect sizes (Durlak, 2009). The American

Psychological Association Publications and Communications Working Group on Journal Article Reporting Standards (2008) has prepared information that is very helpful to reviewers. Lovejoy et al. (2011) published a very helpful, detailed overview for novice and senior reviewers offering guidance for conducting manuscript peer reviews for the *Annals of Behavioral Medicine*. However, many of the points discussed in this article could be generalized to manuscript reviews for other journals. Finally, the APA Publications Manual (American Psychological Association, 2010) is another useful reference for reviewers.

In order to facilitate students' and early faculty members' knowledge and skills concerning manuscript reviews, we have developed two tables that summarize our guidance for preparing reviews. Table 11.1 summarizes general features of an effective review and Table 11.2 summaries specific areas of critique that focus on key content areas of manuscript review. Various key features of reviews are highlighted in the following sections (for additional guidance, see Drotar, 2000a, 2009a, 2009b, 2009c, 2009d, 2010, 2011; Lovejoy et al., 2011).

Table 11.2 Checklist for specific points of critique in manuscript review**Introduction**

- Is the purpose of the research specified?
- Is the relevance of research to the field clearly articulated?
- Is the scientific and/or clinical significance of the research clearly evident compared with previous research?
- Does the author present a clear research question?
- Does the author present specific hypotheses?
- Is a guiding theoretical/conceptual framework for the research and hypotheses clearly evident?

Method

- Does the author provide a clear overview of the study design?
- If the study is part of a larger study or data set, is the relationship to the larger study and published work derived from it clearly specified?
- Does the author follow published standards (APA Publications and Communication Working Group on Journal Article Standards; CONSORT Guidelines for Reporting of Randomized Clinical Trials)?
- Are relevant human participant information and ethical considerations detailed?
- Is a description of the method of sampling provided?
- Does the author provide a clear and comprehensive description of study participants (e.g., demographic characteristics, characteristics of chronic illnesses as relevant)?
- Are the number and characteristics of nonparticipants (e.g., those who fit study criteria but refused participation and/or could not be located) and reasons for refusal (if known) described?
- Is a complete description of sample attrition provided (e.g., number, characteristics, and reasons for attrition (if known))?
- Is the description of study procedures complete (e.g., data collection setting, timing of measures, methods of data collection, and quality control including training)?
- Are the measures well described (e.g., relationship to study aims and hypotheses, scoring and coding, reliability and validity including relevant data for current study)?
- If this is a study of measurement development, does the author follow journal guidelines for measurement development?
- Does the author provide an overview of the data analytic plan, sample size, and power considerations?

Results

- Does the author follow American Psychological Association guidelines for the presentation of data (American Psychological Association, 2010; APA Publications and Communications Board Working Group on Journal Reporting Standards, 2008)?
- Are the primary sections of the results, described in an overview?
- Are the results presented in accord with primary study questions and hypotheses?
- Are data for statistical relevant assumptions presented?
- Are effect sizes and confidence intervals reported?
- Is the text describing the tables and figures integrated with tables or figures?
- Are missing data described?
- Are the results succinctly presented?
- Does the author make use of the journal website to present supplementary data to save journal space (if available)?
- Does the author use statistical analyses that document clinical significance of results (most relevant for studies of interventions)?

Discussion

- Does the author organize results around key findings and conclusions rather than repeat key findings already presented?
- Does the author synthesize findings in reference to previous research as described in the previous introduction?
- Are the novel contributions of the present findings relative to previous research on the topic described?
- Is the scientific and/or clinical significance of the present results relative to previous research on the topic articulated?
- Are limitations of the study, relevant threats to validity (e.g., internal and external), and implications for conclusions that are drawn clearly described?
- Are implications for future research including recommendations for next steps in research clearly described?
- Are the relevant implications of the research for clinical management clearly described?

Importance of Timeliness of Reviews

The managing editor reviews each manuscript independently, but he or she does not make a final decision and write the decision letter to the author until *all* of the reviews are in. For this reason, prompt disposition of a manuscript depends upon reviewers' responsiveness at all phases of the review process. Apart from the importance to editors, timeliness of reviewers' feedback is very much valued and appreciated by authors because of the importance of peer-reviewed publications for career development. Reviewer timeliness is critical in two phases of the review process: (1) a prompt (within a day or 2) acceptance or rejection of an assignment to review and (2) once having accepted a review assignment, providing a review within the specified time limit for the journal.

Reviewers, including mentored reviewers, have multiple responsibilities and time commitments and are volunteering their time to conduct reviews, which can be time consuming. Given multiple constraints, there will be times when it is impossible for you to review a manuscript within the time frame that is required. For this reason, if you see that you are going to be late with a review, or cannot complete it after having accepted the assignment, please let the managing editor know as soon as possible so that they can decide how to proceed. Such prompt notification is very much appreciated because it facilitates the efficient management of reviews. Delays in acceptance or declines of an invitation to review prolong the editorial process and create uncertainty among managing editors about whether to invite another reviewer.

Enhancing Quality of Journal Article Reviews: Process Considerations

What are the critical elements of the content of an effective review? The most critical characteristics of an effective review are clarity, specificity, constructiveness, and thoroughness (Hyman, 1995). A journal article review should inform the managing editor and author of the primary

strengths and weaknesses of a manuscript in a focused way (see Table 11.1). In the event that a revised manuscript is requested, which is often the case, a review should provide clear, detailed suggestions for specific changes to improve the clarity of writing and the quality of the scientific contribution to the field that is most relevant for the journal that the manuscript is being reviewed. Reviewers should identify the most salient points of critique and communicate them clearly and in detail. In this regard, it is especially helpful to include examples where relevant and/or specific references so that authors can understand the key points of critique, the rationale for them, and some potential ways to address them. This is particularly important for design and statistical analysis issues.

An effective review needs to carefully attend to the details of the author's presentation and provide a balanced consideration of strengths and weaknesses contained in the manuscript. Reviewers have a difficult task balancing honest critique and a constructive, fair review. On the one hand, reviewers should be honest in their appraisal of manuscripts in providing critique to authors. At the same time, the tone and content of reviews should be both constructive and tactful (Drotar, 2000a). Although it is always difficult to hear critique of one's work, the way in which critique is delivered will facilitate authors' abilities to improve the quality of their manuscripts (Drotar, 2009a). The constructiveness of a review can be operationalized by concrete suggestions to improve the quality of the writing, the science, and significance of the work and an absence of critical description of how the authors should have conducted the work. It is difficult to write a fair, clear, and concise review. For this reason, we would suggest that reviewers take time to critique their reviews in order to enhance their fairness, clarity, and tone.

Organizing the Content of a Review

Table 11.2 provides guidance concerning various content areas of a manuscript that might be considered when providing critique. However, in

light of the issues of the length discussed above, it is very important to note that it is neither necessary nor desirable to comment on each and every one of the areas that are listed. Such an approach adds significant burden to authors, especially for manuscripts that are revised. No manuscript is perfect. Consequently, it is very important that reviews focus on major or key points that limit the significance and impact. For this reason, we suggest that reviewers focus their editorial energies on the following key content areas: One of these is an explicit judgment about whether the research addresses a relevant and significant question in the field of psychology and advances the science in this field and/or has an impact on clinical care or public health (Drotar, 2009b). A second key content area is the identification of major methodological problems in design, measurement, statistical analysis that would limit the manuscript's scientific contribution. A third relevant content area relates to gaps, inconsistencies, and ambiguities in the presentation of information (e.g., literature review and framework, methods, analysis, interpretation, and discussion of findings). A final key content area concerns the implications of the findings for future research including recommendations for research and implications for clinical care.

Very much like a manuscript, an effective review should be well organized. We recommend that reviewers organize their critique by sections of the manuscript (e.g., abstract, introduction, methods, results, discussion), and focus on key points.

Focus Your Review on Key Points

The most important take home message for reviewers is to focus their critiques primarily on the major scientific issues that are raised by the manuscript (see above). We also strongly encourage reviewers to clearly distinguish and identify their points of critique as *major points* that limit the significance and methodological quality of the manuscript vs. *minor points* that impact the clarity of the presentation. It should be noted that highly specific editorial points involving matters

of wording and writing style are much less important and generally do not warrant extensive description. Reviewers can simply include a sentence if there were many grammatical or typographical errors or lapses in APA style (or other formatting styles) contained in the manuscript. Most journals have copy editors who manage such issues as (1) correct use of English grammar and punctuation; (2) consistency of display of text, tables, and figures; (3) consistency of language; (4) consistency of style in accord with APA, American Medical Association (AMA), or another format. For this reason, reviewers should focus their critique on primary areas of specific method.

On the other hand, we recognize in some instances problematic writing can obscure science in significant ways. If this is the case, it is most helpful for reviewers to identify the primary problems with the writing and include selected examples as opposed to a detailed list of each and every specific example with specific corrections. Mentored reviewers will likely benefit from discussing with mentors how to conceptualize the major points of critique and how to focus their written reviews on them, particularly if they feel more comfortable giving feedback on minor issues such as formatting or writing style.

How Long Should a Review Be?

In our experience, an effective review can be provided in 1–2 single-space pages. In practice, the length of individual reviews can vary from a paragraph to as many as five single-space pages; authors receive from 2 to 3 individual reviews (sometimes more) and an editorial decision letter. Consequently, the burden on authors in responding to reviews for manuscripts that are revised is a significant one that reviewers should consider. It is not uncommon that the combination of detailed reviews and a decision letter can yield more than seven single-spaced pages of critique. For this reason, we suggest that reviewers try to achieve the difficult balance between being as concise as possible in their reviews while also being thorough. As a reviewer or mentored

reviewer, if you find that your list of points far exceeds this length, it may be useful to ask another colleague or your mentor for feedback on your review and specifically for suggestions on prioritizing and summarizing key points.

Moreover, reviewers who collaborate with mentees on reviews face the significant challenge of integrating reviews without producing an excessively lengthy critique. For this reason, mentored reviews usually require extra attention to focusing and summarizing key points.

Describe the Content of Critique Succinctly and Clearly: Number All Specific Points

Managing editors of scholarly journals generally ask authors to respond in some way to the points of critique that are made by reviewers unless they are contradictory (in which case the managing editor should provide guidance to authors to resolve the discrepant feedback). Numbering all specific points of reviewer critique will facilitate the author's organization of their response to critique and the managing editor's task in determining how well authors have responded to critique.

Provide Explicit Suggestions for Key Revisions and a Rationale for Considering Them

Clarity of reviewer feedback and rationale for specific suggestions are very important. Such feedback informs authors and managing editors about the need for specific revisions that are recommended, the rationale for the recommendations, and how the manuscript will be improved by making the changes. On the other hand, authors and editors can be confused and burdened by ambiguous reviews. Authors may have difficulty understanding precisely what reviewers want and, as importantly, the rationale for their suggestions.

Clear communication facilitates authors' understanding and acceptance of critique. For example, consider the difference in how you might respond to a critique that indicates that

your statistical analysis is "problematic" and "needs to be changed" without a specific rationale vs. one that explains why the reviewer thinks the change should be made (e.g., listing the specific threat to validity that needs to be addressed and how it would improve the science described in the manuscript; and/or directing the author to additional resources that can assist with the statistical analyses, etc.).

Indicate Specific Ratings and Recommendations for Editorial Decisions that Reflect Journal Policies

In addition to providing detailed comments about the manuscript that are given to authors, many journals require reviewers to rate the quality of the manuscript in relevant content domains such as design and methods, innovativeness, analysis of data, etc. Reviewers may be asked about ratings of the manuscript's potential impact on the field, the quality of the manuscript compared with those typically published in the journal, and the overall quality of the manuscript. Managing editors appreciate the reviewers' ratings and will use them to help guide their decision. Depending on the policy of a specific journal, reviewers may be asked to communicate their recommendations to managing editors (but not directly to authors) for a specific editorial decision, (e.g., accept, accept with revision, revise and resubmit, revise as a brief report, or reject).

Communicate Consistently with Authors and Managing Editors

Managing editors have the responsibility of integrating information from all the reviews (including their own) to render an editorial decision and articulate suggestions to the author to enhance the quality of the manuscript's revision (in the event that a revision is recommended). In order to provide the most useful information to the managing editor, reviewers should communicate *all* of their most important concerns in their critique to the authors.

In some journals, reviewers have the option of providing comments to the editor that are not seen by authors. In our opinion, such comments should be given sparingly and carefully. The reason for this is that authors should have the benefit of reviewers' honest appraisals, which should always be consistent with the feedback given to the editor. Because confusion and frustration can be generated by discrepant editorial feedback, it is usually *not* helpful to give any feedback to editors' that is highly discrepant from what is communicated to authors.

Reviewers should note that most journals ask them to refrain from making any direct or implicit recommendation for acceptance or rejection of the manuscript in the narrative critique that is provided to authors. The reason for this is that reviewers may disagree concerning the disposition of a manuscript. Moreover, the managing editor's decision may sometimes reflect a minority opinion. For this reason, it is important that reviewers familiarize themselves with the procedures and policies that are required by the journal.

How to Help Editors Manage Difficult Editorial Decisions

The final editorial decision concerning the disposition of a manuscript reflects the editor's overall judgment about the quality of the manuscript and does not necessarily reflect a consensus editorial statement among the reviewers. As noted above, it is not uncommon to encounter minor and sometimes major disagreements among reviewers about the quality of a manuscript and the nature of its contribution to the field. Discrepant training and experience, theoretical orientation, preference, and standards among reviewers can result in different feedback in critiques and recommendations for a manuscript's disposition (Fiske & Fogg, 1990). Even when reviewers identify similar concerns about a manuscript, they may weigh their importance very differently (Fiske & Fogg). In order to facilitate managing editors' decisions, our best advice for reviewers is to be as forthright and direct as

possible in their critiques. Out of kindness and empathy for authors, some reviewers are tempted to bend over backwards to give authors every benefit of the doubt and recommend a revision if they believe there is any chance that the manuscript can be accepted. However, editorial experience in working with authors with their resubmissions, some of which were eventually rejected, has underscored the inefficiency and frustrations raised by revise and resubmit editorial verdicts that turned out to be too lenient. For this reason, we suggest that reviewers focus on whether a revision will be *likely* to result in an important new contribution to research in psychology that transcends current research in method, results, and/or clinical significance as opposed to whether the manuscript would be improved by a revision. Almost all manuscripts would be improved by a revision, but they will not all make a contribution to science (Drotar, 2009b). A revise and resubmit decision should be considered *only* for those manuscripts that have the potential to advance the science and practice of psychology. It is very important that reviewers identify major problems with method, design, or significance that are not potentially correctable or feasible to correct and distinguish them from non-correctable problems.

Conducting an Ethical Review

Important ethical issues need to be considered by reviewers and managing editors (Drotar, 2000a; Palermo, 2010). For example, manuscripts are to be treated as privileged and confidential communications that are seen by reviewers and editors but are *not* to be circulated to or seen by anyone else (with the obvious exception of mentees who participate in a mentored review). Conflicts of interest between reviewers and authors can also raise important ethical issues: Given the relatively small group of researchers in some areas of science, reviewers may be asked to review the work of authors one knows in some capacity. Knowing an author or having worked with him or her in some way does not necessarily pose a conflict. However, reviewers do need to consider whether

they are able to review a manuscript of a former student, professional associate, or academic rival as impartially as they would if they did not know them (Routh, 1995). If the answer is no, they should inform managing editors and asked to be excused from the review. Managing editors cannot readily identify such conflicts and need to rely on reviewers to do so. Consequently, reviewers have the primary ethical responsibility to recognize conflicts of interest and to excuse themselves from a review if they feel that bias could interfere with an impartial review.

We encourage authors and editors to review the conflict of interest statement in the specific journals that they are reviewing for to recognize potential conflict of interests such as close, active collaboration in the content area of the manuscript, faculty members in the same institution, and current colleagues. When in doubt about whether they are in potential conflict, reviewers should feel free to consult with the managing editors.

Manuscripts and reviews are privileged, confidential communication. Reviewers should not discuss the contents of manuscripts they are reviewing with anyone else or share the information about a manuscript they are reviewing with anyone else, no matter how interesting it is. Mentees should take the similar extra precautions to ensure that confidentiality is not broken (e.g., keeping manuscripts being reviewed in a location or on a private computer not accessible by others and refraining from discussing manuscript content in group settings (e.g., journal clubs)). Once the manuscript is reviewed, it is helpful to destroy or delete the manuscript and review.

Improving the Quality of Your Reviews

Graduate students and early career faculty should appreciate that excellent reviewers do not come ready made. As is the case for any kind of writing, it takes a long time to develop your method and style. For this reason, practice in writing manuscript reviews under supervision is the best way to improve the quality of your reviews. Mentored manuscript reviews are one way to do

this. From the standpoint of learning, it is also very useful to compare your reviews with those of others who have reviewed the same manuscript and with the editor's decision letter. This kind of feedback, which is provided by many editors after all reviews have been compiled, provides an opportunity to observe commentaries and differences in reviews.

Another way to improve the quality of your reviews is to obtain practice in written critiques of published work. This can help to sharpen editorial critique within a class format, which can provide an opportunity to compare one's reviews with peers (Drotar, 2000b).

Epilogue

We hope our discussion will help students and early career faculty to obtain experience in reviewing manuscripts for scientific journals and to develop their skills in this important area of professional development. We invite mentors and students to describe innovative and effective training and "on the job" learning experiences in manuscript review.

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William C. Rando and Leonid Rozenblit

Begin with the end in mind.

Steven Covey

Teaching is one of the legs in the academic tripod, along with research and service. As a typical academic psychologist, you will find that teaching will occupy a significant percentage of your time, despite the fact that you may never get any formal training in pedagogy. Today, with increasing numbers of universities offering training in teaching to graduate students, more people are starting their professional careers prepared to teach. Some psychology graduate students receive teaching preparation directly from their departmental mentors. Many take part in training organized by a campus centers for teaching and learning. In either case, graduate students who attend rigorously to this kind of training and mentoring are fortunate; regardless of their innate success with students, they are better able to articulate the elements of their craft, they enter the job market ready to teach well, and they have a much easier time making the transition from student to academic professional. They are also more likely to be in control of the teaching process in a way that allows them to vary the

style they use and the amount of time they spend on teaching, while maintaining a very high standard for themselves and their students.

Due to the vagaries of the job market, new assistant professors may find themselves at institutions with vastly different teaching cultures and expectations from where they were trained. Faculty members who never mastered the art of their own teaching are more likely to struggle with the adaptation. What is worse is that this burden can last a long time, creating a career hampered by “teaching load,”—never giving their full potential to students, and never achieving the rewards of great teaching that so many senior faculty experience (McKeachie, 1999).

Teaching well is important throughout your career, but it is particularly important in the early years. The “publish or perish” scenario that once applied only to highly competitive research universities, now applies to almost all academics, even those who chose careers in so-called teaching-oriented liberal arts colleges. Increasingly, new psychology Ph.D.’s are seeking short-term adjunct faculty positions for reasons of preference or necessity. These per/course positions are typically free of pressure to publish. However, in certain markets, good adjunct faculty positions are competitive, the standards for hiring are quite high. Some schools can use active publication as a standard for hiring adjuncts, while others are not simply looking for credentialed

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scholars—they are looking for scholars with proof of excellent teaching. In either case, the more desirable full-time and part-time teaching opportunities are going to people who have proof of success in the classroom and in the lab. In today's market, schools can overlook the scholar who neglects teaching or who has not had time to publish because she is still trying to figure out how to teach.

Regardless of the position, if you have not adequately prepared yourself in teaching as a graduate student, you may find you have a lot to learn at a time when you probably have little time to learn it. Faculty members who try to learn to teach under these conditions naturally look for the fastest way to prepare and teach a class. One such way is to teach as you were taught, that is, teach a carbon copy of the Introduction to Psychology course that you had as an undergraduate. There are some predictable problems with this approach. For one, you probably do not have the same skills or style as the professor you are trying to emulate, so attempts to replicate his or her classes will likely fall short of your expectations. Moreover, we rarely have the exact same philosophy as our mentors, which means that if we follow their behaviors, we are likely to end up in practical binds, unable to determine practical solutions because we lack a coherent pedagogical rationale for the course of action we have taken. In the end, drawing on our best teachers to build a teaching philosophy and style is an excellent idea. Doing exactly what they did because it worked for them is not. You can borrow some strategies from your mentors, but if you want to be a successful teacher, you have to engage in some serious analysis and reflection about what you are doing and how you are doing it.

For starters, you have to choose what kind of teacher you will be. The profession is full of people unsatisfied with their teaching, though they spend little time on their lectures and even less on their students. They have achieved tenure and/or professional prominence on the merits of their research. That is one kind of career in psychology. If you choose another type of career in psychology, one in which you are rewarded

by teaching, you will need to devote time to it. The fact remains that the time you devote to teaching will have to come from some other important endeavor, like research. If that trade off seems terribly high, consider the following:

- Evolving methods of teaching assessment are allowing schools to give greater weight to quality teaching at hiring, promotion, and tenure time.
- Teaching, like any skill, becomes easier as you get better. Skilled teachers can achieve great results with less time and effort than unskilled teachers.
- As a new professor, a reputation for good teaching allows you to attract graduate students and talented undergraduates to you and your work. This can create enormous professional benefits at a time when you really need them.
- Teaching well is a joy. Teaching poorly is a burden, or worse, a drain on your time and energy.
- The time you devote to teaching this year will pay off in time you can devote to other things next year and in the years to come.

It is nearly impossible to learn to teach simply by reading, but chapters such as this one can provide a valuable framework for improving your teaching. A serious attempt to master the art of teaching requires resources, time, practice, and feedback. Make inquiries as to whether your institution offers assistance in this area, through mentoring programs, teaching grant initiatives, or through some kind of teaching improvement center.

Many of the resources on teaching, including this chapter, are sufficiently general to apply across a variety of subject areas. Nevertheless, as you explore each resource, you may wish to keep in mind some ways in which teaching psychology poses special challenges and opportunities. First, psychology may attract students who are unusually introspective and seek to use introspection as a source of evidence. Second, our students may have strong intuitions or preconceptions about our subject areas, and some humanities where, for example, students may have strong convictions about historical narratives, but is probably of lesser importance in the

natural sciences. (It would be an unusual student that had strong personal commitments to particular concepts in organic chemistry, and it is been centuries since we have seen committed Aristotelians put up a fuss over the laws of motions in classical mechanics.) Third, issues of inference from evidence (statistical and otherwise) are especially challenging because the data in much of psychology are so noisy. The three special challenges combine to bring epistemology closer to the surface in the study of psychology than in many other disciplines. This presents tremendous opportunities to teachers to address fundamental questions about the nature of knowledge, but also imposes a burden of addressing epistemological issues in introductory courses where many students are not prepared to deal with them.

The remainder of this chapter contains tips and strategies for success in the college classroom. These suggestions point to many different styles of teaching, all of which have proven effective in their own way. However, there is one concept that unifies every idea herein, and that is: Teachers must decide how they want their students to be different—smarter, wiser, more clever, more skilled, more appreciative—as a result of being in class. Then they must find a way to achieve that goal (Wiggins & McTighe, 2005).

Four Steps to Designing a College Course in Psychology

Use Student Learning to Define the Overall Purpose of the Course

As stated above, there is enormous benefit in framing or defining your class around core learning goals (Diamond, 2008). First, teachers experience renewed motivation in teaching when they move from a content-centered approach (i.e., getting through the material) to a learning-centered approach (i.e., helping students achieve). This renewed sense of purpose typically generates

more creative and innovative approaches to classroom teaching, which, if nothing else, makes the process more interesting. Second, teachers who successfully communicate their purpose to students may find their students have increased motivation and willingness to work and learn. In classes where the purpose seems to be defined around teacher's lectures and interests, students are more likely to feel like and act like spectators. However, when a class and all its activities are defined around student learning, students are more likely to feel engaged and act like interested participants (Nilson, 2010, p. 18).

The process of defining your goals and objectives begins by asking yourself how you want your students to be different by the end of the course. This holistic approach to thinking about change in students is the first step in Backward Design of your course, a design strategy that begins with the most important aspect of your course, your goals for your students (Wiggins & McTighe, 2005). The difficulty in accomplishing this stems from the challenge of prioritizing: figuring out which goals are most important, and how some goals are prerequisite to other goals. In addition, teachers typically have objectives of different types. For example, there may be facts we want students to know, or skills we want them to acquire or feelings and appreciations we hope they develop. We may also have goals around how students experience us, our course, and our field, and all of these might reflect our own values and beliefs about undergraduate education. All of these goals should be part of your inventory, but then, as mentioned above, the challenge is making sense of them, giving certain goals priority, and turning them into a plan of action. One way to do this is to define a large, terminal goal—the main objective you want your students to be able to achieve by the end of the course—and then work backward, identifying as many of the subordinate skills students will need as you can. Here is an example:

Terminal goal or objective: I want my students to demonstrate the ability to use data and reasoning to address a major issue in public health, education or social policy.

Subordinate goals or abilities: In order to complete the Terminal Objective, my students will need to demonstrate the following:

- The ability to distinguish among different subareas of psychology.
- The ability to critically evaluate social science findings reported in journals or the popular press.
- The ability to write at least three paragraphs that demonstrate the distinction between observation and inference.
- The ability to articulate the power and complexity of experimental design.
- The ability to identify ten threats to validity in a well-respected journal article.
- The ability to apply the scientific method to questions about human behavior, and be able to identify misapplications of the method.

Notice that in the example above, the emphasis is on the demonstration of well-defined abilities. The common trap of many teachers is their tendency to define their goals in terms of what students will “understand” without defining the depth and breadth of the understanding, nor the way that the understanding will be demonstrated. The complexity of the learning process, and the fact that all of our students start out with different skills, and styles of learning make teaching difficult to begin with. However, the more clearly you can define the skills and abilities that students should acquire during semester, as well as how each and every activity and assignment furthers those goals, the more likely your students are to actually learn something (Mayer, Paul, & Wittrock, 2001). Notice also that the Terminal Goal has real-world application. It is the kind of task that might motivate students. The Subordinate Goals are less real-world, more academic, but if you organize the course around the more engaging applications of the terminal goal students will be more motivated to develop subordinate skills.

Get to Know Something About Your Students

Claiming to know anything about students is tricky. Experienced teachers have the sense that

students vary from one another; they vary from class to class, and from institution to institution. The literature on learning styles suggests to us that individual students learn in different ways, and that, in any class, we may have learners who are more or less visual, verbal, social, competitive, cooperative, linear, global, independent, creative, and well organized, etc. (Upcraft, 1996). And while experts disagree on what constitutes a learning style, or whether “styles” of learning exist at all, most experts in this area agree that in any given class, for most individual students, a mix of methods and modes of delivery and assessment is best. They also suggest that we may want to introduce our students to different modes of studying and preparation, joining a study group, for example, so that students can learn to capitalize on their strengths or to practice underdeveloped skills.

It may be easier and more productive to think about the way that students differ between institutions. Obviously, this means taking stock of the academic culture of the place your teaching and learning from colleagues, and from students themselves, about the habits and expectations that are most common (Nilson, 2010). If you are new to an institution, you may be surprised at the norms students have developed for teaching and learning. Some are part of the formal institutional structure, such as the lecture/section method used at many research institution. Most norms arise informally, and are passed down from student to student, and from teacher to teacher. The purpose of understanding teaching and learning norms is not to copy what has been done before, but to understand what parts of your teaching may be viewed as new or innovative by students and what parts are standard operating procedure. If you are new to a campus, AND you are asking students to learn in a whole new way, you may want to ease them into the change and be prepared for a little resistance. It is not always easy to discern the norms and culture of institution, and you may want to take some assertive steps to get the information you need. We suggest talking to as many colleagues and students as you can. Here are some questions you might ask:

- What kinds of lectures are students used to? PowerPoint? Stand-up comedy?
- Is there precedent for students working together in groups? Do they do group projects?
- What kinds of assignments are typical? Long, formal, end-of-term papers or shorter more idiosyncratic essays and exercises?
- How much of the teaching is experiential? Formal? Innovative?

Once you have a better sense of your students, you can look back at your goals and determine ways to achieve them.

Get to Know Yourself as a Teacher

Effective teaching is as much self-knowledge as it is anything else. Sure, a charming, funny, and charismatic teacher will likely have an easier time reaching students. And on some campuses, students may flock to the Nobel and Pulitzer Prize winners. But it is also true that every day, in classes all across the country, faculty members with average charm, and with only average prospects of getting a midnight call from Stockholm, find ways to reach students and even to inspire them. The key here is to find your strengths as a teacher and use them in the service of your goal. Here are some strengths you can build on:

- Writing and delivering great lectures. Summarizing huge amounts of material. Explaining complicated concepts. Making dull material fascinating. Telling jokes and stories.
- Facilitating great seminar discussions. Asking provocative questions and summarizing complicated dialogue.
- Orchestrating large classes into small groups or all-group discussions. Dealing with noise and controversy.
- Designing mini-experiments or analytical tasks for in-class group work. Creating challenges on the spot. Debriefing.
- Working with and managing teams over the course of a semester. Creating motivation through team competition. Dealing with interpersonal situations.
- Consulting with students individually. Doing individual diagnosis and planning. Mentoring.

The key here is to take stock of your strengths and use them to develop goals that will keep you and your students motivated throughout the semester.

In the process of taking stock of your strengths, it is beneficial for a faculty member to simultaneously think about weaknesses and areas for improvement. Assessing weaknesses in teaching is difficult because reliable constructive feedback to teachers is scarce. Constructive negative feedback is notoriously difficult to get from students or junior colleagues who may fear reprisal, and few professionals feel comfortable discussing their shortcomings with peers or superiors. However, feedback about shortcoming can be enormously useful for faculty members who want to become better teachers. You can reflect on the questions below:

- Organization and Clarity: Does the structure of your course as described in the syllabus really make sense to students? Is there continuity and flow in lectures from day to day and in the assignments and classroom activities that accompany those lectures?
 - Rapport with Students: Do students really understand that you respect them and want them to learn? Do they feel comfortable approaching you with questions and problems? Have you earned their respect? Have you lost your respect for them?
 - Fairness in Grading: Related to organization, do tests and graded assignments reflect the work being done in class in a consistent and reasonable way? Are your standards clear, internally consistent and in-line with students' standards in other classes? Are there opportunities to discuss problems and misunderstandings?
 - Expressiveness and Enthusiasm: Does your lecture delivery or discussion leading style increase students' interest in material or detract from it? Do you communicate positive feelings—curiosity, importance, critical interest, passion—for the material? Is your body language or verbal style energizing or enervating?
- Finally, and perhaps most importantly, it is essential to know who you are as a teacher and understand the assumption you bring to the process of teaching (Brookfield, 1995). This reflective

process may seem esoteric, but be assured, it is not. One can easily design a class based on the activities of teaching and learning, without giving a lot of thought to the “why?” But when unusual things start to happen in your classroom, and they always do, having a deep understanding of your basic assumptions about students, learning, authority, fairness, and purpose, etc. will give a solid foundation for action. Before you start teaching, it is a good idea to reflect on the following:

- What is my role as a teacher, and what does that mean for the relationship I will have with my students?
- What personal qualities do I value in students? How do I expect to be treated? How do I expect students to treat each other?
- What is the nature of my authority in the classroom?

Develop a Course Plan That Pulls Everything Together

Every course has multiple elements: purposes and goals, motivation and incentives, content, activities, and assessments and grading, are just a sampling. The end-product of a course plan is a course syllabus in which you and your students should be able to identify all of these elements. As a course designer, you should consider how each element of the course fits together or aligns, and how subsequent elements of the course build on previous elements (Wulff, 2005). The degree to which your pedagogical plan is transparent to students is an issue we will discuss in a later section. For now consider using the questions below to develop your plan for how you will teach each aspect of the course.

- What is the purpose of this section or chapter (develop a skill, practice a technique, master an area of knowledge)?
- How will I motivate students to learn this? Is the material or skill innately interesting or valuable? What does it teach students to do? Will I need to create a demonstration or model? Will I use a graded test or assignment to increase motivation?
- What new information will students need (theories, studies, examples, etc.) and how

will they get it (lecture, reading, video, observation, etc.)?

- What action will students perform on that new information (write about it, discuss it with peers, experiment on it, reflect on it, etc.)?
- How will I assess what students are learning (graded paper, ungraded written assignment, observation)?

You’ll notice how each of these questions is built around student learning, which is common approach among great teachers (Bain, 2004).

Some Practical Considerations in Creating a Course

Once a faculty member establishes goals and rationales for a course, the pragmatic steps and choices become much easier. In the alternative, the structure of the text or the vagaries of semester calendar end up driving the purpose of the class, which is not ideal. In this section, we discuss four choices that every faculty member has to make: textbooks and readings; use of class time; assignments and other out-of-class work; and grading.

Choose a Textbook That Helps You Teach

The trick here is to resist the temptation to let the tail wag the dog by allowing the content and structure of the text to structure the goals of your course. Few faculty members ever find the perfect textbook, until they breakdown and author their own, and even then, there always seems to be something out of place, missing, or overemphasized. Some easy ways to find a respectable pool of good textbooks to consider are ask your colleagues to make recommendations (They will know the level and type of textbook students at your institution are used to, and they may even have direct experience teaching with that book.); the core collection or reserve room of the library will have copies of all the textbooks currently in use; write to publisher for review copies of books you have heard of or seen advertised; consult an on-line resource, for example, A Compendium of Introductory Psychology Texts at <http://teach-psych.org/otrp/resources>.

Your first consideration is the content. You cannot teach effectively from a book that you neither respect nor agree with, unless you design the entire course around debunking the text, which many students find confusing. This does not mean that you have to agree with everything the authors present. Allowing students to see you display a little healthy disagreement with authority of the text is probably good for most students, but it should not be a daily ritual. Find a book that provides intelligent and scholarly treatment of most topics, and that does so in language that you and your students can understand and appreciate. If the book organizes material in way that advances your understanding of things, then you have an additional advantage. Quality of content is the most important consideration, but textbooks contain many other qualities that can help you teach more effectively. Some of these qualities include illustrative examples that explain concepts in various ways; exercises and activities that you can use during class or as out-of-class assignments; side bars and special inserts that discuss related topics like teaching students about the field, real-life or policy applications, personal biographies of researchers or historically important research. Most books these days also include student study aids, such as review questions or self-test. A textbook today may include an on-line supplement which can help you develop lectures or add vibrant visual material to the class. Where cost is an important consideration, consider using one of the increasing number of “open source” or royalty-free textbooks available in electronic form. Textbooks come with a myriad of bells and whistles, not all of which will be helpful. Remember, the book is just a tool to help you teach better. It is not the entire class, nor is it a bible that you have to follow. On the other hand, students are used to focusing on “the book” and looking to it for answers and guidance, so you are smart to get one that really compliments your approach.

Be Creative in Your Use of Class Time

There are many things you can do with class time other than lecture. Class time is your most valuable teaching commodity, but to make the most

of it, we need to design it in the context of what students will do in other settings such as read, do homework, or work with other students. With this in mind, class time is probably not the best time for students to encounter new material for the first time. Research in science education, for example, suggests that class time is a good opportunity to let students work together, and for you to observe students at work and give them timely appropriate feedback (Deslauriers, Schelew, & Wieman, 2011). If you are a stimulating lecturer who can motivate, stimulate, and inspire students to greater heights of academic achievement, then some amount of lecture will likely serve you and your students well. Lectures designed to simply cover material or go over chapters are usually not worth it. If you need to introduce new material, do it quickly—within 15 or 20 min. Use the remainder of the time to:

- Organize small group tasks that allow students to work on material.
- All-class discussions about interesting controversial topics. These can be organized as debates or extended role-play exercises that ask students to take the perspective of a point of view or theoretical orientation.
- Demonstrations with discussion and analysis.

The design of class time is even more important if your class is longer than 50 min or only meets once a week. In these cases, it is important to break the class into clear segments with clear goals. Asking students to sit through 50, 90, or 120 min of straight lecture is not the best use of your time or theirs.

Design Assignments That Allow Students to Make Better Use of Class Time

Students spend more time completing assignments than any other aspect of school, so it is vital that assignments require students to do significant, targeted, academic work. Students’ performance on assignments can be improved by connecting some aspect of the assignment to the work students will do in class the next day. For example, if students are writing reports on research articles, have them use some aspect of those reports to do

an in-class analysis. Motivation can be further increased by setting up in-class peer groups that require individuals to come to class prepared. As you begin to develop your first assignments, look back on some of the assignments you were given, and ask colleagues for their ideas. Consider the assignments that are typically used in psychology classes—the research report, the case analysis, compare and contrast, journal article review, lab report—because these are forms that may be familiar to students. Then focus on the specific goals and objectives you have created for that section of that course, and modify the assignment in the following ways:

- Identify the specific skills that students need to master in order to complete the assignment. An assignment that requires students to demonstrate several skills once or twice, is better than assignment that requires students to demonstrate one skill again and again.
- Find a task that clearly requires the skills you have identified, and which produces some kind of identifiable product, or requires finding the answer to a specific question or puzzle. Try to focus on real questions rather than rote exercises. Be creative in how you frame the assignment so that students will have to use new skills and modes of expression. If possible, allow students some choice in what they do or how they approach the task, but do not sacrifice the core purpose of the assignment. Unique assignments are also more difficult to plagiarize.
- Match the length, difficulty, and scope of the task to the skills you want students to demonstrate. Shorter, focused assignments typically offer more stimulating educational experiences than longer, more complex works. At some point, it may become necessary for undergraduates to demonstrate their ability to sustain an analysis or project for 40 pages. This is not the case for most undergraduate work in psychology.
- Communicate the purpose of the assignment in clear terms of high academic standards. Focus on what students are actually accomplishing for themselves.

Effective assignments are easy to identify. Students will be drawn into the work and they

will exceed your expectations. In addition to demonstrating the required skills of the assignment, you will begin to see evidence of humor, creativity, and critical thinking. Some additional suggestions for creating assignments appear below.

- Effective assignments are clearly defined and have well-established standards. It does no good to wait until you grade a paper to tell students what you were looking for.
- Effective assignments are no larger than the skills they are designed to teach. Do not ask students to produce huge products and long papers to demonstrate small skills over and over again.
- Effective assignments produce real products, with form and structure. Rather than asking students to write a 5 page paper on X, ask them to write up a case analysis or grant proposal, mock legal brief, committee report, letter to the editor or a publishable book review.
- Effective assignments may make use of imagination and perspective, ask students to take on a role and write from that perspective, for example, take the role of a patient, or speculate on a hypothetical situation.
- Effective assignments combine the demonstration of well-defined skills and abilities with opportunities for creativity, uniqueness, and personal expression.
- Effective assignments ask students to demonstrate skills that are directly related to the core goals of the course. That is, students should have to rely on what they learned in class to successfully complete an assignment.
- Effective assignments often include students working in pairs or teams, though students should be individually accountable for their own work and their own grades.

Use Assessment and Grading to Review Students' Work and Give Them Necessary Feedback

Grading students' work effectively is a critically important part of teaching, and not easily done. First of all, let us define our practice. Assessment

is the practice of critically reviewing students' performance. It can be formal or informal. It can result in constructive feedback, or simply a shift in our perception. Assessments, such as ungraded quizzes or "clicker" questions can also be used to help students assess their own understanding. Assessments are powerful teaching tools. They keep teachers and students connected to learning and they provide both with valuable guidelines for how to succeed.

Sometimes, as with formal tests, quizzes, and papers, our assessments result in grades. Grades are fraught because they are typically associated with formal, institutional records. In other words they have lasting consequences. All assessments should be accurate, fair, constructive and timely, but grades need to be especially so. Like it not, they are a big part of what motivates students to work. Because of that, the achievement of grades should be based on your central values and objectives for whatever course you teach. Here are some suggestions:

- Grading begins with your very first thoughts about the course. Once you identify the skills and abilities you want students to demonstrate, you must assign value to the achievement of those skills and to the partial achievement of those skills, and then translate that value into what every grading scheme your institution requires. Listed below are a set of considerations that you can apply to every assignment or test you grade, as well as to the overall grade.
- Establish and communicate specific standards for everything you grade. Inform students upfront what will be graded and how. Reaffirm those standards in the comments that accompany your grades. Remember, the primary purpose of grades is to give students useful feedback about their progress.
- Begin grading short assignments and in-class work early in the term. This will help students become familiar with your standards and their level of preparation.
- Establish ground rules to achieve fairness in grading. Inconsistency in rules and procedures will communicate favoritism and capriciousness. It is not necessary to establish rigid practices to achieve a sense of fairness; however,

your rules must apply to all your students, and in the same way.

- Grade a variety of student work. Make sure your grading structure reflects all of the objectives you have identified for the course. Naturally, you will want to give greater weight to the core objectives. However, you can keep students working and learning at a steady pace throughout the term if your grading scheme gives them continuous feedback about how well they are doing along the way.
- The grading of participation in class should, like all other grades, include clearly defined standards.
- Remember that, under the best of circumstances, grading is difficult. Grading brings to the forefront a fundamental conflict inherent in our work as teachers. We are helpful guides, mentors, and coaches who work compassionately and tirelessly to help students master a new terrain. But we are also gatekeepers, charged with setting and enforcing standards for participating in a profession (Elbow, 1987). The tension between those two roles is enough to give all of us a knot in our gut when faced with a difficult grading task. The best way to mediate this conflict, fortunately, is relatively straightforward: set out clear standards that students must meet at the outset, then enjoy your role as helpful guide.

Write a Course Syllabus That Establishes a Contract Between You and Your Students

The final step in designing a course is the presentation of the syllabus. The syllabus accomplishes one essential goal: it supplies students with all the information they need in order to understand and complete the course in a way that helps them set their expectations and guide their behavior. It can be useful to think of the syllabus as an informal contract between you and your students.

There are many styles of syllabi. Some faculty members choose to put everything in writing, including the purpose of the course and the rationale for its design, while others include

just bare-bones logistical information about due dates, grade requirements and texts. To help you decide how much detail to include, think about what is important to you and to your students. Also, use the syllabus as a reference or teaching tool, throughout the semester. Tone and style are both personal choices, however, be aware that the tone of the syllabus does communicate something to your students. You have seen hundreds of syllabi in your lifetime, so we do not have to describe one. Still, you might want to consider these suggestions for writing a good one.

- Do not take for granted that your students know more about your institution than you do. Remember, many students in any classroom are just as new as you are. Avoid abbreviations and lingo. Remember, first-year students and part-time students may not be familiar with nicknames and other local jargon. Stick to the facts and include as many as you can.
- Highlight the most important ideas or processes of the course. Do not be afraid to include some big ideas in the syllabus, especially if they provide a context or purpose for the course.
- Edit carefully the calendar information you include. Be aware of holidays and other campus activities. Remember, students will use this syllabus to plan their semester.
- Make the document as useful as possible, so that students will keep it and look to it, often. Whether on paper or on the web, the syllabus should be a useful document that you and your students refer to because it has good, reliable information.
- Build the weekly items in your syllabus around questions to be answered rather than topics to be covered.

Teaching Psychology with Information Technology

Extolling the virtues of new technologies in a published text is a risky business. Tools that seem cutting-edge and exciting at the time of

writing tend to sound dated by publication. Yet, as teachers, we are hard-pressed to ignore the information technology revolution. After all, our business is, in some sense, information.

First we will consider some reasons that you might want to use information technology in your teaching. Second, we will ask when you should use the technology (and, conversely, when you should pass). Finally, we will consider how you should use the technology. By concentrating on general principles, we can try to compensate for the short projected shelf-life of the technological specifics.

Why Should I Use Information Technology?

- *To sell and market your course.* Both deans and students at times appear unduly impressed with glamorous course web sites, and polished audio-visual presentations. Cynical as this sounds, sales and marketing may be the most immediately practical set of reasons to supplement chalk and paper with electrons.
- *To solve logistical problems.* Put your notes on the web, print out your presentations as handouts, send notices, or collect and distribute assignments without wasting valuable class time. Tools developed for easy exchange of information in business and among private individuals can simplify the logistical challenges of teaching.
- *To help your students learn.* Help student apply new concepts, actively engage the course material by discussing it with their peers, develop rich knowledge structures, and find additional resources. It can give teachers and students new abilities earlier generations could only dream about. Some particularly relevant examples might be the use of videos to show clinical interviews, computer animation to illustrate complex causal relationships, computers with projectors to show actual experimental stimuli in real time, and online data collection to conduct simple research in a methods course.

When Should I Use Information Technology?

Any effort to introduce innovation into the classroom is fraught with potential difficulties of unknown magnitude, all in pursuit of uncertain rewards. The last thing you want to do as a teacher is to spend days doing web design for a site students will not use.

In the previous section, we emphasized the importance of articulating your goals in terms of student achievement. Technology is just another tool for enhancing student achievement, (Manning & Johnson, 2011) so we propose you think about the use of instructional technology as a four-part process.

1. Define your goals. In student-centered terms: what changes (learning or abilities) do I want to see in my students? What teaching/learning problem am I trying to solve with application of a technology.
2. Consider what tools are easily available (e.g., e-mail, web, newsgroups, chat, multi-media software, FaceBook, YouTube, Yammer). Are there institutional resources you can draw upon? Are there resources available on the Internet? What tool will really help my students learn?
3. Define a strategy for integrating technology into the rest of the class. This is the difficult part, and where most instructional technology fails. It is not enough to put up a web site. Why would your students visit it? It is not enough to create a course chat room or forum. Who will chat there and why? The motto for a piece of technology merely appended to a course should be: "If you (just) build it, they won't come." Your integration strategy—how you fit the innovation with your pedagogical objectives and the rest of your course structure—will determine success.
4. Assess how well your strategy has met your goals. Was the effort worth it? Did using this technology increase student learning or motivation?

When you consider the framework above, the answer to the question "When should I use technology in my teaching?" becomes straightforward: whenever it helps you achieve a clear pedagogical goal in a cost-effective way.

How Do I Get Started Using Instructional Technology in My Teaching?

Psychology researchers are often proud of being Jills-of-all trades. Many of our research projects call on a broad spectrum of skills, and we may often have to switch hats from manager, to programmer, to carpenter in the space of an afternoon. It is tempting to bring some of those skills to bear on developing technological solutions to teaching problems. However, the costs of developing teaching technologies from scratch are often prohibitive (in terms of your time). Activities like web-site design may be fun for some of us, but they compete for scarce time with syllabus design, lesson planning, and student contact. Keeping it simple should be a paramount consideration for implementing any technological innovation.

Fortunately, many prefabricated components for technological solutions are probably already at your disposal. The most important resource should be your college or university. Many universities, and quite a few small colleges have already developed, or are currently developing, ways to support faculty use of IT for teaching.

- Check with your version of Information Technology Services, or Media Initiatives, or Audio-Visual Services to see what kind of help they have available.
- Check for automated tools for placing courses on the web. Our home institution, for example, provides web browser-based construction and management of course web sites that includes web-page design, materials upload and download, chat, and newsgroups.
- If your institution does not have such services yet, ask them to outsource the services, or go through an outside solutions provider yourself (e.g., <http://classroomrevolution.com>).

Web Resources

The Internet has placed a panoply of previously esoteric resources at the fingertips of teachers. Many of the best resources are discipline specific,

and there is no shortage of those geared specifically for teaching of psychology. Here are a couple of index sites to get you started:

- APS Resources for Teachers of Psychology. <http://www.psychologicalscience.org/index.php/members/teaching>
- The Society for the Teaching of Psychology. <http://teachpsych.org>

Introductory vs. Advanced Courses

This section explores the fundamental differences between introductory and advanced courses, suggests ways that you might best prepare for each, and highlights some traps you may want to avoid.

In psychology, as in other disciplines, there are predictable differences between the approach to introductory and advanced courses in the field. Introductory course enrollments are typically large and therefore courses are taught in a lecture format. The stated aim of the introductory course is to expose students to a breadth of content. Assessment usually involves some kind of objective test with a combination of multiple choice and short answer items. The explicit goal of most introductory courses is to introduce students to a large set of basic concepts and foundational facts, and to test their abilities to comprehend them.

Advanced courses, in contrast, are typically small, sometimes very small. The aim is to explore one area of psychology in detail through reading, lecture, and discussion. Students are often asked to write papers or design experiments, in other words, to start doing some of the real activities that psychologists do. The goal here is to test for advanced analytical abilities and to give students a more authentic experience in psychology research. In this way, these courses may also be designed to socialize students into values and norms of the field.

As a new faculty member, you will likely be assigned to teach some combination of introductory and advanced courses in your very first year. Here are some hints for developing successful courses at each level, and for avoiding common pitfalls.

Teaching Introductory Courses in Psychology

Breadth can be boring, and bored, unmotivated students do not learn much. Boredom has repercussions beyond your class; at many universities, the intro to psychology course is the gateway into the major. And since bored students tend to find other majors, you are doing yourself, your students, and your department a big favor if you can find ways to bring Introduction to Psychology to life. Not that teaching an introductory course is all about entertainment—your content still has to be solid, your lectures well organized, your visuals clear, your assignments well designed and your tests lucid and fair—but there are special motivational challenges inherent in reaching students at the introductory level. Here are some suggestions:

- Build the course around some big questions or themes that have relevance for students.
- Learn to use small group or paired work exercises in your large lecture course. Break up the lecture and get students working on interesting questions together. This is especially crucial if your class meets for more than fifty minutes at a shot.
- If you have to use objective tests as your primary mode of assessment, try to create on assignment during the semester that allows students to explore their own interests. Even in the big class, find a way to see or acknowledge every student.
- If you are going to lecture, lecture really well. If you do not know how well you lecture, have a colleague or consultant observe you. Once you have mastered the art of delivery, design lectures around the most interesting feature of any chapter. Tell stories. Find a way to demonstrate a concept or give students a chance to experience it.
- Use end-of-class assessment activities and ungraded writing, for example, one-minute paper assignments, to help students realize what they have learned in every class.

Teaching Advanced Courses in Psychology

In most academic departments, teaching advanced courses is considered a privilege, and a reward for higher standing in the department. Often, advanced courses will include graduate students as well as advanced undergraduates, and the number of students is often less than 15. In some cases, junior faculty will be allowed to teach a course that is directly related to their research, which, if you are on the tenure track, is an excellent way to get students to join your research team.

As a rule, advanced courses are even less structured than introductory courses. This is true for a number of reasons. First, advanced courses are less likely to be taught from a standard textbook, though texts do exist for many advanced topics. Second, as mentioned above, advanced courses are often a direct reflection of the professor's take on the subject or may be built around the interests of the students in the class. Finally, advanced courses are designed to offer students the opportunity to explore a topic in depth and in their own way, which means that students are likely to approach the core topic of the class from a variety of perspectives.

Advanced courses are taught in all types of formats, but for the purpose of this discussion we will consider the seminar. In a seminar class, students are given a collection of readings for discussion each week. It is understood that each student is working on his or her own paper throughout the semester, and drawing on the readings and discussion when appropriate. Students are often expected to go beyond the assigned readings in the completion of their paper, which is often a long, research paper of over 20 pages in the appropriate journal style.

The advanced seminar is rarely the topic of attention in discussions of teaching, because it is expected that the advanced nature of the students and the material, combined with the individual focus of the work make the seminar "run itself." Contrary to this expectation, most of us have par-

ticipated in seminars that felt dull and unsatisfying. Remember, advanced seminars are extremely important courses, especially when they represent capstone experiences for psychology majors. The challenge is to balance the opportunity for individual exploration, with the creation of a common learning experience. Here are some suggestions.

- Just as you would for any course, have a plan that describes what will be accomplished in the seminar, and how. Describe how intellectual work will progress throughout the term. Prepare strategies for changing the discussion, raising the level of dialogue, and breaking unproductive patterns of interaction. Commit to leading the seminar and being responsible for its success.
- Allow for some individual exploration, but make sure that the group as a whole is dealing with the same material at the same time. The purpose of a seminar is to bring minds together on common questions or problems. If everyone is doing their own thing, there is no common content and no dialogue.
- Set very high standards, make them explicit, and then have the courage to hold everyone to them. This does not mean being a tyrant, but it does mean making sure that students adhere to your expectations in their writing and speaking.
- Design the seminar so that nearly everyone has some direct responsibility for advancing the dialogue, every single day. If all but a few people are coming to seminar unprepared every day, the seminar is not a success.
- Start each meeting with a one-paragraph, ungraded-but-submitted writing assignment on the key question or issue for the day.
- Use student pairs, triads, or groups in the seminar, with responsibility to respond to material each day. Students are less likely to ignore the reading if they know it will disappoint their peers. When a key question or issue emerges in discussion, require everyone to respond.
- Give constant, critical-but-constructive feedback, teach students to do the same, and

encourage them to do so. No one wins and no one learns when thirty minutes of unsubstantiated and unclear comments go unquestioned.

Managing and Mentoring Teaching Assistants

In many ways, the Teaching Assistant (or Teaching Fellow or Graduate Student Instructor) is a strange creature whose role is rarely well defined. The TA walks the shadow world between colleague, student, and servant, as all apprentices must. It is the supervising professor who determines, often implicitly, which role a teaching assistant will play. The TA experience is likely to feel servile when their roles are unclear, their tasks menial, or when the TAs do not participate in setting goals of courses and sections they help teach. For example, TAs commonly feel least satisfied when they grade exams they have had no part in creating and papers they have had no part in assigning. On the other hand, a great relationship between faculty member and TA can be a graduate student's most rewarding experience. Supervising faculty can, and often do, have a profound impact on the lives and careers of their students by introducing them to teaching and the life of an academic.

Just as you may not have received training in undergraduate teaching, you almost certainly had no training in management or mentorship. Here are some strategies to help you become a better manager and mentor for your TAs:

- Make your TAs more engaged and more accountable by involving them in setting goals at various levels.
- Meet with the TAs prior to the beginning of class. Explain your pedagogical goals and ask for their input. If the TAs will teach sections, ask them to articulate, preferably in writing, what their section will do for the students.
- If possible, involve your TAs in planning the course, the lessons, and the assignments. This will not only help you come up with better material, but will also be an invaluable learning experience for the future faculty members under your wing. The more invested each TA

feels in the course the more rewarding the work will be. For example, you can have each TA give a guest lecture, then generate exam questions about the guest lecture, and grade the specific questions they have generated.

- Give your TAs more autonomy to run their section as they see fit. Once you have agreed on what the goals of section are, let the TA experiment with the means.
- Clarify expectations at the outset. What will the TAs do? What will they be trying to accomplish? How will they be evaluated?
- Give your TAs the support they need to function effectively. Usually this means meeting early and often, especially in the very beginning of the course. It also means keeping track of your end of the course paperwork, and clearly delegating various assignments to different TAs. For example, who will be responsible for compiling all the section grades at the end of the course?
- A few other ideas: Offer to observe your TA's section to help them become better teachers.
- If your institution offers TA training and development, require your TAs to avail themselves of the training before teaching your course. Make it your business to let your TAs know about the resources available to them.
- If your TAs are responsible for grading, effectively delegate to them that authority. One of the most frequent and bitter complaints heard from TAs is that course instructors summarily overrule their grading decisions without consultation. If you feel you have a question about a grading decision, meet with the TA about it. The TA will often have directly relevant information about the grade and the student in question. Remember, TAs probably know more about the students in their sections than you do.
- Once you have effectively delegated authority to your TAs, you must also hold them accountable for whatever tasks you have assigned. Lack of accountability leads to complaints from students. Some of those complaints will come to you, but others will go straight to your chair or dean. Rest assured, if these complaints become vociferous or numerous, you will be

hear about it. Save yourself the headaches; have clear, fair standards and stick to them. Consider that effective delegation implies you have given the members of your team the freedom to fail, as well as to succeed.

Although successful delegation is difficult, the rewards are large. By investing energy in effective delegation you will save time in the long run, develop better mentoring relationships with your TAs, and have a better class.

Conclusion

We hope this short introduction to teaching will help you navigate the uncertain waterways towards the land of confident and competent teaching. The first years are important, but do not be discouraged if they do not go well. Keep trying new things and asking for help. We have seen great teachers emerge after years of average performance. As a faculty member, teaching will be a big part of your life, so it is important to figure out how to do it well and also how to enjoy it. We have only scratched the surface in this chapter. Here are some additional resources:

- You Campus Teaching Center. Chances are your campus has a teaching center with consultants who can help you define goals, think of strategies for meeting those goals, and observe your teaching. There, you are also likely to find a library of books on teaching, and access to a network of people on campus who can give you advice.
- The American Psychological Association. <http://www.apa.org/>. Type “teaching” into the search box for the latest articles on teaching in psychology
- APS Resources for Teachers of Psychology. <http://www.psychologicalscience.org/index.php/members/teaching>
- The Society for the Teaching of Psychology. <http://teachpsych.org/>

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Part IV

Your Career as a Practitioner

Alan D. Katell and Marcy C. Adler

Clinical psychologists in training have many career paths open to them, and pursuing them requires timely decision-making. These decisions can be challenging ones, as the implications for career options are far-reaching. Many also need to be made early in the doctoral training sequence. Selecting among these opportunities and making the necessary decisions are thus crucial steps requiring both current information and a decision-making model. This chapter will identify important sources for such information, and provide a developmental framework for integrating them. Key points for consideration include (1) academic program's training model, (2) specialty training, (3) choosing among assessment and intervention models, (4) practicum training and supervision, (5) internship training, and (6) post-doctoral training and specialization.

Academic Training Model

In considering career objectives, one of the first and most important tasks is determining which training experiences will facilitate your goal attainment. Clinical training experiences are crucial in this regard, whether your career objectives are academic, service oriented, or a blend.

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Clinical skills are acquired most effectively in the context of broad and general training (Peterson, Vincent, & Fechter-Leggett, 2011) that includes grounding in such core science areas as cognitive-affective aspects of behavior, dysfunctional behavior or psychopathology, and theories and methods of assessment and diagnosis. Skills acquired in the absence of such a foundation are less likely to be implemented and evaluated critically.

As such, early training experiences are particularly important in determining future direction. Competency building that includes a broad range of experiences will increase your potential for match with many competitive internship programs. Because internship training is viewed as the narrowest point in the path from academic program entry to achieving career goals, attention to internship preparedness is crucial. A key objective at the doctoral training stage, therefore, is to achieve clinical competence in areas that will be most useful for your internship year and beyond.

Clinical competencies are most effectively acquired in an academic program that employs competency-based training. Such training has its roots in an elucidation of the key competency domains (Rodolfa et al., 2005) and progressed to widespread adoption with the development of a multidimensional model to facilitate their acquisition (Fouad et al., 2009). Such training models cover clinical skills across the interactive dimensions of foundational and functional competencies along a developmental continuum. Specific skill areas in both the assessment (Krishnamurthy et al., 2004) and the intervention (Spruill et al., 2004)

domains of the functional competencies have been delineated. The functional competency domains of assessment, intervention, and consultation are all inextricably linked to the foundational competency domains of reflective practice/self-assessment, scientific knowledge/methods, relationships, ethical–legal standards/policy, individual-cultural diversity, and interdisciplinary systems. If your training program does not utilize a competency-based training model, you may be able to obtain comparable measures of your knowledge and skill acquisition by speaking to your training director and other faculty members about incorporating them into your annual performance review.

Most doctoral curricula cover both general and focused areas of study. Clinical practicum opportunities range from general to specific as well. In this instance, the terms general and specific refer to populations served, difficulty of problems treated, and complexity of interventions utilized. If you entered graduate training with little or no supervised clinical experience, you should consider beginning it with general practica to ensure development of entry level competencies. This training combined with more advanced courses that may include intervention electives will prepare you for practica with more challenging problems, populations, and/or settings in subsequent years. Such a general to specific practicum sequence will add to your being seen as a well-rounded applicant at internship time, and will enable you to perform effectively in a wide range of settings thereafter. Importantly, this capacity will also afford you extraordinary versatility and robustness in a rapidly changing health-care service environment.

Another important consideration in doctoral training is ensuring accumulation and verification of credentials needed for postdoctoral practice. Whatever their career paths, psychologists will generally benefit from having state or provincial licensure, National Register Health Service Provider (HSP) status (National Register of Health Service Providers in Psychology, 2011), and American Board of Professional Psychology (ABPP) Diplomate status (American Board of

Professional Psychology, 2011). In most instances, licensure is required for the other two credentials. Two other points are important regarding licensure. First, be sure you complete all courses required for licensure eligibility, whether by title or content. Retaining all course syllabi is important in all instances, but particularly when course titles do not match state coverage stipulations. If your doctoral program is on a quarter system, be mindful of how quarter hours equate to semester hours, as some states specify their course requirements in semester hours. Second, while the American Psychological Association (APA) makes model licensure laws available to the states, each establishes its own. You would therefore be well advised to monitor licensure eligibility requirements for states and/or provinces of interest as you progress through your training.

Evidence-Based Treatment

A very positive trend in the evolution of clinical psychology training has been its growing foundation in evidence-based assessment and intervention methods. Paralleling this trend has been an expansion in managed health-care systems' efforts to delineate treatment protocols for specific disorders. The implications of these developments for trainees in clinical psychology are several. First, with growth in the profession's capacity to develop assessment and therapeutic interventions with scientific rigor, the value of training in unsupported methods becomes increasingly questionable. With the growing impact of managed health-care systems on psychological service delivery, you must be prepared to work in a health-care system moving toward greater specification of treatment protocols. Second, reliance on treatment methods with demonstrated efficacy will lead to more effective and consistent client care, and so will bolster the profession's perceived utility as well as your own. Third, as consumerism expands into the health-care arena, providers who employ evidence-based methods will fare best.

The APA has devoted attention to the issue with both practice and treatment guidelines. In addition, APA's Division 12 has been using scientific criteria to ascertain which psychological treatment methods are efficacious. In 1993, it appointed a task force to identify empirically validated treatments (Patrick & Olson, 2000). The Task Force on Promotion and Dissemination of Psychological Procedures (1995) established criteria for the validation of psychotherapies, and provided efficacy data to interested parties, including those funding third party payment for treatment. Chambless et al. (1998) updated the initial report. Their revision delineated criteria and summarized evidence of efficacy for both well-established and probably efficacious treatments. Division 12 maintains a page on the APA website that presents the criteria for determining efficacy as well as a current listing of both well-established and probably efficacious treatment methods (American Psychological Association, 2006). To illustrate, some examples of well-established treatments in the realm of anxiety and stress include cognitive behavior therapy for panic disorder with and without agoraphobia, cognitive behavior therapy for generalized anxiety disorder, and exposure treatment for agoraphobia. Well-established treatments have also been identified in the realms of depression, trauma, developmental disabilities, chronic pain, and enuresis and encopresis.

Your clinical experiences should include solid grounding in the use of evidence-based assessment and treatment methods. If you attend an APA-accredited academic program, your practicum training must include preparation in the application of such methods. Additionally, you should consider working with faculty members who (1) acknowledge the importance of these methods, and (2) can help you learn to evaluate such methods on your own. With continued growth in clinical science, assessment and treatment methods deemed to have empirical support may change. You would be well advised to keep abreast of such changes. A list of additional resources bearing on empirically supported treatments appears in "Additional Resources" at the end of this chapter.

Practicum Training

Developing clinical competencies begins with acquiring a solid background of knowledge and generalizable skills. The competency-based framework discussed in a prior section of this chapter serves as a guide to what these skills should be. In sum, clinical psychologists in training develop knowledge and skills needed (1) to assess and diagnose problems and capabilities of individuals, groups, and/or organizations; (2) to intervene with individuals, groups, and/or organizations to alleviate suffering and promote well-being; and (3) to provide professional assistance or guidance regarding client needs or goals (American Psychological Association, 2006).

Once basic knowledge of assessment, intervention, and consultation skills has been acquired, therapeutic skills are further developed and refined through the practicum experience. Seek to begin clinical training with a practicum that can provide experience with as diverse a population and as broad a range of pathologies and life circumstances as possible. For example, a well-rounded training experience might include treatment of clients across the age spectrum, members of ethnic and cultural minorities, and clients with long-term mental illnesses and such frequently occurring disorders as anxiety and depression. To facilitate your development of therapeutic relationship enhancement skills, seek opportunities to treat persons differing from you in age, ethnicity, socioeconomic status, religion, and world-view.

Begin to obtain assessment experience as early in the training sequence as possible. Assessment in its many forms is an essential component of clinical psychology training. It is important to obtain supervised experience not only in test administration and scoring, but also in interpretation and integrated report preparation. Krishnamurthy et al. (2004) reported that many graduate programs historically have not required students to complete the type or amount of training in assessment techniques that will make them competitive or even eligible candidates for internship. It is probable that effective

preparation for internship requires the inclusion of elective assessment courses and other assessment experiences, including work with projective techniques.

In sum, it is up to you to be aware of and seek what is needed to meet the requirements for internship, postdoctoral training, licensure, and professional practice. You must strive to increase your general knowledge and skills in as many areas of clinical training as possible. It is important to recognize that you have the primary responsibility to ensure the breadth of your clinical training. By the time your first practicum is completed, you will likely have received some exposure to one or more specialized populations, disorders, and/or settings, and some experience in applicable assessment methods. You should also have learned to understand how to utilize the scientific knowledge base to inform your practice. You should likewise have begun to consider your options for future specialization (e.g., with specific populations or in specific settings). These considerations will shape your choices for a second and possibly third year of practicum. By the time you are eligible for internship, you should have a general idea of what specialization areas, if any, you wish to pursue. The internship experience will help you finalize this decision.

It is also helpful to know how much experience will be required to make you a competitive internship applicant. Some internship programs require as few as 600 practicum hours, but 1,200–1,500 hours has become more common. Many students attempt to increase their competitive edge by completing 1,500 hours or more (Gloria, Castillo, Choi-Pearson, & Rangel, 1997). The data are clear, however, that the number of practicum hours is not a predictor of internship placement (Boggs & Douce, 2000; Ginkle, Davis, & Michael, 2010). The primary factor, rather, appears to be the extent to which your academic training, practicum experiences, and professional goals match the training objectives of the internship. In short, goodness of fit is the key selection factor, and effective exposition is a pivotal way to convey it.

Supervision

An important component of maximizing your knowledge and skill acquisition in practicum training is seeking initial placement in ones with structure and guidance that will reduce beginning therapist anxiety and maximize learning. You may feel as if you are being required to assimilate an overwhelming number of variables during your early interactions with clients. You may feel similarly about your first interactions with supervisors. It is generally reassuring, however, to know that your supervisor will offer support while assisting in the planning and implementation of appropriate assessment and intervention methods. Such an arrangement allows you to focus on basic diagnostic interviewing and relationship enhancement skills. After these basic skills are well developed, you may then benefit more from a supervisory arrangement that affords you greater autonomy while maintaining a readily accessible avenue for knowledgeable consultation (Maki & Delworth, 1995).

Models of supervisee development are important in understanding how to approach clinical supervision. Stoltenberg and Delworth (1987) outlined the widely utilized developmental model of training and supervision known as the Integrated Developmental Model (IDM). This model describes the issues trainees encounter through identifiable stages of professional development. Stoltenberg and Delworth (1987) recommended that training and supervision be adapted to each stage. The IDM describes three basic structures that supervisors use to assess counselor functioning at each stage. They are (1) self-awareness and awareness of others, (2) motivation, and (3) autonomy. As a clinical psychologist in training, the structured environment provided during the first stage of development will keep your initial level of anxiety manageable. As your confidence and skills grow, you will become less reliant on your supervisors, and thus shift to the second stage of development. You should then anticipate the eventual assignment of more challenging clients, as your supervisor expects you have developed the competence to use more complex therapeutic techniques.

Stoltenberg and Delworth (1987) argued that the supervisee can anticipate some ambivalence during this second stage of development. You may begin to struggle with motivation, behave emotionally in an adolescent fashion, and experience more aspects of countertransference and overidentification with the client. Stoltenberg and Delworth (1987) advise you to consider personal therapy during this stage of development.

Once you have achieved stability at the second stage of development, you will be ready to move to the third, wherein prior skills are consolidated and new ones are added. This is typically the level of development you might expect to reach during the latter part of your internship and at the postdoctoral level of training. As your skills develop and the scope of your experiences broadens, you will continue to move toward a more autonomous supervisory experience. The increased stability evident during the third stage facilitates rapid development and refinement of skills and therapeutic techniques (Stoltenberg & Delworth, 1987).

As you progress through the skill and knowledge development derived from practicum and supervision, a crucial aspect of your learning will be systematically monitoring and examining any developmental issues of your own that arise. Consult with your training director and other mentors about options for addressing such issues.

The capacity to choose your practica and supervisors will be determined by your program, your faculty, and your training director. However, you should seek to express whatever preferences you can. To this end, some common sense pointers are (1) to request practicum sites that have supervisors with substantial experience with the populations and problems with which you will be working, and (2) to evaluate the extent of your supervisor's current or continuing involvement in a particular area of concentration, whether through research, consultation, or grants. A supervisor's level of continuing involvement will greatly contribute to his or her level of expertise.

Clinical Experience During Internship

Internship has been described as the “didactic-experiential bridge between doctoral programs and professional practice” (Boggs & Douce, 2000, p. 672). APA-accredited training programs for degree completion require internship. Application is competitive on a national basis, and good preparation is necessary to obtain a placement that will enhance your professional development. Founded in 1968, the Association of Psychology Postdoctoral and Internship Centers (APPIC) has helped standardize the internship application process by adopting a uniform online application, promoting fairness and common sense in application deadlines, and developing an equitable method of selection. Their website, provided in “Web Resources,” is an excellent source of information regarding policies and training issues.

Clinical training at the internship level typically facilitates competence in assessment, intervention, consultation, research appraisal and production, program evaluation, outcome measurement, and quality assurance. Your opportunities at this stage of training typically include focused training in evolving areas of the field, which will allow you not only to sharpen your general clinical skills but also to begin developing expertise with particular disorders, populations, and/or intervention for subsequent specialization.

In recent years, the number of internship applicants has exceeded the number of available positions (Rodolfa, Bell, Bieschke, Davis, & Peterson, 2007). Internship training is crucial, and so it is incumbent upon you to stay informed of the implications of this shortfall. As there are many APPIC member internships that are not APA-accredited, one such implication has been that you may increase the likelihood of a match by applying to unaccredited as well as accredited programs. Such a strategy remains controversial, however. For instance, it is not clear what the ramifications for postdoctoral fellowship or employment are of completing an unaccredited internship (Delworth & McNeill, 1985). It is also not known whether completion of an APA-accredited internship may

Table 13.1 Sample timeline for clinical assessment and intervention competencies and experiences

Year	General goals for clinical assessment and/or intervention competencies
Year 1	Attain a solid background of academic knowledge in Conceptual/theoretical foundations of evidence-based assessment and intervention Psychopathology across the lifespan Develop or extend foundational competencies in Self-assessment Relationship enhancement Ethical–legal standards/policy Individual-cultural diversity
Year 2	Attain initial clinical practicum experience in assessment and/or intervention (including supervision and case consultation) Begin to attain intervention skills and experience with commonly occurring disorders Begin to attain assessment skills, including but not limited to the following Personality assessment Behavioral assessment Intelligence testing Projective assessment measures Begin to attain experience in the treatment of Diverse populations Varied pathologies and life circumstances Begin to attain experience in report-writing and clinical case presentations
Year 3	Attain more focused clinical practicum experience in assessment and/or intervention and/or consultation, particularly with more difficult disorders or populations Begin or continue to participate in group or peer supervision Increase your experience in the administration, scoring, and interpretation of assessment measures Increase your experience in report-writing and clinical case presentation
Year 4	Continue to augment your clinical skills by providing assessment and treatment to more specialized populations and disorders Begin to provide clinical supervision with a faculty member’s close guidance Conduct assessment batteries leading to integrated reports Pursue options for later specialization, whether through clinical or research experiences
Year 5	Internship training year (2,000+ clinical training hours) Continue to refine your clinical skills, including work with couples, families, and/or groups Extend training and experiences leading to possible area(s) of specialization

someday be required for licensure in some states. Additionally, the Commission on Accreditation plans to hold accredited academic programs accountable for the percentage of their applicants who match to accredited internship programs beginning with the 2013–2014 internship year. It is therefore important to stay informed on these issues, and to consult with your academic and/or clinical mentors well in advance of starting the application process. A list of websites providing more information on this subject is included in “Web Resources.”

Gaining clinical experience during matriculation may seem like a complicated, extended, and even daunting undertaking. This chapter has attempted to simplify it by providing you with a general

sense of how your development should progress, the key issues to consider and steps to take, and what you should expect to have accomplished by the time you graduate. Table 13.1 presents a summary of assessment and intervention competencies or experiences to achieve during each year of graduate training.

Supervised Postdoctoral Experience

Postdoctoral training has become virtually universal in the past 25 years, whether one is pursuing a career in an academic or other research setting, an assessment or intervention environment, or the consultation arena. The primary purpose is to

complete preparation for professional practice, including the attainment of important postdoctoral credentials. For licensure, for instance, most states in the USA require supervised postdoctoral hours as a component of eligibility. The most common number of hours required in these states is 2,000. One state, however, does not require postdoctoral hours, and a handful of others allows for licensure eligibility without postdoctoral hours, provided supervised predoctoral hours are substantially greater than 2,000. This higher number is most often 3,000 (Association of State and Provincial Psychology Boards, 2010). In addition to the greater number of predoctoral hours, the ratio of supervision to clinical contact hours may differ from that utilized in many academic and internship programs (e.g., 2 hours of individual supervision for every 20 hours of experience). Whether hours for licensure eligibility are predoctoral, postdoctoral, or a combination, the supervision must be provided by a licensed psychologist, and typically in a face-to-face manner. Check the APPIC website (Association of Psychology and Postdoctoral Internship Centers, 2011) for a link to a summary of state licensure requirements. Also check with the psychology licensing board in the state(s) and/or province(s) in which you anticipate seeking licensure.

Postdoctoral settings range from fellowships with formal, organized programs of training to informal residencies with a psychologist in private practice. Applications to postdoctoral training opportunities are generally sought in consultation with, but not under the aegis of your academic program. Most application deadlines are in the late fall or early spring of the internship year. In fellowships, client contact occurs in the sponsoring facility, often a medical center, hospital, or other large treatment facility. The APA Commission on Accreditation began to accredit postdoctoral training programs in the late 1990s. While initial applications for such accreditation were limited, they have grown considerably. There are currently accredited postdoctoral training programs in the specialty areas of behavioral and cognitive psychology, clinical child psychology, clinical health psychology, clinical neuropsychology, family psychology, forensic psychology, and rehabilitation psychology. A listing of

accredited postdoctoral programs may be found at (American Psychological Association, 2010). Additional information about fellowships is provided elsewhere in this handbook.

Informal postdoctoral training opportunities, on the other hand, can be quite variable in how clients are provided, settings utilized, and the format and nature of supervision. Applicable state law generally dictates the parameters of the supervision. Because of the variability of supervision provided in informal postdoctoral opportunities, you would be well advised to enter such relationships only after obtaining complete information about the supervisor, the nature, frequency, and cost of the supervision, and how any disputes will be resolved. A written contract should be obtained before entering such informal arrangements. In general, postdoctoral training without a specified stipend should be approached with great caution.

Many psychologists obtain multiple state and/or provincial licenses in their careers. As there is presently no licensure reciprocity among states, seeking National Register HSP Status (National Register of Health Service Providers in Psychology, 2011) may prove invaluable. The National Register obtains documentation of your doctoral courses, your academic training program's accreditation status and Association of State and Provincial Psychology Boards designation at the time of your training, your internship completion and accreditation status, and your supervised postdoctoral hours. If you hold HSP status at a time you are seeking licensure in another state or province, the National Register can send verification of your academic, internship, and postdoctoral credentials on your behalf. All 50 states currently accept such verification. As academic program faculty members and other supervisors change affiliations over time, such a method of ensuring credentials portability is important to consider.

Summary

While there are many ways to obtain clinical experience in and after graduate school, a framework for doing so is invaluable. There are several

Table 13.2 Gaining clinical experience in and after graduate school: principal points to consider*Curriculum and related issues*

- Be mindful of how the changing marketplace and current supply and demand issues impact your options and obligations for clinical experience
- Familiarize yourself with the predominant schools of thought, their approaches to clinical work, and the differences in their principal methods of treatment
- Acquire substantial knowledge of evidence-based assessment and interventions, including how they interface with foundational competencies
- Plan your curricular options (e.g., electives) with an eye toward the future. Select training experiences that will meet both long-term and short-term goals. Consider your options for postdoctoral specialization

Practicum

- Gain initial practicum experience with as diverse a population and as broad a range of psychopathologies as possible
- Familiarize yourself with assessment methods that will be useful for internship, postdoctoral training, licensure, and professional practice
- Learn how to use the scientific knowledge base to inform practice

Supervision

- Seek supervisors who have had experience with the population you are treating
- For your first practicum, look for a supervisor who will provide structure and guidance
- Seek supervisory experiences that will allow for increasing levels of autonomy
- Be aware of your own developmental transitions within the supervisory relationship
- Consider personal therapy to address issues that may arise during your practicum training

Internship and postdoctoral considerations

- Preferences for internship, postdoctoral, and specialty training will significantly impact your career options, so seek guidance and gather information about them early
- Licensure is determined in large part by having appropriate academic credentials, the required number and type of supervised hours, and a broad knowledge of the field
- Achievement of ABPP Diplomate status is determined largely by scope and expertness of clinical skills in a specialty area, how you inform your practice, and how you integrate ethical, diversity, and other critical matters
- Acquire as much information as possible about expectations for your supervised postdoctoral experience before applying. Obtain a written contract before accepting

key issues to keep in mind, some set by your academic program, but many determined by your career goals, licensure laws, and various credentialing bodies. This chapter has outlined the principal points you must consider. They are summarized in Table 13.2.

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Web Resources

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- American Psychological Association (APA). <http://www.apa.org>.
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- APA Div. 17, Counseling Psychology. <http://www.apa.org/about/division/div17.html>.
- APA Graduate Students (APAGS). <http://www.apa.org/apags/>.
- Association of Counseling Center Training Agencies. <http://www.accta.ucsc.edu>.
- Association of Psychology Postdoctoral & Internship Centers (APPIC). <http://www.appic.org>.
- Association of State and Provincial Psychology Boards (ASPPB). <http://www.asppb.org>.
- Canadian Psychological Association (CPA). <http://www.cpa.ca>.
- Council of Counseling Psychology Training Programs (CCPTP). <http://www.lehigh.edu/ccptp/>.
- Credentialing Opportunities for Professional Psychologists. <http://www.nationalregister.org/grad.html>.
- Examination for Professional Practice in Psychology (EPPP). <http://www.asppb.org/eppp.htm>.
- National Council on Schools and Programs of Professional Psychology (NCSP). <http://www.ncspp.info/resources.htm>.
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Preparation for entering and succeeding in private practice is one vital area that graduate programs typically cannot give adequate attention to due to the long list of “academic” courses that must be offered. And it seems that there is never enough time to learn all we need to know to be fully prepared for our professional roles after graduation day. But the preparation specific to having a career as a private practitioner is an important aspect of career growth and planning. This chapter will provide guidance on how to prepare for a career in private practice.

Years ago, psychologists would receive their degree, become licensed, have business cards printed, take out a yellow pages ad, rent an office, and begin treating patients. Unfortunately, the practice landscape has become much more crowded, competitive, and complicated over the years. There are numerous mental health professionals with various amounts and types of training who are all competing for many of the same patients. While clinical proficiency is mandatory, it is not nearly enough to ensure success in private

practice. Running a private practice is a business enterprise that requires advanced planning, market analysis, a business plan, targeted marketing, and solid business practices.

Preparation for Private Practice

Rather than using a trial and error approach and just learning as you go along, it is best if you prepare to enter private practice well in advance. You can begin by using the resources that surround you to explore options that will allow you to become more marketable and better prepared to be a successful private practitioner. Use your graduate school professors, professionals in your community, and Internet websites to explore your options as early as possible. Seek out mentors who can assist you to prepare for a successful career as a private practitioner. Refer to the checklist below to familiarize yourself with some of the issues you will want to consider both before and after receiving your degree.

While You Are Still in Graduate School

- Take elective courses in specialty areas that interest you. Possibilities include group or family psychotherapy, clinical hypnosis, stress management, and neuropsychological assessment.
- Explore specific internship opportunities that will prepare you for the type of private practice you would like to have.

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- If your school offers a course in the business aspects of practice, take it.
- Seek out professional continuing education classes that focus on business aspects of practice.
- Join your state psychological association and Psychologists in Independent Practice (Division 42) of the American Psychological Association. Participate in one of their mentoring programs.
- Talk to those professors who also work in Private practice and ask questions such as: how did you prepare to enter private practice, what clinical experiences do you suggest I seek to prepare myself for entering private practice, what courses are important for me to take to prepare for a career in private practice, what lessons did you learn from being in private practice that you can share with me for how to be successful in practice?
- Consider how your training will help you to prepare for a career in private practice.
- Address challenges and obstacles you will face when entering private practice and develop a plan for how you will overcome them.
- Consider can you do now to begin preparing so that you can be successful in private practice after graduation.
- Consider if the region you have selected for your private practice is saturated with managed care or if most private practitioners in that area have fee-for-service practices.
- Determine if you will be able to join managed care panels and if so, how long this process takes and when you can begin this process.
- Consider how much “unpaid” time you will spend collecting payment from managed care organizations and if it would be worth your while to hire administrative help.
- Determine if you should open your private practice immediately or if you will need to start with other work and build your private practice into a full-time enterprise over time.
- Develop a business plan, including a budget, for establishing and running your private practice. Determine which experts you should consult with to assist you with this endeavor.

After Obtaining Your Degree

- Explore post-doctoral opportunities that will enhance your skills as a private practitioner. See Chap. 23 of this volume for further information on the potential importance and role of post-doctoral fellowships.
- Continue working closely with a mentor who is an experienced and successful private practitioner. There is no need to have to go it alone.
- Research geographical areas that interest you and determine their needs. Ask yourself the following questions when deciding to practice in a certain area.
- Assess your local area to see if it is saturated with practitioners with a certain specialty.
- Consider if there are any groups of potential patients whose needs are not being adequately met.

After You Enter Practice

- Reflect on what successes and failures you have experienced in beginning and running a private practice.
- Consider the lessons you have learned that you wish you knew when you first entered private practice.
- How did you learn about the business aspects of running a private practice?
- Determine the most important things you have learned about running a successful private practice and keep these lessons in mind.
- Consider what impact your theoretical orientation has played on the nature of your private practice and on your level of success.

Is Private Practice For You?

A career as a private practitioner is not for everyone. However, for those who are well-prepared and who have realistic expectations, it is an enriching and rewarding career choice. Personal characteristics such as strong internal motivation and an entrepreneurial spirit will certainly play a role in your success in private practice. But these

Table 14.1 Pros and cons for a career in private practice

Pros	Cons
Being your own boss	Financial uncertainty and risk with possible periods of low earnings
Ability to decide practice location, hours, areas of specialization	Responsibility for all expenses and overhead
Unlimited earnings potential	Possible professional isolation for solo practitioners
Flexibility	Responsibility for billing, collections, insurance, employee and staff decisions
Control over business decisions	
Full responsibility for success of practice	

factors alone are not enough. Consider the pros and cons in Table 14.1 to establishing and maintaining a private practice.

After making the decision to enter private practice and considering the personal characteristics and professional issues above, it is important to start thinking about some of the more practical issues you will face as a private practitioner. For instance, how will you start your practice? Jumping right into full-time private practice is not necessarily a viable option for all recent graduates. Consider the most realistic and beneficial options relevant to your situation. Specifically, take the time to understand the amount of time it takes to build a full-time private practice, the financial demands of opening a practice in your area, making ends meet while building your clientele, the need for health insurance and other benefits, and the need for professional support, especially early on. Some recent graduates prefer to start out in another setting and transition to private practice slowly.

One way to do this is to work full-time in a salaried position and start your private practice in the evenings and weekends. This will provide you with a full-time salary, benefits, collegial interaction, and supervision if needed. This is a good time to develop competence in specialty areas of practice that you can begin marketing in the local community. You will also have the opportunity to network with other professionals in the local area and to build your reputation while not experiencing the financial instability of slowly building your practice. Or, if you have the financial flexibility, you might want to work part-time in a salaried position with benefits and build your practice in the remaining time. This arrangement gives you the security and benefits of a salaried position along with the needed time to devote

to building your private practice without working the numerous hours required if you work full-time plus have a private practice. The drawback is that the amount of income is less during the time that the private practice is being developed.

An additional option is to dedicate yourself full time to the development of your private practice. This choice provides the fastest route to a full-time private practice, but carries the greatest challenges financially. With each of the first two choices you can decide, based on your success and/or preference, just how much of your time you want to spend in the private practice setting. Some practitioners cut back on the number of hours worked in a salaried position as their private practice grows. Others will find that working part-time in two positions provides them with the best possible combination of financial stability, benefits, varied work activities, and collegial interactions to meet their needs.

Another important decision to make concerns your practice setting.

You may choose to open your own “solo” private practice, you may form a group practice with one or more colleagues, or you may join an already existing group practice. When starting out as a solo practitioner you may lease office space on your own or sublet an office in a suite with other mental health professionals. For those who decide to build their practice part-time subletting space in larger suite of offices may be the best course of action. Offices may typically be rented quite economically, often by the hour, the half-day, or by the day. As your practice grows you may be able to contract for additional time in the office. Another benefit of this arrangement is the proximity of colleagues. Being in a solo private practice on one’s own may be an isolating

Table 14.2 Considerations for a solo practice or group practice

Solo practice	Group practice
Pro: Practitioner independence. Set your own hours, salary, benefits; decide how to run your practice	Pro: When you have a psychiatrist on staff you will have easy access and ongoing communication about your patients who need treatment with psychotropic medications in addition to their psychotherapy
Con: You must find mentorship and supervision on your own as you need it. This might come at a cost	Pro: Interprofessional collaboration and within-group referrals
Con: No administrative support, you will have to allow time for paperwork and correspondence	Pro: Access to clerical and administrative support
Con: Higher costs of operation unless operating from your home, which has drawbacks of its own	Pro: Lower overhead/sharing of costs
Pro: Absolute authority over all decisions	Con: Sharing of decisions and of profits
Con: Unlimited personal liability	Con: Each member of the group must accept some liability for the actions of all group members

Note: A sole proprietorship is not taxed as a business entity. (Depending on your total income, this can be either an advantage or a disadvantage)

experience. Further, not having to pay for office space full time when only using it part time is much more economical. However, when working in a suite of offices with other mental health professionals it is important to ensure that your solo or independent practice is clearly represented to others so that you will not incur any liability from the actions of others in the office suite.

If you choose to participate in a group practice, an additional point to consider is the composition of the group. It may be comprised entirely of psychologists or it may be a “multidisciplinary group.” Further, as Walfish and Barnett (2008) recommend, “When joining a group practice, choose your associates wisely. These individuals can enhance or detract from your reputation and increase or decrease your liability” (p. 56) and your income! Thus, all potential practice arrangements should be fully investigated and careful consideration should be given before making such a decision. Table 14.2 provides an overview of the benefits and drawbacks of solo and group practice arrangements.

Again, it is helpful to speak with private practitioners in a variety of practice settings to hear about their various experiences. This will help you decide on the best plan of action for you. Keep in mind, however, that many practitioners look for positions, get interviewed, accept an offer, and *then* see how it works. There is only so much we can know in advance; some of it must be learned through experience. But, if you consider all these issues and get

a clear sense that one practice arrangement best suits your needs, personality, and comfort level, then that is what you should try.

Questions to Ask When Considering Joining a Group Practice

- Who owns the group and who makes business decisions?
- How are referrals shared and what assistance will be provided to help me get started?
- What administrative support do I receive from the group?
- What percent of the income I generate goes to the practice and what percent to me?
- Does this percentage change over time and if so, by how much and what factors impact this?
- What if I decide to leave the practice; can I take my patients with me?
- What benefits am I provided; malpractice insurance, continuing education, etc.?
- Am I allowed to decide which patients I will treat?
- What supervision and on-call coverage opportunities and obligations are there?
- What are the criteria for evaluation and how does one become an owner or partner?

As you begin to attempt to set yourself apart from the many psychotherapists, counselors, and other mental health clinicians competing with you

for a limited number of potential patients it is important to be able to be more than just another generic mental health professional. It is important that you have a set of skills that meet particular patient needs and that set you apart from others. This is not to suggest that providing psychotherapy and assessment services with excellence is not a worthy endeavor, but these skills should be viewed as the foundation for your private practice. Beyond that, consider developing an area of expertise that can be marketed to targeted audiences (and that also are typically fee-for-service endeavors where you will earn more and not have to hassle with managed care).

Psychologists in Independent Practice, Division 42 of the American Psychological Association, has an excellent series of niche practice guides that provide an excellent introduction to developing a specialty. Each guide provides a detailed description of the specialty area, information on how to enter it, what training is needed, and where to obtain it and training resources available, ethics issues to consider, marketing considerations, and a list of resources to access for additional information. Thirty six niche practice guides are presently available for such diverse areas of practice as health psychology, infertility, psycho-oncology, eating disorders treatment, marital therapy, working with stepfamilies, smoking cessation, ADHD assessment and treatment, geriatrics, sport psychology, treatment of personality disorders, neuropsychology, women's issues, psychologist-dentist collaboration, child custody evaluations, men's issues, and many others. These very useful guides may be ordered through the Division 42 website at www.division42.org. Developing specialty areas is an important step for setting yourself apart from other practitioners in your community. Select areas that interest you, obtain the needed training, and then begin marketing the services you have to offer. In addition to providing clinical services, you should consider how you might apply the knowledge and skills you already possess to other areas that would augment your clinical practice. Suggestions include business consultation and team building, personal and executive coaching, divorce mediation, school consultations, and forensic evaluations. An additional excellent resource for those

starting out in practice is the work by Le and Walfish (2007) who identify and describe 158 strategies in nine different practice areas for providing professional services outside of managed care (available from the author at psychpubs@aol.com). While one should only enter specialty and niche areas of practice with supervision from, or consultation with, an experienced colleague, for many of these ways of augmenting one's practice you may be surprised how little additional training and experience you will need to be competent in these additional areas of practice.

The Business of Practice

Even the most competent clinician can end up sitting alone in the office waiting for the phone to ring. After assessing your local area's needs, developing a specialty area or practice niche, deciding on group or solo practice/multidisciplinary or all psychologists, purchasing business cards and possibly even taking out a yellow pages ad, you must now tackle the business of practice; and it is a business. Ask yourself the following questions regarding the business of running a private practice.

First, will I work as an Independent Contractor or an Employee? An employee is hired by, and works for, an employer, is directed by the employer which patients to treat, when, and how, and the employer takes out withholding for taxes and pays a portion of the individual's social security tax. IRS Tax Topic Bulletin 762, Independent Contractor (Self-Employed) or Employee, states: an independent contractor is defined an individual who is not an employee, but who works with another individual under a contractual agreement. Independent contractors treat whichever patients they like, and when and how they might like. They purchase their own supplies and set their own hours. They pay quarterly estimated taxes and no taxes are withheld by the other person. For additional information see the Internal Revenue Service's website at <http://www.irs.gov/businesses/small/article/0,,id=99921,00.html>.

If you should choose to work as an employee, ask yourself how you will establish your fee structure for services rendered *and* within the practice. Employees typically receive a specific salary and

benefits, based on a certain number of billable hours provided by you in the practice. The employer also pays a portion of the employee's social security taxes. Additional administrative tasks may also be assigned as part of your work duties as specified in your employment contract.

For independent contractors the typical arrangement is to pay the practice owner a certain fee or certain percentage of fees collected for each patient seen. Typically, employees pay the practice owner 40% of all fees collected and keep 60% for themselves. If you are offered a lower percentage of fees collected, such as 50%, be sure your contract stipulates criteria for it increasing over time. A typical arrangement would be to start with paying 50% to the practice and then having this percentage decrease as you begin generating your own referrals. Should you begin providing referrals to others in the group due to your success the percentage paid to the practice should decrease even further. All of this should be clearly laid out in the contractual agreement signed upon joining the group. Being aware of these long-term issues when starting out is very important to your success in private practice.

It is essential that you have all contracts reviewed by your own attorney prior to signing them. Without legal training, we are not able to know the implications of every clause that may appear in a contract. Your attorney is your advocate and considers each contract based on your best interests, at present and over the long term. Paying for the services of an attorney to use in this manner can save you many thousands of dollars over the years based on helping you to not agree to a contract that contains provisions that will limit your earnings in years to come. Failure to consult with your own attorney prior to signing a practice agreement or contract can result in you agreeing to provisions that promote the best interests of the practice owners at your own expense.

Additionally, as you negotiate the contract, you will need to consider what you are receiving for the percentage of collections you pay to the practice. The practice owner is providing the office space, furnishings, office staff and supplies, and perhaps most importantly, referrals of patients for you to evaluate and treat. Typically, practice owners who are very busy and have more incoming

referrals than they can personally treat will take on independent contractors. For the new psychologist just entering private practice this can be an excellent way of starting out. There is a ready stream of referrals, a furnished office with trained staff and infrastructure already in place, and the possibility of supervision, if needed. Other contractual arrangements are possible, such as leasing space in another practitioner's or group's office as has been mentioned, so consider the options available to you to find the arrangement that is in your best interest based on your particular circumstances.

Finally, be sure to educate yourself on certain business principles such as noncompetition clauses, a major area of concern for independent contractors, *before* you sign a practice agreement or contract. The noncompetition clause will be laid out and agreed upon between you and the practice owner when signing your initial contract. This clause specifies that if you leave the practice you may not practice psychology for a specified period of time within a certain distance of the practice you are leaving. This will protect the practice owner from direct competition from you should you decide to leave after they assist you to become established and develop your professional reputation with referral sources in the local area. Unless you have a specialty area not otherwise available in the local area, such contractual clauses are generally deemed enforceable. The practice owner is providing you with referrals and assisting you to develop your reputation in the local area. Without such a clause in the contract you could fill your schedule, build your reputation, and then leave and open your own practice across the street or across town. Yet, often these clauses can be negotiated and they do not necessarily need to be included in practice agreements and contracts. This is another important aspect of contractual negotiations where your attorney can prove invaluable.

Rules of Business Success

Consult the Experts

The first thing you need to know, even if you open a solo practice, is that you can never enter or

run a private practice on your own. You will need the services of experts in two key areas of expertise; legal issues and accounting. As has been highlighted, unless you have graduated from law school we strongly suggest that you *never* enter a business arrangement or sign any contract before first consulting with your attorney. Too many practitioners have learned the hard way just how costly a mistake being your own attorney or accountant can be. While their fees may seem expensive, these professionals will save you a great deal of money, anguish, and legal difficulties in the long run. Speak to experienced practitioners in your local area to find out who they use, if they are happy with the fees charged and services provided, and use this input to guide you. You may also obtain referrals for attorneys through your local or state psychological association as well as through the local bar association. But be sure to check their references and reputation. Do not rely on fancy advertisements for guiding you in such an important decision. Just to clarify the point made above, never sign any contract without first having it reviewed by your attorney who will ensure it is in your best interest and suggest any needed modifications *before* you sign it.

Market Your Practice at Every Opportunity

Even if you are an independent contractor in a group practice, but especially if you decide to open your own practice, marketing yourself to the local community and to a variety of possible referral sources is of great importance. Potential referral sources may include physicians in your community, schools, attorneys, other mental health professionals, and a variety of others. Possible strategies to secure referrals include

- Send an announcement of your practice opening.
- Follow up with a brief letter describing your training, background, and expertise. Be sure to tailor the letters to the perceived needs of each referral source and the specific population they serve. (See [Appendix A](#) for an example).

- Telephone potential referral sources and request a brief meeting to meet and describe the services you offer (and how you can help them and their patients).
- Offer free presentations to the patients of your referral sources. For example, you could offer a seminar on behavior management strategies to the parents of a pediatrician's patients, a presentation on stress management skills to an internal medicine physician's or cardiologist's patients, or a seminar on strategies for working with certain types of learning disabilities for teachers at a school you hope will refer patients to you.
- If you give presentations or seminars, be sure to bring business cards, brochures, and fliers describing you, your practice, and the services you offer. You can utilize marketing professionals and create your own brochure or you can purchase brochures from the APA's Division 42 and then attach your business card to them.
- Available brochures include "Psychotherapy with children and adolescents" and "Choosing a psychologist."
 - Keep likely referral sources updated on additional training you receive and new types of patients you can treat.
- Some private practitioners write a monthly or bi-monthly newsletter that they send to members of the community. Others write columns in local newspapers or do radio talk shows on mental health topics, and some give presentations to local groups such as C.H.A.D.D., the PTA, support groups, or at sites such as at the YMCA, senior centers, and schools. These indirect forms of marketing may also be very effective in establishing your reputation as a local expert and can increase your referrals over time. When giving these presentations do not worry about lost billable time; you are making an investment that may pay significant dividends over time through the referrals these presentations may generate.
- Utilize available professional referral services. Some, such as Psychology Today which at present costs \$29.95 per month and which provides an online listing accessible over the

Internet, can be very cost efficient. If this generates just two referrals per year you will likely be making money on your investment. Other online referral networks exist and each should be investigated to see which best meets your needs.

- Use technology to market yourself as well. Create a website for your practice and link in to a variety of mental health sites. Be sure to keep it up-to-date and include useful information for visitors similar to a brochure or newsletter. Visit these practitioners' websites for ideas to use in creating your own website:
www.teammasters.com
www.kolt.com
www.mindspring.com/~doclld/
www.drelainerodino.com
- You should also market yourself to your colleagues. Utilize your contacts in the State Psychological Association and let them know of your practice and the services you offer. Explore the successful practices in your local area and offer to take the practitioner(s) out to lunch to introduce yourself and meet with them. Many practitioners with busy practices are frequently looking for colleagues to whom they may refer patients they cannot fit into their schedule. They also need competent practitioners to whom they can refer patients whose needs fall outside their areas of expertise. They can only refer these patients to you if they know of you and the services you provide.
- Writing articles in your State Psychological Association's newsletter, giving presentations at conferences and continuing education events, and participating actively on the organization's listserv, each may make you known to your colleagues in a way that highlights your professionalism and areas of professional competence.

Keep in mind that only half the work is done when you have received a referral. By nurturing the contact, you will be sure to keep the referrals flowing in. For instance, when a referral is received, always send a letter of acknowledgment of the referral (with appropriate consent of the patient). In the case of specific services, be sure to keep the referral source in the loop at pertinent

stages. For instance when doing an evaluation, forward a copy of your report to the referral source, and for treatment, provide periodic written updates on the patient's treatment progress. Always be sure to first obtain the patient's written consent before doing so.

Also bear in mind that your job is to solve or reduce the referral source's problems. Initially, they may send you their most difficult and demanding patients. A successful, happy patient and a successful treatment outcome are your most powerful marketing strategies (see [Appendix B](#) for a sample letter).

In summary, you must provide high quality services, give referral sources timely and useful feedback, and market your services both directly to referral sources and indirectly to the community. Actively follow-up all these marketing efforts on a regular basis.

Being a Business Person and Entrepreneur

If you are in practice, you are in business. While your goal undoubtedly is to help others in a compassionate and caring manner, if you are not adequately compensated for the professional services you provide you will not be able to stay in practice. Thus, you will need to run an effective business. You will need to create a business plan, understand what your startup expenses will be and how much financial support you will need to run your practice while working to build it, and know how many patients you will need to have to break even and to then begin making a profit.

You will also need to address issues such as renting office space, furnishing it (buy or rent?), signing up for utilities and telephone service, deciding which administrative tasks you will do yourself and which ones you will either contract out or if you need to hire administrative support staff (e.g., billing, collecting, bookkeeping, typing, etc.), purchasing and maintaining needed insurance (professional liability insurance, premises insurance, etc.), and the like. With guidance from your attorney and accountant you will need to decide what tax status is most advantageous to

you. You may decide to become a professional corporation, limited liability corporation, sole proprietor, or some other legal status. Each brings with it certain potential tax and liability benefits and liabilities.

As a business person, it is essential that you provide patients and referral sources with excellent service. In fact, you should be thinking of customer service, just as any business owner would with his or her customers. Your clients are customers who are purchasing a service from you. Customer service can include business practices such as:

- Returning telephone calls in a timely manner. Thus, you will need to schedule time to check for messages and to return calls throughout the day.
- Have an office that is welcoming and comfortable for patients. Many practices have water, coffee, and tea available free of charge in the waiting room. Comfortable furnishings and a professional atmosphere are important.
- Ensure that office staff are warm, welcoming, and professional with patients.
- Be flexible with scheduling; offering appointment times that are convenient to patients, especially when starting out, is very important. This may include working some early morning, evening, and weekend hours.
- Complete work in a timely manner. For those conducting evaluations, be sure to schedule feedback sessions quickly and have the evaluation report ready for the patient at that time.
- Be available to patients between sessions should they experience a crisis or have questions for you. If you use e-mail, check it often and respond quickly.
- Return telephone calls from referral sources in a timely manner and periodically provide them with written feedback on the work you are doing with the patient they refer.

One goal is for your patients to feel that they were treated well and that the clinical services provided met all their expectations. But, Berman (2005) takes this one step further, speaking of customer delight, the notion of exceeding your patients' and referral sources' expectations and achieving high standards of excellence in all

aspects of their experience with you. The goal here is to provide them with an experience that leaves them so satisfied that they share about their experience with others, thus being valuable referral sources for you.

Setting Up Your Practice

If you work as an employee or an independent contractor in someone else's practice this will be taken care of for you. But, if you open and run your own private practice you must consider and address these important issues.

First consider the physical office. The actual office must be set up so that patient privacy is protected. The use of sound proofing, white noise machines, and even insulated ceilings, walls, and doors all help to keep confidential communications private. Secretarial staff should have an area apart from the patient waiting room where telephone calls can be made. A locked room with lockable file cabinets for treatment record storage is mandatory. Faxes should be received in an area to which unauthorized individuals do not have access.

Next, consider insurance coverage. At a minimum you will need malpractice insurance. It is typically recommended that your coverage be for \$1,000,000 per claim and \$3,000,000 per year. If you obtain hospital privileges or work on any managed care panels this is typically the amount of coverage they require you obtain and keep in force. You may also wish to obtain disability insurance to provide you with coverage should you be unable to work for a period of time and you should consult your attorney about additional types of insurance for your office and staff. You may purchase two types of malpractice coverage; occurrence and claims made. Occurrence insurance provides coverage for claims made against you any time during your career, even if you discontinue your coverage. Claims made insurance only provides coverage while the policy remains in effect. While occurrence insurance is more costly, many choose it due to the coverage provided. The largest malpractice carrier for psychologists is the American

Psychological Association Insurance Trust (www.apait.org). Others include the American Professional Agency (www.americanprofessional.com) and Psychotherapist Professional Liability Insurance Program (www.applip.com).

Next, unless you plan to do all jobs (answering the phone, greeting patients, collecting fees, billing, doing insurance paperwork, filing, and the like) you will likely hire a staff. Consult with your attorney and accountant and learn about applicable laws concerning interviewing and hiring practices, employment law, taxes, and related issues. Then be sure all persons hired understand both their job duties and all applicable ethical standards. Train your staff about confidentiality and related issues. Have written office policies that you instruct them in and have them agree to in writing. Be sure to supervise them adequately to be sure they do not exceed the agreed upon limits of their roles.

Another important area is fee setting. While you certainly should be paid what you are worth, it is advisable to conduct an informal survey of private practitioners in your local area to see what fees they charge. You may either ask them directly or telephone their offices as a potential patient requesting information about their practice. Not only will you learn their fees, but you will also learn about their office policies from the information they share. You may also consult with the newsletter *Psychotherapy Finances*. This is a useful newsletter that posts the results of their annual salary survey of mental health professionals. It may be accessed online at www.psyfin.com.

You will then need to establish procedures for, and forms or documents for, informed consent, release of information, payment policies, billing and the use of insurance, the use of collections agencies, intake forms and questionnaires, follow-up letters to referral sources, follow-up letters for patients who drop out of treatment and for those who successfully complete treatment. You may also choose to do some patient satisfaction surveys, treatment outcome measures, and other measures. Rather than try to develop all these policies and forms yourself, you should request copies of those forms used by colleagues when you meet with them as well as from your mentor.

You may also find several resources very helpful in this endeavor.

First, the annual edited book *Innovations in Clinical Practice: A Source Book*, edited by VandeCreek and Jackson and published by Professional Resource Press of Sarasota, FL (www.prpress.com), regularly includes a wide variety of useful office forms. Typical forms include those for informed consent; a practice information form to distribute to patients that includes explanations of such issues as appointments and fees, billing, cancellation policy, emergencies and after hours contact, the process of therapy, confidentiality, and related issues; a patient intake form; an informed consent to submit insurance form; and an employee agreement to maintain confidentiality form.

You may also obtain a model informed consent to treatment form on the website of the American Psychological Association's Insurance Trust at www.apait.org. Additionally, on this website are a sample child therapy contract and a sample forensic informed consent document. You may download each of these and modify them for your use.

An additional valuable resource is the *Documentation Survival Handbook* by Soreff and McDuffee, published by Hogrefe & Huber Publishers. This volume provides many useful forms such as for the evaluation of the violent patient, for the evaluation of suicide or suicide risk assessment, for an initial patient evaluation, for psychological testing, treatment summaries and discharge summaries, psychotherapy session progress notes, and for the documentation of telephone conversations and consultations. Additionally, several companies market software for tasks such as documentation and patient billing. Many psychologists find the use of such software a great benefit in terms of efficiency and consistency. Examples include TheraScribe (www.therascribe.wiley.com) and QuicDoc (info@quicdoc.com). Finally, practice management software such as Office therapy™ (www.mbcsystems.com) provide software that assists in automated client management, scheduling, billing, insurance filing, and related services.

Finally, supervision is especially important as you begin your career. In addition to individual

Table 14.3 Checklist for beginning your private practice

Analyze the local community's needs
Select a location
Develop areas of expertise
Develop a comprehensive business plan
Hire an attorney and accountant
Rent or lease office space; ensure soundproofing and handicap accessibility
Obtain needed insurance
Furnish the office, hire needed staff, begin phone service, utilities, etc.
Establish office policies and train staff on ethics standards such as confidentiality
Set fees using prevailing community standards as a guide
Develop a multifaceted marketing plan and implement it
Become involved in your community and professional associations
Obtain needed supervision and additional training
Periodically reassess your strategies and practices. Modify as needed
Continue providing high quality services and never stop marketing your practice

supervision you may form or join a peer supervision and support group to connect you with other new private practitioners as well as more experienced colleagues. This may be of great help clinically, to generate referrals, and to help you better cope with the many demands of opening and running a private practice. You should also consult with the information provided in Chap. 4 of this volume for much more detailed suggestions for addressing this important area of our professional development.

In conclusion, the private practice of psychology is an exciting and rewarding endeavor. With adequate advanced thought, preparation, and the use of the resources and strategies described in this chapter you should have a good head start. While a single chapter cannot be an exhaustive reference on all aspects of preparing for and being successful in private practice the information presented above and the checklist in Table 14.3 below should be of assistance.

Appendix A: Sample Targeted Follow-Up Letter

Jenny Jones, MD

Jones Cardiology Group

Jonesville, MD 21108

Dear Dr. Jones

I am writing to follow-up the practice opening announcement you recently received. I am a licensed psychologist in your community who specializes in treating stress-related disorders. The enclosed brochures describe my practice and more information is available on my website at www.stressrelief.com

I understand that many of your patients suffer from stress-related disorders and many of them may benefit from several of the services I provide. I recently presented a stress management workshop at the Healthy Hearts Program at Community Hospital. I would be pleased to offer such a workshop to your patients free of charge. I will telephone you shortly to discuss this possibility.

My practice provides a full range of mental health assessment and treatment services. I focus on health and wellness, working to provide patients with the strategies and skills to overcome their difficulties. I know many cardiology patients need assistance with stress management, combating anxiety and depression, as well as with making difficult but crucial lifestyle changes. I use a full range of empirically supported techniques and will work collaboratively with you to ensure that your patients receive the best possible care.

I look forward to meeting with you to discuss further how I may be of assistance to you and your patients. I will contact your office in the next week to schedule a time to speak.

Sincerely,

Jeffrey E. Barnett, Psy.D., ABPP

Licensed Psychologist

Board Certified in Clinical Psychology and in Clinical Child and Adolescent Psychology

Appendix B: Sample Letter to Follow-Up a Referral

Jane Smith, MD.

Smith Primary Care
Smithville, MD 99999

Dear Dr. Smith

Thank you for your recent referral of Ms. Jen Jones for evaluation and treatment. I met with Ms. Jones initially today and we had the opportunity to discuss her reported difficulties with depression. I began my assessment of these difficulties and will continue this over the next two to three sessions. Once my initial assessment is completed I will be back in touch with you to provide you with my findings, recommendations, and our agreed upon treatment plan. I anticipate having this to you within the next two to three weeks.

(Insert patient's relevant history and mental status examination here)

While no crisis or emergency exists at present, Ms. Jones' depression is a serious concern. She understands that if her symptoms worsen she should contact me immediately. Despite the serious nature of Ms. Jones' depression I am hopeful of being of assistance to her. I utilize a comprehensive treatment approach that will focus on reducing Ms. Jones' distress and provide her with the skills and techniques to help her move forward quickly. I will work closely

with you to ensure that Ms. Jones receives the best possible care and will keep you informed of her progress and all significant changes in her functioning as they occur.

I have enclosed several of my business cards for your use along with several pamphlets that may be of use to your patients. I am also separately sending you copies of a stress management tip sheet that I hope will be of value to your patients.

Once again, thank you for this very timely and appropriate referral. I very much appreciate the opportunity to be of service to Ms. Jones. Please feel free to contact me at any time if you have any questions or concerns about her treatment.

Sincerely,

Jeffrey E. Barnett, Psy.D., ABPP

Licensed Psychologist

Board Certified in Clinical Psychology and in
Clinical Child and Adolescent Psychology

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Mitchell J. Prinstein

The Internship Application Process: A Rite of Passage

For many, anxiety regarding the internship application process begins shortly after the excitement of graduate school acceptance subsides. The predoctoral internship is a curriculum requirement in all accredited doctoral programs in psychology, typically occurring during the final or penultimate year of doctoral training. It is not uncommon for students just beginning their graduate education already to feel inundated with information regarding internship opportunities, strategies for improving one's potential for securing a desired placement, and even tales of distress regarding the application procedure itself. Indeed, although an arduous, time-consuming, and occasionally stressful process, the internship application procedure offers many an opportunity to contemplate and organize their career goals, establish a professional identity beyond the walls of their doctoral program, and develop important networking relationships that will last years after internship training has ended. This chapter will review some important facts, strategies, and suggestions to minimize anxiety and

maximize success throughout the application process (see also Williams-Nickelson, Prinstein, & Keilin, 2012)¹.

Debunking Myths and Reducing Anxiety

Unfortunately, a great deal of misinformation is readily available regarding predoctoral internship placement; several of these fallacies serve to heighten anxiety among those involved in the application procedure. Some calming facts using data from the past 4 years (see www.appic.org):

- Approximately 4,000 doctoral students apply for predoctoral internships each year.
- Between 70–80% of these applicants are successfully matched.
- Of these, approximately 46–50% match at their first choice site; 78–83% match at one of their top three placements.
- The number of available slots has increased in the past several years.
- Of students who are unplaced on Match Day I, about half participate in Match Day II, and of these, 30% are able to secure a slot within the same application year.

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¹All royalties from this book are used to help support the American Psychological Association of Graduate Students (APAGS).

The Application Process: How and When to Begin

Recording Information

As part of the internship application process, students are asked to report their clinical experience, including the number of hours of direct contact with clients (either in intervention or assessment activities) and supervision hours. A tally of hours spent preparing, reviewing, and organizing case material also needs to be tabulated for the online application. A common, but important suggestion is for students to begin recording this information as they complete each practicum assignment throughout graduate training. While this may take only an hour or so at the end of each semester, the task of tabulating this information while preparing application materials years later is taxing to one's time, memory, and patience. Soon, APPIC (the Association of Psychology Postdoctoral and Internship Centers) will offer an opportunity to begin tabulating these hours within the online application for internship beginning in the first year of predoctoral training.

Setting Goals

Arguably the most important part of the internship application process occurs before you review the materials for a single internship site, complete any applications, or schedule interviews. The suggestion to "set goals" is easily disregarded as the kind of trite motivational rhetoric that is used to sell mail-order products on late night television. However, a carefully considered set of goals will help guide your selections, and ultimately will inform the decisions of the admissions committee more than may initially seem evident. In addition to the opportunity to review your career trajectory, goals serve practical purposes in selecting internship sites to which you will apply, writing your application essays, responding to questions during interviews, and ultimately constructing your rank ordered match list.

What kind of internship experience would you like? What rotations, clinical populations, treat-

ment modalities, or orientations are of most interest to you? What types of careers are you considering for your future? Although most doctoral students spend a considerable proportion of their time dedicated to graduate study in psychology, it is not at all uncommon for students to reach the last phase of their formal training without clear answers to these questions. Excellent graduate training offers structured exposure to numerous clinical and research experiences, and as many possibilities for future career paths. This is educational in its comprehensive nature, but also can be disorienting and overwhelming to students planning a career, particularly when focused on more immediate concerns, such as the completion of a dissertation, etc. Internship, and this application process, offers an opportunity to create an individualized career path that builds upon graduate experiences, and forges forward in a direction that is specifically suited to you.

Setting goals is a collaborative activity. Meet with your mentors. Ask them to review your clinical strengths and weaknesses. Also, inquire about the strengths and weakness of clinical training at your graduate training program, and elicit specific suggestions on the types of internship experiences that would best complement your practical training. For instance, if you are from a doctoral program that offers mostly outpatient treatment experience, you may want exposure to more severe presentations of psychopathology, such as that on an inpatient or day treatment unit. Or, if your training has predominantly focused on one theoretical orientation, you may wish to gain exposure to alternate approaches.

Review career options with your mentors. Applicants interested in pursuing careers at a research institution may want to seek internship experiences that will cultivate their development as a clinical scientist. Applicants who wish to develop a clinical specialty may seek training with a specific population, diagnosis, or treatment approach during internship. While meeting with your mentors, be sure to ask for a list of sites to which applicants from your program have successfully applied—and apply to these if they fit your goals. A summary of questions you may consider when forming your goals is listed in Table 15.1.

Table 15.1 Decisions and goals*Training needs*

What do you need to address gaps in your training experiences?

Do you want/need more clinical experience with

A specific population (i.e., age group or presenting problem)

A treatment modality/approach/orientation (e.g., more group treatment, experience with exposure/response prevention, more didactics on empirically supported treatments)

Clients from a specific treatment setting (e.g., a counseling center, inpatient unit, VA)

What experiences would help you build skills you would like to develop?

Do you want to develop your assessment skills? (test administration, interpretation, report writing)

Do you want to develop your ability to work within a multidisciplinary team?

Do you want to develop your ability to supervise others?

Do you want to learn how to conduct clinical trials?

Do you want to specialize, or get generalist experience?

Career needs

What experiences will make you most marketable for the careers you are interested in?

Clinical research experiences (e.g., data analysis, grant writing, publishing)

Opportunities for postdoc placement

Ability to build a client base, community connections

Opportunities to develop a practice niche in the marketplace

Personal needs

What do you need to balance your personal and professional lives?

A specific geographic area you need to live in

A placement that with nearby job opportunities for your partner

Working less than 80 h a week

A flexible schedule

Sample goals

I'd like to gain exposure to clients with severe psychopathology, preferably on an inpatient unit

I would like to continue to develop my expertise in empirically supported treatments

I would like to work with autistic children

I would like to live in Idaho

The Application Process: Soliciting Materials and Choosing Sites

Obtaining information on possible sites to consider is relatively easy using the searchable directory on the APPIC website. Web links will quickly take you to the sites of those programs that match initial search criteria.

Once you have reviewed these materials, use your goals to help select the sites that appear to match your interests. Try ranking each site on a 1–10 scale for each of your goals, leaving an extra category for your overall impressions of the training environment. Keep in mind that most application materials typically offer only a brief description of each rotation and a briefer glimpse of the requirements, environment, and setting at each site. However, this information can be used to rule out sites that simply do not match your

needs. Beware of the temptation to apply to a site that meets most your needs, yet imposes a stringent requirement (e.g., a half-year assessment rotation) that is of no interest to you. The money spent on an interview to this site will ultimately reveal what you already know (i.e., you will have to spend a half-year doing something you are not interested in), and this may prove frustrating by the end of the process. However, also keep in mind that few sites will offer a perfect match to your goals, and some flexibility and open-mindedness is warranted.

How many programs should you apply to? The APPIC website reveals that the mean number of applications submitted by each applicant over the past 10 years has ranged between 12 and 15. Interestingly, results from past application rounds statistically demonstrate that applicants' chances of successfully matching do not increase

Table 15.2 A suggested schedule for the internship application process*Before your application year: March to June*

Compute all practical hours, including anticipated hours. Include the number of supervised client contact hours you have had, types of tests administered, diversity of case load, etc.

Begin evaluating programs. Use the APPIC Directory to find sites that match your interests. Review each site's Web-based materials or request their materials via e-mail or regular mail. Discuss sites with your training director and past/current interns, as they may be able to offer comments about how the site fits your needs

Create a budget. Filling out applications and traveling to interviews can take many dozens of hours and thousands of dollars.

The application year: July to September

Decide on the sites you want to apply. Think about your internship, professional, and personal goals to ensure a good "fit" with a site. Once you decide, rate sites from highest to lowest interest. Review your site preferences with your mentor or a trusted faculty member for their input

Review the information for important dates and information about the application and selection process (e.g., when applications are due, whether or not they require an on-site interview, etc.). Take note of the appropriate way to contact staff to discuss the program

Register for the MATCH (www.appic.org)

Prepare your curriculum vitae. Have a faculty member or another student critique and edit your vitae

Identify 3–4 people whom you would like to ask for letters of recommendation. Most sites require three; however, it is good to have one extra as a backup. Provide references with a copy of your vitae, your goals for internship, and other important information that will help them draft a strong letter

Draft application essays

Complete the APPI and write individualized cover letters

October to January

Submit applications

Wait patiently

Begin to schedule interviews

Practice a sample case presentation and practice for possible interview questions

Review materials from each site and decide whether to complete a literature search on some of the people you might interview with. In other words, know each site well

Compose questions for internship sites

Send thank you notes or follow-up letters

February

Submit rank order for MATCH before the deadline

by applying to more than 15 sites. Thus, for almost every applicant, it should be entirely possible to limit your selections to no more than 15; completing this many applications is an enormous task, and visiting this many sites if extended invitations to all is virtually impossible in the limited time available to schedule interviews. Remember, be sure to include some sites to which others in your program have successfully applied. Also include sites that range in competitiveness, but do not choose a site you would not seriously select simply as a "safety." It is far better to wait a year than to accept an undesired placement. For the current application timeline, a final list of your sites should be compiled by September in your application year (see Table 15.2).

The Application Process: Preparing the Application

Once you have selected your sites, identify the earliest deadline and use this date to complete all of your applications. This is a time-intensive process; it is best to start early and anticipate that it will take as many hours as would a graduate course.

Letters of Recommendation

Although very little work on your part, a good place to start with the preparation of your application is to solicit letters of recommendation from referees. You should ask your major professor/

mentor for a letter, and anyone else who can offer a positive evaluation of your clinical skills. Although letters are generally from psychologists, a single letter from another mental health professional is fine, if necessary. Letters from an extremely well-known psychologist are a good idea only if they can offer informed comments about your ability; otherwise this is not a good idea at all. Letters from a referee who is or was somehow affiliated with the internship site (e.g., a former intern) are also a good idea if an informed critique of your ability is included.

Virtually all letters of recommendation are glowing. Most all state that the applicant is extremely skilled, motivated, and perhaps “one of the best.” Letter writers are consistently enthusiastic and recommend applicants very, very strongly. Given this restricted range, only two letters tend to stand out: (1) those that offer lukewarm praise and (2) those that truly stand apart with exceptional, unique, and heart-stopping praise. Be sure you do not get the former, but do what is reasonably possible to get the latter.

Curriculum Vitae

Your CV should document your training experiences and accomplishments in an efficient, clear, and organized manner. In addition to the information provided on the CV, it is a measure of your professionalism, organizational and communication abilities. It is not a measure of your computer skills (no special fonts, no abundance of formatting tricks necessary), nor is your CV evaluated by its weight or bulk. Be simple, clear, professional, and concise. Remember, the admissions committee will read dozens and dozens of CVs in a sitting—you want to be noticed for your experience, not because you submitted a garish or incomprehensible CV.

The AAPI

As noted above, the APPI is a lengthy document with questions regarding your training experiences. It was created by asking several hundred

APPIC internship sites to submit questions for inclusion, and not all questions will be relevant to the sites you are applying to, nor will all questions be relevant to your own experience. The APPIC website (www.appic.org) offers detailed instructions on completing the application. Invariably, applicants encounter vagaries and ambiguities that make the APPI somewhat challenging to complete. Given the hundreds of training sites and graduate programs, it is inevitable that some attempts to accurately match your experiences to the application question prompts will be like fitting square pegs into round holes. Simply do you best to convey your experiences as accurately as possible given for each question on the APPI. An honest error in calculation, or point of confusion, will not lead to an ethics charge against you or your extradition from the field. Do your best and ask your Director of Clinical Training (DCT) how to resolve difficult reporting decisions, since it is the DCT who needs to verify your report of clinical hours.

Remember that the some parts of the application will be for applicants who have very different graduate experiences and are applying to very different internship programs than you. You are not expected to have experience in each area of competence included on the APPI.

In fact, you are not necessarily expected to be competent—but rather, trainable. The internship year is a training experience, and the best applicants are those who present as confident, with skill, potential, and some humility. More (hours, assessments, etc.) are not necessarily better. Completing 5 WAIS-IVs means that you generally know how to administer and interpret the measure. Completing 50 WAIS-IVs does not necessarily make you a better applicant. A total of 500 direct clinical hours indicate that you have had a sufficient number of opportunities for clinical training. A total of 2,200 direct clinical hours suggests that you may come from an atypical graduate program and/or may have had insufficient supervision, coursework, or research experience. Keep in mind that your pedigree (i.e., your training program, advisors) may convey a fair amount of information about your potential to succeed as an intern. Admissions committees may merely

glance at your application to ensure that you are generally similar to the many other excellent candidates they have reviewed from your graduate program over the years.

The Essays

Other than insuring that your application is completed professionally and accurately, there are few things you can do to enhance your attractiveness as an applicant by the time you are completing your applications. Your referees will likely already have formed their impressions of you and the experiences documented on your CV and APPI already will have been accrued before you start this process.

At this point in the process, the essay section may be your one opportunity to substantially contribute to the strength of your application. Rather than simply documenting your experience, the essays provide you with an opportunity to convey your goals for internship and for your career. Most importantly, the essays allow you to express your belief that the internship site offers a unique match to these goals. This belief should be expressed clearly, convincingly, and repeatedly throughout the essay section.

The APPI includes four 500-word essays, but this could be reinterpreted as an opportunity to tell the site about your interests and goals in 2,000 words or less. In other words, although each essay asks for a statement on a specific topic, use each question as a springboard for stating your interests, and the match with specific opportunities offered at that internship site. Each essay is briefly discussed below.

The autobiographical statement (Essay #1) is often the most perplexing assignment, tempting some to reminisce personal childhood memories, and others to restate the educational and training experiences already listed on their CV. Neither is an optimal approach. More appropriately, the autobiographical statement often begins with a brief discussion of the factors, interests, or experiences that led to the pursuit of graduate training in psychology, and/or a preview of ultimate career goals, with specific, educated guesses on the

responsibilities, setting, or focus of one's ideal job as a psychologist. Efforts to use a humorous anecdote or creative opening to the autobiographical statement are certainly permissible if this is the best way to convey the applicant's character, but unlike a college admission essay, this assignment should probably be geared towards a more professionally written statement—especially for internship sites that have adopted a science-based perspective.

Although a restating of your CV is not a good idea for the remaining paragraphs in your autobiographical statement, it is wise to help the reader “walk through” the most relevant points in your training background and fill in the picture beyond what could be understood from reading the names of your previous practicum placements. A helpful way to do this is to organize your statement around central themes or interests. For instance, if you have accrued assessment experience during several points in your training, and this is something you wish to highlight to the readers of your application (i.e., perhaps because you wish to continue to develop these skills as a specialty area, or because it matches with an internship rotation of particular interest), then you might review your assessment experiences in a brief paragraph. Most importantly, it is not recommended that you merely list the numerous experiences you have had conducting assessments, but rather you should aim to offer an educated observation or critical evaluation of your skills and experiences (e.g., You might note that these experiences helped you to develop an interest in inter-rater correspondence in the assessment of childhood externalizing problems. Or, you might describe how these experiences led you to become interested in working on a multidisciplinary assessment team during internship, or later in your career). Thus, you can briefly recount the experiences that were most important to you in graduate training, but the emphasis is on how these experiences led you to develop specific notions about your role as a psychologist, or goals for your training. Recall the goals you developed at the beginning of this application process (i.e., including how you initially selected these goals), and you will have the information you need for this essay.

At the end of this essay, as with all others, it is essential that you explicitly state how your goals and interests match the training objectives and experiences of the site. Note that if you have selected your sites according to your goals, this paragraph may be identical from application to application, and this is fine. It is very important to be aware that although you will have spent many hours reviewing application materials and discovering that your interests match the site, the admissions committee will be reviewing your application in only a few minutes in the context of dozens or hundreds of other applications. Help the committee see the match as clearly as you do—be very specific.

The second essay asks for your thoughts regarding case conceptualization. This should not be regarded as a quiz, but rather a second opportunity to state your ideas and experiences, and how this has led to training goals that are ultimately matched by the internship site's training opportunities. Of course, it will be important to demonstrate that you have achieved a basic level of competence in case conceptualization, and that you are using a theoretically, and perhaps evidence-based approach to the selection of treatment techniques. You might find a brief case presentation helpful to illustrate your points, or perhaps a description of your systematic, stepwise approach to thinking about cases. You likely will have a variety of strengths and weaknesses (e.g., little exposure to specific theoretical orientations, little exposure to more complex presentations of psychopathology) in your case conceptualization skills at this point in your training. It is acceptable to state these in your essay, and again use this as an opportunity to state how your particular educational experiences have led to your goals for internship training. Again, the last paragraph should tie these goals to specific training opportunities offered at the internship site.

The third essay on the APPI allows you to discuss your experiences and thoughts regarding diversity, as it pertains to clinical and research training. Although the question is worded in such a way as to imply that you should discuss your prior experiences working with clients from diverse backgrounds, not all trainees will have had enough of these opportunities to describe in

approximately 500 words. However, your training experience is not all that is being evaluated here; and in fact, your CV and APPI already has made clear what experiences you have or have not yet had in this domain. Use this essay to discuss your thoughts and ideas regarding the importance of diversity issues in psychology, and how you would/could/should be considering diversity issues in your research and clinical work. Remember that diversity can be defined in many ways, and recall that as a psychotherapist, you have been viewed as demographically different from many of your clients. Your own background experiences have been different from virtually every client you have seen, and thus, you have already had several opportunities to consider diversity issues, if only in subtle ways. Again, a brief case example may be appropriate in this essay, but personal disclosures that are not directly relevant to your training as a psychologist may not be.

For those who may wish to pursue a research-oriented career and/or accrue additional experiences during the internship year as an investigator, the fourth essay (i.e., statement of research interests) offers a particularly important opportunity to describe a program of research and future goals. This is an excellent opportunity to practice writing the statement that will ultimately be expanded and used when applying for research-oriented postdocs and faculty appointments. In addition to a description of the responsibilities you have had on specific research projects, and perhaps a brief reminder of your independent contributions to presentations or manuscripts, be sure to discuss your *program* of research in its preliminary stages. Not all of your experiences will necessarily fit into a cogent package, but your attempts to identify common themes in at least some of your work (particularly culminating in the dissertation for now), would be to your benefit.

Not all applicants are interested in pursuing a research career; indeed, some may anticipate that their dissertation will represent their final work as an investigator. This essay should be taken seriously nonetheless, and can be used to describe past interests and the applications of these experiences to clinical practice. Your ability to speak intelligently about your understanding of the research

process and your own prior experiences as an investigator offers some measure of your general knowledge of psychology, your critical thinking skills, your enthusiasm and passion for psychology, and your dedication to science in the field. Be sure to state the status of your dissertation and its expected completion date. Your statements regarding research and/or their applicability to clinical practice should again be used to illustrate your goals for training and your perceptions of a match.

In Essay 4, be sure that you discuss your research experiences in a manner that highlights (1) the scholarly contributions you made to the work; (2) the way you think about your hypotheses and findings; and (3) the clinical implications of your work. Be sure your letter does not sound like an application for a post-bacc research assistant position. In other words, a discussion of your specific research tasks (e.g., data collection, data entry) is not as appropriate as a discussion that conveys your ability to contribute intellectually.

The Cover Letter

The cover letter usually begins with a brief statement regarding the submission of your application materials and a list of your contact information. Most importantly, however, the cover letter explicitly allows you to discuss the match between your training goals and the experiences offered at the specific internship site to which you are applying. This should be a preview of the points that you will make throughout essays #1–4. Let the cover letter “prime” the reader for the major themes of your application.

A helpful way to organize this letter is by simply stating the three or four goals you developed at the beginning of the application process, followed by a paragraph to discuss each in more detail. Each of these paragraphs should state the names of specific rotations, faculty, or didactic seminars at the internship site that best match your goals. Be very explicit (e.g., “I am interested in XX. The rotation on XX at your site would be an ideal match for this goal”). Most importantly, the tone of this statement should reflect a high level of enthusiasm for the training site, as well as your

strongly stated belief that this training is absolutely essential for you to achieve those well-conceived, requisite goals you need to advance your career. Admissions committees are very interested in having someone who will benefit most from what their site has to offer, and those applicants who will be very excited to have the opportunity to complete their internship training at their site.

Lastly, the cover letter is an appropriate place to mention personal factors that may influence your decision. For instance, it is completely acceptable to offer a brief statement regarding your strong desire to move to a specific geographical region, making the admissions committee aware that you are seriously interested in relocating. Your decision to apply to a specific site should be primarily guided by professional goals. Personal reasons for selecting a particular site should be clearly conveyed as a secondary concern.

The Interview Process

After you have submitted your application materials and endured the agonizing latency period while interview decisions are made, you will most likely begin to receive a series of letters, phone calls, and e-mails inviting you to interview at specific training programs. Some of these interviews will be scheduled (by you or the site) as phone interviews. Although this does not allow you to visit the site in person, phone interviews are much easier to schedule and will not decrease your chances of selection at all. Most interviews are conducted in person, however, and the amount of time required to organize the many transportation, hotel, and car rental reservations should not be underestimated. It is quite common to spend the second half of December and the entire month of January scheduling and traveling to interviews; do not expect to get much work done (e.g., on your dissertation) during this time period. When scheduling your interviews, try to keep at least one day of rest between each interview day regardless of how much stamina you may believe you have before the process begins. Also, once you have started to hear from a few programs, feel free to contact others to check the status of your application and possible dates for interviews. Many of the administrative

assistants or training directors handling these calls have been involved in the process before and will be understanding; however, your respect and consideration for their time will also be appreciated. Similarly, it is common for applicants to find that they need to reschedule interview dates to help coordinate travel itineraries; this is allowed by many sites, although again keep in mind the complexity required for the site's coordination of visits.

Although initially anxiety producing, you will quickly master the interview experience. You may be the only person to visit a particular site on your interview day, or you may have an opportunity to visit along with every other applicant who has been invited for an interview (typically 5–10 interviewees for each available slot). If the latter, you will probably meet several of these applicants at another site later in the process, and you should most certainly take advantage of this mobile support group to compare notes on the process and to develop networking relationships and friendships.

Many sites will offer a tour of the facility or an opening information session to begin the interview day, followed by a series of individual interviews with faculty and interns (who may formally sit on, or informally advise the admissions committee) to ask and answer questions. Yet, there is great variability between sites on some of these dimensions. Group interviews (involving several faculty or several other applicants) are possible. Some interviewers will ask many challenging questions; others will ask none, but allow you to solicit information about the training site. Some interviews will consist of colloquial, friendly chit-chat; others will be exclusively focused on topics related to psychology training. Pay special attention to the response you have to each training environment and each interviewer—this is a fair measure of what your experience may be like as an intern located at that site, or under that faculty member's supervision for an entire year.

By the time you have been invited for an interview, the admissions committee has typically determined that you are most likely qualified for an internship position, and the selection criteria has changed. You are being evaluated on at least three qualities, and this should guide your pre-

sentation and self-evaluation for each interview. These are Social Skills, Enthusiasm, and Match.

Social Skills

Surprisingly, some doctoral candidates in psychology who have successfully navigated the curriculum requirements for a degree and skillfully obtained an invitation to interview for internship are fairly bereft of social skills. If you suspect that you may be one of these people, you should schedule a frank discussion with your mentor or peers and solicit constructive feedback on how to best present yourself in a professional, appropriate manner.

Others may strongly believe that they possess appropriate social skills, but are, in fact, grossly mistaken. A quick review of consistent successes or failures in past interpersonal relationships may help to reveal whether you belong in this category.

Still others with acceptable social skills may find that when confronted with an anxiety-producing stimulus, they quickly devolve into an unfortunately inept buffoon. A variety of anxiety management strategies are available for those who fit within this category. The value of practice in mock interviews (with mentors, friends, family members, pets) cannot be overstated.

Luckily, the many applicants will find that they do not belong in any of these categories above, but rather feel reasonably confident that, like in clinical situations, they should be able to manage the interview experience relatively effectively. Most important, given the restricted range of this variable, it will be important to convey the manner in which you stand apart from other applicants (due to your enthusiasm or match, see below). However, note that attempts to select interview clothing that will help you to be noticed, such as a “power tie” (for men), or a bright red dress (a particularly bad idea for men), are usually misguided.

Enthusiasm

Imagine that you are an internship supervisor on the admissions committee. Would you like an

apathetic or enthusiastic co-worker/trainee to arrive to work every day? Would you like supervision meetings to be dull, perfunctory, and mundane, or enlightening, rewarding, and stimulating? An enthusiastic intern is energetic, grateful, and motivated, eliciting the same in his/her supervisors. With all other qualities being equal, the enthusiastic intern applicant always is the desired choice.

Expression of enthusiasm during your interview can be accomplished in subtle ways (Note: the use of pom-poms to spell out the name of the internship site during the interview is generally unnecessary). When asked to discuss a case or describe your past experiences, a smile and brief, prefatory remark (e.g., “OK, here’s an experience that was particularly rewarding.” “That opportunity is something that is especially exciting for me” “That is just the kind of activity that I am really looking forward to.”) are very effective. It is, of course, important that this is sincere, and if you are sitting in the office of a faculty member who will supervise you on the rotation that perfectly matches those training goals that you have developed to guide you towards the ideal career of your choice, then it should be fairly easy to muster the appropriate level of enthusiasm. If you believe that you are a relatively “low-key” person who does not frequently express giddy happiness, however, you may want to practice a little in mock interviews before visiting sites.

Match

Rather than an evaluation period, the interview process could be accurately described as a sorting process between applicants and sites. Because most applicants will be placed, the interview period offers a time for all to determine “fit” more than anything else. Like you did within your essays, your goal for the interview is to reveal the match—explicitly, clearly, repeatedly. Note that many interviewers will have reviewed your application materials long ago, or not at all; thus, it is crucial that you state the names of rotations, faculty, and other experiences that you think makes the site match your needs.

You will be asked for your internship goals numerous times during the interview process.

Your work during the initial phase of this process once again will pay off. State your goals followed by your assessment of how the site will meet them.

Virtually every question asked on an interview can be used to launch a discussion about the match (while showing enthusiasm). If asked about your theoretical orientation, reply, and then immediately ask about the related opportunities available at the site—if you are excited by the response, say so—clearly (see Williams-Nickelson et al., 2012 for a list of common interview questions). If asked to discuss career goals, reply, and ask about the types of careers typically pursued by interns from this site. Again, if you like what you hear—say so. If you do not like what you hear, but you are intrigued and feel you can be open-minded, then indicate this. By the end of the interview, it should be readily apparent to you and the interviewer that you are (or are not) well suited for a position at this site. Remember, the goal of this process is not merely to get a slot, but to get a true match.

Thank You Notes

Be a courteous, respectful visitor to each site. A brief note following your visit is a nice way to express gratitude, and a great final opportunity to once again state how the site matched your goals. If you are especially interested in the site, be sure to state this in the note. However, remember that thank you notes are not at all necessary, nor is the form of the note (i.e., e-mail, handwritten, on personal stationary, singing telegram) at all important.

Making Your Decisions

Be sure to keep careful notes of your impressions as you finish each interview day. Your initial (and most accurate) impressions are very susceptible to interference during this process, and you will want to make sure that you select a site that you will be comfortable with upon placement. When you finish all of your interviews, use these notes to review each site and the initial goals you had constructed for internship training. Based on your

experiences in interviewing at each site, it is common to discover some new priorities, and you may wish to add or delete a goal from your list. A rating of each site on each of these goals can give you some concrete information on how each program fits your needs. However, an un-quantifiable “gut” feeling may ultimately prevail in making your decisions.

Remember to solicit the feedback of your mentors when making your final decisions. Also take into consideration any additional information you have encountered subsequent to the interview day. It is quite common for training sites to call you or your mentor with an opportunity to ask additional questions, or with a subtle statement indicating their level of interest in your application. Although this should not ultimately affect your rank order list, this could prove informative nonetheless.

Conclusion

The internship application process is the first step towards establishing an independent identity in the field. Although admittedly difficult to

appreciate while experiencing the process, most who have survived report that the applications and interviews allowed for critical self-evaluation of professional goals, and establishment of professional connections that last throughout an entire career. You will emerge from this process not only with an internship placement at the site of your choice but also a more clear direction regarding your professional future than before.

References

Williams-Nickelson, C., Prinstein, M. J., & Keilin, W. G. (2012). *Internships in psychology: The APAGS workbook for writing successful applications and finding the right fit* (3rd ed.). Washington, DC: APA.

Additional Resources

Instructions for joining the APPIC INTERN-NETWORK listserv for questions and discussion can be found at www.appic.org

Corey J. Habben

In a profession that is rich with complexity and virtually boundless in applications, the simplest of facts remains: if you want to practice as a psychologist, you must be licensed to do so. This is true in every state, province, and territory of the USA and Canada. In several states, you may not legally use the title of “psychologist” without a license to practice psychology. Perhaps the most damaging reality is that a license is required by nearly every third-party payer for reimbursement of services. Without the ability to independently receive reimbursement for services, there is very little you can do without a license to practice and earn a sustainable income. Although the primary rationale for the license to practice is protection of the public, it can sometimes feel like yet another hurdle to a new psychologist.

Many graduates of doctoral-level psychology programs go on to have full and rewarding careers without ever obtaining a license. University professors and research scientists have no practical need for it (although some will obtain a license to supervise clinical students, conduct treatment outcome studies, or to satisfy accreditation requirements). Nevertheless, if your plan is to rely on practicing psychology, then the psychology license represents the first essential requirement for independent practice.

You do not become a practicing psychologist when you receive your doctorate; you become one when you obtain your license.

You may have various reasons for wanting a license. You may be training to start a career as a full-time practicing psychologist. Or, you may plan to work in an academic setting with the hopes of doing some clinical work on a part-time basis. Perhaps you want to train and supervise students to become psychologists themselves. Regardless of your reason for seeking licensure, there are many things that you need to know in order to make the licensure process occur smoothly and expeditiously. This process has changed in noticeable ways in the past decade since this chapter was first written for the first edition of this book. Prospective applicants at the dawn of the new millennium were still sitting for paper and pencil licensure exams, which were only offered on two fixed dates per year. The iPod had yet to be invented and study preparatory kits still offered tape cassettes as part of their materials. Students and postdocs and early career psychologists sought support and answers to their questions on email listservs rather than social networking sites. Nearly every jurisdiction (state and/or province) would not allow a postdoc to take the Examination for Professional Practice in Psychology (EPPP) during their post-doc year and several other licensure laws and statutes had yet to be changed.

In spite of these changes in the past 10 years, the basics for getting licensed have not. This chapter is intended to provide you with the main

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Table 16.1 Essential tips for getting licensed

Applying/preparing (during your predoctoral internship year)

- Review ASPPB’s website and information on licensing at www.asppb.net
- Contact your licensing board and request an application packet
- Know the requirements of your jurisdiction and make sure your training meets eligibility
- Contact supervisors and provide them with necessary documentation
- Organize and prepare any hard-copy typed application, documentation, and transcripts
- Submit your application when you are eligible (usually after postdoctoral year is complete), respecting any deadlines
- Prepare yourself for numerous fees
- When eligible, apply to sit for the EPPP exam at a time that allows for adequate study and preparation time

Studying (during your postdoctoral year)

- Purchase an EPPP study program kit; if it is too expensive, share the expense with another applicant or borrow a recently used (i.e., within last 2 years) kit
- Take your first practice exam no earlier than 12 months, and no later than 6 months, *within* your anticipated EPPP exam date to identify your baseline “pre-study” score
- Begin studying lightly 6 months prior to your exam
- Continue self-administering timed practice exams once or twice per month, reviewing your errors, analyzing weaker content areas, and charting scores and dates
- Focus your study time on the content areas with which you are having the most difficulty
- Increase study time accordingly based on performance on practice exams
- Become familiar and comfortable with the unique style of EPPP questions and multiple-choice answers
- Do not cram

information you need to plan and execute the process of obtaining your license. As you will discover, there is some variability among states, provinces, and territories which may play a role in your future as you plan your career. Table 16.1 lists a number of suggestions for beginning the licensure application process.

Before You Even Get Started: Looking Ahead

Psychology licensure laws are quite different from driver’s license laws, in more ways than one. Every state, province, and territory in the USA and Canada has its own unique licensure law. Although the laws are all generally similar, there is enough variability to make some license requirements uniquely different from others (e.g., exam cutoff scores, supervised training hour requirements, etc.). To complicate things further, the license for each state, province, or territory applies *only* for that state, province, or territory. If you have a license to practice in California, you cannot practice in New York unless you have a New York license; your license only applies in

California. If you were to move to New York and you wanted to continue practicing, you would then need to also get licensed in New York.

Because of these differences, it is important to know the state(s) in which you plan to be licensed as you begin preparing for the licensure application process. Unfortunately, this requires an assumption that you know in which state(s) you will be living or working within a year or two; an assumption that may not always be realistic. What if you live in the Washington, DC area and you will be considering jobs in Virginia, Maryland, and the District of Columbia? What if you are considering several different states yet have no idea what jobs will be available? What if your spouse or partner will need to relocate to an as yet undetermined area in the future? What if you decide to relocate to another state many years into your career?

There can be a number of reasons why you may not be certain where you will be practicing, yet you will likely only be able to apply for one state license. Because of this, it is a good idea to become familiar with the requirements for the states you are considering; particularly, your top three preferences. Knowing what these states

require will be very important as you complete your internship and postdoctoral training. You want to ensure that your training, whether predoctoral or postdoctoral, is meeting the minimum eligibility requirements for all of the states you are seriously considering. Most predoctoral internships and postdoctoral fellowships will design their training so that your training hours exceed the eligibility requirements for most states.

General Eligibility Requirements for Licensure: What You Will Need

Although there is some variability, requirements for licensure involve three main areas: education, training/supervised experience, and examinations. As noted, each state, province, and territory has its own specific licensure requirements and the wording can often vary. Eligibility requirements will be described in more general terms.

Education

All licensure laws for independent practice require a doctoral degree in psychology, usually from a regionally accredited institution. Criteria are usually provided for required coursework. Because each jurisdiction is different, you will want to ensure that your transcript includes the required courses specified. Many states require that the program be accredited by the American Psychological Association (APA), Canadian Psychological Association (CPA), or designated by the Association of State and Provincial Psychology Licensing Boards (ASPPB)/National Register Joint Designation Committee. If you do happen to graduate from a non-APA-accredited program, you will need to provide documentation that your program provided all of the required coursework specified.

Training/Supervised Experience

Each jurisdiction has its own requirement for number of clinical hours necessary for licensure.

These requirements have changed in the past decade in several states and provinces. It is generally the standard that at least 2 years of approved full-time supervised experience are required. Of these 2 years, 1 year is usually predoctoral (internship) and the other year is postdoctoral (postdoc). However, several jurisdictions have made it easier to become licensed upon graduation, rather than making it legally impossible to be licensed during the first postdoc year. At the time of the first edition of this book, only one state (Alabama) did not require a postdoc year for licensure; at the time of this writing, 11 US states, four Canadian provinces, and one US territory does not require that the supervised clinical hours be obtained postdoctorally.

Since the cumulative hours of supervised clinical experience tends to range from 3,000 to 4,000 per year, the trend toward modifying the requirement that one of these years be post-doctoral has helped prevent the dilemma most postdocs face of being unable to obtain a license during the first year of their career and, subsequently, receive third-party payment for services, be eligible for most clinical jobs, or even legally refer to oneself as a psychologist. Criteria for supervision time, clinical internship, and residency are usually specified. Because of this, it is particularly important to check your prospective state to see what their current requirements are.

Examinations

A passing score on the EPPP is required by all states, provinces, and territories. The EPPP will be discussed in more detail later in the chapter. Only applicants for licensure are eligible to take the EPPP; it is not an exam you can take during graduate school or internship. The EPPP is most commonly taken upon completion of the postdoctoral year, though some jurisdictions allow postdocs to take the EPPP prior to completion of their postdoc year. Some states also require oral and/or written exams, most often the jurisprudence exam.

Assuming these requirements, it is a good idea to begin contacting any state, provincial, or territorial licensing board for licensure

application information before you begin your postdoctoral year. In addition to the application, this should include a copy of the licensure law as well as the rules and regulations of the board. It will be important to determine when you will be eligible to take the EPPP exam, as well as any other required examinations, and to complete any required paperwork prior to the appropriate deadlines. You may find that materials need to be submitted by a deadline that falls during the middle of your postdoctoral year. A list of state, provincial, and territorial psychology licensing board phone numbers and addresses is available at the website for the ASPPB at www.asppb.org.

Considerations of Differences Among State, Provincial, and Territorial Requirements

As mentioned, each state, provincial, and territorial license law is different. As a result of this, there are roughly 63 slightly different sets of requirements. Although they are similar in many ways, you will want to be aware of the way in which they are specifically different. As you review the licensure requirements for the state, province, or territory you are considering, there are a number of questions you will need to address:

- Does my degree meet the required criteria?
- Do I have the minimum number of required hours for both predoctoral internship and postdoctoral training? Do both training experiences meet the criteria?
- Do I have enough documented supervision time? Is that requirement specified?
- Am I eligible to take the EPPP exam during my postdoc year?
- Will I be able to obtain my license during my first postdoc year?
- What is the cutoff score for the EPPP? When will I be eligible to take the EPPP?
- Am I required to take any other examinations?
- What are the deadlines for submitting my application and documentation?
- What are the various fees I will be expected to pay?

These questions should all be answered in the materials you receive from the licensing board. ASPPB offers a full guide of the requirements for each state, territory, and province on their website. This information used to be available as “The Handbook of Licensing and Certification Requirements for Psychologists in North America,” available as a hard copy book for \$26. The information is now available for free at the ASPPB website at www.asppb.org when you search for “specific licensure requirements.”

As you review the requirements for your state, province, or territory, it is recommended that you consider the requirements for the other 62 licensing boards. It is ideal to exceed the requirements for all 63 licensing boards should you ever wish to obtain licensure in another state later in your career. For example, a 1,500-h predoctoral internship is sufficient for licensure in Colorado, yet it falls short for dozens of other states. If you were considering practice in the Washington, DC area, you would want to know that the requirements for face-to-face supervision for postdoctoral training differs from Maryland, Virginia, and the District of Columbia. It would also be important to know that the most common EPPP cutoff score is a scaled score of 500 (or 70%), although a few boards have a different cutoff score for each test administration. A review of the requirements for all 63 licensing boards on the three main areas (education, supervised experience, and examinations) will help inform you.

The Examination for Professional Practice in Psychology

The EPPP was developed by the Association of State and Provincial Psychology Boards (ASPPB) to serve as a standardized examination to evaluate applicants for licensure. Its stated intent is to evaluate the broad-based knowledge expected to be gained, following the appropriate doctoral education and supervised training in psychology. All 63 licensing boards require the EPPP for licensure in psychology.

For years, the EPPP was a paper-and-pencil exam that was offered two times a year on a mass

scale (this author took one of the last written EPPP exams in 1999). Since 2002, the EPPP has become administered entirely as a computer exam and available at any time. The original paper-and-pencil EPPP was made up of 200 multiple-choice items; the computerized administration is made up of 225 items. For several years, the additional 25 items were used as experimental items to be determined whether or not to use in future administrations and the EPPP score was based on 200 scored items. This ratio shifted slightly starting August 2011, where 175 items are scored and 50 items are unscored “pretest” items. This does represent the first time that the EPPP score is based on 175 items and not 200, which may slightly shift the margin for error. On a 200-item EPPP, an applicant could miss 60 items and still pass in most jurisdictions; on a 175-item EPPP, the margin of error goes down to 52. However, the computerized administration of the EPPP has a time limit of 4 h and 15 min, which allows for 15 additional minutes over the original 4-h limit of the shorter pencil-and-paper exam, and it is available year-round.

The content of the EPPP consists of items representing eight weighted content areas. The newest current content areas (revised and effective August 2011) are based on a 24-month analysis completed in 2010 examining what licensed psychologists do and what knowledge is required of them. Detailed explanations for each of the content areas are available from ASPPB, and are summarized below with their content percentage:

- *Ethical/legal/professional issues* (15%)—Knowledge of (a) the ethical code, (b) professional standards for practice, (c) legal mandates and restrictions, (d) guidelines for ethical decision-making, and (e) professional training and supervision.
- *Assessment and diagnosis* (14%)—Knowledge of (a) psychometrics; (b) assessment models and instruments; (c) methods for initial assessment of and change by individuals, couples, families, groups, and organizations/systems; and (d) diagnostic classification systems and their limitations.
- *Treatment, intervention, prevention, and supervision* (14%)—Knowledge of (a) individual, couple, family, group, organizational, or community interventions for specific concerns/disorders in diverse populations; (b) intervention and prevention theories; (c) best practices and practice guidelines; (d) consultation and supervision models; and (e) evidence of efficacy and effectiveness of interventions.
- *Cognitive–affective bases of behavior* (13%)—Knowledge of (a) cognition; (b) theories and empirical bases of learning, memory, motivation, affect, emotion, and, executive function; and (c) factors that influence cognitive performance and/or emotional experience and their interaction.
- *Biological bases of behavior* (12%)—Knowledge of (a) biological and neural bases of behavior, (b) psychopharmacology, and (c) methodologies supporting this body of knowledge.
- *Social and cultural bases of behavior* (12%)—Knowledge of (a) interpersonal, intrapersonal, intergroup, and intragroup processes and dynamics; (b) theories of personality; and (c) issues in diversity.
- *Growth and lifespan development* (12%)—Knowledge of (a) development across the full life span, (b) atypical patterns of development, and (c) the protective and risk factors that influence developmental trajectories of individuals.
- *Research methods* (8%)—Knowledge of (a) research design, methodology, and program evaluation; (b) instrument selection and validation; (c) statistical models, assumptions, and procedures; and (d) dissemination methods.

The computerized EPPP can be taken 6 days a week throughout the year. Should you need to retake the examination, up to four exams are allowed per year; you would only need to wait at least 60 days from your previous administration. The EPPP is administered at an authorized Prometric Testing Centers, of which there is available testing centers in every state, and you need not take the exam in the jurisdiction for which you are applying. After applying for licensure in your jurisdiction, you can then apply to take the EPPP online via PsyIMS at ASPPB’s website at www.asppb.net. Prometric Testing Centers in your vicinity can be located at www.prometric.com.

Another significant difference resulting from the shift to computerized testing is the use of scaled scores. The pencil-and-paper EPPP utilized a raw score and was reported as a percentage. For example, an applicant receiving 150 correct answers out of 200 would receive a raw score of 150, or 75%. With the computerized exams, the raw scores are converted to National Scaled Scores ranging from 200 to 800. This is done in an attempt to allow comparisons of different exams with varying difficulties. A National Scaled Score of 500 is considered the equivalent of a raw score of 140, or 70%. A National Scaled Score of 450 is considered the equivalent of a raw score of 130, or 65%. Since 2002, all scores are reported as scaled scores.

No computer proficiency is needed to take the computerized EPPP. The program is designed to allow you to skip a question, if necessary, and return to it later on. Upon finishing your exam, results should be received within 2–3 weeks. This is a marked improvement from the pencil-and-paper examination, which resulted in 6–8 week waits for crucial EPPP exam score results.

Studying and Preparing for the EPPP

Regardless of how you performed in graduate school, the EPPP is an examination that requires preparation, review, and practice. Many senior psychologists will candidly remark that, despite their experience and proficient knowledge of psychology, they would have a difficult time passing the EPPP were they to take it today. Yet, the majority of doctoral-level examinees do receive a passing score on the exam. Success on the EPPP will result from many of the same factors relied on in graduate school: a combination of preparation, knowledge, and anxiety management.

If you speak with others who have taken the EPPP, you will hear a variety of strategies to help prepare you for the EPPP. Perhaps the most focused and helpful of strategies are the EPPP study kits/programs often advertised on psychology publications such as the *APA Monitor*. For years, the two most common and popular programs are available from the Association For

Advanced Training In The Behavioral Sciences (www.aatbs.com) and Academic Review (www.academicreview.com). Both programs offer comprehensive multi-volume home study programs with analysis of content areas, full-length practice exams modeled after EPPP exams, multi-volume audio CD programs, computer review programs, live workshops, and other study aids designed to prepare you for the EPPP. Prices are relatively expensive, although different price levels are available and many will argue that the benefits of the program are priceless. Both programs are comparable in effectiveness and reputation.

Perhaps the most integral components of these programs are also the most inexpensive to obtain; that is, the books, CDs, and practice exams. The designers of the program do an impressive job of condensing several years of psychology graduate school into books designed purely for study and review. Some academics may bristle at the notion of creating Cliff Notes versions of graduate school in psychology; however, the comparison fits and fits well. Your old text books were not designed to be reviewed as efficiently as these books were. The audio CDs offer another mode of ingesting large amounts of information, particularly in times in which you would otherwise be doing very little such as commuting or exercising.

The practice exams, probably beyond anything else, are the most integral tool you can use to prepare you for the EPPP. Both AATBS and Academic Review offer over half a dozen full-length practice exams modeled after the EPPP and provided with detailed explanations for each answer. Sample items from former EPPP exams are also available through ASPPB and are quite helpful. There are a few benefits of the practice exams. First, you become more familiar with the often vague or cumbersome manner in which some EPPP items are presented. Second, you can continually monitor which content areas you understand with proficiency, and in which content areas you are underperforming. Continued administration of the practice exams provides you with opportunities to learn from items answered incorrectly. Finally, practice exams

demystify the EPPP and condition you to the timing and fatigue variables and facilitate development of better test-taking strategies. ASPPB also offers practice exams, administered at the same Prometric testing centers as the actual EPPP, under similar conditions as the EPPP. The Practice EPPP (PEPPP) is available for a fee by going to www.asppb.net/student.

If you have completed a doctoral program in psychology, then you likely know what study strategies work best for you. Some people prefer to study individually; others prefer to study in groups. Your colleague may prefer to use flashcards, while you never have. Nevertheless, it is best to avoid comparing your progress to that of others preparing for the EPPP; every person is different and you need to focus on the strategy that works for you. Regardless of what that strategy is, you should set aside several months of progressively intensive study to be adequately prepared for the EPPP. Some have suggested 300–400 h of study time, although that would depend on your study habits. A sample study schedule is provided in Table 16.2.

Perhaps your best measure of your level of readiness will be reflected in your performance on the practice exams. Because of this, it is a good idea to take an initial practice exam *at least* 6 months in advance of your planned EPPP administration date. Both AATBS and Academic Review study programs should provide corresponding content areas for each question, which allows you to calculate percentage scores for each of the eight content areas. For example, you may find you scored 40% of the Treatment/Intervention questions, 51% of the Assessment and Diagnosis questions, and so on. Do not be alarmed if your performance on the first practice exam is poorer than you expected. Keeping track of your performance on the eight content areas serves to inform you of the areas on which you need to focus your studies. It also provides you with a barometer of your progress over time. It is a good idea to take at least one, if not two, practice exams per month. It is *ideal* to be scoring above the 75% range overall by the time you are preparing to take the EPPP. As you review your scores, take note that the practice tests in both

Table 16.2 Studying for the EPPP

Sample study schedule for a 6-month study plan

- Month 1—1–3 h per week; 1 practice exam
- Month 2—2–5 h per week; 1–2 practice exams
- Month 3—4–8 h per week; 2–4 practice exams
- Month 4—7–12 h per week; 2–4 practice exams
- Month 5—10–20 h per week; 2–4 practice exams
- Month 6—10–20 h per week; 2–4 practice exams

Additional suggestions

- Make adjustments based on your own study preferences, knowledge of content material, and performance on practice exams
- Do not compare your study schedule to someone else's and panic; everyone is different
- Plan on finding the EPPP challenging
- Expect to get one out of every four questions incorrect (this would still give you an exceptional score)
- Pace yourself
- Anticipate a few questions that will seem impossible to answer correctly
- Guess if you are uncertain; there is no penalty for guessing incorrectly so do not leave any items unanswered

study kits are often more difficult than the EPPP itself. Although it is unlikely you will ever feel completely comfortable and confident, you should feel relatively prepared by the time you are ready to take the EPPP.

After Licensure: Banking Your Credentials

Assuming you have successfully completed all of the requirements for licensure and have obtained your professional license to practice psychology, you should consider banking your credentials (see Table 16.3). This usually involves the process of submitting and verifying documentation to a centralized credentials “bank” for your education/coursework, practica, internship, doctoral degree, postdoctoral training, EPPP scores, license, and other credentials. This can be very helpful and time-saving in the future as you apply for insurance or managed care panels, jobs, or other credentials. ASPPB offers a Credentials Bank program, which allows you to electronically store your transcripts, exam scores, and documentation of training experience so that it can be sent as needed to future licensing boards. As mentioned,

Table 16.3 To-do list after obtaining a license

Upon licensure

- Bank your credentials with ASPPB or the National Register
- Display your license in your main office as required by most jurisdictions
- Remain current with license fees and continuing education requirements, if required
- Retain copies of your licensure application information, which will be needed for various applications such as insurance panels or the American Board of Professional Psychology

you may find yourself changing jobs and location sometime in the future, whether in the next few years or decades from now. Organizing and submitting documentation can be difficult enough; it can become increasingly difficult years later after supervisors retire, programs modify or close, and addresses change. The Credentials Bank provides a readily accessible archive for necessary licensure documentation. There is an initial fee to set up the record, and then a maintenance fee every 2 years to keep the record available.

In an effort to streamline the mobility of licensure from state to state, ASPPB also developed the Certificate of Professional Qualification in Psychology (CPQ). The CPQ is a credential given to applicants who meet certain eligibility requirements (similar to most licensure requirements), practiced for a minimum of 5 years, and have no record of disciplinary action. ASPPB recommends to licensing boards that the CPQ be accepted as a sign of eligibility for licensure. At the time of this writing, 44 jurisdictions accept the CPQ as evidence of eligibility for licensure and several others are in the process of accepting or recognizing the CPQ.

The National Register of Health Service Providers in Psychology also provides the opportunity for credential banking. There are similar eligibility requirements, although once listed in the National Register there are additional benefits such as verifying credentials for applications to insurance panels and the American Board of Professional Psychology (ABPP). The National Register is available at www.nationalregister.org.

Some states, provinces, and territories will allow an applicant to be “license eligible” if they hold the CPQ, National Register, or ABPP. You would usually only need to take and pass the written or oral local examination, if required, to be licensed in that jurisdiction. Some jurisdictions will also require a certain number of continuing education hours per number of years to maintain licensure.

Throughout the process, obtaining a license can be a difficult, challenging, and even frustrating task. Yet, for the practicing psychologist, it is the most important credential you will ever acquire.

Additional Resources

- www.asppb.org—Association of State and Provincial Psychology Boards
- www.aatbs.com—Association for Advanced Training in the Behavioral Sciences
- www.academicreview.com—Academic Review
- www.nationalregister.org—National Register of Health Service Providers in Psychology
- www.prometric.com—Prometric Testing Centers

Robert D. Hill and Ted Packard

This chapter describes essential information for the graduate student who has questions about board certification in professional psychology and its importance as a long-term objective in the student's professional training and practice preparation. Board certification through the American Board of Professional Psychology (ABPP) is a postdoctoral credential that follows licensure as a psychologist. However, even though awarding of this designation requires graduation and the accumulation of 5 years post-licensure experience, like other important professional training milestones, it makes sense to become as knowledgeable as possible at the earliest stages of one's career so that prerequisites can be obtained during the formative years in one's training so that you can take advantage of opportunities when they arise that will help you to meet licensure/post-licensure ABPP requirements. If you are a graduate student this means becoming aware now of what board certification is, why it is important to the profession, the processes for obtaining board certification, and the benefits that are available to board certified psychologists. Because board certification is not required for practice as a

licensed psychologist, one of the first questions to ask is whether one needs to even expend the effort to become board certified. This chapter will discuss why it is worth the effort and, in fact, why a "best-practices" psychologist really requires board certification. Support for becoming board certified through ABPP will be explained systematically around five questions: (1) What is Board Certification in Professional Psychology? (2) Why is Board Certification important? (3) What are the benefits of board certification? (4) What is the process involved in becoming Board Certified? (5) What can I do now to prepare myself for board certification?

Before responding to these questions and by way of background, this chapter will cover earlier material about the process of board certification that appeared in the first edition of *The Portable Mentor* (Packard & Reyes, 2003). Some of this earlier material remains useful and relevant; however, the scope of board certification has evolved substantially since then including the development of formalized pre-application procedures for doctoral students still in training. For this reason, we will focus mainly on new material that has emerged in recent years and that reinforces the concept of board certification as a twenty-first century advanced practice imperative.

In the previous chapter it was noted, "Since the mid twentieth century an increasing number of psychologists have provided a variety of psychological services to the public and have identified themselves as 'professional psychologists'" (p. 22). This statement is still true today,

The Early Entry Application for graduation students as listed in the Appendix of this chapter can be found by consulting <http://www.abpp.org>.

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although the number of psychologists providing services has increased markedly since then to approximately 93,000 providers nationwide (APA, 2011). New emphases in professional psychology such as Police and Public Safety Psychology have emerged to serve a broader range of clientele and address issues germane to specialty practice. In addition, specialty areas such as clinical neuropsychology have evolved and changed in the specificity of requirements for board certification. The ranks of the ABPP composed of psychologists who are board certified through APBB have also increased to over 5,000 as of 2010.

As writers of this chapter, we are both board certified in professional psychology. Ted Packard was licensed as a psychologist initially in 1967, became an ABPP board certified counseling psychologist in 1984, and has had various involvements in the educational and regulatory side of psychology as described in the author notes. Robert Hill, PhD, ABPP has been licensed as a psychologist since 1988 and was board certified in counseling psychology in 1995. Dr. Hill currently serves as an ex-officio member of the ABPP Board of Trustees and is the editor of the ABPP *Specialist* the official newsletter of the ABPP. In addition, we have both been training directors of APA-accredited doctoral programs in Counseling Psychology and have had occasion to answer many questions posed to us by graduate students seeking to learn more about board certification in professional psychology. Thus, our combined experience and expertise places us in a good position to answer the questions posed at the beginning of this chapter.

As a final introductory point, board certification and ABPP are integral to the continuing evolution of professional psychology, and an understanding of the historical development of specialty practice within the profession reinforces this contention. We will not, however, cover in detail this historical material but instead refer the reader to Nezu, Finch, and Simon (2009) for a detailed overview of the historical underpinnings of ABPP and specialty practice and specialty practice in general. Suffice it to say that ABPP represents—profession-wide—standards of competence for specialty practice. Board certified specialists are

increasingly recognized as having competency in their areas of specialization beyond that demonstrated by the “generic” licensure process, and ABPP board certification parallels specialty certification in other major professional areas including medicine, dentistry, and law (APA, 2006). It is for these reasons that we strongly urge students who are engaged in graduate study leading to licensure as a psychologist to place board certification through ABPP as a concrete post-licensure training objective.

Our goal in this chapter is to give you sufficient information so that you can begin the process of acting on this possibility and make concrete plans to obtain board certification when the time is right. In this chapter you will learn what you can do now to make the future process of board certification as efficient as possible. Now, let us address our five questions.

What Is Board Certification in Professional Psychology?

Board Certification in Professional Psychology is a credential that provides peer and public recognition of demonstrated competence in a recognized and approved specialty area in professional psychology (ABPP, 2008). This statement from ABPP underscores the idea that board certification represents a value in professional psychology for specialized expertise in the provision of services to meet specific client health and psychological needs. This is accomplished through advanced training and skill acquisition to address specific client needs. The public acknowledgement of specialty skill in the provision of psychological services occurs after licensure as a psychologist. This means that ABPP specialty certification is a post-licensure credential. Board certification brings public recognition of specialized expertise and documents the designated psychologist’s high level of competency and ethical sensitivity in providing the specialized services that are encompassed within the specific domain of board certification. Therefore, board certification is distinct from licensure in that to be board

certified denotes that the provider has competence beyond basic or generic state-approved skills. This competence means that a board certified provider of services knows how to apply advanced psychological knowledge in an ethically appropriate way to address specific client issues and concerns.

Established in 1947, the ABPP is today nationally recognized and widely accepted within the profession for its work in providing legitimate and credible voluntary credentialing examinations to psychologists seeking specialty certification (Nezu et al., 2009). Initially, only clinical, counseling, and industrial–organizational psychology were recognized followed a few years later by school psychology (Bent, Packard, & Goldberg, 1999). Currently, board certification is offered in 14 specialty areas with each specialization developing and implementing its own examination procedures. With the passage of time, however, along with the proliferation of research that has produced a broader array of practice approaches for a wide range of client issues, recognized specialty areas in addition to clinical, counseling, I-O, and school psychology have expanded to also include clinical health psychology, clinical child and adolescent psychology, rehabilitation psychology, psychoanalysis in psychology, forensic psychology, couple and family psychology, clinical neuropsychology, cognitive and behavioral psychology, group psychology, organizational and business consulting psychology, and most recently police and public safety psychology. Table 17.1 summarizes each specialty along with the steps needed for board certification in each specialization. Most of the specialty areas follow a somewhat standardized procedure for board certification that we will explain in detail later; however, in two areas, clinical neuropsychology and forensic psychology, an objective multiple-choice test is also required as part of the process. The reason for this is that these two practice areas involve highly specialized understanding of brain and behavior structures or matters of civil and criminal law that are essential in providing “best-practices” services to clients who have these kinds of service needs.

Across all of the specialties listed above the common requirements to obtain board certification involve (1) an initial application and a credentials review, (2) an oral examination where competency in advanced skills within the specialty domain is demonstrated, and (3) an ethics examination.

Why Is Board Certification Important?

Board Certification is important for three reasons: (1) It is a value espoused by the profession of psychology that represents competency to provide services for client issues and concerns that fall within the specialty domain. (2) It is an important part of the developmental process of becoming a “best-practices” provider of psychological services. (3) It is a systematic mechanism to ensure continuing education and lifelong learning as a professional psychologist and as a provider of state-of-the-art services within one’s given specialty practice domain.

At its core, specialty credentialing is a professional value and an assurance that the certified provider possesses up-to-date knowledge and state-of-the-art skills in behavioral health delivery in the provider’s designated specialty area. By way of analogy, most physicians and even general surgeons would not be qualified either by foundation knowledge or practice competencies to perform open-heart surgery. This is not only well known across the profession of medicine, but is commonly understood by consumers of medical services. Although an initial diagnosis of a heart condition that would warrant such surgery might be made by a primary care physician, the full assessment of a patient’s condition and the resulting medical procedures would be determined and ultimately performed by a specialist who is board certified in the relevant medical domain. In medicine, this is an unquestioned requirement and a shared core value as well as a clear consumer preference. The value for board certification in this regard is represented by a widely accepted premise that there is a specialized form of medical knowledge and skill that can be applied to specific patient problems or

Table 17.1 Steps to certification by type of specialty

Specialty name	Initial application	Generic credentials review	Specialty credentials review	Objective knowledge test	Practice sample	Oral exam
Clinical, Child & Adolescent Psychology	X	X	X		X	X
Clinical Health Psychology	X	X	X		X	X
Clinical Neuropsychology	X	X	X		X	X
Clinical Psychology	X	X	X	X	X	X
Cognitive & Behavioral Psychology	X	X	X		X	X
Counseling Psychology	X	X	X		X	X
Couple & Family Psychology	X	X	X		X	X
Forensic Psychology	X	X	X	X	X	X
Group Psychology	X	X	X		X	X
Organizational & Business Consulting Psychology	X	X	X		X	X
Police & Public Safety Psychology	X	X	X		X	X
Psychoanalysis in Psychology	X	X	X		X	X
Rehabilitation Psychology	X	X	X		X	X
School Psychology	X	X	X		X	X

concerns that is not possessed by every professional who holds an MD degree and an active medical license. Further, in medicine, knowledge and advances and new skills emerge from research findings. Board certification also ensures that the provider of the specialty services is up-to-date and proficient in the latest knowledge and techniques for delivery of the services within the specialty domain. It is without question that board certification is a requirement in medicine and an explicit demand of consumers who want the best medical treatment for their health issues. There are widely published lists by specialty area by hospitals, clinics, and consumer groups of board certified physicians. The date of a physician's certification is frequently published to further designate up-to-date knowledge in an area of specialization.

Consider psychiatry as a second case in point. Although the specialty of psychiatry is based on the value that psychiatrists possess specialized knowledge and skill for treating psychiatric disorders that involves the prescribing of highly specific medication regimens, it is frequently the case that diagnosis and pharmacological treatment occurs through the primary care physician. In this second example of board certification the lines of service provision are more blurred, but the value of board certification remains the same.

It is commonly expected both within the medical profession and for the general consumer of medical services, that a psychiatrist will provide the most competent treatment and ethical management of patients with psychiatric disorders because psychiatrists have received advanced training and possess specific practice skills in up-to-date and state-of-the-art pharmacological and related medical interventions that address psychiatric disorders. Therefore, given ideal conditions and resources, the patient with a psychiatric disorder will be served most optimally by a psychiatrist specialist rather than a primary care generalist physician even though both types of providers are licensed to prescribe pharmacological agents to treat psychiatric conditions.

In medicine, however, the gateway to a specialist is through the primary care physician who can also be board certified as a specialist within the "primary care" domain as well. In this case, advanced specialty training in primary care health intervention delivery involves developing a breadth of understanding and competency concerning health conditions, diseases, and possessing related diagnostic skills to facilitate patients receiving additional specialty assistance through referral. In this case, a generalist is also a specialist in providing primary health care as well as referral when needed for specialized treatment.

Psychology, like medicine, requires an entry-level practice credential (i.e., licensure); however, that credential is “generic” and does not qualify every psychologist to treat all problems or concerns utilizing every available assessment or intervention procedure. Rather, state or provincial licensure indicates that certain minimum practice and training standards have been met to permit a possessor of the license to provide reasonable services addressing client issues or concerns of a psychological nature. Like medicine, however, the profession of psychology values the potency of cutting-edge behavioral health intervention techniques, advancing bodies of knowledge, and specialized skill sets focused on amelioration of specific psychological issues. Thus, the value espoused by the profession of psychology is that specialty service capabilities exist and that these should be employed to serve specialized client needs. Acknowledgement that these services are administered at the level of “best practice” is through the board certification process. To provide psychological services as a competent specialty provider; therefore, requires board certification. To receive a specialty credential also means that the holder of the credential embraces and values the importance of specialty services for meeting the needs of particular classes of clientele. Finally, it is without question that knowledge is changing in the science and practice of psychology. This means that what would be considered a best-practices approach to treatment today may be different in 10 years time. Such advanced in knowledge and treatment approaches will likely require a provider to engage in continuing learning and education to stay up-to-date on the latest knowledge and the most effective service delivery techniques. Board certification ensures that specialty providers remain current in their specialty area through ongoing continuing education by way of organized workshops, training, and proactively delivered information germane to each specialty area. Board certification, therefore, is essential to ensure that you remain up-to-date in knowledge and skill associated with your specialty area of service delivery.

What Are the Benefits of Board Certification?

Cox (2010) provides a cogent summary of the benefits of board certification. We highlight several of these benefits here and then elaborate on them. We also provide a few concrete examples of how these benefits are realized. The first benefit is *enhanced salary or compensation*. If you are working in a community mental health setting, salary upgrades linked to increased responsibilities for supervision or administration may become available through the agency’s recognition of your seniority or specialized skill based on your APBB credential. For example, if you are interested in the area of clinical neuropsychology, Sweet, Nelson, and Moberg (2006) reported data from a recent APA employment survey that neuropsychologists who were board certified reported higher salaries within institutions where they were employed than those who were not board certified through ABPP. For students who are interested in long-term careers in the Department of Veteran’s Affairs or related governmental public health services, recent federal legislation provides for potential salary increases based on a psychologist becoming board certified through ABPP. Similar legislative action has occurred for military psychologists through the Duncan Hunter National Defense Authorization Act of 2009 (U.S. Congress, 2008). This Act entitles psychologists within the US Armed forces who are board certified through ABPP an accession salary bonus. These two examples underscore a trend towards better financial remuneration for psychologist who have acknowledged, through ABPP, advanced specialization. Therefore, your efforts to prepare yourself in the future for board certification could have positive income consequences.

A second benefit is in *reduced costs to practice* through a reduction in malpractice liability insurance. There are two benefits in this instance. Those with ABPP specialization, as a group, are less likely to have a malpractice claim levied against them. The reason for this is that the standard of professional training and the ethical management of practices cases tend to be higher among ABPP board certified practitioners than

non-board certified practitioners. This enhanced standard of practice is also recognized by multiple malpractice insurance firms. For example, the American Professional Agency provide a 20% discount to board certified practitioners, and the American Psychological Association Insurance Trust (APAIT) offers discounted rates to psychologists who are board certified through ABPP.

A third benefit is *practice mobility*. Licensure reciprocity usually refers to being able to practice temporarily in a state other than the license holder's home jurisdiction or to expedited procedures for becoming licensed in additional jurisdictions. Though this sounds simple in practice, requirements vary considerably from state-to-state, and related procedures often are very time consuming, difficult, and frustrating. Relocating a practice in a different state will require completing a new (or reciprocal) application for licensure as a psychologist in the new state. This can be a burdensome task and often requires additional paperwork, assembling background information, and a waiting period for processing forms and approvals. It is frequently the case that the usual paperwork for licensure in a second jurisdiction is reduced for psychologists who are already board certified through ABPP. In fact, there are currently a few states within the USA such as Florida (see State of Florida, 2007) where there is nearly automatic approval for state licensure for an ABPP board certified psychologist. In addition, a new development for practice is "telemedicine" or the delivery of mental health services over the internet or telephone to patients in hard-to-reach areas. Telemedicine involves the provision of services to patients who are unable or prefer not to come to a building or facility for fact-to-face counseling. As has been the case for the Veterans Administration and for a growing number of large managed healthcare organizations that work across state borders, the issue of licensure and reciprocity across multiple states is substantial. Board certification may facilitate work with telemedicine by minimizing the many challenges of verifying credentials across state and provincial boarders.

A fourth benefit of board certification is *credibility in training and supervision*. For graduate students pursuing an academic career within an

APA-accredited training program, an ABPP credential is viewed generally as a marker of professional credibility. It is of great value to students to receive supervision and training from instructors who are acknowledged by ABPP to hold to the highest standards of excellence in practice. For example, the Association of Psychology Postdoctoral and Internship Centers (APPIC) indicates that one necessary criterion for member programs is that the program director "...has expertise in an area of postdoctoral training offered and has credentials of excellence such as the American Board of Professional Psychology diploma..." (Association of Psychology Postdoctoral and Internship Centers, 2006, p. 1). What this means is that the careers of graduates who desire to be directors or future leaders in the education and training settings for professional psychologists will be facilitated by board certification.

A fifth benefit is opportunities for *continuing education*. Becoming board certified involves a commitment to lifelong professional development and continuing education. Initially, preparation for specialty certification includes developing a comprehensive work sample, studying for an advanced ethics examination, and a willingness to be evaluated by your professional peers in a written and oral examination format. Through this process you will create for yourself an opportunity to revisit important ethical principles and test your skills in providing effective specialty services. Upon successful completion of the ABPP, you likely will experience yourself as a competent, confident, and up-to-date professional. As we mentioned earlier, it is a truism that knowledge and competency in all professional fields—medicine, dentistry, law, and psychology—changes and the emergence of new knowledge is accelerating over time. Therefore, it is critical to develop strategies of lifelong learning and to create mechanisms that encourage you to engage wholeheartedly in the professional continuing education process. Board certification can provide that infrastructure. Not only will you earn continuing education credit for preparing yourself for board certification, but in achieving specialty certification you will also enhance available resources you can turn to for continuing quality

continuing education and professional advancement. ABPP offers ongoing workshops nationally, opportunities to interact with other board certified specialist, and it maintains an active website for members and nonmembers as well as a regular member newsletter, all containing helpful information, continuing education materials, and connections to board certified psychologists. ABPP also encourages its board certified members to mentor more junior psychologists through the board certification process, so there is also a way to continue refining your practice and supervision skills through ongoing mentoring of others. While you are a student, engaged actively in learning, such benefits may seem far distant and only a remote need. However, a common complaint, especially among psychologists who have been working for years in private practice, is the sense of isolation that can be associated with solo practice. ABPP can be a professional network of support professionals and a learning community that is integrally tied to the most up-to-date knowledge in the field.

How Do I Become Board Certified?

This is perhaps the most frequent question posed by students. It is often phrased as “What steps are involved in board certification?” There are essentially three steps. First is an application review. The ABPP application can be found on the ABPP webpage (<http://www.abpp.org>) and much of the information contained within this application is part of an early entry application process for graduate students that will be explained in more detail below. When your application is complete it is reviewed by members of the ABPP staff to ensure that the information that you provide qualifies you for board certification. For example, an essential piece of information is documentation you are a licensed psychologist in a recognized jurisdiction and that your license is in good standing. Then there are additional informational items that go beyond licensure and are related to professional experiences that you have accrued during training and since entering practice as a licensed professional. This initial application is

the same for essentially all boards. However, for some boards, such as the American Board of Clinical Neuropsychology and for Forensic Psychology, you must sign up to take a written content examination that is multiple-choice in format. The reason for this is that for this specialty, along with Forensic Psychology, specific extensive content knowledge is essential for the provision of best-practice specialty services.

The second step of the process involves the creation of a work sample that has multiple components of which the central piece is a video-tape or computerized presentation of a case that is prepared for presentation to a selected group of ABPP board certified representatives who are designated as your examination committee. These representatives review the work sample that you develop prior to you making an oral presentation and then provide you with written feedback that help you prepare for the Oral Examination. The third step is a face-to-face examination session (or Oral Examination) to evaluate your readiness for board certification within your chosen specialty practice domain. The work sample that you prepared and that was approved in step 2 provides a portion of the content of this oral examination.

The same examination committee that evaluated your work sample typically conducts the face-to-face oral examination. Most oral examinations last 3–4 h and are designed specifically to be collegial in format and in this case the questions and follow-up discussions are not interrogations, but probing questions to assess your knowledge and skill level. Examination committees follow strict written guidelines in the conduct of the Oral Exam. While there are some differences in pass rates between the various ABPP specialty boards, a large majority of candidates are successful on their first try through the board certification process and they become board certified. Notification of outcome is provided shortly after completion of the Oral Examination. After becoming board certified you are then authorized to present yourself professionally as a specialist in your chosen area of specialty and, for example, affix “ABPP” after the doctorate designation in your correspondence signature block and in other professional documents

that you may publish. Most ABPP's specialty boards also have associated Academies that you may join once you are board certified. For example, the American Board of Clinical Psychology has an affiliated "Academy of Clinical Psychology" in which you automatically become a "Fellow" once you complete the certification process (and pay modest annual dues). We invite you to visit <http://www.abpp.org> for more in-depth information concerning the process of becoming board certified.

What Can I Do Now to Prepare Myself for Board Certification?

ABPP places high value on students in doctoral training programs, predoctoral internships, and recently graduated and/or licensed psychologists engaged in postdoctoral residencies. ABPP actively reaches out to professionals early in their careers and, especially, to students in training in multiple informal ways. Students, for example, may encounter ABPP at its regular information booth at the American Psychological Association's annual convention. At this booth it is possible to interact with board certified psychologists and ABPP staff members and to learn further about the process of board certification. And the ABPP webpage is an excellent resource for advanced information about board certification. As a graduate student it is critical to make contact with ABPP through one of these outlets as a first step in preparing yourself for board certification.

ABPP also has a formal *early entry program* designed to link budding professionals with the ABPP system. Enrolling in the early entry program creates an active contact point between yourself and ABPP for ongoing information and updates through the ABPP Central Office. This includes receiving notification of the ABPP *Specialist*, which is an online publication. Among some professional doctoral programs in the USA and Canada the early entry option is described in their program's training handbook.

The early entry program provides an opportunity to submit relevant materials related to the

credentialing process including relevant supervised experiences and, of course, completion of the doctoral degree when this occurs. Such materials can be submitted to an electronic file that is retained as a permanent document by the ABPP Central Office and that accumulates by your ongoing submission of material for eventual board certification as your education and training moves forward. Although a formal review of these materials does not occur through ABPP until you actually begin the formal post-doctoral application process of board certification, enrolling in the early entry program is a useful precursory step that starts the record keeping process and engages you in the board certification environment. Operationally, to become part of the ABPP early entry program there is a brief form to complete and a modest up-front fee to pay that enrolls you in the program. Once you submit the early entry form and pay the fee ABPP will follow-up once this material and send you a notification that you have an active in the ABPP system. As an early entry applicant, ABPP will ensure that you stay connected with the organization and that you receive ongoing materials for pursuing board certification during the regular course of your career progression.

To initiate this process, a copy of the most up-to-date application can be obtained from the ABPP webpage at: http://www.abpp.org/files/page-specific/3349/Early_Entry_Application.pdf.

Keep in mind that like all forms, this is an evolving document; therefore, to get the latest information on the early entry option including the specific steps for making an application and the most up-to-date application materials it is important that you consult the ABPP webpage that we have listed above.

In summary, we have addressed five questions that are important for graduate students to consider as they plan their doctoral education and especially as they incorporate aspect of this formative educational experience to prepare themselves to be eligible for board certification through ABPP. When the time arrives in their post-licensure career development cycle, it is our view that becoming board certified is an

essential step to maintain “best-practices” professional status. Our experience has been that advanced planning around one’s career direction is essential for an optimal career as well as for enabling oneself to be the most competent provider of psychological services that one can be. Clearly, the science and profession of professional psychology is on an advancing trajectory and it is critical that one is proactive and remains in the loop to maintain one’s skills at a “best-practices” level of proficiency. This includes being up-to-date and skilled in the used of delivery models of psychological interventions to address those who are in need of behavioral health services. It is our view that the board certification process through ABPP is the most effective way to remain a skillful and effective provider of psychological services.

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Erica H. Wise and Ellen E. Fitzsimmons-Craft

Whether you realize it or not, if you are in a professional psychology training program, it is likely that you will be asked to be a clinical supervisor at some point in your career. In fact, based on an extensive survey of the members of the American Psychological Association (APA) division that represents clinical psychologists (Division 12; Society of Clinical Psychology), it was determined that clinical supervision is provided by 55% of University Professors, 71% of Hospital Psychologists, and 36% of Independent Practitioners (Norcross et al., 2005). For many of you, this is an eagerly anticipated activity, and for others, it may be a source of some uncertainty or even anxiety. The purpose of this chapter is to demystify the idea of *becoming a supervisor* by providing broad theoretical models for conceptualizing the practice of supervision and practical suggestions to guide you through the process of learning to be a supervisor. We will also discuss current competency-based supervision practice and provide suggestions for how to incorporate ethical and multicultural considerations into supervision. Throughout the chapter, we will include the perspectives of an experienced clinical supervisor (EHW) and an advanced graduate student (EFC) who is starting her journey towards becoming a competent supervisor in

an effort to provide you with different perspectives on this learning process.

Most graduate students and interns see learning to supervise as a critical and expected step in their professional development. In fact, the expectation that you will attain a reasonable level of competency in supervision prior to completing your training is now integrated in a step-wise fashion into the accreditation standards for doctoral programs and internships. Doctoral programs are expected to provide *exposure* to theories and methods of supervision, but specific experience or expertise is not required (Commission on Accreditation, APA, 2009). In contrast, internships are expected to incorporate training experiences that will ensure that by the end of the internship experience the intern will "...demonstrate an intermediate to advanced level of professional psychological skills, abilities, proficiencies, competencies, and knowledge in... supervision" (Commission on Accreditation, APA, 2009, p. 15). This means that most of you, in addition to *being* supervised in your training programs and internships, will also be starting the process of *learning* to supervise others. What is it that you will be learning to do in supervision training? Let's turn next to defining supervision and providing a broader context for this activity.

Defining Supervision

Despite the fact that most of us know what *supervision* is and what it means to be a *supervisor*, the terms can be surprisingly difficult to define in a

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comprehensive manner. A classic and broadly accepted definition is provided here:

Supervision is an intervention provided by a more senior member of a profession to a more junior member or members of that same profession. This relationship is evaluative and hierarchical, extends over time, and has the simultaneous purposes of enhancing the professional functioning of the more junior person(s); monitoring the quality of professional services offered to the clients that she, he, or they see; and serving as a gatekeeper for those who are to enter the profession (Bernard & Goodyear, 2009, p. 7).

Let's walk through this definition since the elements capture the central functions of supervision (from the Latin for *oversight*) in contemporary professional psychology. In the first sentence of the definition, it is stated that supervision is an *intervention*. What does this mean? The notion that supervision is an intervention in its own right is somewhat counterintuitive. It is interesting to note that the term is derived from the Latin word *intervenire* or *inter* (between) *venire* (come); to come between. In our field, psychological interventions are, at their essence, intended to alter a negative course or process in order to improve psychological functioning. If supervision is an intervention, then it is attempting to *come between* or alter the behavior of the person in training who is, in turn, attempting to intervene with the client. If supervision is itself a complex and multifaceted process, then it is clear that teaching someone to be a supervisor is even more so. In terms of overarching goals, we are attempting to improve the skills of the supervisor-in-training, improve the clinical skills of the supervisee (usually a less advanced practicum student), and improve treatment outcomes for the client; that is, we are attempting to intervene on multiple levels. As we will discuss later in this chapter, these levels of interweaving goals and responsibilities tend to become very complex. The definition provided above goes on to clarify that there is an ongoing and evaluative component to supervision that includes overseeing the quality of what is being provided to the client(s) and *servicing as a gatekeeper* for the profession. This last statement reminds us that supervision is not only intended to ensure high quality treatment for current clients,

but for future clients as well. In training programs, it is common to differentiate between *formative evaluations*, which are designed to support the growth and development of the psychotherapy trainee, and *summative evaluations*, which are designed to assess competencies, determine if adequate progress is being made, and provide a gatekeeping function for the academic program or internship site and the profession. It is clear that this classic definition of supervision quoted above incorporates the full range of these essential supervisory functions.

Taking on Your New Role

Becoming a clinical supervisor will involve several familiar roles that are merged into a new context. It will be subtly, but importantly, different from activities you have been exposed to, gained experience in, or mastered in your graduate training or personal life. In addition, you will likely have some key questions, and possibly some concerns, as you contemplate this new role: What will be expected of me? What if I have nothing to contribute? Should I focus on the supervisee or their client? It can be helpful to remember that new roles bring rewards as well as challenges. And, as mentioned above, you will indeed be able to draw from familiar roles. There are sophisticated theoretical and research analyses of the competencies and roles in supervision that you may find helpful to draw from as you begin your work as a clinical supervisor and refer back to as you become more experienced.

Social Role Discrimination, Developmental and Theoretical Models of Supervision

You have likely already learned in multiple contexts that theories and models serve to organize complex experiences. The *social role discrimination* model explicitly describes the familiar roles that you will draw from in learning to be a supervisor. This model was initially developed by Bernard (1979) and has been elaborated by

Bernard and Goodyear (2009) in their classic text. In this model, both the *role* and the *focus* taken by the supervisor throughout the course of a supervision session are identified. As supervisors become more experienced, they are encouraged to more intentionally select the *role* that is enacted and the *focus* of the supervisory session that is selected. In this model, the three central *roles* that have been identified are: *teacher*, *counselor*, and *consultant*. Here are some examples of the social roles that can be identified in supervision:

- *Teacher*: In supervision, you may be *teaching* your supervisee very basic skills, such as how to schedule an appointment, complete consent forms, or complete progress notes. More complex skills might include learning how to take a detailed family history, conduct a suicide risk assessment, or introduce a mindfulness exercise. In cognitive-behavioral programs, supervisors will be teaching supervisees how to provide psycho-education to their clients regarding the interrelatedness of thoughts, feelings, and behaviors, how to collaboratively engage in a functional analysis, how to assign and analyze thought records, how to conduct behavioral activation, etc.
 - *Counselor*: In this role, a supervisor might process with the supervisee the experience of feeling more anxious about particular clients more so than others or how their own experiences might impact their interactions with a client who has a similar concern. A supervisor may also discuss various fears that the supervisee may have about beginning clinical work: What if my client replies to my questions with one-word answers? What if the client asks my age or if I am their first client? What do I do if I don't know what to say? Will my client want to come back and see me again? It is useful to note that if you are a supervisor in training, these questions from an anxious supervisee seeing their first client might in turn make you a bit anxious in your new role as a supervisor. We will talk later in this chapter about the notion of *parallel process*.
 - *Consultant*: In the *consultant* role, the supervisor might jointly explore and discuss complex case conceptualization issues and how these might impact the treatment plan or collaboratively discuss how the client's cultural background might necessitate altering an established evidence-based treatment. The *consultant* role has been identified as important, but not surprisingly, it tends to be more difficult to define or identify in both theoretical writing and in observational research.
- In *social role discrimination* model, the *focus* of supervision may be on *intervention skills*, *conceptualization skills*, or *personalization skills*. Some examples of each are provided below:
- *Intervention skills*: What is the supervisee actually doing in the session? The *focus* may include an examination and discussion of how the supervisee implemented or plans to implement a particular intervention technique or how the supervisee reflected or summarized the client's thoughts and emotions in the session. This may also include discussions of points in the session where the supervisee felt confident in responding, was not sure how to respond, felt that a particular intervention strategy did or did not go as intended or, more generally, had a sense that a session was or was not effective. After viewing or listening to the session, the supervisor may note points in the session related to the considerations described above and may have specific suggestions for modifying intervention strategies.
 - *Conceptualization skills*: How does the supervisee understand the client(s) and the presenting problem(s)? In supervision, the *conceptualization* focus might involve the supervisor and supervisee collaboratively discussing factors that contribute to the maintenance of the client's difficulties, such as avoidance, maladaptive thinking patterns, or a lack of emotion regulation skills. Such conceptualization work may also involve the supervisee and supervisor thinking through the ways in which various background factors, such as cultural considerations, may impact the way in which the client is experiencing his or her present difficulties.
 - *Personalization skills*: How does the supervisee blend or interface their *personal* style with the therapy that is being provided? This may involve the supervisor and supervisee discussing

how the supervisee interacts with clients: What is the supervisee's tone of voice like? How does the supervisee's style change (or not) with various clients or with a client's different affective presentations? How much is the supervisee vs. the client talking in session? Generally, this skill involves the supervisor working with the supervisee to learn when and how they may want to adapt their natural therapeutic tendencies for a particular client or client presentation. As with the consultation social role discussed above, this factor is clearly important, but is more difficult to clearly define or identify in a supervision session.

The 3 × 3 table of the social role discrimination model of supervision provides a useful structure for engaging in a sophisticated process and content analysis of treatment. We encourage you to consider each of the cells as you read the rest of this chapter and to use it as a guide if you are currently learning to be a supervisor or if you are in supervision yourself. Becoming more aware of the social roles and foci we are most drawn to can help us to assess whether we are taking an approach that is well matched to the needs of the supervisee and their client (Table 18.1).

In addition to the *social role discrimination* model described above, there are complex *developmental* models for understanding supervision. These models focus on the observation and description of common developmental pathways typically taken by the supervisor in training as they move through the learning process. Some of these models have been extended beyond training and into professional practice. Most useful to consider here is that early in training, supervisors in training tend to prefer clearly articulated structure and may be most concerned about "doing it right." This same conceptualization applies to a novice psychotherapy trainee. Therefore, we would expect that, when you, as a supervisor in training, are supervising a novice graduate student therapist, you will spend relatively more time in the teacher role focusing on conceptualization and intervention skills. In parallel, the novice supervisor may want a bit more specific instruction regarding how to effectively provide supervision. As novice supervisors in training and therapists

Table 18.1 Bernard's (1979) 3 × 3 social role discrimination model

	Social roles		
Focus of supervision	Teacher	Counselor	Consultant
Intervention			
Conceptualization			
Personalization			

become more confident (and competent), they will likely spend more time in a consultative role and in the consideration of more complex conceptualization and personalization issues.

Theoretical models of supervision are based on psychotherapeutic models. Since many academic professional psychology programs now endorse a cognitive-behavioral therapy (CBT) model, we will briefly discuss how this model translates into the practice of supervision.

A supervisor using a CBT model would tend to work collaboratively with the trainee in supervision, would be likely to incorporate active agenda setting into the supervisory process, would identify and use role-playing techniques to assist the trainee in learning new behaviors, and would be alert to dysfunctional thoughts, underlying beliefs or schemas that might interfere with optimal functioning of the supervisee. Of course, since this is not psychotherapy, the focus remains on thoughts, feelings, and behaviors that are relevant to learning to be an effective therapist.

Parallel Process and Alliance in Supervision

Earlier in this chapter, we mentioned the notion of *parallel process*. What is this? This idea has its roots in psychodynamic theory and a full discussion is outside the scope of this chapter. For our purposes, it is the recognition that some aspect of the psychotherapy process is being recreated or reenacted (in parallel) in the supervision. For example, a client may be dissatisfied with the psychotherapy and believes that it is not good enough or not sufficiently helping. For the client, this may reflect real problems in the treatment and could also reflect early experiences and associated core schemas in which caregivers or authority figures

were not helpful, validating, or supportive. The first parallel might occur when the trainee comes to the supervisor in training and expresses dissatisfaction with the assistance that they are receiving for dealing with the challenging client. In supervision training, we add another level to this parallel process when the supervisor in training becomes anxious that they are not helping the psychotherapy trainee and experiences frustration that is then directed to the faculty supervisor. As mentioned earlier, the complexities quickly escalate in supervision training and it can be helpful to identify parallel process when it is occurring. This can be a useful perspective to consider, even in the context of cognitive-behavioral treatment and supervision that does not generally tend to focus on transference and countertransference issues.

The role that a positive *working alliance* has on supervision process and outcome has been extensively explored (Bernard & Goodyear, 2009; Ladany et al., 1999). Generally, the elements of *alliance* in both the psychotherapy and supervisory relationship are an agreement on goals and tasks in the context of a trusting (or bonded) relationship. While the research regarding the importance of a positive working alliance is more clearly demonstrated in psychotherapy than it is in supervision, there is general agreement that supervisees will disclose more in supervision and experience more satisfaction when there is a strong working alliance with the supervisor. We would therefore encourage the fostering of a relationship in which your supervisee will disclose subtle areas of concern or discomfort. The alliance is also critical to a consideration of multicultural factors in therapy and supervision. As a caveat to the research regarding the role of alliance in supervision, it has been pointed out that this research has yet to clearly document a direct impact of supervisory alliance and process factors on client outcome (Lichtenberg, 2007).

Ethical Considerations

Supervision and supervision training occur within an ethical and legal context. While state laws vary, it is likely that supervision is addressed in

the Psychology Practice Act in your state. In contrast, the APA Ethics Code (APA, 2002) applies to all of us and provides guidance and standards regarding the practice of clinical supervision. The major ethical issues related to clinical supervision include competence and client welfare, informed consent, supervisee rights, the relationship between supervisor and supervisee, and confidentiality. Standard 2 (Competence), 2.01 Boundaries of Competence (a) reminds us that “Psychologists provide services, teach, and conduct research with populations and in areas only within the boundaries of their competence, based on their education, training, supervised experience, consultation, study, or professional experience” (APA, p. 1063). It is a good general rule to not supervise a psychological treatment or assessment that you, yourself, are not competent to provide. Similarly, a faculty supervisor should always be competent in the psychological service that is being provided in a supervision training context. This standard also relates to competence as a supervisor which we will discuss in the next section. Standard 2.05 Delegation of Work to Others is interesting to consider as it relates to learning to be a supervisor: “Psychologists who *delegate work to...supervisees...take* reasonable steps to...authorize only those responsibilities that *such persons can be expected to perform competently* on the basis of their education, training and experience...with the level of supervision being provided” (APA, p. 1064, excerpted with emphasis added). What does this mean and why is it important? In both learning to be a therapist and a supervisor, if you were already fully competent, you would not need to learn how to do it and this chapter would not need to be written. The faculty or staff supervisors in your doctoral program or internship are responsible for ensuring that you have sufficient preparation and oversight to ensure competent service is being provided to the client and competent supervision to the less advanced graduate student *while* you are learning. We like to consider this to be your *learning edge*, and it requires careful assessment and communication to ensure that the therapist or supervisor in training is challenged, but not overwhelmed. The ethical standards related to

Informed consent (10.01) remind trainees to inform clients that they are being supervised and to provide the name of the supervisor, when legal responsibility for the treatment resides with the supervisor. The Multiple Relationship standard (3.05) reminds us to be careful about potential conflicts in roles that could impair objectivity or judgment. Therefore, it is critical to inform the faculty supervisor if a personal relationship with the trainee might preclude you from providing effective supervision. This latter issue may be a common occurrence in doctoral programs and should be discussed directly. It is also important to remember that, as a supervisor in training, your interactions with the trainee are protected by educational confidentiality. Finally, Standard 7 (Education and Training) is important and I would encourage you to review it in its entirety as you begin your role as a supervisor in training. Standard 7.06 is so important that it is cited below in its entirety:

7.06 Assessing Student and Supervisee Performance

- (a) In academic and supervisory relationships, psychologists establish a timely and specific process for providing feedback to students and supervisees. Information regarding the process is provided to the student at the beginning of supervision.
- (b) Psychologists evaluate students and supervisees on the basis of their actual performance on relevant and established program requirements (APA, 2002, p. 1069).

Faculty supervisors, supervisors in training, and training programs are jointly and mutually responsible for ensuring that evaluations occur as specified in the ethics code and in accordance with your program's policies and procedures.

Multicultural Considerations and Competencies

Supervision training can be a bridge to incorporating the knowledge of multicultural and diversity issues that are learned in courses into clinical practice. In a survey of professional psychologists, it was determined that psycholo-

gists are more likely to be able to *identify* best multicultural practices than they are to endorse actually *following* these practices (Hansen et al., 2006). In considering the implications for training programs, the authors recommend that in addition to typical multicultural training practices, that supervisors might initiate "...a frank discussion about why clinicians do not always do what they believe to be important. Identifying and openly discussing these barriers may improve the ability of practitioners to follow through when doing psychotherapy with clients who differ racially/ethnically from themselves" (Hansen et al., 2006, p. 73). The authors recommend that multicultural training include a focus on the behaviors that psychologists endorse as being important, but don't practice. In this study, the five behaviors that were found to exhibit the largest discrepancies between what psychologists say they believe in and what they actually practice were evaluating one's multicultural competence, using culture-specific case consultation, making DSM-IV cultural formulations and culture-specific diagnoses, and implementing a multicultural professional development plan. It is clear that supervision provides a key opportunity at many levels for you, as a supervisor in training, to assist the beginning therapist in the integration of multicultural concepts and competencies into clinical practice. In addition to ensuring that what is taught in multicultural courses is incorporated into practice, addressing barriers to the use of this knowledge is an important step in improving the multicultural competence of our profession in the future.

The Process of Learning to Be a Supervisor

From the Perspective of a Supervisor in Training (EFC)

Learning to be a supervisor has brought up many of the same feelings that I had when I was first learning to be a therapist several years ago: excitement, anxiety, and fear, among others. As I

began this journey, I also found myself having similar thoughts to those that I had when I started with my first clients: Will what I'm saying make sense? Will this person leave the session feeling satisfied? Will I know how to respond to this person's questions/comments? Do I really have anything to offer? Thus, in many ways, this process has felt very similar to beginning my work as a therapist—I've found myself having a wealth of mixed emotions, as well as a good deal of doubts and worries about my own abilities. However, just as we have familiar roles that we can draw on as we take on our new role as "therapist," by the time we are ready to become supervisors, we have even more familiar (and likely more comfortable) roles that we are able to draw upon (e.g., teacher, therapist). By the time we are supervisors in training, we have accumulated a wealth of graduate school experiences that have all likely prepared us for this new role in some way. Although it is probably natural to have some sense of the "imposter phenomenon" when taking on your new role as a supervisor (e.g., "Sometimes I'm not quite sure what to do with my own clients, and now I'm supposed to be guiding someone else in this process?!"), it is important to recognize all of the skills that you *do* have and that you can draw upon in this new role. For me, this has been an extremely helpful thought "reframe" to keep in mind.

In my journey towards becoming a competent supervisor, I've found "supervision of supervision" to be an incredibly helpful aspect of this learning process. Having the opportunity to bounce ideas off of an experienced supervisor with many years of experience has been invaluable, as has drawing from some of my most positive supervision experiences. I often find myself thinking back to my early work as a therapist and what I found most helpful in supervision. What sorts of strategies have my most helpful supervisors employed with me? Thus, in learning to be a supervisor, keep in mind that not only do you have familiar roles that you can draw upon, but that you also have a good deal of experience as a "supervisee" yourself. Some specific suggestions (adapted and expanded from Neufeldt, 1994) are presented in Table 18.2.

From the Perspective of the Faculty Supervisor (EHW)

I am going to keep my section short since most readers of this book are likely to be graduate students, interns, or early career psychologists. When we began to offer supervision training in our program several years ago, I was excited, but also daunted. In my own training, the ability to be an effective supervisor was *assumed* rather than *taught*. My first professional position was in a university psychological services center. As was common practice at the time, I was assigned practicum students, interns, and psychiatric residents to supervise with limited preparation in my own training for how to do so. Therefore, for me, as for many of my professional peers, there were no clear models for either how to be supervisors ourselves or how to teach others to supervise. Over the last few years I have adopted a model that includes formal elements (readings, regular meetings, and videotaping) and more informal discussion of the process and the experience. As described above in the section on parallel process, I have quickly learned that the responsibility for a client, a novice graduate student therapist, and an advanced graduate student supervisor can be complex—even when things are going well. I have found it useful to balance our consideration of the needs of all parties involved and to be sensitive to the alliance and parallel process at all levels. For faculty supervisors who are considering becoming involved in supervision training, I will share that, for me, the supervision of supervision in an academic doctoral program has been an immensely rewarding and energizing experience. It has provided me with an impetus to read the supervision literature and to be able to notice and articulate to someone else (hopefully with some coherence!) what it is that I do when I supervise. It has become a central and valued aspect of my own professional development. In fact, as another instance of parallel process, writing this chapter with an advanced graduate student who is currently learning to supervise in our academic training clinic has pushed me to crystallize my thinking about the process and to familiarize myself with the classic and current

Table 18.2 Key strategies for supervisors in training in working with supervisees

1 Getting started

- a. Ask supervisee about experiences they have had that may relate to therapy (e.g., conducting research interviews, being a dorm resident assistant (RA), volunteering at a crisis hotline)
- b. Elicit areas of concern for the supervisee (with examples) (e.g., client asking about level of experience, client responding to questions in a very brief manner)
- c. Ask about what the supervisee is most looking forward to in beginning their role as a therapist
- d. Set goals for the practicum experience and for supervision
- e. Clarify when summative evaluations will occur (generally, these occur at the middle and end of an academic year)
- f. Encourage the supervisee to share their thoughts, concerns, etc. about supervision throughout the semester (i.e., not just when summative evaluations occur); foster an environment of openness and a willingness to share (this applies to both the supervisor and supervisee)
- g. Discuss logistics of getting started in the clinic (e.g., how to schedule a session, how to audiotape or videotape sessions, how to get in contact with first clients, and what to discuss on the phone with them); be willing to spend time on these issues
- h. Discuss logistics of a first session (e.g., discuss going over paperwork, discuss assessment areas to cover—including the client’s goals for therapy); incorporate role plays into these discussions since they are common areas of concern

2 Things to consider in watching or listening to supervisee therapy sessions

- a. The supervisee’s style (e.g., tone of voice, manner) with the client
- b. What do you notice about the interactions? Does the client often interrupt the supervisee? Does the supervisee tend to do most of the talking?
- c. How did the supervisee utilize various intervention strategies in session? Did the supervisee spend enough time introducing a particular concept?
- d. Points in the session where you (the supervisor in training) have additional thoughts regarding how to intervene, how to respond, etc.
- e. Points in the session that you thought went particularly well or that seemed particularly challenging, etc.
- f. How this session adds to the conceptualization of this client

3 Things to consider related to actual supervision sessions and discussing therapy sessions with supervisees

- a. Establish rapport, including a sense of safety and comfort
- b. Discuss and evaluate interactions observed between the supervisee and client during the therapy session (e.g., interactions that went particularly well, interactions that were particularly challenging); encourage the supervisee to come into supervision with specific interactions they would like to discuss; watch interactions of note together in supervision and discuss
- c. Ask supervisee to provide hypotheses about the client and their current difficulties
- d. Identify appropriate interventions for the next session in light of overarching treatment goals
- e. Encourage the supervisee to provide rationale for their interventions (e.g., “What was going through your mind when you decided to bring up the dialectical behavior therapy technique of opposite action this session?” “What were your intentions in using that intervention strategy?”)
- f. Encourage the supervisee to apply theory to clinical situations
- g. Teach, demonstrate, or model intervention techniques; also provide resources/references that may be of use to the supervisee in learning a new technique
- h. Explain the rationale behind specific strategies and interventions
- i. Interpret and discuss significant events and/or interactions that occurred in the therapy session (e.g., Did something play out between the supervisee and the client in session that appears similar to interactions that the client has outside of the therapy room? If so, what did this interaction teach the supervisee about the client’s interpersonal style, interpersonal difficulties, etc.?)
- j. Explore supervisee feelings that occurred during the therapy session, including points of confidence, worry, uncertainty, affective responses, etc.
- k. Explore supervisee feelings during the supervision session
- l. Explore supervisee feelings concerning utilizing specific techniques or interventions (e.g., What might be difficult or challenging in introducing the idea of mindfulness to a client?)
- m. Help the trainee define personal competencies and areas for growth
- n. Provide alternative interventions or conceptualizations for the supervisee to consider
- o. Encourage supervisee to brainstorm strategies and interventions to use with the client in moving forward (given their conceptualization of the client, the client’s current level of functioning, how other strategies and interventions have worked, etc.)
- p. Encourage supervisee to consider the client’s current level of motivation
- q. Solicit and attempt to satisfy supervisee needs during the supervision session (e.g., What are the supervisee’s most pressing concerns/questions during this supervision session in particular?); agenda setting is often helpful

(continued)

Table 18.2 (continued)

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- r. Allow the supervisee to structure the supervision session (e.g., What does the supervisee think would be best to discuss first?)
 - s. Help the supervisee to conceptualize the case (e.g., What is maintaining this client's current problems? What sort of change strategies makes sense given the conceptualization?)
 - t. Use parallel process to model appropriate strategies for interacting with clients
 - u. Explore supervisee-client boundary issues/questions
 - v. Assist the supervisee in processing feelings of distress aroused by the client's experience
 - w. Reframe supervisee's ideas in a positive manner and build on them
 - x. Assist the supervisee in incorporating outcome measures into treatment
-

supervision literature. In terms of specific recommendations for faculty supervisors, I would encourage the incorporation of direct observation of the therapy sessions that are being supervised by the supervisor in training and, when possible, the direct observation of a supervisory session. It is interesting to note that a survey of internship training directors revealed a stronger consensus regarding supervision competencies than there is on effective training models or methods (Rings et al., 2009), suggesting that while there is theory and research to draw from, as a field we have not yet identified a specific and preferred training model for learning to be an ethical and competent supervisor. Hopefully this chapter will provide useful strategies for you to consider as you begin your training in this realm.

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Part V

Your Professional Service Career

Getting Involved in Professional Organizations: A Gateway to Career Advancement

19

Daniel Dodgen, Raymond D. Fowler,
and Carol Williams-Nickelson

Graduate students and new professionals in psychology have many options for career development. One of the most useful decisions a new or emerging psychologist can make is to join a professional association. Psychological organizations provide opportunities for personal and professional development, and offer opportunities to serve the discipline and society at large. Since the late 1800s, psychologists around the world have been organizing themselves into psychological associations to promote clinical, research, or personal interests. The great variety of psychological associations that exist today offer unique opportunities to network, share research, exchange ideas, and learn about critical developments within the field. This chapter will briefly describe relevant aspects of psychological organizations, emphasizing specific opportunities they offer to graduate students and to early-career psychologists.

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Professional Organizations in Psychology

Professional associations seek to advance the body of knowledge in their fields, keep their members informed of professional developments, and provide a variety of services to their members and to the public at large (Fowler, 1999). Joining an association is a critical aspect of career development for new professionals. As far back as 1835, Alexis de Tocqueville noted the tendency of Americans to join together to form voluntary associations. “Americans of all ages, all conditions, and all dispositions constantly form associations,” he noted, “They have not only commercial and manufacturing companies, in which all take part, but associations of a thousand other kinds” (1835). De Tocqueville’s assessment continues to be true. With over 23,000 national organizations and 141,000 regional, state, and local organizations and chapters to choose from, 70% of American adults belong to at least one association and 25% belong to four or more (Ernstthal & Jones, 1996). Psychology contributes its fair share to this proliferation of organizations. Because the authors are most familiar with the American Psychological Association (APA), many examples will be drawn from that organization, but APA is only one piece of the discussion.

National and International Psychological Organizations

As early as 1889, psychologists had begun meeting with colleagues from other universities and cities at international congresses (Pickren & Fowler, 2003). By 1892, the first national psychological organization, the APA, was founded. Since then, psychological associations have been founded in every continent but Antarctica, and national organizations for psychologists exist in over 80 countries (Pickren & Fowler). This expansion created both broadly focused national psychological organizations and more narrowly-focused societies specializing in specific professional concerns (see Table 19.1). The latter organizations are comprised of psychologists with similar research interests (e.g., Society of Experimental Social Psychology), applied interests (e.g., Association of Practicing Psychologists), administrative responsibilities (e.g., Society of Psychologists in Management), and employment settings (e.g., National Organization of VA Psychologists) (VandenBos, 1989). Other organizations are based not just on the members' professional responsibilities, but also on their demographic characteristics and how they identify themselves. These include organizations for students (e.g., the American Psychological Association of Graduate Students-APAGS), ethnic minorities (e.g., Society of Indian Psychologists), and geographic locations (e.g., California Psychological Association, Middle Eastern Psychological Network). Finally, many psychologists participate in organizations whose membership includes other disciplines, such as the American Association for the Advancement of Science (AAAS) or the English Association for Child Psychology and Psychiatry (ACPP) (Table 19.2).

The Function of Professional Organizations Within Psychology

All organizations have a mission statement governing their activities. APA's mission statement, for example, outlines three principles: promoting psychology as a science, promoting psychology as a profession, and using psychology as a means of promoting health and human welfare (see

Table 19.2). Most psychological associations, from the European Federation of Sports Psychology to Psychologists for Social Responsibility adhere to one or more of these goals. However, the implications of such a mission are quite far reaching (Table 19.2).

One of the primary means of advancing the profession is through the advancement of knowledge. To that end, most organizations sponsor regular conferences that serve as opportunities to exchange information about recent advances in practice and research. The International Union of Psychological Sciences (IUPsyS), for example, holds meetings every 4 years, while the European Federation of Professional Psychology Associations (EFPA) meets every other year (Fowler, 2000). Other organizations, such as APA, hold yearly conventions.

Journals also advance the knowledge of the field through their role in exchanging information. Nearly every national organization publishes a journal tailored to the interests of its members. Examples include the American Psychological Society's *Psychological Science*, the Society for Research in Child Development's (SRCD) *Child Development*, AAAS's *Science*, and the Australian Psychological Society's *Australian Journal of Psychology*. Like conferences, these journals provide an opportunity for members to share their own expertise and to benefit from the expertise of others as well as to contribute to the literature of the discipline.

In addition to their journals, many organizations offer newsletters containing information in a more succinct and readable format. Whether they take the form of magazines, like the *APA Monitor on Psychology*, or a more traditional newsletter format, like the Society for Community Research and Action's (SCRA) *Community Psychologist*, these newsletters serve a vital information-sharing function. Without newsletters, journals, and conferences, no psychologist, regardless of his or her training, would remain competent in the field for more than a few years after completing graduate school.

Beyond information sharing, psychological organizations serve several other critical functions. As Pickren and Fowler (2003) point out, these organizations serve several "gatekeeping" functions.

Table 19.1 Illustrative list of psychological associations

Canadian Psychological Associations		
Psychological Association of Alberta		
British Columbia Psychological Association		
Psychological Association of Manitoba		
Manitoba Psychological Society, Inc.		
College of Psychologists of New Brunswick		
Association of Psychologists of Nova Scotia		
Association of Psychologists of the NW Territories		
Ontario Psychological Association		
Corp. Prof. Des Psychologues du Quebec		
Saskatchewan Psychological Association		
Psychological Society of Saskatchewan		
Association of New Foundland Psychologists		
Psychological Association of Prince Edwards Island		
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U.S. Regional Psychological Associations		
Eastern Psychological Association		
Midwestern Psychological Association		
New England Psychological Association		
Southeastern Psychological Association		
Southwestern Psychological Association		
Western Psychological Association		
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Affiliated State Psychological Associations		
Alabama	Kentucky	North Dakota
Alaska	Louisiana	Ohio
Arizona	Maine	Oklahoma
Arkansas	Maryland	Oregon
California	Massachusetts	Pennsylvania
Colorado	Michigan	Puerto Rico
Connecticut	Minnesota	Rhode Island
Delaware	Mississippi	South Carolina
District of Columbia	Missouri	South Dakota
Florida	Montana	Tennessee
Georgia	Nebraska	Texas
Hawaii	Nevada	Utah
Idaho	New Hampshire	Vermont
Illinois	New Jersey	Virginia
Indiana	New Mexico	Washington
Iowa	New York	West Virginia
Kansas	North Carolina	Wisconsin
		Wyoming
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International Psychological Associations		
International Union of Psychological Science (IUPsyS)		
International Association of Applied Psychology (IAPP)		
European Federation of Professional Psychologists Association (EFPPA)		
Interamerican Society of Psychology (ISP)		
International Council of Psychologists (ICP)		
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Interdisciplinary Groups with Strong Psychological Interface		
American Association for the Advancement of Science (AAAS)		
American Education Research Association (AERA)		
Society for Research in Child Development (SRCD)		
Gerontological Society of America (GSA)		
Cognitive Science Society		
Society for Neuroscience		
Human Factors Society		
National Mental Health Association (NMHA)		
World Federation for Mental Health (WFMH)		
Society for Psychotherapy Research		

(continued)

Table 19.1 (continued)

Acoustical Society of America
American Pain Society
Behavior Genetics Association
International Society of Hypnosis
American Correctional Association
Association for Behavior Analysis
International Brain Research Organization
American Psychopathological Association
American Orthopsychiatric Association
American Evaluation Association
Academy of Management
Society for Clinical and Experimental Hypnosis
American Association for Marriage and Family Therapy
Association for the Psychophysiological Study of Sleep
Society for the Advancement of Field Therapy
American Society of Group Psychotherapy & Psychodrama
Association of Business Simulation & Experimental Learning
Association of Mental Health Administrators
Biofeedback Society of America
Comm. on Rehabilitation Counselor Certification
International Society of Research on Aggression
International Society for Psychological Research
International Society for Research on Emotion
Society for Clinical & Experimental Hypnosis
Society for Exploration of Psychotherapy Intervention
Society for Reproductive & Infant Psychology
Society for the Scientific Study of Sex
International Society for Mental Imagery Techniques in Psychotherapy & Psychology
Society for Professionals in Dispute Resolution
Association for Gifted-Creative Children

Student Organizations
American Psychological Association of Graduate Students (APAGS)
Psi Chi
Psi Beta

Education and Training Groups
Council of Graduate Departments of Psychology (COGDOP)
National Council of Schools of Professional Psychology (NCSPP)
Association of Psychology Internship Centers (APIC)
Council of Training Directors (CTD)
Council of Undergraduate Psychology Programs (CUPP)
Association of Medical School Professors of Psychology (AMSPP)
Council of Teachers of Undergraduate Psychology (CTUP)
Joint Council on Professional Education in Psychology (JCPEP)

Credentialing and Licensing Organizations
American Association of State Psychological Boards (AASPB)
American Board of Professional Psychology (ABPP)
National Register of Health Service Providers in Psychology

Ethnic Minority Psychological Associations
Asian American Psychological Association
Association of Black Psychologists
National Hispanic Psychological Association
Society of Indian Psychologists

Other Psychological Association
Psychonomic Society, Inc.
Society of Experimental Psychologists
Society for Multivariate Experimental psychology

(continued)

Table 19.1 (continued)

Society for Computers in Psychology
Society for Mathematical Psychology
American Psychological Society (APS)
Psychometric Society
National Academy of Practice in Psychology
National Association for School Psychologists (NASP)
American Association for Correctional Psychologists
Association of Practicing Psychologists
Society of Psychologists in Addictive Behaviors
American Academy of Forensic Psychology
National organization of VA Psychologists (NOVA Psi)
Society of Psychologists in Substance Abuse
Psychologists in Long-Term Care
Society of Air Force Clinical Psychologists
Association for Jungian Psychology
North American Society of Adlerian Psychology
Society of Psychologists in Management
Association of Applied Social Psychologists
Association for the Advancement of Applied Sports Psychology
Psychologists for Social responsibility
Association of Women in Psychology
Association of Lesbian and Gay psychologists
Society of Experimental Social Psychology

From VandenBos (1989)

Table 19.2 Mission statement of the American Psychological Association

The object of the American Psychological Association shall be to advance psychology as a science and profession and as a means of promoting health and human welfare by

The encouragement of psychology in all its branches in the broadest and most liberal manner

The promotion of research in psychology and the improvement of research methods and conditions

The improvement of the qualifications and usefulness of psychologists through high standards of ethics, conduct, education, and achievement

The establishment and maintenance of the highest standards of professional ethics and conduct of the members of the association

The increase and diffusion of psychological knowledge through meetings, professional contacts, reports, papers, discussions, and publications

Thereby to advance scientific interests and inquiry, and the application of research findings to the promotion of health and the public welfare

They may determine who can call themselves psychologists or identify themselves as experts in a subspecialty of the field. Through accreditation of continuing education classes, they can influence what people study after completing their degrees, and what they can get credit for studying. Their journals and conferences also

determine what information is communicated to the field and how credible it will be when it is disseminated. Fortunately, most organizations exercise this power wisely, since they are themselves governed by the psychologists who make up their membership. In addition, most societies have a complex system of checks and balances that help the system function fairly and democratically (Fowler, 1999).

Benefits of Psychological Organizations for Individuals

A Professional Home

Professional associations, quite simply, provide psychologists with a way to remain current in the field and to develop their professional identity. Without them, psychologists would function in a vacuum. Beyond those global benefits, however, professional associations provide many less obvious ones. In the first place, they provide a place where like-minded psychologists can come together to focus on the issues of most importance to them. Many associations are organized around the unique characteristics and interests of their members.

Examples include the Association of Black Psychologists, the Asian American Psychological Association, the Association of Lesbian and Gay Psychologists, and the Association of Women in Psychology. The 60 state, provincial, and territorial associations affiliated with APA represent a vital home for many psychologists. Other associations organize themselves around topics of interest, such as the Society of Psychologists in Addictive Behaviors or the Association for Jungian Psychology. APA's 54 divisions also reflect a wide array of interests from experimental psychology to psychological hypnosis to the study of lesbian, gay, and bisexual issues. For a complete list and description of APA divisions, see <http://www.apa.org/about/division.html>. In all cases, people choose to affiliate with these specialized groups in order to find a professional home. Professional associations and their divisions and affiliates serve that function.

Interaction with Leaders and Potential Mentors

Interaction with colleagues is a vital component of professional development. Professional organizations offer an excellent opportunity for emerging psychologists to associate with other psychologists and to develop their own professional identity. Through that interaction, graduate students and early-career psychologists gain access to content experts and potential mentors while developing a sense of belonging within their discipline. Only at national conferences are young professionals likely to interact with renowned researchers and have the opportunity to hear them speak. The leaders in the field, regardless of the specific domain or subdiscipline, typically belong to national organizations. After all, it is primarily through the mechanisms organizations provide, such as journals and conferences, that leaders in the field emerge.

These meetings provide one additional benefit to young psychologists and graduate students. At most of the conferences sponsored by professional societies, students can be part of panels or can present their research at poster sessions. In this way, they contribute to the meetings as well as benefiting from them.

Resources

Many organizations offer a wealth of resources to their members. In addition to the primary journals that are usually a benefit of membership, many organizations offer additional journals for more specialized interests. In addition to the *American Psychologist*, which goes to every APA member, APA publishes over 60 journals. Other informational resources include newsletters, books, electronic information databases such as PsychINFO, and Web-based resources.

The resources offered by these national organizations extend far beyond what may typically come to mind. The Ethics Office at APA, for example, provides guidance through written materials, Web sites, and staff members on ethical questions that arise in research and practice settings, as well as other dilemmas that may occur during graduate school (i.e., harassment or dual-role questions). Several organizations also provide guidance on issues regarding human subjects and animal research. Another resource at APA is the Office of Testing and Assessment, which serves as a source of information about the use of tests and assessments in clinical, counseling, educational, and employment settings. In yet another example, the APA Center for Workforce Analysis conducts ongoing studies that provide timely statistics on students entering and graduating from psychology doctoral programs, psychologists' salaries, employment settings, marketplace trends, and more (see <http://www.apa.org/workforce>). Other resources available through psychological organizations range from employment assistance to financial assistance for students.

Fellowships, Awards, Scholarships, and Grants

Many national organizations provide unique opportunities for their members to receive various fellowships, scholarships, grants, and awards. For example, each year APA's graduate student group, APAGS, grants competitive scholarships to graduate students in psychology and awards of

excellence to graduate students, mentors, and psychology departments (see <http://www.apa.org/apags/members/funding.html>). Many other student scholarships, grants, and awards of recognition are sponsored by various national, state, and local psychological associations, as well as divisions of larger organizations (for other examples within APA, see <http://www.apa.org/students/student4.html>). In addition, SRCDC, AAAS, APA, and the Society for the Psychological Study of Social Issues (SPSSI) all sponsor fellowships for doctoral-level professionals to come to Washington, DC, for a year and participate in the policymaking process through work at federal agencies, congressional offices, or a national organization's policy office (see <http://www.apa.org/ppo/>). These Fellowships are open, but not limited, to early-career psychologists who often compete successfully for these positions.

Benefits of Psychological Organizations to Society

National Initiatives

Individual psychologists have much to contribute to our social welfare, but often lack a mechanism for disseminating their knowledge. National organizations are well positioned to develop initiatives that can impact society at a broader level. Two APA projects focused on youth violence serve as examples of the kind of initiatives only a large organization can undertake. *ACT—Adults and Children Together—Against Violence* is a project developed by APA in collaboration with the National Association for the Education of Young Children (NAEYC) to prevent violence by reaching out to adults who raise, care for, or teach children under 8. Based on psychological research, the project includes community trainings and a national multimedia campaign utilizing public service announcements. The television spots for this campaign, developed in conjunction with the Advertising Council, were shown about 30,000 times in media markets across the country between January 2001 and January 2002. The Warning Signs project, the result of a

partnership between APA and Music Television (MTV), was launched on April 22, 1999 (just 2 days after the Columbine High School shootings) with a 30-min MTV special coproduced by APA and MTV. Since then, over four million young people have seen the program and over 1.25 million copies of the Warning Signs brochure have been distributed to offer guidance to young people. APA members have also assisted nearly 175,000 youth and parents by facilitating over 1,400 violence-prevention forums using the Warning Signs video.

As most readers know, assessment is a vital aspect of psychological research and clinical practice. It is also becoming increasingly important in the educational environment from elementary school forward. For this reason, there is a tremendous need for organizations with expertise and credibility on the national scene to come together to provide principles to guide testing and assessment. The American Educational Research Association, the National Council on Measurement in Education, and APA came together more than 20 years ago to produce the *Standards for Educational and Psychological Testing*. Updated most recently in 1999 (and currently under revision), the *Standards* are the most widely accepted professional standards in the development, evaluation, and use of tests, and have been cited by the United States Congress and others as a model guide for testing and assessment. Only national organizations could have undertaken this endeavor with such success.

Advocacy for Psychological Research and Practice

Legislation and regulation have a significant impact on all areas of psychology. Many national organizations have Washington-based policy offices that advocate on behalf of psychological research and practice. Given the constant battle for recognition of the value of behavioral and social science research, these efforts are critical to the field of psychology. Psychologists and psychology graduate students who have received funding for their research from the National

Institutes of Health (NIH), the Centers for Disease Control and Prevention (CDC), the National Science Foundation (NSF), or other federal agencies probably have the policy staff of a professional organization to thank for their money. National organizations with practitioner members also focus a great deal of effort on issues of interest to clinicians, such as parity in insurance coverage between mental health and physical health. These efforts may also include special attention to the needs of graduate students. In this regard, APA lobbies actively for funding for the Minority Fellowship Program, which supports graduate students of color, and for other loan reimbursement and scholarship programs for psychology graduate students. The voice of national psychological organizations is critical in these efforts, as most of these programs focused exclusively on medical professions, and excluded psychology until recently.

Although much of this advocacy provides direct benefit to psychologists and psychology graduate students, that is not always the aim. Some organizations, such as APA or SRCDC, also advocate for programs and services benefiting the populations psychologists serve and research. As an example, APA and SRCDC were both highly involved in the recent reauthorizations of the federal Head Start and Elementary and Secondary Education programs. Although these programs do not necessarily benefit psychology directly, the work of psychologists is critical to the understanding of both social and cognitive development. For that reason, these organizations were willing to allocate resources to inform policymakers about relevant research so that federal policy might reflect current knowledge from the field.

It is not only paid advocacy staff who effect policy change. National organizations provide opportunities for their members to become involved in the process as well. Following the Columbine shootings, for example, nearly a dozen psychologists were invited to testify before the Senate Commerce and Health, Education, Labor and Pensions Committees, the House Judiciary Committee, the Congressional Children's Caucus, and at a special closed briefing

for members of Congress and their staff convened by Senator Edward Kennedy (D-MA) and Representative Bobby Scott (D-VA) through the auspices of the APA. Psychologists representing various national organizations have testified before Congress on issues ranging from child maltreatment to women's health to terrorism response. These testimonies can have great influence on the congressional committees developing federal initiatives.

While testifying before Congress is an exciting activity, it is also a rare one. Many other opportunities exist, however, for psychology graduate students and psychologists to become involved in policymaking. Most national organizations have electronic Listservs, newsletters, and other vehicles for keeping their members informed about current policy issues affecting their work and providing them with information about how to get involved on a particular issue. Many State Psychological Associations also have advocacy initiatives they are promoting at the state and local level. These include parity initiatives, questions about independent licensure, and other issues of local interest. Typically, any member of a society can get involved in these efforts by signing up for an electronic or fax list.

Getting Involved

Most of the discussion above focuses on what organizations do for their members or do on behalf of their members. It is important to remember that there is also a great deal that members can do for their organizations. For example, most organizations have multiple opportunities for members to get involved in and influence the leadership of the organizations. The decisions of members, whether expressed directly or through elected representatives, set the policies and direction of their associations. Because organizations need the participation and guidance of their members to function, most organizations have multiple boards, committees, and councils to govern their activities. These groups are made up of members of the association who are elected by the

general membership, elected by a subset of the membership, or selected by other members of the association because of the unique contribution they can make. To illustrate further the variety of opportunities and mechanisms for involvement, it may be helpful to examine one organization in more detail. Because of their familiarity with the organization, the authors have chosen to use APA for that purpose.

APA: A Case Study

Many psychologists obviously find professional organizations to be a vital part of their careers. With over 154,000 members and affiliates, APA is the largest association in the world representing organized psychology. APA members are primarily doctoral-level psychologists, about a third of whom are employed in educational settings, a third in private clinical practice, and a third in other settings such as hospitals, clinics, business, industry, and government (Fowler, 2002). Affiliates include graduate students (about one-third of the total APA membership), high school teachers of psychology, master's level mental health professionals, psychologists in other countries, and others.

After beginning as an academic-focused organization, APA reorganized in 1945 to incorporate several smaller psychological organizations, evolving into a new organization with a mission that included both professional and scientific issues, as well as the application of psychology to the public interest (see Table 19.2). Over time, a multifaceted structure that included divisions and state psychological associations developed, reflecting the diversity of the field and APA's members. Today, APA has over 600 employees, publishes a number of highly respected journals, has a respected book publishing arm, holds an annual convention attended by 12,000–17,000 people, provides a monthly magazine to members, and houses multiple offices to address a variety of issues with the goal of advancing psychology as a science and profession in the legislative, public, academic and research realms (Fowler, 2000).

Professional Networking

Beyond the activities mentioned above, APA offers many other benefits to its members. In particular, many networking opportunities exist in APA for students and early-career psychologists. For example, students may participate in a variety of meetings and conferences, including the annual APA convention, or join any of APA's 54 divisions, enabling them to associate with psychologists and student colleagues who share similar professional interests. Divisions range in size from 300 to 7,500 members, with each focusing on a clinical or research interest, or some personal or other factor. Often the personal and research interests overlap, as with the Division 44, the Society for the Psychological Study of Ethnic Minority Issues, so these categories are clearly not exclusive. All the divisions have officers and executive committees (sometimes referred to as boards). These committees provide excellent opportunities to learn about association leadership and to influence the direction of the division. Furthermore, about half of the Divisions now include a graduate student representative on the executive committee, with the number increasing yearly. All Divisions also have newsletters that frequently welcome articles from the membership, providing opportunities for students and early-career professionals to contribute to scientific, although not necessarily peer-reviewed, publications. Some divisions also have divisional journals or other publications that provide information on the domain of interest to the members and provide additional publishing opportunities. Detailed information about APA's divisions is linked through <http://www.apa.org/divisions>.

Much of the work of the Association is completed by member volunteers who serve on APA's various Boards and Committees. These groups report to the Council of Representatives, APA's most powerful governance group. Boards and Committees carry out a wide range of tasks as evidenced by their names (see Table 19.3), and may frequently have student members or liaisons. Association activities and interests are not limited to the topics of the various continuing Boards and Committees. APA Task Forces and Ad Hoc Committees are formed to address time-limited or

Table 19.3 APA boards and committees

Board for the Advancement of Psychology in the Public Interest
Board of Convention Affairs
Board of Educational Affairs
Board of Professional Affairs
Board of Educational Affairs
Board of Professional Affairs
Board of Scientific Affairs
Policy and Planning Board
Publications and Communications Board
Elections Committee
Ethics Committee
Finance Committee
Membership Committee
Committee on Structure and Function of Council
Agenda Planning Group
College of Professional Psychology
Commission for the Recognition of Specialties and Proficiencies in Professional Psychology
Committee on Division/APA Relations
Committee on International Relations in Psychology
Investment Committee
Committee for the Advancement of Professional Practice
Committee for the American Psychological Association of Graduate Students
Council of Editors
Committee on Accreditation
Committee on Education and Training Awards
Continuing Professional Education Committee
Teachers of Psychology in Secondary Schools
Committee on Professional Practice and Standards
Committee on Animal Research and Ethics
Committee on Psychological Tests and Assessment
Committee on Scientific Awards
Committee on Aging
Committee on Ethnic Minority Affairs
Committee on Urban Initiatives
Committee on Women in Psychology
Committee on Lesbian, Gay and Bisexual Concerns
Committee on Disability Issues in Psychology
Committee on Children, Youth and Families
Committee on Psychology in the Public Interest Awards
Committee on Rural Health

newly identified issues that are important to APA members and to psychology in general. Some examples of recent Task Forces and Ad Hoc Committees include the Ad Hoc Committee on Early-Career Psychologists, the Task Force on Psychology in Early Education and Care, the

Advisory Committee on Colleague Assistance, the Work Group on Professional Practice Issues in Telehealth, the Working Group on Children's Mental Health, the Electronic Resources Advisory Committee, the Task Force on Serious Mental Illness/Severe Emotional Disturbance, the Joint Committee on Testing Practices, and the Task Force on Statistical Inference, just to name a few. Members of these groups can usually be self-nominated or nominated by peers, and graduate students should not be reluctant to nominate themselves for graduate student slots on these committees. Early-career professionals should also consider volunteering to serve on these groups as well.

APAGS: The American Psychological Association of Graduate Students

The discussion above only scratches the surface of opportunities for involvement that exist at APA. For graduate students, of course, there is a very specific avenue for greater involvement. The APAGS was organized in 1988 and has become the single largest constituency group in the Association (see Table 19.4 for the APAGS mission statement).

APAGS initial membership of 18,000 has grown to approximately 54,000 members in its 23 years of existence, representing one-third of the current APA membership. Over the years, the list of APAGS activities has lengthened tremendously and its level of integration into the Association has substantially increased. Through participation in governance initiatives and policies, APAGS provides direct student contact and support, develops resources to meet the information and advocacy needs of students, provides leadership opportunities, and offers special convention programming and other distinct training for students.

Involvement in APAGS

There are numerous opportunities for students to become actively involved in APAGS and develop their leadership talents. Students can run for an elected position on the APAGS Committee, or on one of APAGS five specialized subcommittees: the Committee on Ethnic Minority Affairs; the

Table 19.4 The mission statement of the American Psychological Association of Graduate Students (APAGS)

<p>The APAGS Committee shall</p> <p>Promote the highest standards in the research, teaching and practice of psychology to further the education and development of all psychology students</p> <p>Represent all graduate study specialties of psychology, facilitating information exchange between these groups</p> <p>Promote leadership development to communicate and advocate for students' concerns</p> <p>Establish and maintain channels of communication between APAGS and schools, universities, training centers, institutions, and other members of the psychological community</p>	<p>a career in psychology. These organizations offer psychologists professional benefits through their journals, conferences, employment assistance, and guidance on ethical standards. They offer personal benefits though opportunities for networking, finding mentors, and receiving scholarships, fellowships, and other awards. Furthermore, these organizations offer an avenue for psychologists at any stage of their careers to make a contribution to the field. They contribute in a global sense by supporting an organization that is furthering critical national initiatives and advocacy efforts. More importantly, they provide opportunities to contribute at an individual level by becoming involved in leadership positions, speaking or presenting posters at conferences, contributing to journals and newsletters, or becoming an advocate. Different benefits will be most salient to different people, but all of them together provide ample evidence that membership in a psychological organization is an investment that yields rich dividends.</p>
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Committee on Students with Disability Issues; the Convention Committee; the Committee on Lesbian, Gay, Bisexual and Transgender Concerns; and the Advocacy Coordinating Team (ACT) which focuses on national and state legislation that impacts psychology.

APAGS and Career Development

APAGS offers programs and information on topics such as the business aspects of psychology; internship; postdoctoral training; completing your dissertation; finding a mentor; balancing work and career; negotiating job offers; presenting and publishing research; and various career paths in psychology. In addition, APAGS features a special Web site and a plethora of resources to help students and early-career psychologists prepare for licensure, understand basic business strategies to build an independent practice, get on insurance panels, obtain grants, and pursue the tenure track (see <http://www.apa.org/earlycareer/> and <http://www.apa.org/apags>).

Conclusions

It should be evident to the reader that the authors believe participation in a psychological organization is a vital part of developing and maintaining

a career in psychology. These organizations offer psychologists professional benefits through their journals, conferences, employment assistance, and guidance on ethical standards. They offer personal benefits though opportunities for networking, finding mentors, and receiving scholarships, fellowships, and other awards. Furthermore, these organizations offer an avenue for psychologists at any stage of their careers to make a contribution to the field. They contribute in a global sense by supporting an organization that is furthering critical national initiatives and advocacy efforts. More importantly, they provide opportunities to contribute at an individual level by becoming involved in leadership positions, speaking or presenting posters at conferences, contributing to journals and newsletters, or becoming an advocate. Different benefits will be most salient to different people, but all of them together provide ample evidence that membership in a psychological organization is an investment that yields rich dividends.

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Christopher W. Loftis

Winston Churchill famously declared, “Americans will always do the right thing... after they’ve exhausted all the alternatives.” This statement may be even truer in today’s hyper partisan political environment. Churchill’s comment points to the role of advocates in helping policymakers to select and implement effective solutions. Psychologists, as members of a helping profession, are naturally drawn to advocacy on behalf of public well-being and have the skills to succeed as advocates. Yet, many perceive advocacy as “confrontational,” “irrational,” or “unseemly” and, as data presented later will show, psychologists are more averse to political giving than other health professions.

One of the messages of this chapter, however, is that advocacy takes many forms, most of which are well-suited to the skillsets of psychologists. This chapter gives a brief overview of the motivations and methods of policy advocacy, and helps students and early career psychologists identify ways to engage and integrate advocacy into core professional duties. As professionals serving the public well-being within a representative government, advocacy is one of our most important responsibilities to society, the profession, and ourselves.

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Why Advocate?

Advocacy is the process of influencing policymakers when they make laws and regulations, distribute resources, and make other decisions that impact our well being & freedoms. The principal aims of advocacy are to establish, reform, and manage how policies are implemented. Jansson (2003) describes three rationales for advocacy that can be categorized as societal values, analytical (or scientific), and political. Given the intellectual underpinnings of psychology training, many psychologists are naturally drawn to societal and scientific motivations, but the political are just as important, if not more so. Values and research are useless without action, and political processes (e.g., legislative, regulatory, and other policymaking institutions) are the means to shape and implement change. Integrating all three towards a common objective can result in powerful contributions to policy-making. The societal, scientific, and political rationales are described below within the context of psychology (Fig. 20.1).

Societal Rationales

Psychologists are obligated by professional ethics, principles, and codes of conduct to protect and enhance the well-being of individuals and groups. Principles of beneficence, nonmaleficence, justice, integrity, and respect for people’s rights

and dignity underlie a fundamental responsibility of psychologists to inform and improve public institutions, laws, and cultural influences. Psychologists engage in advocacy to address issues of individual and professional autonomy, freedom, equality, due process, and societal or collective rights, and to enact visions of a just, humane society.

Analytical (Scientific) Rationales

Psychologists are trained to evaluate and use empirical data to guide careful and considered decision-making. Our ethics code compels psychologists to avoid validating or perpetuating assumptions, stereotypes, and falsehoods that harm clients and society. Many psychologists regularly engage in analytical advocacy through research and publishing, as well as debating and dialoguing with others in scientific and community leadership.

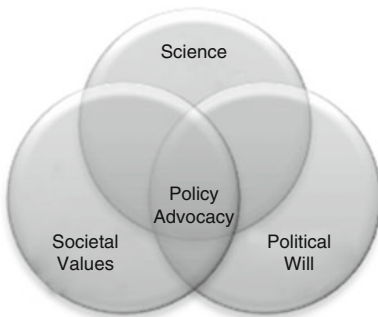


Fig. 20.1 Effective policy advocacy combines societal, scientific, and political rationales for change

Political Rationales

Living in a representative government requires an acceptance and awareness that power is unequal and often biased towards interests groups, corporations, institutions, etc., that have the ability to direct more money and time to influence policy-makers. Ignoring this reality and failing to engage the political process cedes power to those interests, and allows decision-making to be driven by narrow, short-term interests that do not support the values and well-being of society.

Overview of Advocacy Process

Identify Problems, Pressure Points, and Solutions

The above rationales provide the foundation to outline and develop an advocacy strategy (Fig. 20.2). Societal, scientific, and political considerations should be reviewed and documented to evaluate the causes, determine the pressure points, and delineate possible policy solutions. Thinking broadly and flexibly about the causes will help to identify a range of solutions to the policy issue. As will be discussed below, opportunities to address policy concerns are frequently indirect and disjointed, and build upon each other over time to construct a cohesive policy solution. It is critical to thoroughly identify the multitude of factors impacting the policy issue in order to effectively prioritize the policy activities, and to be prepared for planned and unexpected opportunities. Table 20.1 provides a list of questions to consider when outlining the policy problems and needs.

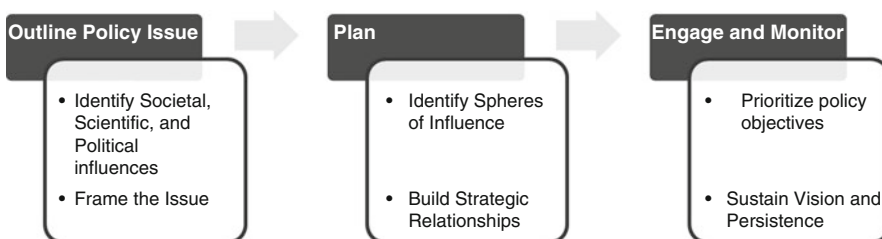


Fig. 20.2 Model for developing advocacy plan

Table 20.1 Outline policy issues

Analyze policies and political institutions	<p>What is the history of the laws and regulations impacting the policy issue?</p> <p>Which government and civilian organizations manage or influence the policy?</p> <p>Are there conflicts between local, state, and federal policies?</p> <p>Are there any major activities planned or underway to change or update the policy?</p>
Understand community concerns	<p>What is the impact of the policy on key constituencies and stakeholders?</p> <p>What is the community's awareness of the issue?</p> <p>Who are key voices of the community for and against the issue?</p>
Understand the political environment	<p>What are the key political debates, and who represents each side?</p> <p>Which interests are invested in maintaining status quo?</p> <p>Which interests are motivated to change, and how do their motivations for change match yours?</p> <p>Who are the key policymakers and how do their political objectives match, conflict, or complicate your policy objective?</p> <p>Who are respected or powerful groups involved with the issue?</p>

Frame the Issue, Then Support with Data

Mark Twain said, “There are three kinds of lies—lies, damned lies and statistics.” Today, it seems we are inundated with another kind of lie: half-truths. Media, interests groups (including professional societies), lobbyists, and politicians, abound with half-truths. Debates over policy frequently get stuck on problem assessment and defining the “facts” of the issue. The consequence is that policymakers tend to problem solving or proposing solutions when unsure of the facts. Information overload and misuse increasingly overwhelm policymakers and their staff, and paralyze decision-making bodies as interests groups and leaders willfully exacerbate confusion about the problem or the solution. In the meantime, the public suffers the consequences—failing schools; greater numbers of uninsured and underinsured; increasing threats to environmental sustainability; disgust and distrust of public institutions.

Framing the issue, typically with a human interest angle, is critical to focusing the conversation on the desired policy goal. The above analysis of the policy, community, and political environments provides important information on the motivations and pressure points of relevant stakeholders. Interest groups and lobbyists

succeed when they focus policymakers on what is and isn't relevant to the issue at hand, bringing clarity to complexity. A powerful vision of the ideal outcome also helps direct the conversation, constrain misuse of data, and filter conflicting information from interests groups and lobbyists.

Within the legislative setting, research data are rarely used to drive decision-making but are more frequently used to support decisions based on other factors. Understanding this basic difference between the role of data in science and the policy world is a difficult but very important lesson for many psychologists. If psychologists want to put research findings “into play” for policy deliberation, data need to be introduced, explained, or framed in the context of current political exigencies. Through relationship building and persistent engagement, psychologists can begin to educate legislators on the importance and long-term value of data-based decision-making derived from quality data. This is a long-term process that underscores the value of fostering a secure, trusting, and steadfast relationship with legislators and administrators so that they will think of and turn to psychologists for assistance in developing and implementing health policy. Data alone almost never motivates change, but when presented within the right framework or vision, data can provide the reassurance and additional justification to change.

Identifying Spheres of Influence

Psychologists advocate through multiple levels of government and administration to protect and advance the interests of the profession and the populations we serve. Advocacy at local and state levels can be sufficient to address immediate issues of the community, but it is often necessary to engage federal legislative and regulatory processes to address systemic or long-term policy issues. It is helpful to differentiate between primary and secondary target audiences for advocacy activities. *Primary audiences* include government officials (elected, political appointees, and civilian employees) who have direct decision-making authority over the issue whereas *secondary audiences* are individuals who can influence the decisions of the primary audience. Secondary audiences include lobbyists, interests groups, business leaders, friends, family, or anyone who can provide a way to reach the primary audience that may not be directly available to you. Secondary audiences can include policymakers as well, such as members of Congress who lobby colleagues on key committees or an elected official with oversight and strong connections to an Executive agency.

Table 20.2 provides a framework for identifying key individuals at the local, state, and federal levels. Delineating primary and secondary individuals for each of these areas will help prioritize efforts, identify a timeline for known opportunities,

and be ready for unexpected opportunities at different levels of government and community engagement.

Process Is Important, But Relationships Are Essential

The number of bills introduced in recent years has increased, but the number of bills actually passed has declined over the past two decades (Tauberer, 2011), in part because of the increasing use of omnibus legislation to combine multiple measures into one bill. Omnibus legislation is compiled by Congressional leadership in closed door meetings and the content can be disparate and sweeping. Measures can also be attached as riders to popular or expedient legislation. For example, the recent *Paul Wellstone and Pete Domenici Mental Health Parity and Addiction Equity Act of 2008* was signed into law, after a decade of advocacy (Rovner, 2008), when it was attached to the \$700 billion Troubled Asset Relief Program under the *Emergency Economic Stabilization Act of 2008* (division A), which also included the *Energy Improvement and Extension Act of 2008* (division B), and two tax relief acts. In contrast, the number of ceremonial bills (naming post offices and other federal buildings) has risen dramatically, and as well as the number of bills introduced as a way of establishing a public position on an issue or making a symbolic gesture. Nearly 14,000 pieces of legislation were introduced in the 111th Congress introduced, more than any Congress since 1980, but only 3.3% of the bills actually were signed into law, the lowest success rate since 1976 (Singer, 2008).

Our high school civics lessons on how a bill becomes law have clearly become insufficient to effect substantive, timely policy change. In fact, most legislators spend a great deal of time finding ways to subvert or work around the process. Psychologists should certainly understand the legislative, regulatory and judicial processes and timelines (see valuable resources below that describe important decision points), but knowing the specific agenda and styles of key policymakers is often more important than the process. And

Table 20.2 Sample table for documenting key policymakers

	Local	State	Federal
Legislative Branch			
Executive Agencies			
Courts			
Allied Organizations, Foundations, Coalitions			
Consumers, Public Opinion			
Media, PR Firms			
Interest Groups, Lobbyists			
Organized Political Groups (PACs, Unions)			

having existing and accessible relationships with legislators is critical to being able to move policy forward *at the right time and place*.

Policymakers are human beings, not institutions, and accordingly, personal connections are essential to being heard in advocacy. Fortunately, psychologists are uniquely trained to establish supportive working relationships, to work with individuals across a diversity of perspectives, and to understand the need for compromise. However, being a cerebral profession, there is often a failure to appreciate that it is not the intellectual strength of an argument, nor the persuasiveness of a white paper or written testimony, that will carry the day with legislators. Rather, with all politics being local, nurturing ongoing, productive relationships with policymakers is extremely important. Relationships with key policymakers cannot be forged by one visit to the legislators' offices, one appearance before a legislative committee, or only engaging with policymakers during times of crisis and need. For our expertise to be appreciated, psychologists must regularly engage in policy debates, participate in political process, and be active in community and media activities that influence policymakers.

Vision and Persistence

A vision of your ideal state of affairs serves as a driving and reinforcing inspiration for your advocacy activities. Advocacy is rarely linear, and progress is often experienced as a series of victories and setbacks, or more typically, a series of modifications and interpretations of policies by different levels of government and private sector organizations. Change can also be unsettling, and advocates should expect resistance from policymakers institutions, and even from colleagues. As a result, advocates cannot always perceive personal or even tangible benefits in the outcomes of their efforts (DeLeon, Loftis, Ball, & Sullivan, 2006).

In addition to serving as a meaningful framework to make sense of data and motivate policymakers, having a long-term vision provides direction and clarity on when and where to apply pressure and share expertise. It is also important to develop a vision for both personal and professional activities in order to identify advocacy strategies that can be incorporated comfortably and reliably into professional duties and sustained over the long haul. Advocacy works best when it is integrated into core roles and responsibilities.

Case Study: Health and Behavior CPT Codes

Psychology has been at the forefront of healthcare integration for decades, well before recent reform initiatives ballyhooed integration as a means to simultaneously improve outcomes and reduce costs. The "health and behavior" (H&B) Current Procedural Terminology (CPT) codes, established in 2002, illustrate the profession's commitment to advancing the practice of psychologists in service of the public well-being. H&B codes allow psychologists to bill behavioral, social, and psychophysiological services provided to patients with physical health (rather than mental health) diagnoses. Before these codes were implemented, reimbursement was limited in the general healthcare sector for psychological work with patients without a mental health diagnosis. Developing these new codes involved the combined efforts

of the American Psychological Association (APA) and the Interdivisional Healthcare Committee (IHC), representing APA divisions 17, 22, 38, 40, and 54. The number of H&B claims submitted by psychologists to Medicare increased over 625% from 64,000 claims in 2002, the first year they were available, to almost a half million claims for H&B services in 2010, rising from \$1.56 million in reimbursement for these services to \$8.1 million. As a result of many years of advocacy to Medicare and the American Medical Association (which owns and oversees code development for the CPT), these codes constitute a milestone in the recognition of psychologists as healthcare providers. Further, the codes have positioned psychologists to play a central role in defining and implementing evidence-based practices and integrated care models.

A Note on Political Gift Giving

Elections are expensive, and getting more expensive every year. Despite promises of cheaper social networking technologies, grassroots networks still require significant financial investment in order to successfully impact elections. Moreover, campaign advertising is an effective and proven method for winning elections, even more so as access to good and bad information has increased exponentially during the internet age. Representatives serving 2-year terms campaign and fundraise constantly, perhaps more than they have time to legislate. Many work nights and weekends, sometimes going weeks without seeing loved ones, to fundraise and meet with constituents. As a result, they kindly remember and feel ingratiated to individuals who help elect and reelect them. This is likely to remain true regardless of fixes to campaign finance reform, redistricting, or term-limits. In a free market society, money will always play a large role in elections.

It is an extreme disadvantage then that psychologists rank towards the bottom of professionals that support campaigns, even among healthcare professions with fewer members. Table 20.3 compares political gift giving among healthcare associations (Government Relations Office, American Psychological Association Practice Organization, personal communication, December 20, 2011). Although the APA and the Association for the Advancement of Psychology (AAP) have made significant strides in this area, the above table demonstrates that the profession could be a much stronger player if more psychologists donated to political campaigns, and even more so if the average donation increased only \$5.

Even with the most compelling issues and best data, psychologists first need to get in the room and build the relationship. While legislators certainly value expert input, they are more receptive to those who can also alleviate the time and energy devoted to campaigning. Dismissing this reality as corrupt or unseeingly is neither

Table 20.3 Comparison of political giving among healthcare professions

Profession	Association membership	Median salary	Disbursed 2009 + 2010	Percent increase over 2008 disbursed	Per member per year donation
Podiatrists (APMA)	12,000	\$181,500	\$964,539 [#]	↑ 9.3	\$40.20
Optometrists (AOA)	35,000	\$104,500	\$1,798,658	↑ 1.4	\$25.70
Nurse Anesthetists (AANA)	35,000	\$157,000	\$1,413,246	↓ 14.4	\$20.19
Dentists (ADA)	128,020	\$134,500	\$2,430,850	↓ 6	\$9.49
Chiropractors (ACA)	18,000	\$130,500	\$347,250	↑ 11.3	\$9.64
Physical Therapists (APTA)	69,825	\$75,000	\$1,263,668	↓ 3.3	\$9.05
Nurse Midwives (ACNM)	6,500	\$92,000	\$108,228	↑ 3.8	\$8.32
Occupational Therapists (AOTA)	36,000	\$73,500	\$423,238	↑ 0.2	\$5.88
Psychiatrists (APA)	38,000	\$193,500	\$367,375 [#]	↓ 41.2	\$4.83
Psychologists (APAPO)	39,000	\$82,859	\$367,977	↑ 20.5	\$4.71
Dietitians (ADA)	67,000	\$53,500	\$432,403	↓ 4.2	\$3.23
Physicians (AMA)	231,693	\$225,000	\$1,428,163	↓ 57.3	\$3.08
Nurses in (ANA)	150,000	\$66,000	\$768,329	↓ 10.4	\$2.56
Social Workers (NASW)	150,000	\$47,000	\$691,237	↓ 17.3	\$2.30
Audiologists, Speech/Lang Pathologists (ASHA)	127,000	\$68,500	\$212,348 [#]	↓ 14.3	\$0.83

Note. Federal Election Campaign disbursement data through 12-31-10 from <http://www.fec.gov/finance/disclosure/srssea.shtml>, except those designated #, which are through 11-22-10. Median salary figured from salary.com

↑ Increased; ↓ Decreased; *APMA* American Podiatric Medical Association; *AOA* American Optometrist Association; *AANA* American Association of Nurse Anesthetists; *ADA* American Dental Association; *ACA* American Chiropractic Association; *APTA* American Physical Therapy Association; *AOTA* American Occupational Therapy Association; *APA* American Psychiatric Association; *APAPO* American Psychological Association; *ADA* American Dietetic Association; *AMA* American Medical Association; *ANA* American Nurses Association; *NASW* National Association of Social Workers; *ASHA* American Speech-Language-Hearing Association

accurate nor helpful. Legislators want to make a difference and contribute to society, but first they have to get in and stay in office. Referring back to the three rationales for advocacy, psychologists are widely respected for our academic credentials, science-based discipline, and commitment to the public good, but psychologists have a poor track record of demonstrating political will.

Getting Started

Partnerships

Although Hollywood glamorizes the power of strident individuals to change the system, our political system is constructed to respond to groups of people. This is truer today as policymakers struggle with information overload. A groundswell of public support will always be more compelling than one vocal citizen.

Joining professional associations and interests groups is an ideal way for students and ECPs to become active in local and national advocacy. The APA with 55 divisions and 60 affiliated state, provincial, and territorial associations (SPTAs), as well as the Association for Psychological Science (APS), all provide a variety of ways for students and ECPs to engage in advocacy, at discounted membership prices. These associations support grassroots networks, organize Hill Days to lobby legislators, host annual leadership conferences that provide advocacy training, and produce e-newsletters to update members on recent policy activities and opportunities to participate. Several societies also offer Congressional and Executive fellowships for ECPs, including the APA, Society for Research in Child Development, and American Association for the Advancement of Science.

SPTA's and APA Divisions are also a great way to participate in advocacy directed towards specific issues of direct personal and professional relevance. The APA web site provides links to the SPTA's and divisions, as well as regional organizations. APA also supports advocacy networks

focused on specific areas of psychology, such as the Federal Education Advocacy Coordinator (FEDAC) grassroots network. Many divisions and SPTAs send representatives to leadership conferences sponsored by the Science, Education, and Practice Directorates of the APA, held annually in Washington DC and organized around a current advocacy theme or agenda. In addition, APA, APS, and many SPTAs are affiliated with 501 (c)(6) organizations that can support advocacy networks, engage in fundraising activities, and have expanded capabilities to pursue policy activities (see web resource below for links).

Almost all of these associations also publish online advocacy guides that outline the legislative and regulatory processes relevant to psychology and provide guidance on different advocacy methods (American Psychological Association, 2010), such as:

- Letter writing and emails
- Phone calls
- Media interviews
- Press releases
- Meetings with representatives and executive agency staff
- Providing legislative testimony
- Fundraising

The APA Government Relations Office provides links to many of these guides as well as the organizations discussed above.

Student Advocacy

The American Psychological Association of Graduate Students (APAGS) Committee is charged with assuring the "student voice" is heard within the APA governance system. As the world's largest organized group of psychology graduate students, APAGS leadership is comprised of both elected and appointed committee members who are responsible for advocating on behalf of the APA student membership. Its governance structure (see <http://www.apa.org/apags/governance/index.aspx>) provides a variety of opportunities for involvement, including a

Campus Representative program and an Advocacy Coordinating Team (ACT) that supports graduate student participation in federal and state legislative advocacy through collaboration with the APA Practice Organization (APAPO) and the APA Government Relations offices for Education, Science, and Public Interest.

Policy Relevant Resources

APA Government Relations Office
(<http://www.apa.org/about/gr/index.aspx>)

All graduate students and early career professionals should become familiar with this site. It has extensive links to other policy sites, and explains how to become members of the three government relations offices for Education, Science, and Public Interest and the two APA-affiliated 501 (c)(6) organizations for APAPO and the Education Advocacy Trust. This link provides Action Alerts, instructions on how to sign up for policy newsletters, and links to advocacy information on a range of topics.

Association for the Advancement of Psychology (<http://www.aapnet.org/>)

Psychology's first and largest national political action committee (PAC) that supports legislators supportive of psychology through electioneering activities. AAP offers a quarterly newsletter and provides discounted rates for students.

Directory of State, Provincial and Territorial Psychological Associations (SPTAs) (<http://www.apapracticecentral.org/advocacy/state/spta.aspx>)

APAPO works with its 60 affiliated state, provincial, and territorial psychological associations

(SPTAs) on a broad range of issues affecting the professional practice of psychology.

Advancing Psychology Education and Training: A Psychologist's Guide to Federal Advocacy (<http://www.apa.org/about/gr/advocacy/advocacy-guide.pdf>)

This guide, published by the APA, provides general guidelines for advocacy by psychologists, including an overview of the legislative procedures and committees relevant to psychology.

Advancing the Science: A Psychologist's Guide to Participation in Federal Policymaking (<http://www.apa.org/about/gr/advocacy/participate.aspx>)

A web-based guide by APA providing an overview of advocacy related to psychological science.

Curriculum for Advocacy Training
(<http://www.apa.org/about/gr/advocacy/sample-curriculum.aspx>)

A sample curriculum to provide programs and faculty with resources to facilitate the incorporation of advocacy training into the curriculum by promoting.

Thomas: Legislative Information on the Internet (<http://thomas.loc.gov/>)

The Library of Congress sponsors this site, and it is an invaluable resource for anyone interested in understanding federal legislation. The site contains clear descriptions of the legislative process, detailed information on roll call votes, listings of the composition of all House and Senate Committees, and easily accessible links to the home pages of all members of Congress. Students can also look up the status of individual bills,

searching by number or key words (for example, typing in “Psychology” as a key term will pull up all bills in which the profession and practice of psychology is specifically addressed),

FirstGov (<http://www.firstgov.gov>)

FirstGov.gov is a quasi-official U.S. Government portal to 47 million pages of government information, services, and online transactions. This site is a good starting place for any search for information on public agencies or organizations (e.g., students may want to look up an organizational chart for the Department of Health and Human Services, get a listing of all NIH Institutes or look up the names of all the Supreme Court Justices).

How a Federal Bill Becomes Law (<http://www.igc.org/acm/acmbill.htm>)

This is a clear, brief, and straightforward explanation of the steps involved before a federal bill can finally become a law. The document can be printed and used as class handouts.

National Council for Community Behavioral Healthcare

The National Council represents 2000 behavioral health organizations (e.g., Community Mental Health Centers) and has an active advocacy agenda supporting recovery and inclusion for individuals with a wide range of addiction and behavioral health disorders.

Bazon Center for Mental Health Law (<http://www.bazon.org/>)

This site is a rich source of information for those psychology students interested in the interface of mental health and the law.

National Alliance for the Mentally Ill (NAMI) (<http://www.nami.org/advocacy.html>)

NAMI maintains an active advocacy program and has tremendous influence on Capitol Hill. Their positions on issues do not always line up with those of professional or scientific psychology, but they serve as a role model for effective advocacy.

Kaiser Family Foundation (<http://www.kff.org/>)

This site allows students and professors with policy interest to sign up for email alerts and the *Kaiser Daily Health Policy Report*. The report can be customized so that only topics of interest are posted (e.g., AIDS, mental health policy, homelessness, etc.). A weekly health policy update is also available at no charge from this site.

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Public Education of Psychology: An Interview with Philip G. Zimbardo, Ph.D.

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Philip G. Zimbardo

Psychology and the Media

By disseminating findings from psychological research and promoting psychological services to the public, the media serves an important function benefiting the public and our field. Psychologists early in their career can serve an important role as consultants to trade media, community media outlets, or even national/international media conglomerates. We asked Dr. Phil Zimbardo to discuss his vision for the role of the media in psychology, his advice for psychologists who are contacted by the media, and also to discuss his own groundbreaking experiences with the media on behalf of psychology over the years.

Importance of Media Involvement Among Psychologists

Interviewer (MJP): What do you think is the current public image of psychology as a field?

PGZ: I think that the incident and experiences around September 11th have helped to create a more positive and accurate image of psychology for the public. The public has become more aware of psychologists contributing their services as therapists in New York and Washington and elsewhere. I know the APA website was used very

extensively by the general public at this time. The whole concept of posttraumatic stress disorder and the important effects of stress and anxiety in our lives really became salient after 9-11, and I think psychologists have responded expertly and admirably in response to these events.

But, prior to that time, and generally, I think the public has had either a null or somewhat negative image of psychology. I don't think the general public knows the difference between psychiatry and psychology. It has been apparent to me that the media is often unaware of the sub-disciplines within psychology. There is some awareness that psychologists do research and some psychologists do engage in clinical practice, but how the two are related is still often vague. It is rare that the research foundation of practice is apparent to the public. Indeed, it is likely the average person does not know the difference between psychiatrists and clinical psychologists. As a psychologist who has always been concerned with making psychology relevant to the goals of society, it is clear that the media plays a critical role at the interface between what we know, what we do, what we want the public to know, and how to utilize our knowledge and our expertise to help society. So far, this has not really happened in a very productive way. Psychologists and the media could and should have a greater synergy than they currently do.

Interviewer: How does the image of psychology compare with the image of other sciences or related mental health disciplines?

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PGZ: I think the public better understands media stories from other sciences such as biology and from medical research, the reason being that newspaper science writers who write about medicine and biology are usually much better trained than the science writers who write about other areas. There are workshops that train journalists in these areas, and those journalists often have had biology or premed courses in college. They want to get the story right. One of the problems with many stories about psychological research is that most reporters don't have a psychology background and they don't get the story right. For example, they don't appreciate what a control group is all about or they will emphasize only one part of a research investigation without understanding its broader context. My feeling is that biology and medicine are better understood and appreciated by the general public than is psychology. I think the media does not clearly differentiate psychology from psychiatry either in terms of practice or in terms of research, or for that matter, from other social sciences. One clear exception can be seen in the articles written by Erika Goode, the New York Times behavioral sciences columnist, who studied for an advanced degree in social psychology at University of California, Santa Cruz. She interviews enough of the right people, does her homework, gets dissenting views as well as supporters of the issue being presented, and crafts it all in an accessible style.

Interviewer: How do you think psychologists' involvement in the media could be helpful to the public?

PGZ: Our field offers much of value that can improve everyday functioning and quality of life, with clear implications for preventive healthcare. Our field could have a dramatic influence on learning and training in the fields of education, law, and business. The media are the gatekeepers between the public and us. It is our job to learn how to open those gates more fully.

In 1969, APA president George Miller started the American Psychological Association by saying we should give psychology away to the public. It was a startling statement because until that time psychologists gave psychology away to each other.

Most psychologists were totally unconcerned about the public. The whole notion of being "relevant" was akin to 'selling out' to the proles. We were saying that we're not pop psychologists, we are serious scientists, and we shun the media since it is part of the commercial establishment. Psychologists did research, and we wrote about it in our journals, and we talked to each other. George Miller was an experimental/theoretical psychologist, so coming from him, this statement was very profound. Unfortunately, not as much has been done since then as might be to actually make psychology relevant to the public concerns.

It is a growing trend among psychologists to say that we ought to be able to demonstrate that what we have done makes a difference in people's lives. In more recent years, most funding agencies have asked that researchers indicate how their research could conceivably have societal applications. I think that at a deeper level there are more and more psychologists who believe that research—even basic research—could have meaningful application. Now I should say that one of the reasons psychologists have not been interested in giving psychology away is because many psychologists are very modest, saying: "we're not sure we have anything worthwhile to give away." Other psychologists go on record saying, "we don't know how to give psychology away". "We don't know what of all of our psychology people would want." And then the question becomes what is the process for any psychologist to give psychology away to the public? And for me, one idea, not addressed by George Miller, is a clearer understanding of how we as psychologists can discover how to share information with the public. The media is the secret to how we can give away what we do and know. The media decides which of the information they will pass onto the public, and in what form.

The Future of Psychology in the Media

Interviewer: What do you think are some of the most important messages that we should be giving away?

PGZ: There are many important messages. My primary APA presidential initiative is to help demonstrate whether and how psychological research has made a significant difference in people's lives. I believe that the answer is of course, "yes – it has in many ways." My presidential initiative has started collecting the database, but we will continue doing so for a number of years. We are starting in the United States and it will hopefully be expanded to many other nations' psychological societies. We have been conducting a survey asking APA members to nominate research that demonstrates a significant impact on individual learning, education, financial behavior, health status, organizational behavior, and more. We are literally identifying hundreds of individual studies or programs of research that demonstrate how psychology has had an impact, and has been translated into public policy, or practice within schools, hospitals, clinics, and organizations. We are just now collecting that information and ideally, we will have a compendium of psychologists' most valuable impacts compiled within a year or two. We will post this list on the APA website to demonstrate that we have made a difference, and we will make this compendium available to the media, to legislatures, and to the general public. It seems to me that this is something that psychology should have done a long time ago to demonstrate that what we do makes a difference in people's lives. APS has also agreed to collaborate with APA in gathering similar data from its members, one of the first collaborative efforts between the two societies.

We are getting some excellent examples of the impact of psychology in making significant changes. For instance, in the area of safety, researchers in the field of perception have made a difference in airline safety by redesigning commercial airline cockpits to correct for a visual illusion that was causing accidents. Other researchers were instrumental in the decision to change the color of emergency vehicles from red to lime green because you can see lime green in dim light better than you can see red. This is basic psychophysics being applied. Another example pertains to social psychologists and psychologists working in the area of psychology

and law. Here, researchers have demonstrated the conditions under which testimonies can be biased or eyewitness accounts are fallible. Psychologists such as Elizabeth Loftus, Gary Wells, and a number of others have had such a substantial impact on the criminal justice system that former Attorney General Janet Reno arranged to have psychologists work with her staff to develop guidelines on reliable and valid eyewitness testimony. This is an indication that basic research on eyewitness identification by social psychologists has had a direct impact on influencing our legal system.

Another example pertains to research on post-traumatic stress. Terry Keane at the Boston VA is one of the pioneering researchers who have identified, diagnosed, and developed various treatment programs for Posttraumatic Stress Disorder—initially with regard to Vietnam veterans before they realized that this was a general phenomenon. Anyone who's experienced extreme trauma—rape victim, victims of various kinds of natural disasters, victims of terrorist attacks on September 11th—have benefited from this work.

One of the potentially most valuable instances of psychological theory making a difference is the application of Al Bandura's social-cognitive theory of modeling. A Mexican TV producer has developed it in creative ways by weaving different kinds of social models into soap operas. These long-running programs are watched by millions of viewers daily and they see powerful examples of the need for family planning, for raising the status of women through education, for safe sex practices in preventing AIDS, and other vital messages. An international communications agency has extended this approach to develop similar soaps for many other countries worldwide. A critical component of this project is systematic independent evaluation of its effectiveness with solid behavioral outcomes.

Interviewer: Your initiative sounds like an important step towards the giving away of psychology and should be very helpful in educating the public about psychology. Why do you think this has not happened earlier?

PGZ: One problem with the interface between psychology and the public is the ever-present

disdain for “pop psychology”—that is, of promoting unscientific psychology for commercial gain. It is important to realize that psychology is unlike any other discipline. Our work in academic psychology spans an enormous range of topics, from the most intricate details of the functioning of the nervous system, witnessed by the current excitement being generated by cognitive neuroscience, all the way to understanding issues such as the cultural construction of the self, conflict and peace, health, and spirituality. Psychologists are working at very micro levels of analysis up to the broadest macro level. There is no other academic discipline that has our breadth and range. Moreover, psychology also has an effective, evolving practice component, which is also unique among the behavioral sciences. In addition, we have a built in, intrinsic popular component since we have something to say about virtually every aspect of human nature, how to understand it, and even how to improve it. Because of our breath of focus, and overlap with yoga, meditation, spiritual awareness, religion, and personal effectiveness, we are the core of the “self help” industry. Some for the better of society, some for society’s schlock pile. One of the big dangers of psychology, especially among academics and scientists, is that some psychologists have overpopularized it and have pulled it out of the context in which psychology means anything specific to the general public. So we lose our uniqueness and sacrifice what is special, our research foundation, to self-proclaimed gurus peddling contemporary versions of snake oil to the public.

Interviewer: So, it sounds like there might be some ways that our interactions with the media could endanger our reputation or inhibits us from appropriately conveying the kind of work we do as psychologists. Could our involvement with the media also be helpful to the field...how do you think this would happen?

PGZ: My strong sentiment is that we need the media and that the media needs us. Psychology is one of the most interesting fields of intellectual inquiry. Psychologists are doing so much that is exciting and interesting to the general public. The media needs our stories and we need the media to

convey them to the public. Without the media, the only outlets for people to learn about psychology are through college and high school courses, or by reading our journals. Magazines, newspapers, TV, radio, and now the Internet are really the major outlets to reach what I’m calling the ‘general public,’ that is, the less well-educated public unlikely to read our primary sources of research. If you want to reach teenagers with a message about depression, suicide prevention, or bullying, where else do you go than a public service spot on MTV? We have to become more sophisticated in seeding our important information in media venues most likely to reach the audiences we want to influence.

When I visit congressional offices in Washington during my trips to APA central office, every single office is constantly tuned in to television news; members of congress all have the local newspapers and current magazines available. The point is that legislators have to be tuned into the media. Legislators are the people who vote for funds to support our research, our education, training, and determine how practice dollars will be spent. If our stories get out into the media—such as onto CNN, public television, NPR, and radio talk shows, the New York Times, USA Today—any place where legislators will read or hear about our work, it will help create a positive image of what psychologists do in the minds of those in positions of power. The power to help society work better, as well as the power to provide resources to help psychology function more effectively.

Interviewer: Any risks in working with the media?

PGZ: Let’s talk about what the media means. At one level, the media is this huge conglomerate. The media is made up of moneymaking corporations—ever larger concentrations of companies dominating multiple media outlets. The bottom line for all of these companies is a profit motive. The media has to present shows on television that will get good ratings, so they can charge more for advertising, which oils the media machine. That’s the bottom line. It’s the same thing with radio, newspapers, and magazines. If these outlets cover stories that attract

more readers or viewers, then the media is going to want more of them. We, as psychologists, have stories to tell that the media will want to report on because people want to see, hear, or read about what other people do, and what they might do differently or better. The popularity of “reality TV” is based on the public’s fascination with observing other people behaving in a variety of settings. As an aside, however, there is little reality in these shows since they are so obviously staged, but more importantly, what they lack is some type of psychological analysis of what the behavior means.

Another important aspect of the media is that the decision of what gets accepted, how it gets accepted, and how it gets presented often rests on a single person (e.g., the editor, the production supervisor, or even a higher up). That one person may have a point of view or a particular bias that can affect the story they want to tell, and how they tell it, or reject it. This is one of the dangers of the media. Sometimes a given media source has a prearranged story that they want to get across. They are looking for psychologists that will give them either their expert opinion (without data necessarily) or some supporting data to promote their point of view. This is where psychologists often get trapped—we get misrepresented, misquoted, or quoted out of context because reporters may not be really listening to our whole stories. In some cases, they don’t want the whole story; they just want information that will support a particular perspective that they already have in mind. I got trapped once in such a mess, a story I will share with you later on in this interview.

Getting Involved

Interviewer: How can psychologists get more involved in working with the media?

PGZ: One important problem is that psychologists have very little training in how to deal with the media. Suppose you conduct a study and reveal very interesting findings with important applications. So, what do you do with that? You can write it up for publication, submit it, and it

may take a year to two years before it is published— or revise and resubmit endlessly. Mostly other psychologists will read the research. Now if the research is really “hot,” that is, the research is touching on some issue of national or regional significance, then you want to make sure that the public is informed about your findings ASAP. What do you do?

One thing you can do is to issue a press release. Not many psychologists know how to write a press release. Some major universities have news services that will do it for you or help you write one. APA also writes press releases each week on articles that it thinks could be of media interest, but again, people don’t have to wait for APA. Certainly any researcher should be doing this kind of self-promotion if they really believe the research is important. You can work with the news service of a university, if you have one, or if not, you ought to learn how to write one—one pager leading with the significance and then highlighting the kind of research foundation for the finding you are promoting.

The second thing you can do—we all should be doing more of—is to write op/ed pieces. An op/ed piece in the New York Times, the Washington Post, and the Chicago Times, LA Times, or Herald Tribune reaches millions of people instantly. You can have more impact with 500 words in one of these media outlets than you can by writing several books. The Science Directorate of the American Psychological Association has a website (www.apa.org/science/editorial.html) with some examples of good op/ed pieces. Early career psychologists can begin by writing op/ed pieces for the local, city, or regional newspaper, or even for a school newspaper if you’re an academic.

You can also write a book. A book has the potential to reach many people in the public. Trade paperbacks are like monographs on a single topic, written for the public in an engaging, accessible style. But, if your publisher, or you privately arrange a publicity tour for your book, then it has the potential to reach a much wider audience. There are author’s agents who can arrange such tours for a fee. For textbooks, publishers hire sales representatives for promotion.

But for trade books, you are the sales representative. It is expected that the author will do an author's tour of self-promotion, if the book is judged to be a potential big seller and the author is personable—marketable. Depending on estimates on how well the book will sell, the publisher will organize a tour for you, or will help to support a tour. You might have to hire your own press agent and spend at least a couple of weeks on the road with the media promoting your book. If you are an academic, this is a huge burden, because it is time away from research and teaching. Whereas if you consider yourself primarily as a writer, it is delightful because it is two weeks traveling around the country meeting people, friends, making fans. An ideal author tour might include 7–10 cities, including appearances on television networks or guest spots on AM radio. You might appear on some evening program or a call-in radio and/or television program. Several newspapers and/or magazines might interview you. In some cases, you go to a city, do two or three interviews, go to a new city and be in the Green room by 6 am the next morning. Your comments on a radio call-in will be very different than when making a brief presentation on morning news show. You cannot have any notes; it must all be well rehearsed. In contrast, newspaper interviews can last an hour or two and be very detailed. But you must keep in mind, that you are selling a product, your book, the topic, and you.

Book writing and book promotional tours are not activities we usually think about as psychologists. But recently, psychologists doing interesting basic research are now repackaging their work as trade books. This is important for summarizing a body of research in a domain that the public and the media will think is interesting. It can also be a lucrative activity. One of the best ways to earn money as a psychologist these days is to be an author or coauthor of a trade book or textbook.

One way to get access to publishers for a possible future as a coauthor of a text is to volunteer to do text chapter reviewing for the publisher in your domain. And then write brilliant reviews that will catch their attention. That is how I got chosen to replace Floyd Ruch, author of the best

selling *Psychology and Life* introductory psych text, only they asked me to do the review in hopes I might adopt the edition for my course.

Lastly, you can work directly with television. For this approach, it is important that you utilize different kinds of media in your research that can be used on television. Let's say you do an experiment and you have some interesting results. If you called your local TV station to tell them about your research, the very first thing they are going to ask you is if you have any videotape. If you are doing research on topics that might have popular appeal and might lead to media interest, then you must videotape the sessions. Of course, you need to obtain the appropriate consent and human subjects approval to do this. As psychologists, we're trained to focus primarily on results, so when you go to a convention and do a talk we often rush through the procedure and simply describe the findings. The media is interested in the procedure, however, and it is important for them to show this to the public on videotape. Process is as important as Results for visual media.

This is one of the most important things I have learned about interacting with the media. Two examples: Stanley Milgram's research and the Stanford Prison Experiment. The reason those two studies have had enduring value is because they are on video. Milgram was way ahead of his time in the '60s by filming part of his research, and that film is still being shown now—thirty years later. Incidentally, I believe that the flak he got about the ethics of his blind obedience research was due largely to seeing the participants showing so much stress in deciding whether to continue to step up the shock levels. That does not come across in the same dramatic way from just reading his article or book. I did something similar with the Stanford prison study. We videotaped our procedure both as part of our data collection and for future teaching purposes. But because we had this archival material available in a day-by-day chronology of events, the research became more accessible to the media. Thirty years later (the Stanford prison experiment was conducted in 1971), NBC will show (in 2002) an hour-long documentary on the Stanford Prison

Experiment, partly because we have so much video material available to share with them.

Indeed, the Stanford Prison study, in a way, was a forerunner of Reality TV. I have two strong feelings about Reality TV. On the one hand, it's wonderful because it demonstrates that the general public is fascinated with observing human behavior—and that's what we get paid for—that's what psychology is all about. Observing human behavior, trying to make sense of it, trying to explain it, trying to influence it in a positive direction, trying to predict it. Reality TV is popular because it's fascinating for people to simply observe other people in various settings, as I mentioned earlier. On the other hand, Reality TV does not offer any explanation of the behavior—it is raw behavior undigested. What I would want to add is a psychological component. Psychologists have the understanding of nonverbal behavior, of interpersonal dynamics to explain the significance of people's behavior to the public. Second, because of the media ratings, Reality TV have becomes more and more corrupted—it is hardly reality. It's all staged, and highly edited and hyped to be more appealing to audiences. The enduring popularity of the Milgram study and of the Stanford Prison study was simply having available a film document of what the experience was like from the perspective of the subject. In essence, that is really what Reality TV is all about. That was the gift of Candid Camera, and the genius of Allen Funt, an intuitive social psychologist.

The best of reality television in my biased opinion was a program called "The Human Zoo." It was produced in 2000, in London by Granada Media, London Weekend Television (in conjunction with Discovery Channel). It was a study of the fundamental psychological principles involved when a dozen strangers meet for the first time in a lodge in the lake country of England—a remote area where they lived together for a week. It includes essentially the most basic ordinary psychological and social psychological processes. For instance, people making a first acquaintance, people getting to know one another, people forming impressions of others, making their own impressions on others, forming dyads,

forming friendships, organizing into groups, groups dominating one another, etc. What differentiates this from other reality television programs is that a British psychologist and I are commenting from time to time on the process while it is happening. We are making predictions about who will be friends and who will be enemies based on the same evidence the audience has of verbal and nonverbal behavior. And then you can see whether or not we are correct. Throughout the program, there are cutaways from the psychological phenomenon exhibited by the 12 participants to mini experiments and demonstrations that illustrate comparable concepts from a psychological perspective. For instance, we see people making first impressions as they initially meet one another, and then there is a cutaway to a demonstration of research on job interviewers' formations of first impressions within the first 15 s of a meeting. Unfortunately, the Discovery Channel decided to show only 2 of the 3 programs. The last program did not air, and the station is not distributing videos. That is part of my frustration with the media; in this case, some stupid executive making the decision that American audiences won't appreciate programs with people who have British accents. Do they not know about the popular British shows on PBS?

Interviewer: What would you say to graduate students or early career psychologists who may be interested in working with the media?

PGZ: Psychologists should always be aware of their reputation within their department and their reputation within the field. And departments vary considerably in terms of their acceptability quotient for media portrayals of research. There are some departments that do not like to see young professors quoted in the media, or promoted in the media; in other departments, it's just the opposite. Certainly universities benefit when, for instance, it is reported that findings come from "a study done by a Yale researcher." This instantly gives Yale credit for important work, and the alumni love to see this. But, there is always tension between colleagues who may be envious of you for the media attention. Also, some colleagues may feel somehow that working with

the media is commercializing or popularizing psychology inappropriately. After all, psychology should be a basic scientific enterprise—you do not often see theoretical physicists hocking their wares. Many people believe that media coverage cheapens the research, and if senior colleagues hold this position strongly, then working with the media could be held against you. Indeed, one way I have dealt with this tension was to be sure I always had a sound scientific study to balance against my more popular work, to keep my science colleagues happy, and accepting of me.

On the other hand, in terms of promotion of the field, I have always believed from the time I was a little assistant professor without tenure, that media involvement is crucial to help create a positive image of the field to people outside of psychology. If you have something important to say—if you’ve done something that’s meaningful and you want people to know about it—then your colleagues and certainly your administration should be pleased to have you reach out beyond the confines of the traditional academic distribution channels. (If not, send me their names and cousin Gino will pay a friendly visit to them.)

But again, the danger is that no one controls the media. You can’t control what the media will say or what the media will do. You can’t control it even by giving the media your documentary video—they may elect only to show a minute or two of the video, and perhaps not the most important or cogent part from your perspective. Psychologists are often frustrated because we are used to exercising control over our product—our product is usually an article we’re writing, or a book project that allows us to negotiate with the editor before making changes. With the media, once they have the material, they control it—they can change it virtually any way they want. Also if it falls under the heading of “news,” then there is no editorial control at all for authors of research.

Interviewer: Given these risks and the loss of control, what advice would you have for early career psychologists who are contacted about their work?

PGZ: Well, you don’t want to passively sit and wait for somebody to ask you. There are many sources that can help early career psychologists

promote their work. Publishing in *Scientific American* or *Psychology Today* are sources that will help you reach millions with your research. The APA Monitor is another great source. If you have a study that you think is newsworthy and is of interest to psychologists broadly or the public, contact the Monitor staff, and if you can convince them of its value, they may have a staff research reporter do a story on it.

The media may contact an early career psychologist directly, but typically this is because a colleague has mentioned your name. Networking in psychology is very important—early career psychologists should try to know people in different areas of the field. Go to conventions, present posters, give talks, make yourself visible, give constructive feedback to colleagues, give compliments when appropriate, schmooze with your colleagues. But know your limits. You may be contacted for a story that falls outside your area of expertise. Suppose you are contacted by a local reporter to comment on a story pertaining to child molesters or adultery that happens to be in the news at that time. If you are not an expert, indicate that immediately and if possible refer the reporter to colleagues who are. This is important, even if you are asked only for a quote—a single sentence, refuse if you are not comfortable being quoted as The Expert. That is where your colleagues will bristle. Reporters are not really interested in you as an Individual; rather it is you as part of a larger category of relevance to their readers. They will attach your quote to the reputation of your university—for instance, they want to be able to say, “A Stanford professor says...” or a “Psychological researcher believes...”

Overall, if the media contacts you, it is really important to think about the experience as a negotiation. Most young psychologists are extremely flattered that someone from the local newspaper, radio or TV station thinks that what they have to say is important. But you must establish guidelines: What is it exactly that they want from you? What is the theme of the piece? What are they searching for? What’s the conclusion? How much time or space do you have? Do they just want a quote? You don’t want to talk for an hour when, in fact, they just want a sentence or simple

conclusion statement. It's the same thing if you appear on a television program. It's critical to ask how many minutes you will be allotted. It is common for psychologists to plan on communicating several important points, but because they were unaware of the length of the edited interview, they talk too long about only the first point and the others never make the final cut. So you start out by saying, "There are three important features of Z: A, B, and C. A is special because..." That way, it is clear you have a proper overview of what is important, but have had time only to develop point A. Also, be sure to ask about others that have been consulted on this topic, and always suggest other experts, even after you've spoken.

Interviewer: How did you first get involved with working with the media?

PGZ: My very first experience with the media was when I was a graduate student at Yale University. I did a study in 1957 on the effects of caffeine and chlorpromazine on the sexual behavior of the male white rat. I did it with Herbert Barry, a fellow graduate student and we published it in *Science*. I was the senior author and it was a hot topic. Chlorpromazine had just become available, so this was one of the very first studies on this drug that revolutionized treatment of schizophrenia. What we found simply was that chlorpromazine depressed sexual behavior, and caffeine accentuated and enhanced the sexual behavior of the male white rat. Well, we published it and people were mildly interested.

The next week there was an article in Joyce Brothers' column, which said something like 'ladies, if you want to revive your spouse's bedroom vigor, give him an extra cup of coffee.' Our research was dealing with the male white rat and high doses of pure caffeine, and she's making this extension completely out of context. It was actually humorous. Dr. Brothers also reported it on the popular *Tonight Show*, and I was inundated with reprint requests. It highlights the point that the media are looking for a story. Remember, everyday the media has to fill thousands of pages of newspapers and magazines, and thousands of hours of airtime on radio and television channels. The media is desperate for stories, and we have

stories to tell. That was my first experience learning about the media's interest in stories from psychological research, albeit from a somewhat distorted perspective.

I also got involved in news media from other research I had done as a graduate student at Yale, and published in the first volume of *Psychology Today*. It was an analysis of the psychological tactics used by the police in extracting confessions from suspects—sometimes powerful enough to induce false confessions. I was invited to defend the research at a national law enforcement conference, and it got picked up and distributed by the *New York Times*. I guess I have tended to work on topics that have broader appeal than some of our more typical psychology subjects, like shyness, evil, cults, violence, and madness.

A bizarre incident occurred when I first arrived at Stanford University. I received a call from a *New York Times* reporter, John Leo (who has since become quite famous), on a deadline for a story on women using profanity. I explained that I did not know anything about this topic. Remember, you should make it clear when you are not an expert. But also remember, that they will never give up if they have to meet a deadline. So, this reporter said that he had a tight deadline the next day, and he needed just one quote. I asked about why he was interested in this story, and he said that his editor was cursed out at a cocktail party and he wanted to know whether it is a general phenomena that women are using more profanity, or whether it was just this woman personally cursing him out. And I said, "well I can't help you." He asked, "are there any psychologists who are studying this?" "Well as far as I know there are no psychologists studying profanity in women," I told him, "there are a lot of areas that psychologists just never study, that they're not interested in." He asked, "Can you think of anything in your experience where you've noticed women using profanity?" "Now that you mention it, yes." Mistake—he sucked me in to the black hole I should not have entered. I told him, "When I was taking an abnormal psychology graduate student course that met at Middletown State Hospital, we visited the back schizophrenic wards. Women patients were typically

more expressive than male patients. That is, they often exhibited themselves, cursed, and did other dramatic things, more so than did males.” This was 1956, before antipsychotic medication, and patients’ psychoses were much more florid. Now obviously these are not controlled observations, I likely noticed women being more overtly expressive because of the greater deviation for the usual baseline of women not being so publicly demonstrative. Regardless, the reporter thanked me and said a cordial goodbye.

Hold the presses. Next day, the New York Times felt it was fit to report a new trend sweeping America. A front page article exclaimed, something like, “Women are using more obscenities from swanky cocktail party matrons to mental patients on hospital wards – according to psychological researchers”—only ME! The story was distorted to indicate that I had observed *over many years* that female mental patients were very obscene. Notice the changes in timing and lifting of my restricted observations and the special population that I had casually noticed. The story was picked up by news services and spread literally around the globe. I became a very embarrassed world’s leading expert on female obscenity, but did turn down talk show offers.

What you may find interesting is that I actually used this anecdote in *Psychology and Life*, the textbook I wrote in 1971, as an instance of how research gets distorted and how an instant authority is created and should not be believed just because the NYT says so. Sometimes all the news is not fit to print, even in the New York Times.

Interviewer: How did you get involved with the discovering psychology series, candid camera, and now NBC news?

PGZ: A PBS station in Boston, WGBH-TV, was interested in doing a series on psychology. Some people at the station had taken a few psychology courses, and realized that despite the limited public perception at the time, psychology was about more than the brain and Freud. And so they approached the Annenberg CPB foundation with a proposal to fund a PBS series on psychology. Annenberg officials agreed, stipulating that the series should be geared towards remote learning/

adult education. They did a search for a host, who would also be the chief scientific advisor. They wanted someone who had written a textbook, who was doing current research, and had a good media presence. A number of psychologists were “screen tested.” I gave some lectures at Swarthmore, attended by WGBH staff, and won the job, undoubtedly on charm points.

I essentially created the series. Originally, it was going to be 13 one-hour programs, and I decided that it would be better to have 26 half-hour programs. I wanted to make sure that we would have something that would be good for PBS viewers, something that would be good for adults and Telecourse learners via videotape, but then also something good for high school and college students to have as an in-class resource. So as not to dominate the 50-min class hour, I decided the half-hour format would serve best. Essentially I laid out what would be a good introductory psychology course, with one program on each of the major topics in psychology. Then I was in the position of selecting the psychologists who would be interviewed, and I shaped each program. In the process, I essentially trained the entire WGBH production staff in basic psychology. For each program I wrote 25–50 pages of background on the topic, including the basic principles, the historical background of each topic, who were the key research contributors, who were the current people who I thought would be the most interesting on camera. Then I would block out the program, deciding on the format and sequence for each episode. I was aided enormously by a team of ten advisors that I selected to represent a broad range of psychology and education. We started filming in 1989 and finished in 1990–1991, and the series has been a huge success. It has aired continuously since 1990. The series has been shown in most colleges, virtually all high schools, and 10 different countries worldwide. They have sold thousands of videos; it is one of the most popular series in the Annenberg program. I have just revised the series in 2001. We have 3 all new programs—cultural psychology and cognitive neuroscience—that did not exist a decade ago, and applied psychology. For 17 of the original episodes, we have filmed new

interviews or revised old material. That project has been my most enduring, and probably most positive impact via the media, because I had a lot of control of the procedure, process, and outcome. I was the chief scientific advisor, as well as cowriter and creator of each series. As the host, I was able to really influence the way that many people teach introductory psychology. Unfortunately, the series never made it to prime time or the basic PBS station. Because it was only a half hour, it was always on the second PBS station, which is really the community college station. It is not reaching the general public as much as it should because it's really a very good series. I should say in passing that I don't receive any royalties or residuals for the *Discovering Psychology* series. I did it only for my love of psychology and teaching. The new program on cognitive neuroscience just won an Emmy for instructional television, as external justification for my efforts.

Candid Camera, in a sense, was kind of the prototype for Reality TV. The show looked at ordinary people in either natural or contrived situations. Years ago, I wrote to Allen Funt saying I would love to have access to his material in order to create videos for teachers and students of psychology. I wanted to prepare a video for introductory psychology and one for social psychology courses. I worked hard to convince him to work together with me on that project. He initially refused, but I was not deterred. As President of WPA in 1983, I invited him to give a keynote address in San Francisco, which he did brilliantly. Then, I invited him back later on for me to do a "pull piece" interview with him for *Psychology Today* magazine. I wined him and dined him, and we became friends. The key however, was convincing Funt that he was more than an entertainer, he was an educator—that viewers could learn while they laughed. He finally succumbed to this persuasive pressure allowing me to work with him reviewing hundreds of candid camera episodes. We identified 16 programs that I felt were most interesting for introductory psychology teachers and 16 other programs that were interesting for social psychology teachers. McGraw Hill publishes distributes the videos and laser discs, and I wrote a study guide with Allen Funt

to accompany the videos. (I do not receive any royalties from the Candid Camera series or study guides either; more doing it for the love of psychology and teaching.)

Another opportunity to work with the media came from the Stanford Prison study. That has been a big media event; the research itself is a dramatic piece. It is really like a Greek drama—what happens when you put good people in an evil place? There is a stage-like setting, costumes, actors, auxiliary actors (i.e., the police, the parents, a public defender, a Catholic priest). There is deep dramatic focus in the story. Do good people win over evil situations or do evil situations corrupt good people?

I am always thinking about how to communicate research findings in my teaching, so during the study, I took video, audio, and slides as the experiment progressed. Afterwards, I prepared a tape narration synchronized with the presentation of 80 slides that I distributed at cost for many years to teachers and community groups. Now that presentation is available on a free website now (www.prisonxp.org) along with some video clips from our documentary video. This fine web site, created with the assistance of Scott Plous, has had more than 6 million unique page viewers over the last two years. This is astounding to me that my little study should reach so many people so many years after its debut.

Then, working with undergraduates at Stanford, primarily Ken Musen (now a film maker), I created a video of the Stanford Prison study using the original black and white archival footage. We updated this with interviews of some prisoners and guards in 1989. It is titled: "Quiet Rage: The Stanford Prison Experiment." This version has been distributed to colleges, high schools, and criminal justice groups. That video has been influential in a number of ways to help others get a sense of what the experience was like. We distribute it from my office at Stanford, with ordering information in the web site.

Recently, a German film company produced a film called *Das Experiment*, which was based on the Stanford prison study. It was produced with an outstanding cast and one of the leading directors of Germany. Unfortunately, it is a terrible movie

for the image of psychology, and I have debated publicly the screenwriter and lead actor and done interviews deploring it. The first part of the movie documents the procedure used in my research, but then the second part is a fantasy sequence with extreme violence and graphic sex scenes that, of course, had nothing to do with the original experiment. Guards kill prisoners and rape the female psychologist-researcher, and prisoners kill guards! Sadly, the movie ends in a shambles with no debriefing, no explanation of why the study was conducted, and no sense of which part of the movie was real and which part was fiction. All the promotion of the film features references to my study, our web site, and to the research publications with Craig Haney and Curt Banks—but then they say it is a fantasy exercise. It is a sad example of the worse kind of exploitation of psychological research for purely commercial purposes. Recent research in Germany shows that viewer attitudes toward psychology are more negative after watching this awful film. And that is very distressing to me.

Lastly, on the prison study, the BBC recently did a recreation of the study with volunteers for a week and shown on prime time over 4 hours. I refused to be a paid consultant on the program because it was now clear the study was unethical and because I felt it would suffer from the Heisenberg effect. A made for prime time TV experiment would alter the behavior being studied by the very act of obviously recording it to get good sound and video close-ups. The participants would be aware at most times of being under surveillance and would want to look good for the home audience when it was all over. And that is indeed what happened. The prisoners wore lapel mikes at all times and often held them while talking to each other. Then there were “confessional” breaks when guards, prisoners, and the two British experimenters each spoke at various times to the camera. The essence of my study was creating an intense cauldron of behavioral dynamics that soon lost the sense of being an experiment and became a prison run by psychologists. The BBC experiment was always an “experiment,” and always a TV show to the participants, and so lost the essential intensity

created in the Stanford Prison Experiment. Interestingly, in that recreation, the prisoners won over the guards—hardly with any external validity to prisons of which I am aware.

Currently, I am the psychological consultant for NBC News. NBC has asked me to help them develop programming ideas that have psychological content, psychological relevance. As I said earlier, one of the programs is going to be an hour-long documentary of the Stanford Prison study in the fall. We are trying to generate other kinds of ideas for how to get good psychology into NBC programming, into the Today Show, to NBC News. Also NBC Dateline creates programs for other networks, like the Discovery Channel. We just did a pilot show for Discovery, called “Only Human”, that sadly they did not buy for a season series. In large part they rejected further shows because the host-comedian, whom they chose, got terrible ratings. The concept is a good one, that I hope to push further, a series of interesting or funny skits each based on a psychological theme, like compliance, conformity, the burden of keeping secrets, invasion of other’s personal space—but with some psychological analyses after each one, by me or relevant experts. If done right, it can’t miss.

Interviewer: You have certainly been our field’s leader in helping to educate the public about psychology. Was this initially one of your career goals?

PGZ: When I think back now, my primary experience with the media has really come about mostly through my teaching, but also through my research. In my teaching, I’ve always used videos, film, audiotapes, newspaper, or magazine articles—anything to help me breach the barrier between the classroom and everyday life. The media has always been an integral part of my teaching. As I mentioned earlier, my research tends either toward the dramatic or the appealing mundane—as with my research on shyness in adults and children. But mainly, the media has always been part of what I teach. In my first edition of *Psychology in Life*, I included a section on how to be a wise consumer of research. Essentially, this is for the average student who is

not going to be a psychologist—95% of students who take introductory psychology are not going on to even major in psychology. However, they will be consumers of our research, as physicians, lawyers, business people, and legislators, so we want them to know what psychology has to offer. My work educating the public about psychology has been an extension of my commitment to teaching.

Aside from the content of psychology we have another unique message—our experimental research message—our focus on controlled observation, systematic variation, and our sensitivity to human bias. No other discipline has this to the same extent. This makes psychology able to talk to the general public about matters of value to them, and to teach them about dangers in misleading advertising allegedly based on “research shows that...” Thus, we have an important contribution to make—and young psychologists should be taking over from us old farts and

leading the way to promoting psychology, to giving it away to the public in the right ways.

In conclusion, I have enjoyed sharing these random reflections of my career as a media maven, or media buff, and hope the basic message gets through to the next generation of psychologists.

As a fitting ending of this interview, I was just notified today that I would receive a special award from the Council of Scientific Society Presidents for my media and textbook work. It is the Carl Sagan Award for Improving the Public Understanding and Appreciation of Science. It puts me in a rather select group of previous winners, among them: Carl Sagan, E. O. Wilson, National Geographic, NOVA-TV, Scientific American and the NYT-Science Times. Wow! Now I will have to redouble my future efforts to live up to such an honor, and hope to be able to do so. Thanks for your attention.

Ciao.

Rhea K. Farberman

When Journalism Meets Psychology

For psychologists and behavioral researchers, media reporting of news and current events offers a credible, far-reaching, and inexpensive way to educate large numbers of Americans about psychological findings and knowledge. For the news media, psychologists are interview sources who can help answer the “why” of news events and social trends and can add interest, credibility and a fresh or unique angle to the news. So why is the relationship such a tenuous one?

When journalism and psychology meet, two very different worlds are coming together. The foundation of psychology is the careful analysis of research done over time. The foundation of journalism is the clock, or too often the stopwatch; a continuous rush to meet deadlines and beat the competition.

Blogger David Salvo often writes about the uneasy relationship between science and journalism and attributes much of the discomfort to pressures journalists face in the ever-changing media landscape.

“Scientists, as sources to journalists in the maelstrom, have become increasingly fearful that the credibility of their findings is being stretched thin to grab readers’ attention. Making the news ‘sexy’ frequently means glossing over crucial distinctions, like the classic distinction between correlation and causation,” DiSalvo (2011) writes.

Understanding what is considered news by the gatekeepers of the news process (reporters, editors, and producers) is a key factor in successful media relations. What’s important to realize is that many of the decisions made during the process by which an event becomes news are subjective. While most editors and producers will tell you that they make decisions about what gets in the paper or on the air based on objective factors such as timeliness, uniqueness, significance, impact on the community, proximity to the audience, drama, and the availability of good visuals, that person’s view of the world also enters into the decision-making process.

APA Public Affairs Office

The APA Public Affairs Office and its counterpart in the APA Practice Directorate work on a daily basis not only to make the news media aware of the knowledge and expertise of psychologists, but also to prepare psychologists to be successful newsmakers. APA’s media referral service is an electronic database that records the area of expertise and media experience of approximately 2,000 APA members who have expressed

*This chapter was initially published as Farberman, R. K. (1999). What the media need from news sources. In L. L. Schwartz (Ed.), *Psychology and the media: A second look* (pp. 8–22). Washington, DC: American Psychological Association. Reprinted with permission of the American Psychological Association.

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an interest in doing media work. The system works as a match-maker, putting the journalist in touch with the right psychologist, one who can answer questions intelligently and in a speedy fashion. This service lists psychologists with expertise in approximately 150 subject areas from child development to intelligence tests, from eating behavior to sport psychology. In an average year, between 5,000 and 6,000 APA members are referred to journalists for interviews through the referral service.

Interpreting and publicizing the research published in APA journals is another way the organization seeks to educate the media, and through them, the public, about the value and contributions of psychology and psychological research. APA Public Affairs staff review all journal articles for news potential and write press releases based on those judged most likely to attract the interest of editors, reporters, and producers. Between 50 and 60 press releases, many based on new research being published in APA journals, are distributed to the media each year.

APA makes this large annual investment in educating the media about psychology, psychological research, and the value of psychological services as part of its ongoing public education program. Today, in addition to traditional news media outreach, APA also communicates with reporters, and directly with the public, through social media platforms like Facebook, YouTube, and Twitter. These efforts, while unprecedented in the over 100-year history of the organization, are dwarfed by the investment other organizations and corporate America make in communicating with the public. For example, the APA public education campaign is funded at the level of \$1 million a year. When Lays wanted to introduce its fat-free potato chip to American consumers, it spent over \$40 million in a 6-month period on advertising and marketing!

The costs of communicating directly to the public through paid advertising make news media relations all the more important for psychology. It is important to remember that those professions and organizations which build ongoing relationships with the news media have a voice when important news breaks and when

national policies are discussed. Those organizations which remain silent or are not proactive in their communications efforts will be stuck on the sidelines of most news events and public policy debates. The APA is but one example of a group that works to inform news media reporting of current events and be an active player in the Washington public policy arena.

Simply put, if you want your expertise reflected in news coverage you have to communicate with the people who produce and report the news. If you don't communicate your expertise and point-of-view others will and those sources may not understand an issue as well as you do and probably will not cast you and your research, university, profession, as you would.

Nearly 30 years ago TV news elder statesmen David Brinkley noted that when a government or industry spokesperson "deals with television, it is not us they are dealing with. They are dealing with the American people through us. They give clear, short answers because they are more effective when they are delivered by us to the American people" (Rafe & Pfister, 1983, p. 56). The news media's ability to be the conduit through which organizations speak to the American public is larger and even more powerful today. The advent of websites, blogs, and twitter feeds have lessened the gatekeeper role of media. Today, more and more Americans are getting their news and information from new (social media) vs. traditional news sources (newspapers).

Most psychologists agree that it is important for organized psychology to build and maintain ongoing relationships with the news media. But, most would also agree that media relations can be a double-edged sword. If you don't know what you're doing you can get hurt.

Special Opportunities and Special Problems

As the news media offers opportunities for psychology and psychologist it also presents special problems. Examples of these special problems are (1) the uninformed reporter, (2)

fitting complex research into a sound-bite, (3) patient's confidentiality, and (4) public education vs. "on-air" therapy, (5) the challenge and opportunity of social media.

The Uninformed Reporter

Typically the reporter assigned to do a story with psychological implications has a limited understanding of psychology and behavioral science. The exception would be a large media outlet with the resources to assign an experienced writer to the psychology beat. Only a few national outlets such as *The New York Times*, *CNN*, and the *Los Angeles Times* have such a reporter. What is more likely is that the reporter who calls the psychologist for comment or explanation of a new piece of research or a news event is a generalist, called a general assignment reporter in the industry.

An investment of time and patience is required when dealing with the inexperienced reporter, but that investment is critical to the quality and accuracy of the final story. A good piece of advice to the news source—the interviewee—is: one should approach the reporter as one would approach a student. Think of the interview as a teaching opportunity, and as such, communicate to the student (the reporter) in language he or she can understand.

The craft of news reporting is very much a story-to-story, day-to-day profession. Unless you are blessed with a reporter covering psychology on a regular basis, the odds are that any reporter covering a story involving you may not know very much about you, the discipline, the story, and what happened before the reporter was assigned to your story. The protection you need in that situation also happens to be an effective way of providing service to the reporter. Who knows more about your work than you do? By compiling basic information about your research or practice, you can make the reporter's job easier and the eventual reporting more accurate.

In other words, by taking the time to educate the reporter and provide him or her with all appropriate background material you are making an investment in more thorough, more accurate news coverage.

Fitting Complex Research into a Sound-Bite

The average news sound-bite today is under 10 words in length. But psychological research is complex and there are limitations as to how resulting data should be interpreted and applied. Caveats are important. Simply put, what the researcher sees in his or her research results—one piece of the overall research puzzle that can only be applied within the limits of this particular study, is different from what the reporter wants to find in a research study—the all encompassing headline.

The challenge for the news source, the psychologist, is how to translate the research into a meaningful sound-bite; this is especially true when preparing for interviews with electronic media—radio and television, which often emphasize speed and brevity above in-depth reporting. The challenge for journalists is how to accurately cover complex science in the space or timeframe an editor has allotted and in a way the public will understand.

One valuable strategy for doing so is for the researcher to ask himself or herself simple questions about the research study. What was the goal of the research? What theory did I set out to prove or disprove? How might the results of this study be applied in the future? Brief but descriptive answers to these questions create a sound-bite that is simple without being simplistic. Also consider the media outlet you are being interviewed by. The type of interview you would do with your community newspaper is different from the one you would do with *National Public Radio* and different again from the one you would do with a network evening magazine like *ABC's 20/20*.

Patient's Confidentiality

Reporters are also looking to personalize the news and to make it dramatic. Often with issues in clinical psychology, reporters or news producers will ask psychologists to provide names of patients whom the reporter can also interview or who can appear on a broadcast with the mental health provider. These requests create vexing

dilemmas for psychologists. Some, indeed many, psychologists feel that their responsibility to uphold patient's confidentiality would rule out giving reporters the names of patients, either current or past. Other psychologists see the value, in terms of helping other people with similar issues who are not yet in therapy, of giving the media the opportunity to humanize and personalize the ailment by allowing them to introduce an actual person who is struggling with it or at best who has conquered it. The Division of Media Psychology and APA's Public Information Committee have looked at this issue in depth and found both value and areas of concern. The Division's suggestions for psychologists working with the news media are as follows:

When considering using clients on air, psychologists weigh several issues carefully, and where the needs of the psychologist and patient differ, the patient's welfare always comes first. Among the factors to be considered are: the vulnerability of the patient; whether or not the appearance of the patient would be exploitative; whether the patient is deciding to participate to please the therapist; and whether the appearance is a perceived testimonial or a demonstration of a therapeutic technique. The public education value of the appearance should also be considered (1996, p. 33).

Public Education vs. "On-Air Therapy"

Experienced media psychologists all recognize that educating the public about psychology and psychological interventions is not therapy nor should it be. The value of media psychology is to inform consumers about how psychology could help them or their loved ones. At its best, media psychology can suggest alternative behaviors, can motivate people to look at a situation with a new perspective or to seek the assistance of a mental health professional for a problem. Media psychology cannot however, in and of itself, solve the complex problems that are part of many people's lives today.

It was precisely the limits of what media psychology can and should do that caused so much disquiet within the profession about the talk show phenomenon of the early to middle 1990s. At that time, talk shows were increasing in num-

ber, each trying to outdo the other in terms of the startling personnel or outrageous on-air behavior. The shows were numerous, *Jenny Jones*, *Ricki Lake*, *Montel Williams*, to name a few. Each wanted mental health professionals to "perform" as part of the show's formula—conflict for the first 50 min, and then a resolution by a therapist during the last two broadcast minutes. Although the shows were successful in being able to attract "therapists" to appear on air, many experienced media psychologists refused to take part. Today, newer programs such as *Dr. Oz*, *Dr. Phil*, and *The Doctors* attempt to be more reasonable and more evidence-based but are still pressured by the industry's need to be competitive and earn high ratings.

The Challenges and Opportunities of Social Media

Today's social media platforms to some degree level the playing field between an organization like APA and the traditional news media. Now APA can communicate directly to the public through its website, Facebook, and YouTube. Today any psychologist can be a news reporter and publisher through their own blog.

If you are interested in joining the social media revolution you will need to do two things: (1) hone your public communications skills: writing for the public is very different from writing for your professional colleagues, and (2) differentiate your webpage or blog from others by communicating and emphasizing your specialized credentials and expertise. A well-crafted site that demonstrates your expertise will attract visitors. To keep them coming back you will need to freshen the site with new content frequently!

Why Do the News Media Do the Things They Do?

What drives the news media? Time, the quest for accuracy and fairness, and competition with other outlets—but mostly time. The only way to really appreciate the time pressures under which

journalists work, particularly reporters who work in radio, television, and on daily newspapers, and web-based news outlets, is to be aware of them. Reporters writing for daily newspapers typically receive a story assignment in the morning and face a deadline that afternoon. In this time, the reporter has to quickly educate him or herself about the issue, ascertain the facts and get quotes from people involved or other knowledgeable experts to achieve balance between both sides of a story. All this has to be done in anywhere from 4 to 6 hours. Often the news source who returns the reporter's call most promptly or who is most helpful to the reporter's understanding of the issues involved is the person who gets quoted or has the most effect on the story.

Radio journalists face even tighter deadlines, as radio tries to provide listeners with something that newspapers cannot: hourly updates on the news. Often a radio station will want to do a news interview with a source immediately, or certainly that same day.

Television deadlines range somewhere between the immediate need of radio and the "this afternoon" deadlines of print reporters. But TV has an added dimension. Whereas the majority of interviews for print, web and radio journalists are done over the phone, television reporters want to go to the news source's office or to some other appropriate setting to do the interview (and get "pictures" to go along with the story). The TV reporter has to leave the studio and get videotape; that adds time and pressure to the news-gathering process. Many web-based news sites also deliver both print and video news, i.e. will want to both speak to a news source and video tape an interview.

Deadlines vary in television. Daily morning or afternoon broadcasts want to do interviews today, or at times do live interviews during the actual broadcast. Other types of television news, like weekly magazine format shows have longer lead times and typically work on a show segment 4–6 weeks in advance of its airing.

The need for speed doesn't always allow the media to find the best fit between news source and story. It also doesn't always allow the reporter time to do the necessary homework in

order to get grounded in a topic area before conducting an interview. Such situations put both the news outlet and the news source at risk of a story or a quote that is incorrect or out of context or incomplete. The news organization cannot do much to change the nature of the news-gathering process and the news cycle. They certainly cannot add hours to the day. News sources can, however, take a few steps to try to be as efficient and effective as possible in spite of the media's time pressures.

How to Level the Playing Field?

The news source should approach every interview as an opportunity to communicate their message and educate the public. Working with the news media should be on the agenda of every psychologist as psychology and behavioral science fights for appropriate consumer recognition and its fair share of the research pie. But, also compulsory when doing news media interviews is preparation.

Washington, DC media trainer Nancy Coffee writes, "an interview is an opportunity to deliver a story to an audience. An interview is not an intellectual exercise, a debate, an argument, or a friendly chat. You and the reporter have a job to do."

The Preinterview Phase

From the interviewee's perspective, one of the most important pieces of the interview process is the "interview before the interview." This preinterview process is when the news source gets to ask the questions. Here's what you will want to know:

1. What news outlet is the reporter calling from? If you're unfamiliar with it, ask more questions. What is its format (newspaper, magazine, radio, TV spot news, TV magazine news, etc., audience, live or on-tape)? Length? Frequency? Other guests? Understand that news columnists, bloggers and hosts of news commentary shows have different roles than do traditional reporters. Their opinions often become a part of the news-gathering process.

2. What's the theme of the story, or in what direction does the reporter think the story is moving? What information is the reporter looking to you to provide? If the reporter says "I'm really just beginning to talk to some people about this," it's a golden opportunity for you. It may require a bit more time on your part, but it's an opportunity to really educate the reporter and therefore have more influence on the story than any other news source.
3. Who else has the reporter spoken to, or has plans to speak to? (This information can often give you a clue as to the direction or bias of the story).
4. If you're being asked to appear on a broadcast show pay extra attention to the show's format. What you want to avoid is being asked to participate in what is being set up to be a heated debate; or being asked to solve the complex problems of another guest in the last 30 seconds of the show.

Once you have asked these questions and gotten answers it is time to decide whether you feel you are the right person to do the interview. If the answer is yes, agree on a time that the reporter can call you back or come to your office to do the interview. Keep in mind the reporter's time pressures. The earlier in the process the reporter gets your information and point-of-view the better he or she can synthesize the information into the story in its appropriate context. Remember at this point in the process you also have the right to set some ground rules as to where the interview will take place and how long the interview will last. Being generous with your time in helping a reporter learn about and understand the subject area makes sense, but spending hours with him or her does not. A good length of time for a typical phone interview is 15–20 minutes; for an in-person interview 30–45 minutes; no interview should go beyond 1 hour.

If you don't feel you are the right person to do the interview it's a good idea to decline. While declining you can help the reporter by suggesting another colleague who knows more about the subject than you do.

Preparing for the Interview

Having a goal for the interview and knowing the words and phrases you will use to express your knowledge and point-of-view is critical to its success. Preparing brief summaries of your research or clinical work is a good way to help you frame your message, but also gives you a valuable overview you can share with reporters to help them prepare as well.

According to Clarie Bithell of the Science Media Center in London, a good interviewee uses colorful language and explains things in a simple fashion. "if you work in a complicated area of science," Bithell (2006) suggests, "use analogies from the outside world."

Before the interview begins, create the three most important message points you want to communicate. Ask yourself: *What is the important information on this subject I want the audience to know?* Write out your message points. Practice them. Are they credible, simple without being simplistic, brief, and true to your expertise and the psychological literature? Brevity will be important; the average quote is 7–10 words. Giving reporters longer quotes could lead to being misquoted. It is also important to give some thought to the questions you will likely be asked, and of course, what your answers will be. But don't assume that every question the reporter asks is the right question. Some will be the wrong question based on the reporter's lack of understanding of the subject area or a reporter who is fishing for controversy. It is important to acknowledge a reporter's question but also to correct it if it is based on a false premise. Then bridge away from it if it leads you away from the messages that you want to deliver.

Examples of "bridge" phrases are

- "The real issue is..."
- "What's important to remember is..."
- "I don't know the answer to that question, but what I do know is..."
- "The main point here is..."
- "The bottom line here is..."

During the Interview

With practice, and when you are at your best, you can control the content, tempo, and pace of the interview by sticking to your talking points, keeping your answers brief and avoiding the temptation to fill all the interview time with your voice. Don't wait for permission to tell your story. Think of the reporter's questions as entry points for your messages. Begin to tell your story—succinctly—in response to the reporter's first question, expand on those messages into response to question 2 and so on. Silence between questions should not make you nervous; it gives both you and the reporter time to think.

Reporters are fond of asking a few questions at one time and are known to interrupt frequently. When faced with multiple questions and an aggressive reporter, it is important to keep your cool. Break down multipronged questions and deal with one issue at a time. When stuck about how to respond or where to go next, remember the message points that you crafted and want to deliver. Returning to your message points will help you get back on track if you feel an interview is going awry.

After the Interview

Evaluating Your Performance

We are often our own worst critics, especially when it comes to seeing our image on television or hearing our voice on the radio. However, the best way to evaluate your performance is to ask yourself the question, "Did I deliver my three message points, and did they get into the story in an appropriate context?" The only issues you should concern yourself with in terms of how you look or sound is if your appearance, body language, or voice got in the way of the audience hearing your message. Such questions as, "Did I mumble or speak too rapidly?" "Did I

look disinterested or nervous?" "Was my loud tie a distraction?" are all appropriate.

What to Do When You Are Unhappy With a Story

Very rarely is a news report everything you would have wanted it to be if you had written it yourself. What's important to focus on is the big picture. What broad theme or message is received by the reader or viewer? Remember that it takes many, many impressions over time to influence public opinion. Consider your interview one small piece of that larger effort.

Occasionally news sources feel that they were misquoted by a reporter and want to demand a correction. There are times when it is appropriate to ask for such a correction but there are also times when making such a request can backfire. When a factual error appears in a news story it is fair and appropriate to ask for a correction. Do so firmly, but nicely. Remember that journalists are people, too, and therefore subject to the same issues of ego and anger as everyone else. (What's different, however, is that news people control what will be reported on tomorrow. You do not.) It will also be important to make the correction in future interviews on the subject. Reporters often use old news clips as a way to brief themselves on a topic. If a reporter's question is based on a false premise, tell them so and explain why.

When you feel that the story for which you were a news source has missed a particular context or nuance this is not necessarily the time to demand a correction. One risk of doing so is that you put yourself and your organization at risk of being perceived by the editor or reporter as "protesting too much" and that can beget an embarrassing second day news story, or a less than friendly reporter the next time you are involved in a news event. Remember, quoting or summarizing the opinion of someone with whom you disagree does not necessarily constitute a mistake on the reporter's part (Table 22.1).

Table 22.1 Strategies for successful interactions with the media

Before you are interviewed

- Do your homework
- Anticipate key questions
- Prepare key answers; including quotable phrases
- Prepare and fine tune your three message points

During the interview your rights are

- You have the right to determine the approximate length of the interview
- You have the right to select where you want to be interviewed
- You can ask in advance for the topics to be covered during the interview (occasionally reporters will give you a copy of the questions they would like to ask. But this doesn't happen often and if you do get such a list don't assume that the interview will not stray from that list)
- You have the right to set your own pace in answering questions. Don't let the reporter rush you. Taking time to think before responding to a question is a good idea
- You should correct false premises and challenge questionable assertions or assumptions

During the interview your job is to

- Deliver your message points in brief, understandable, quotable language
- Speak in plain English and avoid jargon
- Speak within the range of your knowledge, and don't be afraid to say, "I don't know"
- Be positive, not defensive. Use bridges to move away from topics you do not want to talk about and to your message points
- Don't let the reporter put words in your mouth or create controversy when none exists

Use social media

- Social media outlets such as Facebook, Linked-in, YouTube and blogs are an important extension to any news media relations work. Use them to educate both reporters and the public!

Conclusion

Working with the news media is an important means by which psychologists and behavioral scientists educate the public about the value of their work. Interviews are the primary means by which news is gathered. The news media and psychologists have important things to offer each other. News media relations are, however, something which should be approached with a degree of caution and lots of preparation. Psychologists who are interested in working with the news media should avail themselves of media training workshops and seminars offered by APA and other entities. As long as political and marketplace issues impede on the study and application of psychology and human behavior educating the public through the news media about the value of psychology will continue to be an important public relations tool for the discipline.

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Additional Resources

For more information about APA's referral service or to request a membership application contact the APA Public Affairs Office at 202 336-5700, email: public.affairs@apa.org. Also see the newsroom section at APA's website at www.apa.org/news/press/index.aspx

Part VI

Your Career After Graduate School

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The dissertation or clinical internship is typically the final requirement fulfilled for the psychology doctorate, and its completion is certainly just cause for both celebration and relief. However, completing the doctorate does not necessarily denote the end of “trainee” status. In many of the settings in which psychologists work, a postdoctoral fellowship is increasingly recognized as a desirable, if not necessary, next step prior to employment or licensure as a professional psychologist. Academic institutions and university medical centers increasingly prefer job candidates with advanced postdoctoral training. Such experience may also be required for licensure. Finally, some specialty practice areas within the field (e.g., neuropsychology) now require formal postdoctoral training at an approved program for specialty certification.

The diversification of psychology and the growth of professional practice over the last 50 years have prompted ongoing debate regarding the necessity and definition of postdoctoral training. Supervised experience beyond the doctoral degree prior to psychology licensure was first recommended by the American Psychological Association (APA) in its model acts for licensure (APA Committee on Legislation, 1955, 1967), and today, most state licensing boards mandate some form of supervised, postgraduate experience to qualify for the licensure exam. The exact nature of postdoctoral training has been the subject of a number of conferences including an Association of Psychology Postdoctoral and Internship Centers (APPIC) national conference on postdoctoral training in 1992 (Belar et al., 1993; Larsen et al., 1993) and the APA sponsored National Conference on Postdoctoral Education and Training in Psychology held in 1994. Nonetheless, uniform criteria for postdoctoral training do not exist.

Leaders in the field are pressing to create more uniform requirements for postdoctoral training, which currently vary greatly between states, and to establish professional organizations, rather than state regulatory groups, as the arbiter of postdoctoral training standards. The APA Commission on Accreditation (CoA, 2011) includes within its scope of accreditation “... postdoctoral residency programs providing education and training in preparation for professional practice at an advanced level of competency in one of the *traditional* areas clinical, counseling,

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or school psychology or in another recognized *specialty* practice area.” As part of the process for becoming accredited, programs must first submit a detailed self-study that includes information such as training goals and objectives, program policies/procedures, expected student competencies, and outcome data demonstrating achievement of these competencies. Following initial approval of the self-study, a site visit team involving a group of professional colleagues conducts an on-site review of the program. Finally, the site visit team submits a report to the CoA, which makes final decisions regarding accreditation.

As of April 2010, there were seven specialty areas that met the guidelines for accreditation: behavioral and cognitive psychology, clinical child psychology, clinical health psychology, clinical neuropsychology, family psychology, forensic psychology, and rehabilitation psychology (APA Commission on Accreditation, 2011). However, institutions offering postdoctoral training are not required to be accredited. While only a small number of postdoctoral programs are APA accredited (59 APA accredited programs in 2010), it is expected that the number of accredited programs will rise in 2011 (Forand & Applebaum, 2011). Finally, of note, a minority of the institutions offering postdoctoral training formally participate in APPIC and fewer are APA approved. Of the 126 programs participating in the 2010–2011 APPIC Directory, only 33 represented APA-Accredited programs (Lese-Fowler, 2010). The large majority of these are Veterans Administration (VA) fellowships because APA approval has been required by the VA in order for a fellowship to be approved.

Although neither postdoctoral training nor the accreditation of postdoctoral training programs has been mandated, these issues remain actively debated by various professional organizations. Supporters of mandated postdoctoral training contend that postdoctoral training benefits not only new psychologists, but also the field as a whole and consumers of psychological services. Detractors assert that the field has unnecessarily expanded its definition of what students need to know to become competent psychologists. Whatever your position on this issue, it is important when

planning your career path to recognize what we believe is a growing reality: the field of psychology, those employing psychologists, and state regulatory agencies maintain that graduate school alone cannot provide the broad range of knowledge and skills required for the modern practice of psychology. Complicating matters is the current state of postdoctoral training, which exists in a variety of institutions offering a range of different experiences, varying in their duration, amount of supervision, and compensation. So, even if you are ready to pursue postdoctoral training, the lack of uniform training standards and variability in positions raise many questions about what kind of position to pursue.

The goal of this chapter is to clarify these issues and assist you with two basic tasks: determining whether postdoctoral training is right for you and understanding how to obtain a fellowship that meets your personal and professional needs. With regard to the first task, we will explore advantages and disadvantages of postdoctoral training as well as other considerations in the decision to pursue a postdoctoral position. For those who might wish to seek such training, we will explicate the steps for locating, applying, evaluating, and securing a suitable fellowship. Finally, some thoughts and recommendations about the postdoctoral experience are offered.

Types of Postdoctoral Training

Before evaluating the potential benefits and costs of postdoctoral training, a brief introduction to the range of postdoctoral training opportunities seems warranted. As previously noted, with the exception of APA-approved fellowships, there are no established requirements to which institutions, mentors, or supervisors must adhere in the training of postdoctoral fellows. Consequently, postdoctoral positions, especially non-APA approved fellowships, even within a particular domain (e.g., research vs. clinical/applied) or specialty area (e.g., neuropsychology, health psychology, forensic psychology) are likely to vary greatly along a

variety of dimensions, including funding, training focus, structure, and setting. While such variations should not be equated with a corresponding range in quality, understanding the differences will assist you in determining which, if any, type of postdoc will best meet your needs.

Stipends

Stipends considerations are critical, as most recent graduates cannot afford to accept a postdoctoral position that offers no monetary compensation. Although there are some informal supervisory arrangements to gather postdoctoral hours toward licensure that are unpaid, the large majority of formal postdoctoral positions are funded. Based on the 2010–2011 APPIC Directory of postdoctoral programs, a total of 126 sites funded 549 full-time slots and 3 half-time slots (Lese-Fowler, 2010). Only 12 slots (5 full-time, 7 half-time) were unfunded. Of the postdoctoral programs participating in the 2010–2011 APPIC Directory, the median salary for all full-time funded slots was \$38,200 (range: \$20,000–78,000). The amount of funding offered, including both salary and benefits varies tremendously and often depends on factors particular to the institution, sector (academic vs. industry), geographical area, and funding source of a given position (Committee on Science, Engineering, and Public Policy, 2000). The highest paid full-time postdoctoral trainees, based on programs participating in the 2010–2011 APPIC Directory, were in military settings (average salary \$68,500). In contrast, the lowest paid postdoctoral trainees were in psychology department settings (\$25,000) (Lese-Fowler, 2010). There is also variability between average full-time salary for APA-accredited and nonaccredited positions. For programs participating in the 2010–2011 APPIC Directory the average salary for APA accredited program slots (206 slots) was \$44,700 (range: \$29,500–78,500), whereas the average salary for non-APA accredited program slots (243 slots) was \$35,900 (range: \$20,000–74,000).

Training Emphasis

The training emphasis of a postdoctoral position is one of its most salient features and typically a primary criterion for choosing a particular position. Most postdoctoral programs emphasize either research or applied/clinical training. Many offer training in both domains, but fewer integrate research and training activities, and those that do tend to be more highly structured (see below). In evaluating programs, it will be important to examine the relative emphasis placed on research, academic, and applied/clinical training and the fit with your own training goals, as most positions will offer more training in one of these areas.

Although funding and training focus may be persuasive features of a postdoctoral position, other factors, including structure and setting should also be considered. With respect to structure, postdoctoral training programs are frequently distinguished as providing either “formal” or “informal” training. “Informal” training usually occurs when supervision is provided within the context of a traditionally defined job. In contrast to this informal on-the-job training, “formal” postdoctoral training takes place in an organized educational and training program designed for the expressed purpose of developing advanced competencies and expertise (Belar et al., 1987). In defining formal requirements for postdocs related to professional practice, APPIC has designated the following essential characteristics as essential to the formal programs listed in their directory: (1) the program is coordinated by a designated staff psychologist; (2) the duration of training is at least 1 year at a minimum of half-time status; (3) training occurs under the supervision of a minimum of two psychologists; (4) at least 4 h/week of supervision are required, and at least 2 of these 4 h must be individual supervision of patient care; and (5) direct clinical services must account for a minimum of 25% of the fellow’s time commitment.

Looking beyond the clinical focus of some of these characteristics, a more general contrast can be seen in the relative emphasis placed on education and training. This is perhaps the most defining feature of formal postdoctoral programs

as compared to the informal, on the job, supervised training that may also be pursued to fulfill licensure or other experiential needs. In weighing the merits of formal vs. informal training, the trade-off is typically financial. Formal training programs typically offer lower financial rewards, with an understanding that part of the trainee's compensation is the education gained through structured mentoring and training experiences. Because informal postdoctoral training often happens in the context of supervised employment, these positions may offer more financial incentives but fewer organized educational opportunities, such as seminars and dedicated time for mentoring, supervision, writing, and other professional development activities.

Although survey data suggests that new psychology graduates express a preference for informal over formal postdoctoral training, those who have completed formal programs might be more satisfied with the training they received (France & Wolfe, 2000). In a survey of 117 psychologists who completed formal postdoctoral training, France and Wolfe (2000) found that 68% rated their experience "very valuable," 27% as "valuable," and 5% as "somewhat valuable." None of the psychologists who completed formal programs judged their experience to be "not valuable." In contrast, only 38% of 189 psychologists surveyed who completed informal postdoctoral training rated their experience as "very valuable." Thirty-four percent judged their postdoctoral training as "valuable," 21% as "somewhat valuable," and 8% rated the experience as "not valuable."

Setting

The primary settings offering postdoctoral training in psychology are freestanding hospitals, academic medical centers, and universities, although positions are also available through government agencies and private industries. Differences between the institutional missions of these settings and the type of work they support might affect whether a particular postdoctoral position is best suited for your training needs.

For instance, hospitals and some academic medical centers might be more likely to focus on applied aspects of both research and clinical practice, given their primary mission of service delivery. Accordingly, those whose interests lie in the treatment of particular types of medical or psychiatric disorders might be better suited for this setting than those whose work focuses on basic theory or other issues whose implications for improving health, development, or quality of care may be less direct.

The setting of the postdoc position may also affect the type of training experiences available. Hospitals and academic medical centers might be more likely to offer hands-on and interdisciplinary training opportunities such as treatment teams and grand rounds presentations, but may not offer coursework or teaching. It is common for more clinically oriented postdocs to be found at sites that provide predoctoral internships (i.e., clinics, VAs, private and state hospitals, etc.; Forand & Applebaum, 2011). In contrast, research oriented postdoc positions (e.g., such as afforded through NIH T32 National Research Service Award institutional training grants) are typically offered in academic medical centers, universities, or VA medical centers (Forand & Applebaum). Academic medical centers and university psychology departments typically offer more opportunities to teach and mentor, which could be important in obtaining a subsequent university or faculty position. Such institutions may also have more opportunities for learning skills relating to academic jobs, such as grant writing, manuscript review, or presenting research results at conferences. Important considerations regarding positions in the academic medical center include the possibility that postdocs may be assigned to work with a single mentor with little oversight or protection, have limited access to university facilities, or be isolated from other postdoctoral trainees.

Postdoctoral positions in industry are usually geared toward creating marketable and profitable products. They typically offer stricter time limits on duration of training, better salaries, employee benefits, well-equipped research facilities, exposure to industrial culture, and the

Table 23.1 Summary of differences across hospital, academic medical center, university, and industry settings for postdoctoral training

	Hospital	Academic Medical Center	University	Industry	Government
Professional practice or applied training	√	√	X	√	X
Ability to accumulate supervised professional practice hours toward licensure	√	√	?	X	X
Participation in decisions regarding training activities	?	√	√	X	X
Cross-disciplinary training and collaboration	√	√	?	?	√
Coursework or teaching opportunities	X	X	√	X	X
Opportunities to mentor or supervise students	X	√	√	X	X
Opportunities to learn and practice grant writing	X	√	√	X	?
Opportunities to participate in peer review of papers submitted for publication	X	√	X	?	√
Opportunities to coauthor publications	X	√	√	?	√
Protected time for research activities (data collection, data analyses, writing)	X	√	√	X	?
Opportunities to pursue independent research	X	√	√	X	X
Ownership of projects or data	X	?	√	X	X
Professional level pay scale	X	X	X	√	X
Benefits package (medical, paid vacation)		√	√	√	√

√=likely to be present; X=not likely to be present; ?=may or may not be present

opportunity for teamwork. However, industry positions might also offer fewer teaching opportunities, less choice about one’s particular placement, and limited ability to take ownership of projects. The work during the fellowship may have an exclusive focus on marketable results as well as restrictions on information exchange for proprietary reasons.

Lastly, training positions in government facilities typically occur in the context of large national labs that may be unique in scope of research and size of research group. Like academic medical centers, they might offer more interdisciplinary training, more interactions with other divisions and researchers, and participation in joint decision-making. However, government facilities might offer fewer teaching/mentoring experiences as well as less flexibility in determining the direction of one’s work.

A summary of the pros and cons of the various training settings is presented in Table 23.1. It is important to again note that the variations presented above do not necessarily constitute differences in the quality of the training offered, but differences in the types of opportunities or training activities that may be available. Such

differences will arise again later in our discussion, as we discuss how to evaluate potential postdoctoral training opportunities.

Benefits and Pitfalls of Postdoctoral Training: Is it Right for You?

Many professional and personal issues factor into a decision about whether to pursue postdoctoral training, and both types of issues should be seriously considered. Needless to say, the relative import of these issues will vary by person, and it will be up to you to determine how much weight to give any one of these factors in your decision-making process.

Potential Benefits of Postdoctoral Training

The overarching benefit of postdoctoral training is the opportunity it provides to develop new or better skills that will advance one’s professional goals. This may be accomplished in a variety of ways, including acquiring specialty area training,

Table 23.2 Potential advantages of postdoctoral training

	Potential advantages of postdoctoral training
Professional practice issues	Gain specialty training in an area of psychology or with particular population Accumulate hours toward licensure Fulfill requirements for specialty area certification (if applicable) Increase job marketability Supervisors and advisors can facilitate job search
Professional development as clinical scientist	Learn new research skills (grant-writing, statistical analyses, paper review, etc.) Opportunities to integrate clinical and research skills in applied settings under guidance of experienced mentor Protected time for research activities enhances research productivity Publish papers Initiate program of independent research Teaching and mentoring experiences Increase job marketability Supervisors and advisors can facilitate job search

logging the supervised hours necessary for obtaining licensure, or enhancing professional development as a scientist-practitioner. Although these agendas are not mutually exclusive, they may serve different career objectives. A summary of beneficial functions that postdoctoral training may potentially serve in advancing professional goals is presented in Table 23.2.

Specialty Training

Postdoctoral training can provide opportunities for advanced clinical or research training in a particular specialty area (e.g., pediatric psychology, neuropsychology, geropsychology, behavioral health, forensic psychology, etc.), with a particular population (e.g., patients with chronic schizophrenia, cancer, substance abuse, etc.), or a certain age group (e.g., infancy, adolescence, older adults, etc.). Such specialty training may render individuals more marketable for desired jobs or may even be considered mandatory within some areas of research or practice. For example, a postdoctoral fellow with specialty training in

inpatient pediatrics might be preferred over a recent graduate from a more general clinical child internship for a medical center position in pediatric oncology. Similarly, academic institutions may perceive a candidate who utilized postdoctoral training to publish papers and begin an independent program of research to be a surer bet for a faculty position that requires obtaining the support of external grant funding in order to sustain the position and advance academically.

Specialty areas of applied practice are now being organized into formal specialties though a system recently developed by APA under the auspices of the Commission for the Recognition of Specialties and Proficiencies in Professional Psychology (CRSPPP). These specialty distinctions are particularly important for those who might seek postdoctoral training for the express purpose of training in a particular area of research or practice. As specialty areas define themselves, they have begun to require specific types of training experiences for new psychologists seeking recognition or certification in that area. Table 23.3 lists the 12 specialty and 7 proficiency areas recognized by CRSPPP at the time of this writing. A listing of these areas and their related links may also be found at <http://www.apa.org/ed/graduate/specialize/recognized.aspx>.

Professional Licensure

In addition to providing opportunities for specialized training, postdoctoral positions can provide an opportunity to obtain the supervised postdoctoral clinical hours needed to qualify for clinical licensure. In an informal survey of current and former postdocs, as well as postdoc mentors, acquiring supervised hours and experience for licensure was cited as the most common reason for pursuing a postdoctoral position (Forand & Applebaum, 2011). However, state requirements vary in the type of required experience, the minimum number of supervised postdoctoral clinical hours (most programs require between 1,500 and 2,000 h), the length of time allowed to complete training, the kinds of activities allowed during training, and the amount of

Table 23.3 Specialty and proficiency areas currently recognized by the Commission for the Recognition of Specialties and Proficiencies in Professional Practice (CRSPPP)

	Year of recognition
Specialties	
Clinical Neuropsychology	1996
Clinical Health Psychology	1997
Psychoanalytic Psychology	1998
School Psychology	1998
Clinical Psychology	1998
Clinical Child Psychology	1998
Counseling Psychology	1999
Industrial-Organizational Psychology	1996
Behavioral Psychology	2000
Forensic Psychology	2001
Family Psychology	2002
Professional Geropsychology	2010
Proficiencies	
Biofeedback: Applied Psychophysiology	1997
Psychopharmacology	2001
Treatment of Alcohol and Other Psychoactive Substance Use Disorders	2001
Sport Psychology	2003
Assessment and Treatment of Serious Mental Illness	2003
Police Psychology	2008
Personality Assessment	2010

supervision required (1–2 h/week is typical). Clinicians seeking to work even part-time in professional practice or conduct research with patient populations will likely need to become licensed, and obtaining postdoctoral clinical hours within a formalized training system usually facilitates licensure in that state. Those knowing the state(s) in which they ultimately might wish to practice might want to increase their familiarity with the licensure requirements for those states. Such knowledge might even help to guide decisions about potential internship and postdoctoral training programs. Information about individual state requirements can be obtained by writing to a state's psychology board, which will have copies of relevant statutes, rules, and regulations regarding psychology licensure. Alternatively, *The Handbook*

for Licensure and Certification Requirements is published annually by the Association of State and Provincial Psychology Boards (ASPPB) and contains information about specific postdoctoral requirements, such as number of hours and supervision requirements. This and other information concerning professional licensure can also be obtained at the ASPPB web site, <http://asppb.org/>.

Professional Development as a Clinical Scientist

For those interested in research or academic careers, the postdoc can be an important training ground for professional development as a scientist-practitioner. More formal programs may provide didactics relating to teaching, research, or grant-writing skills. There are often opportunities to work closely with a mentor in a variety of more advanced professional activities, such as writing research papers, developing professional presentations, assisting with the review of papers submitted to journals, and the development of one's own research studies. For those with applied interests, postdoctoral training can provide a level of training in applied settings that is often difficult to obtain in graduate school. The guidance of an experienced mentor can provide invaluable opportunities for integrating research and clinical skills as well as for learning to negotiate the politics and hierarchies involved in doing research in multidisciplinary settings composed of individuals with divergent professional backgrounds and interests.

Potential Drawbacks of Postdoctoral Training

Table 23.4 summarizes some of the factors that might weigh against the decision to pursue postdoctoral training. One of the biggest struggles encountered in the decision to pursue postdoctoral training is the one between making the transition to becoming a full professional and prolonging one's trainee status

Table 23.4 Potential drawbacks of postdoctoral training

Potential drawbacks of postdoctoral training	
Personal development issues	Continued financial sacrifices for another 1–2 years Potential need to relocate for postdoctoral training and then again for a professional position Relationship and family obligations: dual career demands, children, childcare, ability of family to relocate, availability of suitable local training Social stressors of relocation
Professional development issues	Prolonging trainee status and delaying entry into professional position Balance of available training opportunities with clinical service or other professional demands

(Kaslow, McCarthy, Rogers, & Summerville, 1992). Personal issues, such as finances and relocation, are often an important part of this decision. Postdoctoral training almost certainly entails a continuation of financial sacrifices for another 1–2 years. You may also need to relocate for a given type of training and then, perhaps, move again in order to obtain a professional position. Other personal issues such as cost of living, dual career demands, family goals, and relationship commitments need to be carefully factored into postdoctoral training decisions, as these matters can sometimes outweigh the professional advantages of or perceived need for additional training.

Postdoctoral Training Versus University Faculty Position?

Following completion of predoctoral internship, some trainees interested in pursuing research or academic careers may deliberate between pursuing postdoctoral training or applying for university-based faculty positions. This is often a difficult decision, again with pros and cons associated with each choice. In the increasingly competitive job market, one advantage of pursuing research-based postdoctoral training is the opportunity to advance one's research career by providing "protected" research time that may be used to write up the dissertation, other data, and book chapters for publication, develop a grant, or make other types of progress in defining your future program of work. Another concrete advantage to pursuing postdoctoral training is that data

collected on a new project during the fellowship will be available to analyze during the first few years in a junior faculty position. This opportunity can greatly facilitate academic productivity by providing manuscripts that can be written up for publication while establishing one's own research program at a new site. Postdoctoral training programs that offer formal or informal opportunities to develop grant-writing skills may also give the trainee a competitive edge when it comes time to apply for faculty positions, particularly if the trainee submitted their own extramural grant application during postdoctoral training.

While there are advantages to pursuing postdoctoral training, there may also be strong reasons to apply for faculty positions and forego postdoctoral training. One practical consideration is that because the availability of faculty positions varies year to year, it may be worth pursuing an opportunity that is an excellent "fit" in terms of research focus, geographical location, or type of institution. Similarly, given that the market for tenure-track positions is competitive, trainees may plan to give themselves 2 or more years to apply for academic faculty positions, instead of waiting until the end of postdoctoral training. This may mean that a trainee decides to simultaneously apply for both postdoctoral training positions and faculty positions and/or that the trainee applies for faculty positions in the middle of postdoctoral training. Finally, trainees who have a strong record of research productivity by the end of their predoctoral internship may not need the "boost" provided by additional research time

within postdoctoral training. In this case, the financial and other personal benefits (e.g., not having to relocate for postdoc) of securing a faculty position may outweigh the potential benefits of further research training provided by postdoctoral training.

Ultimately, you must decide how each of these factors affects your personal and professional goals. Whatever path you take next will likely entail some level of personal or professional sacrifice. For example, some trainees may be unable to relocate for a postdoctoral specialty training position because of a variety of personal factors such as limitations in the geographic flexibility of a partner's job, the impact of losing extended family supports, financial obligations, or a need for an income that is consistent with their stage of adult development (e.g., purchasing a home). Yet other trainees may decide to pursue advanced training because their partners' careers are relatively mobile, the desired training is available locally, or they are less financially constrained. Potential variations of this scenario are endless, illustrating that the particular sacrifice that any one person is able or willing to make is highly idiosyncratic. Those considering postdoctoral training may wish to rate the relative importance and flexibility of their family, social, relocation, financial, and developmental needs/goals and compare these ratings to the perceived importance of postdoctoral training to their career goals, a subject we turn to next.

Is Postdoctoral Training Right for You?

The question of whether postdoctoral training is right thing for any one person depends on their unique constellation of professional and personal goals, needs, and constraints. Perhaps the best reason to pursue postdoctoral training is to learn new skills or obtain specialized training that will enhance your professional goals and make you more marketable in the future. Less ideal, but nonetheless compelling, reasons include the absence of other job offers or the need to obtain another year of supervised experience to qualify

for the licensing exam. It would be a poor idea, at least in our opinion, to accept a postdoctoral position based primarily on its availability. At this point, you may feel uncertain about your particular motivations for considering postdoctoral training, and this may indicate some uncertainty about your goals. If you have not already done so, we recommend returning to Tables 23.2 and 23.4 and ranking the relative importance of the potential benefits and pitfalls for your particular situation.

Identifying the Right Postdoctoral Position for You

If you have made the decision to pursue postdoctoral training, you must next locate, apply for, and evaluate potential positions. Announcements typically begin to appear in the late fall or early winter months (November through February). By that time, you should already have defined and prioritized your training goals as well as any geographical, institutional, structural, or financial needs and constraints. These considerations will allow you to eliminate positions that do not meet your "must-have" criteria. However, it may not be wise to limit your search beyond the ones that do not fulfill your essential criteria, especially since no single position is likely to meet all of your conditions. We advise you to first establish what issues you cannot compromise on, gather the information necessary to assess whether they meet your most basic demands, and eliminate programs accordingly. You may then wish to consider investigating and even applying to a range of programs that vary in their fit to your other, less critical goals to maximize your range of options. Although postdoc positions are posted throughout the year, the vast majority of applications are due between December and March, so it is important to begin the process early (Forand & Applebaum, 2011). *Locating potential positions.* There are a variety of ways to locate potential postdoctoral positions. National professional organizations, including the APA, American Psychological Society, and Association for Behavioral and Cognitive Therapies include monthly advertisements for postdoctoral positions in the *APA Monitor*, *APS Observer*, and *the Behavior*

Therapist. These ads may be accessed through the actual paper publications (available at most libraries) or the organizations' websites (www.apa.org, www.psychologicalscience.org, and www.abct.org). Positions may also be posted on job sites such as the Chronicle of Higher Education website (<http://chronicle.com>) or psychcareers.org. The APPIC also publishes a yearly directory of training institutions whose programs meet the minimum criteria established for APPIC inclusion. There are also other structured and formal training programs that, while not listed in the APPIC directory, may offer comparable experiences. Similarly, publications in your desired area of specialty training may post advertisements. For instance, the Society for Pediatric Psychology or other APA division newsletters frequently offer such announcements. These resources may be located through university libraries, the professional society itself (many have websites), or faculty and peers who may belong to the organization. See Forand and Applebaum (2011) for advice on searching for postdoctoral positions.

Although published announcements are an excellent reference, many opportunities are never advertised and are made known through word of mouth or electronic announcements on professional list serves. For this reason, direct phone calls or letters to specific persons with whom you might like to work can be a profitable means of identifying potential positions that might not be otherwise known. This type of networking might include contacting members of your dissertation committee to see if they can recommend (and potentially even put you in touch with) potential postdoc mentors who would be a good fit for your interests and goals. Similarly, communicating with internship advisers about whom they know might also yield additional leads. Several internet groups have also formed for new or soon-to-be new graduates. Some of these member groups offer forums for discussions about professional development and even share announcements for postdoctoral and professional positions. One such group can be joined by sending a blank email to newpsychlist-subscribe@yahoo.com. Those wishing only to access posted job announcements can search its archives at <http://groups.yahoo.com/group/NewPsychList/messages>. Finally, particularly for those applicants interested in a research oriented position, it may be

worthwhile to look into independent funding opportunities (e.g., NIH's F32 National Research Service Award training fellowships) or to utilize the NIH RePORTER website (<http://projectreporter.nih.gov/reporter.cfm>) to search for individuals who have recently received funding in areas you are interested in, and then emailing these individuals to see if there may be open postdoc positions (Forand & Applebaum, 2011).

Diversity Related Considerations

Trainees who either have an interest in working with a diverse clinical or research population, or are themselves from a diverse background, may also want to consider these factors when applying for and selecting a postdoc position. Broadly defined, diversity in a clinical or research population could include such factors as racial/ethnic minority status, age, socioeconomic status, religion, sexual orientation, disability, or gender. Thus, an individual who is interested in conducting health disparities research with a particular population (e.g., low-income Latino families) may want to consider applying for postdoc positions in an area where this population can be recruited. Trainees from diverse backgrounds and/or who are interested in conducting research with minority populations may be able to locate unique postdoctoral opportunities through the APA Minority Fellowship Program (<http://www.apa.org/pi/mfp/about/index.aspx>). For example, the Postdoctoral Fellowship in Mental Health and Substance Abuse Services, funded by the Substance Abuse and Mental Health Services Administration (SAMHSA), is geared toward trainees committed to a career in ethnic minority behavioral health services or policy and trainees from ethnic/racial minority applicants are "strongly encouraged" to apply.

Application Procedures and Guidelines

Application requirements will vary. Some positions may require only your vitae and letters of recommendation, while others might also ask for a written statement of purpose or job talk.

Likewise, interviews can range from informal email and phone correspondence to extensive multiday in-person interviews. We advise you not to make any assumptions about these matters and to ask each institution about specific application procedures early in the process.

Clinical psychologists should note that the application for postdoctoral fellowships is somewhat different than that for predoctoral clinical internships. Postdoc applications, more than internship applications, should be tailored to specific positions and mentors and should emphasize your most relevant experiences. Those reviewing your application will want to know that you understand how the experiences they offer fit with your career goals, are prepared for this next level of specialization, and have valuable skills to offer. These points should be clearly conveyed in your cover letter and you should tailor your vita accordingly. For instance, those applying for a postdoctoral position emphasizing clinical research might want to elaborate on their research experiences (including publications), including their clinical work as experiences that have informed a research agenda. However, those applying for specialty training in particular areas of clinical practice might want to elaborate on the nature of their clinical experiences and list relevant research training and publications toward the end of the vita.

Similarly, personal references should be able to speak to the skills that are most relevant for the type of position to which you are applying. You should prepare to have at least three people submit letters of recommendation on your behalf for any position to which you apply. Clinical supervisors and research professors are often asked to write such letters. Although your choice of letter-writers will partly depend on the type of postdoctoral training positions you apply for, you should be sure that whomever you ask will write a very positive recommendation. If you are uncertain, you should reconsider your choice of writers or, in the absence of other alternatives, discuss this concern with your writer directly. Wherever possible, find writers who not only know you, but who are known and trusted to those reviewing your application, as such letters may carry extra weight. It may also be helpful to ask writers to personally address the

director or agency in your letter instead of the generic salutation of “to whom it may concern.”

Whatever the application process, your job as an applicant is to sell yourself as both a qualified and suitable match for the program as well as a “safe choice” (Koocher, 1997). “Safe choices” are not only competent but reliable, interpersonally skilled, collaborative, and self-initiating. According to Koocher (1997), warning signals for selection committees might include comments from supervisors that you were a challenge to supervise; academic transcripts showing several “incompletes,” even if they were subsequently completed; and applications that arrive late or at the last minute. Of course, some potential signals may not be correctable (e.g., incompletes), in which case, you may wish to address these matters directly in your application letter or during an interview.

Interviews vary in format, formality, and length, so you should inquire about each position in advance so that you can sufficiently prepare. Whatever the format, interviews provide additional opportunities to convince potential supervisors that you are the person they want to hire. Most sites do not reimburse applicants for travel expenses associated with in-person interviews. The following suggestions may assist you in presenting yourself as a competent, interested candidate who matches well with the position and program.

- Read the materials sent to you and consider the fit between the position and your career goals so that you may demonstrate your knowledge of the program.
- Be prepared to discuss your work to date in the context of the position you are seeking. For example, if you are seeking training in a new or specialty area, be prepared to discuss ways in which this area is either an extension skills for this new area.
- Prepare a couple of questions that you can ask about the program that were *not* addressed in the materials sent to you.
- Listen closely to the interviewer and avoid overly personal disclosures.
- As the interview closes, ask whether there are any questions about your application. Instead of arguing with any responses, you may write a thank you note containing a paragraph that

corrects any misconceptions or potential shortcomings that were noted.

- Write a thank you note summarizing your interest in the program and its fit with your training goals.

Evaluating Potential Postdoctoral Opportunities

As previously stated, the needs and goals of various postdoctoral training positions may range from well-funded programs at institutions committed to training and high quality services to sites where postdoctoral fellows are little more than inexpensive labor and clinical service is prioritized over training needs. It is your job as the applicant to assess where on this spectrum a potential position falls. The following considerations may be helpful in making this determination:

- Is the position organized around the trainee's or institution's needs?
- What are the clinical demands in terms of billable hours or direct patient care required?
- What is the supervisory structure?
- How satisfied are current postdocs?
- Are there formal didactics in place?
- How many hours are dedicated to individual and group supervision?
- Are there a sufficient number of clinical hours built in to meet licensure requirements?
- How much time is protected for research activities? (1-year postdocs are not ideal for individuals interested in improving their research portfolios, since there is a relatively small amount of time to collect data and publish prior to beginning a job search)
- What is the number of licensed psychologists available for training and supervision?
- What is the stipend?
- Is medical insurance offered and at what charge to the postdoc? Are spouses and children eligible for coverage?
- How much time is allowed for vacation, sick leave, and professional leave?
- Is there a possibility of being hired within the institution after completion of postdoctoral training?

Information relevant to these questions may be obtained in a variety of ways. Read all program brochures and descriptions carefully, attending to the stated training goals and agency mission (Koocher, 1997). Take note of whether the program and agency promote themselves as a training site or talk about their educational mission. Review all listings of supervisory staff, their interests and career paths to assess their fit to your particular training interests and needs. For example, a program staffed by well-published, faculty appointed psychologists will probably offer different training than a staff of experienced direct-service providers. Although one is not necessarily better than the other, one may provide a better fit to your training needs.

Another possible source of helpful information when evaluating potential postdoc opportunities may be found in previous papers (e.g., Lopez & Prosser, 2000; Plante, 1996) that have been geared toward providing strategies for success to new professionals (e.g., becoming familiar with managed care).

Evaluating Potential Postdoctoral Mentors

Most postdoctoral fellows work with a mentor who takes primary responsibility for the postdoc's training program and with whom the postdoc works most closely. Choosing a mentor can be an important part of the decision process. Both the mentor's prestige and mentoring abilities should be considered in balance. Ideally, you should select a mentor who is an expert and productive in your area of interest. It is desirable to arrange a personal meeting with a prospective mentor, or at least a series of phone conversations. It is important to consider the potential mentor's management style and how this style may fit with your own needs and preferences. Talking with current or former postdocs who have worked with that person and organization can also be quite helpful. Your communications with potential mentors and other informants should answer most, if not all, of the following questions.

- What are the mentor's expectations of the postdoc?
- Will the mentor or the postdoc determine the content of the training program?
- How many postdocs has this mentor had? What positions did they obtain after the postdoc?
- What do former and current trainees of this mentor think about their experience?
- Will the mentor have sufficient time for mentoring or will it be necessary to seek out other mentors?
- How many others (grad students, staff, postdocs) now work for this mentor?
- How many papers are being published? Where are they being published?
- What are the mentor and institution's policies on travel to professional meetings? (e.g., Is the trip only paid for by the institution if you present a paper? If so, how many trips are covered?)
- What is the mentor's policy on authorship and ownership of ideas?
- Is there time and opportunity to develop skills in grant writing, teaching, oral presentations, manuscript preparation, manuscript review?
- Can you expect to collect data or be a part of data analyses or manuscript preparation after completion of the postdoc?
- How are issues of authorship negotiated for projects where data collection extends beyond the postdoc's tenure?
- How long is financial support guaranteed? On what does renewal depend?
- Can you count on assistance with locating and obtaining your next position?

Finally, it is important to acknowledge that there are numerous ways that mentors can provide guidance. In addition to a primary research or clinical content areas, these domains may include: scientific methods and publication, professional development, funding, identification and development of goals, work/life balance, specific skills (e.g., how to give a talk), prioritizing & time management, strategizing for promotion and advice on relevant departmental/institutional policies. It is likely that no one mentor will be able to provide guidance in all of these

potential areas. Thus, there may be advantages to postdoctoral training structures that provide opportunities to work with more than one mentor, even when a primary mentor is clearly identified.

The Final Decision

If you are considering several postdoctoral options, your final decision may not be an easy one. Part of the complexity arises because there is not currently a uniform notification date (UND) for postdoctoral positions, which can lead to applicants feeling that they should accept an expiring offer from a lower-choice program when they are waiting to hear back from a more preferred program. As described by Forand and Applebaum (2011) there has recently been a push by APPIC to create a UND in February or March in 2012. Some programs have been hesitant to commit to a UND given concerns about losing top applicants to other programs that may extend offers prior to the UND. When making a final decision, it may be helpful to revisit your prioritized list of benefits and drawbacks in light of the specific positions you are considering may be of assistance, though you may find that some of your priorities have changed. Be sure to gather enough information to adequately assess what you and your potential mentor(s) *each* expect from one another and the experience of working together. You should have a rough "roadmap" of expectations and goals that seem appropriate to your position and overall career objectives. Once you accept a position, use this roadmap as the basis for outlining a more specific training and work program with your new mentor/supervisor.

Once You Have Accepted a Position

After accepting a position, you should expect to receive an appointment letter stating the basic contractual framework for your appointment, including your title, the sponsoring institution

or department, the beginning and ending dates, stipend level, and benefits received.

What to Expect During Your Postdoctoral Fellowship

Although postdoctoral positions vary widely along a number of different dimensions, there are some underlying similarities in the experiences encountered and the responsibilities taken on. The primary intention of the postdoctoral experience should be to provide a period of apprenticeship for the purpose of gaining professional skills that advance one's professional career. Because the primary function of the postdoctoral fellowship is educational, you have the right to expect mentoring that includes oversight, feedback, consultation, and periodic evaluations. Ideally, you will have ample opportunity to learn relevant skills that will further your career. The mentoring relationship can be important to helping you understand the context of your work and the requirements of your chosen career path. However, both the postdoc and mentor share the responsibility for making this relationship work through frequent and clear communication.

In order to maximize the training experience, new postdocs should arrange to meet with their mentors early on to further clarify the "training roadmap" discussed during the application and interview process. The postdoc and mentor should come to some agreement about the work products or experiences that will further your training goals, the timeline for these accomplishments, the extent of collaboration between fellow and mentor; the form that collaboration will take, and the type and frequency of supervision. You and your mentor should jointly appraise this roadmap, especially your professional goals, once or twice yearly for the purpose of evaluating your performance and updating your goals as you develop in your position.

For many, the postdoctoral training period serves as a developmental transition period from "professional adolescence" to "professional young adulthood" in which the developmental task is to create a more coherent and integrated sense of

professional self that is separate from one's mentors and supervisors (Kaslow et al., 1992). Early in this process, postdoctoral trainees must create and define their roles within their new position and fulfill their new responsibilities with increased autonomy. Those in more structured programs may focus more on their responsibilities while those in less structured programs may expend more effort in defining their experience. According to Kaslow (1992), the most common difficulties encountered by postdocs at this early stage are associated with role functioning in multidisciplinary settings and negotiating autonomy and status issues.

In the middle phases of postdoctoral training, professional identity solidifies and commitment to one's work deepens. Having resolved concerns about where they fit in, postdocs at this phase begin to carve out their own unique role in their setting. More aware of their professional strengths and weaknesses, postdocs often begin to pursue their professional goals more actively and with greater commitment. The end of postdoctoral training signals a move toward greater independence and the termination associated with both the postdoc and the end of one's formal training may give rise to a new set of professional concerns. Concerned mentors can be useful in supporting the postdoc both in finding the next position but in supporting the postdoc through this termination process.

Final Words

This chapter attempted to provide information on the various issues related to determining whether postdoctoral training is right for you and understanding how to obtain a fellowship that meets your personal and professional needs. This included a review of advantages and disadvantages of pursuing postdoctoral training as well as other considerations in the decision-making process on whether to pursue a postdoctoral position. For those who might wish to seek such training, the steps for locating, applying, evaluating, and securing a suitable fellowship were discussed. Navigating the postdoctoral search and decision-making complex is complex, and we hope that this chapter provided

a sufficient overview of postdoctoral training such that readers will be able to better weigh personal and professional considerations and arrive at the best decision for their situation.

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Introduction

One of the most important and daunting roles of the early academic is the pursuit of NIH grant funding. Although NIH funding allows for great autonomy and comes with validation and prestige, the process can feel overwhelming even for the most seasoned investigators. Therefore, being armed with information is crucial. Most importantly, it is vital to keep in mind that applying for NIH funding is much more of a marathon than a sprint. Only, it's a marathon where there is no planned route, where you often realize you've been going in the wrong direction and have to double-back with few signs to assure you, where you will be questioned and second guessed at every step by those evaluating your performance

as well as your supporters, and where you will be guaranteed to feel like you are stumbling across the finish line no matter how confident you were at the start. With those caveats in place, it's a marathon with some pretty amazing prizes for those who are successful, including resources to do your research in the best way possible with an opportunity to build a research team of pre- and post-doctoral trainees and support staff, as well as better visibility in the research community and a big boost in the promotion and tenure process. Moreover, these scientific benefits also often come with financial support which may serve as the basis for your salary in an academic medical setting or allow you more time to devote to research through course buy-outs or summer salary support in a Psychology Department. Clearly, the pursuit of an NIH grant is a high-risk/high-reward venture that should not be entered into lightly.

Aiming to provide a guide to NIH grants with the early academic in mind, this chapter outlines many of the key issues you will tackle throughout the process. These include: (a) Developing Your Idea; (b) Finding the Right Mechanism for You and Your Idea; (c) Preparing Your Application; (d) Submission and Receipt of Your Application; (e) The Review Process; and (f) Post-Review Strategies. We will address these issues in light of the recent changes in the NIH grant submission and review process to provide an objective source, complemented by our favorite tips for your consideration.

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Developing Your Idea

A lot must go into moving from the first spark of an idea to the completion of a fully formed grant. A viable grant should begin with an idea that is well suited to your background and focused on a topic you know well. It is important to select research questions that will allow you to maximize your professional development and provide a chance to make your own “mark” on the field. Therefore it is critical to consider how you can strategically develop your research to be programmatic in nature so that it will be sustaining and long-lasting, making numerous cumulative contributions to the field. While it’s imperative to select a topic that fits with your expertise and interests, a successful NIH grant also must have clear public health relevance and place within the scientific literature in that field.

Based on the review criteria we will discuss in detail later, key questions to consider when generating ideas include: How will this study be significant, exciting, or new? Is there compelling rationale? Is there potential for high impact? How will aims be focused, clear, feasible, and not overly ambitious? How will the study clearly link to future directions? Have I demonstrated expertise or publications in line with the approach? Do I have collaborators who offer expertise to the proposed research? Do I have the necessary institutional support?

Once you get a bit further along in developing your idea, it can be helpful to talk to NIH staff, particularly staff who have a portfolio that includes similar types of grants. One way to see funded grants to ensure your research idea is reasonable (and also not already being done!) is NIH REPORTER (<http://projectreporter.nih.gov/reporter.cfm>). This electronic database provides information on NIH-funded research including titles, principal investigators, and abstracts.

Finding the Right Mechanism for You and Your Idea

A critical component of the idea development process is selecting the right grant mechanism. Similar to getting advice on your grant idea as

noted above, you should consider checking with a program official from the institute you are targeting with your application to assess fit between your idea, your career trajectory and goals, and a particular mechanism. As an early career psychologist, the choice will likely be between a career development award (K-series) or an investigator-initiated research award (R series). Of note, it is common to refer to the former as a K award and the later as an R grant, so we will use this terminology throughout, but be aware that both are technically grant awards. In the following sections we provide a detailed description of the K award and the R01 grant including a direct comparison of the two. Although we will not discuss it here, you should also be aware that NIH also offers post-doctoral fellowship awards called F32’s that may be a useful option to consider (see <http://grants.nih.gov/grants/guide/pa-files/PA-11-113.html> for details).

K Awards

There are a number of types of K awards (for more details see: <http://grants.nih.gov/training/careerdevelopmentawards.htm>). The most relevant for early career psychologists are the K01 (Mentored Research Scientist Development Award for career development in a new area of research or for a minority candidate), K08 (Mentored Clinical Scientist Development Award for development of the independent clinical research scientist), and K23 (Mentored Patient-Oriented Research Career Development Award for development of the independent research scientist in the clinical arena). There also are mid-career and even later career development awards that provide resources for investigators to develop new areas of expertise—and provide mentorship to junior investigators. The K award usually requires that at least 75% of your effort (9 calendar months in NIH terms) be devoted to the research project and to career development for 3–5 years. These awards are evaluated as training mechanisms. Applications require not only a research plan but also a training plan for career development activities under the guidance of a research mentor, local collaborators, and external

consultants. The university must usually agree to release the PI from most teaching, clinical, and administrative duties. In return, NIH will pay the PI's salary, up to certain limits. There is a great deal of variation among the different NIH institutes as to which Career Awards are available, what PI qualifications they expect, the dollar limits for salary and research expenses that they will award, their application deadlines, and their supplemental proposal instructions. It is best to contact the relevant institute prior to preparing your proposal to be sure you understand that institute's guidelines for a K award.

R Grants

The R grants most relevant to the early academic include the R03, R21, R34, and R01 (for more details see: http://grants.nih.gov/grants/funding/funding_program.htm#RSeries). The R03, small grant program, provides limited funding for a short period of time. Funding is available for 2 years with a budget up to \$50,000 per year. Some institutes (e.g., NIDA) also offer rapid transition awards called a B/Start (i.e., Behavioral Science Track Award for Rapid Transition) which consists of 1 year of funding for \$75,000. Because reviewers submit reviews without a full review meeting, this mechanism often includes a shorter lag time to completion of the review process (i.e., funding occurs within approximately 6 months of the date of receipt of the application).

The R21 is considered to be an exploratory/developmental research grant used to support the early stages of project development (e.g., pilot or feasibility studies). Funding is available for 2 years and the budget cannot exceed \$275,000. Extensive preliminary data are not expected, but applications must make clear that the proposed research is sound and that the investigators and available resources are appropriate to the task.

The R34 is a clinical trial planning grant intended to support development of a clinical trial. The typical project period is 1 year with a budget of \$100,000. However, some institutes also offer a more extensive R34 that includes a further level of treatment development and some

initial testing. In these cases, the R34 lasts for 3 years with a budget of \$450,000.

The R01 is NIH's most commonly used grant program which is generally awarded for 3–5 years. There is no specific budget limit, but budgets under a particular amount can be submitted with less detail than more expensive R01's (called modular and typically \$250,000 direct costs each year). Budgets over a particular amount (typically \$500,000 direct costs each year) must obtain institute approval before being submitted. Although you should request the budget you need to conduct your project, an extremely large scope and budget in an application from a new investigator may raise red flags for reviewers.

K/R Hybrids

Of note, there is an additional mechanism that serves as a bridge between a K award and R grant called a Pathway to Independence Award (K99/R00, nicknamed kangaroo). This mechanism provides up to 5 years of support consisting of two phases. The first phase provides 1–2 years of mentored support as a postdoctoral fellow. The second phase is up to 3 years of independent support (contingent on securing an independent research position). Recipients are expected to compete for independent R01 support during the second phase to allow for continued funding once the K99/R00 support has ended. Eligible principal investigators must have no more than 5 years of postdoctoral research training.

Advantages and Disadvantages of K Awards and R Grants

K awards and R grant mechanisms each have a number of advantages and disadvantages. A K award can provide 50–100% of your salary (depending on the type of K and branch of NIH) for up to 5 years. This allows for a more highly stable period of funding than the typical R01, which usually funds only 20–40% of the principal investigator's (PI) salary for a period of 3–5 years. This allows investigators to concentrate on

their specified research efforts without the concerns or distractions of needing to constantly be pursuing additional sources of support or fulfilling extensive clinical or teaching responsibilities at their university. Other advantages of the K award are the opportunities for mentorship, training, and thoughtful development of a programmatic line of research in the PI's chosen area. The K will provide funding (typically \$50,000 in addition to salary support) specifically to support these critical opportunities, which include: time and funds for focused coursework, study materials, access to consultants and mentors—and funds to travel to meet with off-site mentors at their research labs or attend professional conferences. These resources are paired with a highly personalized training plan that is developed as a part of the grant application. Because career development and training is a central aspect of K awards, the expectation of research is different and more modest than that for an R grant that will have a much more highly specified research project (and no training component).

For all of those reasons, the K award is very well suited for the needs of junior investigators who may have only limited pilot data of their own and require additional training experiences before attempting the larger scale R grant projects. Nevertheless, the K award is not necessarily the best mechanism for some junior investigators. Some are discouraged by the prospect of an ongoing role as “trainee.” Others are deterred by the lack of flexibility in the mechanism itself. For example, K's are often not easy to transfer to other institutions due to their heavy reliance on local mentors and investigators, as well as unique aspects of institutional research and training environments. They also do not provide sufficient funding to implement large-scale research projects (e.g., a randomized clinical trial). Moreover, they require significant institutional support documented within the application that is not always proffered or feasible for budgetary reasons or instructional needs. K's also pay a vastly lower indirect cost rate (8%) than R grants (typically in the 50–65% range). Indirect costs are funds provided to the applicant's institution to cover the costs of administering and supporting the

applicant's research. This amount is *above and beyond* the funds provided to the applicant for the research (called direct costs), but is calculated as a percentage of the direct costs. Although this should not lead you to apply for an R grant over a K Award if the latter is a better choice for you and our research, but you should be aware that the disparity in indirect costs of a K award may leave junior faculty investigators at a disadvantage in terms of obtaining additional institutional support once the application is funded and the research begins.

A major advantage of the conventional R01 award (and to a lesser extent other R grants) is the significantly larger project budgets, dictated by the specific requirements of the scientific protocol. However, new investigators applying for any R grant must be prepared to demonstrate to the review committee that they have the appropriate background, expertise, and skills to implement and complete an independent research project. There are a number of ways to successfully demonstrate these qualities. They include the availability of relevant scientific pilot data, a “track record” of publications in your area of research, and a thorough, well-conceived, and convincingly argued research plan (i.e., scientific protocol). Applications for R funding are evaluated almost exclusively on their scientific merit, significance, and innovation. R01 grants are quite competitive, but there is a tangible advantage in the evaluation process if you are a new investigator defined as not previously or currently holding R01 support (previous R01 submissions do not affect this status until one is funded). Specifically, in many cases your application will be considered in a separate pool of applications devoted to only new investigators. This “levels the playing field” and prevents your application from competing directly with applications from more seasoned investigators.

Application Types

A large percentage of applications are investigator initiated (often called “unsolicited”). Investigator-initiated applications can be submitted according to published submission deadlines, most often in

Table 24.1 Tips by grant section

Section	Do	Don't
Project summary	Focus on the big picture Highlight public health significance	Include a lot of jargon Get overly technical
Aims	Include clearly testable hypotheses End with a paragraph on future directions	Be overly ambitious or spread too thin Propose too many exploratory aims
Significance	Build a bridge from the problem to your study Tell a clear story, making few assumptions	Introduce study without first building a case Wait until the end for public health significance
Innovation	Be bold without overpromising Discuss current and future benefits of your work	Forget to note any methodological innovations Minimize this section for space reasons
Approach	Provide rationale for approach decisions Link expertise of team to strategies proposed	Leave out key methodological details Leave out details establishing feasibility
Data analytic plan	Include a detailed power analysis Link all analyses closely to the study aims	Power only for the main aims and hypotheses Leave out an appropriate consultant
Human subjects	Discuss all aspects of subject safety Focus on inclusion of underserved groups	Use for extra space for scientific information Exclude a group without a rationale

February, June, and October. Applications that fall under special interest areas such as HIV/AIDS have different deadlines that accommodate a faster review, so you are encouraged to check these deadlines closely (see <http://grants.nih.gov/grants/funding/submissionschedule.htm>).

Another option is to submit in response to a Request for Applications (RFA). RFAs are meant to stimulate research activity to address NIH-identified high priority issues and areas. They do not utilize regular deadlines and are announced with a specified deadline (often less than 4 months from the announcement). As such, researchers most interested and immersed in these areas of research have a decided advantage because they are likely to have already thought through some of the key issues and in some cases already have available pilot data that could serve as the base for the RFA submission. Of note, these applications typically are reviewed by specially convened panels that are selected based on the specific RFA and are therefore likely to have significant relevant expertise. As one might guess this can be an advantage in that one is getting a review from individuals who are most qualified to evaluate that application. However, an expert also may have particular expectations about how things should be done and may be more likely to focus on esoteric aspects of the application that might go unnoticed by reviewers with less expertise in that area.

One source of confusion can be Program Announcements. PAs are similar to RFAs in that they are issued by one or many Institutes and outline topics that are of particular interest. Like an RFA, PAs provide a level of assurance that the type of research you are proposing will be of interest to the institute that issued the PA. In the recent past, investigator-initiated applications did not have to name a PA and only did so when there was a very clear fit. Currently, however, all unsolicited applications must be submitted “in response” to a particular PA. In some cases PAs are extremely specific and feel a lot like an RFA and in other cases they are vague enough to ensure that almost any application can be submitted.

Preparing Your Application

The following paragraphs outline each section of a typical research grant. We also provide Table 24.1 that highlights a few things to do and not do. Please note that in addition to this information, you can find helpful information on preparing your application at: http://grants.nih.gov/grants/writing_application.htm and information on page limits can be found at: http://grants.nih.gov/grants/forms_page_limits.htm. Moreover, we also encourage you to utilize the following links which provide more general tips in a video

format (<http://cms.csr.nih.gov/resourcesforapplicants/insidethenihgrantreviewprocessvideo.htm>) as well and as a pdf of insider tips (<http://cms.csr.nih.gov/nr/rdonlyres/60b2d32e-ae00-4358-8c51-2e11cc46eac8/23564/insiderguideapplicantsfinal1.pdf>).

Project Summary

The project summary is a two part overview of your proposed project. The first part is the abstract in which you have 30 lines to describe succinctly every major aspect of the proposed project including a brief background, specific aims, objectives, and/or hypotheses, public health significance, innovative aspects, methodology proposed, expected results, and implications. The second component of the Project Summary is the Project Narrative which provides a plain language 2–3 sentence description of your application.

Aims

Aims provide a one page statement of your goal, objectives, and expected outcomes and implications. The aims should start with a brief statement of the problem and its public health impact, followed by what is known, and then the gap between what is known and how your project will address this gap. The most important part is the statement of your specific aims and the hypotheses you have for each aim. These statements should be concise and include clear, testable hypotheses. Occasionally, you may include an exploratory aim that addresses an important question but for which enough information is not available to draw a hypothesis; however, these should be used sparingly. You then should conclude with a summary paragraph that also suggests the research directions and implications that this work will spawn. NIH wants long-term not short-term relationships with its applicants. As such, your ability to discuss how this work will not be a single effort but the start of an effective line of research is crucial.

Research Strategy

Significance

This section explains the importance of the problem or critical barrier to progress in the field that the proposed project addresses, and how the project will advance the application of scientific knowledge. In doing so, this section outlines the relevant literature and how this project directly addresses relevant gaps.

Innovation

This section explains how this work takes a new perspective, develops/utilizes a new approach, and/or moves the field in new directions. It is important in this section to emphasize that the novelty is not simply for the sake of being new, but holds important strengths over existing approaches- and sometimes novelty involves nothing new per se but creative use of existing methods or samples. You also should note that innovation can be a slow process and your work can be innovative if it sets the stage for future work. However, in this case it is especially up to you to be clear how your work can be the start of a fruitful and impactful line of research and why that makes the current work innovative. This may be especially true for those conducting preclinical or other forms of basic research. Also note, innovation.

Approach

This section describes the overall strategy, scientific methodology, and analyses to be used to accomplish the specific aims of the project. It is useful to link the approach as clearly as possible to the specific aims and hypotheses. Although there is a “[Human Subjects](#)” section below, human subjects issues that have important scientific bearing are addressed here. These might include an empirical justification for including only one gender or a theoretical reason to focus on a narrow developmental period in adolescence. Within Approach you also are encouraged to include two subsections. One subsection is *Preliminary Studies* which outlines the previous work of you and other members of your research team that support your aims and hypotheses, and

establish that you are qualified to undertake and successfully complete the project. The other subsection is *Potential Problems, Alternative Strategies*, and *Benchmarks for Success*, which provides you with the opportunity to anticipate and address the questions that reviewers are likely to ask themselves as they read your application. We discuss the importance of these subsections and strategies to make the most of them below in “Tips.”

Data Analytic Plan

This section outlines your statistical approach. Here it is crucial to address issues of statistical power and sample size calculation and preliminary analyses before outlining the primary analyses. The readability of this section and the overall flow of the application will be greatly enhanced if the plan is presented in the context of the specific aims and hypotheses.

Human Subjects

Although it is not placed in the body of the research plan, the section on the protection of human subjects and the inclusion of both genders, children, and underserved members of minority groups is an important part of your application. It should carefully describe aspects of the grant related to the risk-benefit ratio and demonstrate that all necessary precautions are in place to protect the rights and safety of human subject participants. In most R grants this section includes virtually all of the information expected in an application for Institutional Review Board (IRB) approval. This should include strategies to ensure adequate recruitment of underserved groups and a clear statement for why certain groups aren't included especially if for methodological reason (which also should be noted in the section on [Approach](#)). This section also should include a data and safety monitoring plan as it is now required for all clinical trials (phases I, II, or III) and a monitoring board for larger scale trials, multi-site trials, and those including vulnerable populations (e.g., prisoner populations).

Additional

The following sections also need to be included in your grant application: Appendix Materials, Bibliography & References Cited, Care and Use of Vertebrate Animals in Research, Consortium/Contractual Arrangements, Consultants, Facilities & Other Resources, Resource Sharing Plan(s), Select Agents, Multiple PD/PI, and Use of Internet Sites. See http://grants.nih.gov/grants/writing_application.htm for additional details. Additional content sections specific to K award applications include the Candidate's Background, Career Goals and Objectives, Career Development/Training Activities during Award Period, Training in the Responsible Conduct of Research, Statements by Mentor, Co-mentor(s), Consultants, Contributors, Description of Institutional Environment, and Institutional Commitment to the Candidate's Research Career Development.

Submission and Receipt of Your Application

All applications are submitted through an electronic portal called grants.gov. You should note that your application must be submitted and free of errors by the due date. Therefore, be sure to closely follow all of the rules and regulations governing each aspect of the application to prevent your application from being withdrawn from the review process. Given these warnings, the actual submission process might seem daunting in its own right. However, your research office should have numerous tutorials and provide support to ensure that you complete this part on time and accurately.

Once you have worked with your research office to submit your application on grants.gov, a NIH referral officer will typically assign the application to the most appropriate institute. Although this includes a review of the entire application, decisions are driven by the title, abstract, and to a lesser extent the aims. This process also can be influenced by a cover letter you can prepare with your application indicating which institute you believe is the best fit for the

application. The most common institute for psychologists to submit applications is the National Institute of Mental Health. However, it is important for you to develop your idea and then consider the most appropriate institute which often means branching out to other institutes (for a list of institutes see <http://www.nih.gov/icd/>). Once directed to a particular institute, it will be assigned to an Integrated Review Group (IRG) and then ultimately a study section within that IRG. These study sections keep a regular roster of reviewers that rotates every 4 years. You can get an idea of the study section based on the roster and you may choose to request a particular section in the previously motioned cover letter.

Once your application has received an assignment to a NIH institute and study section, it is given a unique grant number. Shortly thereafter, you will receive a notice documenting this information and providing you with the name and contact information for the Scientific Review Officer (SRO) who organizes the work of the review committee (e.g., distributing applications; assigning specific reviewers; coordinating dates and sites for the three review committee meetings each year). There is a lengthy interval between the time you submit your application and the time it is actually reviewed; for example, applications received on June 1 are typically reviewed in October or November. For this reason, many study sections will accept supplementary materials in the 3–4 weeks prior to review. For example, if you have collected additional pilot data since submitting your application, you may want to provide a brief report about these research activities and results. Such supplemental materials should be brief (e.g., 1–2 pages). To determine whether and when you might submit a supplement, contact your SRO. Supplemental material can be helpful especially when a new paper is accepted for publication or if new data become available that were not expected at the time of the submission. With that said, we *do not* recommend relying on supplementary material as “extra time” to add to your application after the deadline. Although often accommodated, supplemental material is not always accepted and more importantly there is no guarantee that reviewers

will consider this additional material, especially given that they already will have plenty to cover in the original application.

The Review Process

Approximately 6 weeks prior to the review meeting, members of the study section receive copies of all of the applications being reviewed in that cycle. Typically, three members (designated as primary, secondary, and tertiary) are assigned to each application, based on the fit between their research expertise and the content of the grant. Reviewers provide written critiques of the application, organized according to the NIH review criteria: significance, approach, innovation, investigator, and research environment (see Table 24.2 for more detail about the criteria and how best to address them). If sufficient expertise is not available from the standing membership of the committee, the SRO can invite ad hoc reviewers to participate. However, do not assume everyone or even anyone will be an expert in your particular topic, and be sure that your application does not rely on jargon or make assumptions about reviewer familiarity regarding idiosyncrasies or convention approaches in a particular area of research.

As the meeting approaches, the SRO will solicit feedback about which grants are ranked in the bottom half of the current group and will not be formally discussed at the meeting (referred to as streamlining). A final consensus about streamlining is usually made at the beginning of each review meeting. Although they will not be discussed at the meeting and will not receive a score, the PI will receive the feedback prepared by each of the three reviewers for the meeting. The rationale for streamlining is to allow greater time for discussion about those applications perceived to be ready for support and thus to maximize the value of the review for both applicants and NIH program staff.

About the top half of applications are discussed at the review meeting. The primary reviewer provides a description of the application and then outlines strengths and weakness in the

Table 24.2 Hypothetical grant timeline

Grant phase	Starting	Ending
Initial development	October 1	November 30
Preparing application	December 1	December 31
Final preparation and submission	January 1	February 10
Grant review completed	June 15	June 30
Review comments received	July 1	July 30
Plan resubmission	August 1	September 30
Finalize and resubmit application	October 1	November 14
Grant review completed	February 3	March 29
IRB approval to get in JIT	April 1	April 30
Council meets	May 1	May 31
Funding starts	July 1	

domains listed above. Each additional reviewer adds any further information and can add new points or issues where they disagree with a previous reviewer. At this point the other panel members can ask questions and raise additional points (although they are not required to have read the application). The group then has a discussion. The goal is consensus but this is not a requirement and sometimes there can be significant disagreement among the reviewers. After discussion, the reviewers provide scores again. Reviewers may shift scores after the discussion to support consensus but are under no obligation. The remaining committee members then provide their votes anonymously, however if they are outside of the low and high score by a predetermined range, they are asked to provide a written explanation.

Core Review Criteria

Your application is evaluated on the following five core review criteria including: (1) Significance, (2) Investigator(s), (3) Innovation, (4) Approach, and (5) Environment. For a detailed outline of these criteria with a comparison with previous criteria, see http://grants.nih.gov/grants/peer/guidelines_general/comparison_of_review_criteria.pdf. As we have covered Innovation and Approach thoroughly in “Preparing Your Application,” we focus only on the key features of the other three criteria here.

- *Significance.* Is this work addressing an important question and will have an impact on the field in terms of knowledge, application, or in the best case scenario both? It is not crucial that the application be immediately addressed in a submission (especially in more basic research projects) but reviewers will want to see evidence of how this work ultimately could have such impact.
- *Investigator(s).* Are you qualified to conduct this project and how well does your team of collaborators (or mentors for career awards) provide specific support in areas where your experience and expertise could be supplemented? For evaluating your credentials, reviewers often will focus on training and specific research productivity. Also, evidence that there is a specific role for the collaborators/mentors is crucial as is some evidence of past work together or future plans to ensure their participation. This can be best represented in letter of support and clearly articulated in “personnel justification” which is an additional administrative section of the grant not covered here.
- *Environment.* Can the work be carried out with adequate institutional support and resources? Additionally, are there unique features of the scientific environment, subject populations, or collaborative arrangements that are evident at the research site? These strengths should be clearly articulated in “facilities” which is an additional administrative section of the grant not covered here.

Overall Impact/Priority Score

For each of the five core review criteria, reviewers evaluate your application and provide a score from 1 (exceptional) to 9 (poor). Each reviewer then also provides an overall score, also from 1 to 9. There are no clear guidelines to reviewers in how to develop the overall score from the scores for the core areas, and it is not meant to be an average or median score. Moreover your score can be influenced by several other additional criteria including human (or animal) subject issues. Reviewers can make recommendations about your budget, but these recommendations should not affect your score.

From the overall scores of each reviewer as well as the other committee members, a normalized average is calculated and multiplied by 10 to provide a final priority score from 10 to 90, where 10 is the best score possible. As much as we'd like to indicate a range of likely fundable scores, there just simply aren't hard rules that apply in all cases across all institutes (but for some guidance see: <http://www.nlm.nih.gov/ep/FAQScores.html>). With that said, many PIs would be quite pleased with a score under 30.

Post-review Strategies

Often within a week of the review meeting, you will be informed via eRA Commons about whether your application was scored, and if so, the priority score. The written critiques are organized into "summary statements" (still called "pink sheets" by some older investigators because of the color of the paper originally used). Approximately 4–8 weeks later, you will receive this summary statement, which includes a brief account of the committee discussion as well as the written comments provided by separate reviewers. A new feature is that reviewers can now make additional comments that will be made available to the PI. Sometimes it is difficult to read between the lines of reviews and these comments are an opportunity to provide direct recommendations about the overall viability of the project and particular methodological issues.

At this point several things can happen. If your application was scored it will go to a "Council" meeting (the second level of review) where the quality of the SRG review is assessed, recommendations to Institute staff on funding are made, and the program priorities and relevance of the applications are evaluated and considered. If your application was unscored or it went to Council, but was not recommended for funding (or it was recommended, but for one reason or another such as budget issues ultimately wasn't funded), then you can consider resubmitting. Of note, before Council meeting you will receive a request from a Grants Management staff for the following additional documentation, referred to as "Just-in-time information" (JIT): updated 'other support' for key participants; the status of IRB action on your proposal; certification that key personnel have received training in the protection of human subjects. This request for additional information is not an award notice, though it is encouraging because it represents a critical step prior to the notice of grant award (NGA).

It can be difficult to decide on what to do next if the original submission is unscored. An unscored grant may be revised, resubmitted, and eventually funded, but you should read the reviews carefully and with an open mind to help your decision. There is no simple formula to determine whether you should resubmit. Ask yourself several questions: Do the reviewers acknowledge the importance and innovation of the proposed research? Do they credit you, the PI, with having the appropriate background and abilities to accomplish the work in the area? Are their scientific concerns the ones that you can effectively address? If the answer to each of these questions is "yes," then you should strongly consider resubmission of a revised application. Many of us have had the experience of going from an unscored application to a funded grant award upon resubmission. However, it's important to be honest with yourself about what is realistic. Talking with a relevant program officer also may be helpful to discuss next steps, especially if they were in attendance at the review committee when your application was discussed and can offer insights from the discussion.

If you do decide to resubmit, possibly the most important part of your revised application is the single page you are given to address all reviewer comments called the Introduction to the Revised Application. The success of your application will be greatly influenced by the thoughtfulness of your response to the reviewers outlined in this page. Although your revisions will be reflected in the application (we recommend doing so with underlining as opposed to bolding to save space if needed), it is crucial to show that you understand and have addressed the reviewer points. And in rare cases where you disagree with the reviewer point, it is crucial here to address the spirit of the point, and make a clear theoretical, empirical, or practical argument to defend your choice. Although mindlessly agreeing with reviewers or other empty attempts at pandering will certainly not help your case, declining reviewer suggestions should not be undertaken lightly. Also be sensitive to the “tone” of your response—because the reviewers most certainly will be!

Finally, if your application was unscored (or in some unusual cases scored) and you are not optimistic about your likelihood of significantly improving your chances for funding in a resubmission, then you can consider going back to the drawing board and developing a sufficiently modified application. Of course some similarities between the original and the new application may be inevitable, but the new application must be meaningfully distinct from the original application. Although there is no official connection between these applications, the good news is that the new application often benefits from your experiences in preparation and review of the original application.

Tips

Don't Mess with Father Time

For many individuals deadlines are crucial to setting goals, staying on task, and not losing motivation. Be aware of the deadlines and what goes into getting things done in a timely manner.

Be more conservative with things that rely on others such as letters of support or analytic sections prepared by a statistician. With that said, deadlines can have their drawbacks, because they can lead to procrastination and a burst of work near the deadline, without ample time to run ideas past others and have a sufficient pre-review of the application from collaborators and potentially helpful colleagues. For this reason it can be useful to utilize a timeline for each step along the way to submitting your application. As can be seen below illustrating a mock timeline, it can take nearly 2 years from the start of idea development for a grant to actual funding should resubmission be needed (as it most often is). This timeline illustrates the previously stated notion that grant funding is more of a marathon than a sprint.

Slow Your Roll

While you want your application to be methodologically rigorous and have high impact on your field, you cannot lose sight of feasibility. The reviewer code word used when there are doubts about feasibility is “over-ambitious,” and it is a clear kiss of death when this term is used to describe an application. Therefore, keep your specific aims focused, and make hypotheses that you can clearly tie back to theory and/or pre-existing data. Consider the necessity of multiple studies within a single grant. Although these can be quite elegant, the connection between studies can provide many pitfalls, especially if subsequent studies rely on particular results from initial studies. Remember, although your passion for your research area may be strong and your intellectual curiosity high, each grant application represents only one small step in a research career that may last for several decades. Try not to be ruled by emotions (especially when receiving and responding to critical feedback) and keep a clear eye on your long-term goals. Persistence, patience, and creative problem solving are usually critical ingredients in the career of a successful independently funded investigator.

Remember That Reviewers May Control Your Destiny, But They Can't Read Your Mind

NIH clearly states that you cannot have any contact with reviewers before, during, or after your review. Therefore, the only way you can get your point across is the extent to which you communicate with them in the application. Within the section on [Approach](#), the subsections on Preliminary Studies as well as Potential Problems, Alternative Strategies, and Benchmarks for Success provide a great opportunity for this. For the subsection on Preliminary Studies, you can make your case that you have sufficient background (and pilot data especially for an R01) to conduct this work and that it marks a logical next step in this line of research, both for you and for the field in general. For the subsections on Potential Problems and Alternative Strategies (previously referred to as design considerations), this is your chance to walk reviewers through the highly complex discussions you and your collaborators had when you determined the best decisions for the application. This is an interesting section and presents a real opportunity because some applicants largely ignore it and at best tell the reviewers essentially “don't worry we know what we are doing” or “we've got it covered.” As a new investigator, it is up to you to ensure that the reviewers understand the decisions you made. This section also increases the odds that the primary reviewer can best present your application and that others reading can quickly understand some of the key features of your application. Think of it as giving reviewers access to all the critical thought that went into the strategies you ultimately chose (as well as those you didn't choose). Finally, your Benchmarks for Success show a level of sophistication and often can help ameliorate any fears about feasibility. This section would benefit greatly from a table that outlines the planned activities of the grant and the deliverables at each time point.

Name Drop (with a Purpose)

Especially as a young investigator, your research team is crucial and it is important for you to clearly highlight their role in your application. For K awards, mentors are especially key elements of the successful application. It is critical to tell a clear story of each person's role in your training, with as much detail as possible. Explicitly, it is not enough to simply list the “right” people. It is necessary to explain who they are and why they were chosen, show that you will have the right training experience with them, and describe how each mentor will contribute to your career development.

For R grants and the young investigator, the role of collaborators can be a bit more ambiguous. In some academic settings, you may experience a tension between the traditional value placed on independence and the emerging growth of team-based or multidisciplinary science where it's no longer expected (or even possible) for one individual to master all elements of a complex research project. In fact, at NIH it is usually expected that applications will include a team of experts representing different domains. For example, in applications related to mental health and addictions it is common to see psychologists, psychiatrists, statisticians, anthropologists, epidemiologists, neuroscientists, economists, etc. collaborating together. A true research team will involve well-selected experts that can work well together, each contributing unique and relevant expertise to the proposed project. It is crucial to clearly articulate the key parts of the application and the role that each collaborator plays in those parts.

Don't Forget Games People (Shouldn't) Play

As mentioned above, there are strategies to increase the odds of funding such as trying to steer your application to the most appropriate

committee, “guessing” what likely reviewers might want, and talking to program staff to avoid making mistakes or proceeding in a negative direction. However, you should be careful about these efforts becoming more about gaming the system than developing the best application for you. It is important to note that for every great game player, there is a straight shooting scientist who has a strong sense of their interests, is willing to find a mechanism in NIH that accommodates that interest, makes efforts to align their interests with that of NIH including RFAs and PAs but does not let this betray their own actually interests, and simply allows the process to play out. This is not to say that some strategizing is not warranted but when the strategies approach more of a game like level, they hold as

much likelihood of backfiring (or simply being irrelevant) than actually helping.

Final Words

In conclusion, NIH grants are frightening and exhausting, and sometimes the secrets to securing them can feel quite elusive. However, your biggest weapon in this battle is knowledge to give you both the direction you need to be most effective in developing your application as well as the confidence to endure the ups and downs of the process. This is simply one of many available resources and we encourage you to utilize as many as possible as you begin to develop your own style and secrets to your success!

Robert J. Sternberg

Just a few years ago, one could obtain almost any product or service one could imagine through the Internet. One could buy pets or pet food, order food to be delivered to one's house, buy clothing from an astonishing array of manufacturers, and much, much more. Today, some of these Internet services remain, but many others are gone. New products and services have replaced some of the old ones. No doubt there are many lessons to be learned from this Internet transformation, but certainly one of the most powerful is that, before investing in the creation of a product or service, one needs to ensure a market will be there, ready to buy.

This lesson is perhaps the fundamental lesson that aspiring psychologists need to keep in mind, whether they plan to pursue an academic job, a practice job, or any other kind of job: You need to establish a market for your skills. It is for this reason that I recommend to my own students that they start thinking about job prospects pretty much from the very beginning of their graduate-school career. Graduate school training is qualitatively different from undergraduate school training, because it is preprofessional in character. It is designed, of course, to enrich students' knowledge and understanding of psychology; but most of all, it is designed to prepare students for a career. Because a career largely begins with

one's first job, getting that job can be one of the most important steps a psychologist ever takes. And because one's first job often contributes substantially toward shaping both one's professional possibilities and even the future jobs one may obtain, it is important to devote substantial resources to getting the best job one can.

What Is the "Best Job"?

Before talking about how to get the "best job," it is important to talk about just what the "best job" is. People have different priorities in searching for jobs. Among the characteristics they look for are (a) geographic location, (b) prestige, (c) salary, (d) benefits, (e) teaching load, (f) research opportunities, (g) congeniality of colleagues, (h) opportunities for advancement, (i) levels and kinds of expectations of employer, and (j) general working conditions, such as the condition of the building or office where one will spend much of one's time. In my experience, however, by far the most important consideration in targeting that first job is "fit"—the extent to which the institution or people with whom you will work match your own system of values, motivations, and expectations. The more their expectations are congruent with what you wish to offer, on average, the happier you will be.

I have seen students take jobs that, on paper, looked wonderful, only to find that, when they arrived, what they had to offer was a poor fit to what the institution wanted to gain from them. So

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in my experience, the most important question to ask is the same as that you would ask in any kind of marriage, that of compatibility. If you and the institution in which you go to work are not compatible, you may find that little else matters: You will be miserable despite everything else. For example, you could be the best teacher in the world, but if you take a job at an institution that values research, but, at best, pays lip service to teaching, you may find all of your best-developed skills unappreciated by the people in your environment. Or you might be a wonderful researcher, but if you are required to teach four classes a semester, you can expect to have relatively little time to exercise those wonderful research skills.

The Variety of Jobs

A doctorate in psychology can lead you to a wide range of jobs (Sternberg, 1997, 2007). Among these jobs are (a) teaching and research in a college or university psychology department, (b) teaching and research in a university school of education, (c) teaching and research in a university business school, (c) psychotherapy administered in private practice, (d) counseling in a clinic or private practice, (e) outreach through community services, (f) psychotherapy administered in a hospital setting, (f) government service, (g) service in a school setting, (h) service as an industrial/organizational psychologist, (i) work in a consulting firm, and (j) work in the military. Of course, this is not a complete list. What it shows, however, is the wide range of careers available to people who specialize in psychology.

Preparing from “Day 1”

You may not literally start preparing for your job search on Day 1 of graduate school, but the sooner you do so, the better. By the time you are nearing the end of graduate school, you should already have set much of the scaffolding in place upon which you will construct your job search. What kinds of preparations do you need to be making:

- *Courses.* There are many reasons to take courses. For example, you may wish to learn how a particular professor sees the world, or you may wish to acquire specific statistical, laboratory, or therapy techniques. In a clinical program, your courses may be largely prescribed. But whatever program you are in, be sure to take courses that you will need to get employed in the kind of position you will seek. The appropriate courses will differ as a function of the kind of job you want, so you need to consult with your advisor, other faculty, and advanced students regarding what courses will serve you best.
- *Research.* Most graduate programs have a major research component (although some PsyD programs may not particularly emphasize research). Doing research that will distinguish you from others applying for similar jobs can be one of the best ways to prepare yourself for the job search.
- *Service.* Many graduate students do not think of service to their advisor’s lab group, or the department, or the university, as an important aspect of graduate training. Indeed, it probably is not the most important. But when it comes to hiring people, many institutions would rather have someone who will be willing to help others than someone who cares only about him or herself. Showing you are willing to contribute to others is an important step in getting yourself hired. At the same time, you do not want to drown yourself in service activities so that you have little time for everything else.
- *Letters of recommendation.* You probably will need three or even possibly four letters of recommendation. You therefore have to start thinking early about ensuring that at least three, and possibly four, individuals (usually, faculty members) know you and your work well. One of these recommenders will almost certainly have to be your main advisor. Another might be a secondary dissertation advisor, and a third, someone for whom you have been a teaching assistant. Or, if you are going into practice, you will probably want to have a clinical supervisor write you a letter. Do *not* wait until near the end of your graduate

career to start thinking about recommenders. It will be too late. Start thinking about them early, and then get to know them sooner rather than later.

Preparing Your Materials

Different institutions require different kinds of materials. But, on average, there is a core of stuff that most institutions require, regardless of the kind of job for which you apply.

The Vita

The vita, also called the “curriculum vitae,” is a summary of your main accomplishments. Often, it is the document that hiring institutions look at first. If your vita does not fit the profile of the person or person they wish to hire, they may look no further. Hence, a strong vita is essential to your success.

The most basic elements of a vita are your (a) name, (b) contact information (postal address, phone number, e-mail address, fax if you have one), (c) present status, (d) degrees (including anticipated ones), listing what they are and where they are from, (e) job experience, including consulting (f) honors and awards, if any, (g) publications, if any, (h) teaching experience, if any, (i) clinical experience, if any, (j) reviewing you have done for journals, if any, (k) and (l) teaching and research interests (where relevant). Many people also list family information (such as whether they have a spouse and/or children), although this information is optional. Although people sometimes list social-security numbers and birth dates, I would not advise it, given the problems that can arise from theft of such information.

When you list publications, you should list both published and in-press articles. If an article is submitted for publication you may wish to list it, but do not say to where it has been submitted, as you may later be embarrassed if the article is rejected. Make sure that anything you list you can produce. Listing a paper that you cannot provide on demand marks you as deceptive. And listing

things on your vita that are not true (e.g., phony degrees, papers as accepted that are not accepted, and so forth) can be grounds for you to be terminated from a job if the falsifications later are discovered. Hence, put yourself in the most favorable light, but *never* fabricate.

A strong vita is an important basis for getting a job. Hence, you should start building up the vita as soon as possible. Keep in mind the categories above, and try to fill them in. But remember that quality will usually be more important than quantity. A few good publications often are worth more than a smattering of not so good ones. Hiring institutions look at the quality of the journal in which the articles are published, and are likely to be less impressed with publications that appear in weak or non-peer-reviewed journals.

The Personal Statement

Although some job candidates integrate the personal statement with the vita, I usually recommend keeping them separate, as they serve somewhat different functions. For academic jobs, one might even wish to have separate teaching and research statements. For clinical jobs, one may wish to prepare a statement regarding one’s clinical experience and aspirations. The statement is important, because it helps define who you are both as a professional and as a person. A good statement tells a story. It might tell about how your teaching or research interests developed, or it might tell how your various projects tie together. It is worth putting a lot of time into the statement, and getting feedback on it from multiple faculty members and other colleagues.

Whereas a strong statement can generate interest in you, a weak statement can kill it. Statements may be weak for several reasons. The most foolish thing you can do probably is not to proofread what you write. Who wants to hire someone who turns in a statement with spelling, grammatical, or capitalization errors? An unfocused statement is also not likely to help you. Hiring institutions like to see focus, clarity, and coherence, not a stream-of-consciousness approach that seems incoherent to the reader,

however coherent it may seem to you. Also, do not just say what you are interested in. Say what you have done about your interests.

When and if you write a teaching statement, keep in mind not only your own interests, but also, the needs of the institution. Almost all teaching institutions expect new faculty to teach some service courses, such as Introductory Psychology or Introductory Statistics. You are also more desirable to an institution if you can teach lower division courses. So when writing about your teaching plans, be sure to list lower division (basic) courses as well as more specialized seminars.

When and if you write a research statement, keep in mind that a major factor in hiring for a research-oriented institution is that you will have a research program that will keep you busy for the next several years. So be sure to spell out in some detail not just what you have done, but also, what you plan to do. It also helps if you can show how the research you are doing does indeed form a coherent program rather than consisting of isolated bits with little relation to each other.

Letters of Recommendation

Letters of recommendation are required for almost all jobs. You cannot directly control what your recommenders say, of course. What you can do, however, is to choose your recommenders carefully. Choose people who know you well and who, to the best of your knowledge, have a positive view of you—the more positive, the better, of course. In the real world, it also matters who the recommenders are. Chances are that a recommendation from a person of distinction will carry more weight than a recommendation from someone who is unknown or, worse, who has a bad reputation. Sometimes, in choosing recommenders, you have to trade off how well known the person is with what you think the person will say. But given the choice between a more well-known recommender and a better letter, I would advise you to go for what you believe will be the better letter.

Most important is that the person really knows you. No one is impressed to read a letter, even

from a well-known person, when it is obvious that the person writing the letter has only the foggiest idea of who the person is for whom he or she is writing the letter of recommendation. Also, people who knew you a long time ago but have not kept up with you tend to be poor choices as recommenders. It usually is obvious from their letters, even if they do not explicitly say so, that their knowledge of you is not up-to-date.

Sometimes job applicants wonder whether they should include “political letters.” Such letters might be from actual politicians (e.g., a Senator or a member of the House of Representatives), or might be from people who are supposedly “connected,” such as a member of a Board of Trustees or a major donor. In my experience, such letters are much more likely to backfire than to have a positive effect. Unless you absolutely know that such a letter will be received warmly, do not arrange to have it sent. It sends a message about the kind of person you are, and probably not the message you want to send.

Publications

For academic and even many nonacademic jobs, you may be asked to provide sample publications. If you do not have any, of course, publications are not an issue. If you do, be sure to include them with appropriate citations. If you have the luxury of having produced a number of publications, you may wish to select only those you and your advisors consider to represent your best work. You can also send in-press and submitted or even to-be-submitted papers with your credentials. But do not send anything that seems half-baked.

Finding Out About Job Openings

How do you even find what jobs are available in the first place? In my experience, there are several major options:

- *APA Monitor on Psychology*. This monthly magazine, published by the American Psychological Association, publishes a list of

almost every job opening in psychology in the United States, and some abroad. It lists jobs by universities within states.

- *APS Observer*. This monthly magazine, published by the American Psychological Society, contains a somewhat more limited selection of jobs. It specializes in academic jobs.
- *Chronicle of Higher Education*. This weekly newspaper contains a number of academic jobs but is especially useful in finding administrative jobs.
- *Electronic Bulletin Boards*. There are many electronic bulletin boards that post job listings. For example, many of the divisions of the American Psychological Association have listservs that post selected jobs.
- *Newsletters of Specialized Organizations*. Many specialized organizations have newsletters that occasionally post jobs. You should therefore look at newsletters of special interest organizations that are relevant to your own professional interests.
- *Letters and Phone calls to Advisors*. Sometimes, faculty members receive letters or phone calls advising them of the availability of jobs. Thus it is always a good idea to check with faculty members regarding possible job listings.
- *Word of Mouth at Meetings and Elsewhere*. Sometimes news about jobs is passed by word of mouth. For this reason, networking can be an excellent way of finding out about jobs. Think about all the possible contacts you have, and use them. Talking to others on the job market or individuals who work for organizations that you might be interested in working for may inform you about jobs that are not yet posted, or even that will not be posted.
- *Creating Jobs*. It doesn't happen much, but it happens. Three times in my life I had an idea for a job, and spoke to high-levels managers in the relevant organizations about what I thought I could do for them. In two cases, the jobs were summer jobs, and in one case, a part-time job. In all three cases, it worked: A job was created for me. You cannot count on jobs being made to order for you, but you never know until you try.

Kinds of Jobs

A degree in psychology opens up many different kinds of jobs—so many, it is not possible to list all of them in one short book chapter. Different kinds of careers require different kinds of preparation, so the earlier you can decide on the kind of career you are interested in pursuing, the better off you are likely to be in preparing yourself appropriately. For example, if you wish to become a practicing psychologist, you will need to prepare for an internship. If you wish to prepare for an assistant professorship, you will need to get your publication record in order. You also may wish to consider a postdoctoral fellowship before going on the market for assistant professorships.

In my opinion, the best thing you can do to prepare is to be flexible. Many graduate students do not know exactly what they want to do when they start. Therefore, acquiring a broad range of skills will serve you well later on. For example, courses on statistics or on research methods will probably serve you well in almost any career. Many psychologists, even those in practice, teach at least part-time, so gaining teaching experience also will be useful for a wide variety of jobs. Acquiring experiences that will be useful in a variety of jobs can enable you to delay a bit your zeroing in on exactly what kind of job you want.

A good source of information on different kinds of jobs is *Career Paths in Psychology* (Sternberg, 1997, 2007), which describes different kinds of careers, including (a) what the career is, (b) how to prepare for the career, (c) typical activities people pursue while they engage in the career, (d) the approximate range of financial compensation for people in the job, (e) the advantages and disadvantages to the career perceived by people in the job, (f) personal and professional attributes desirable for success in the career, and (g) opportunities for employment and advancement in the career. The book covers academic careers (in a psychology department, a school of education, and a business school); careers in clinical, counseling, and community psychology, both within and outside hospitals; careers in

diverse organizations (government, schools, organizations, consulting); and careers in diverse areas of psychology (human factors, military, and health, etc.). The book also contains references suggesting other places one can seek information about careers.

The Job Interview

Regardless of the type of job you pursue, one of the most important events in getting a job is the job interview. If you are fortunate enough to be called for a job interview, the chances are that your performance in the interview will determine, to a large extent, whether you become merely one of a number of candidates who are interviewed or, instead, the candidate who is (first) offered the job. Thus, you wish to prepare assiduously for the job interview.

The Job Talk

The job interview may have many elements, but the central element almost always is the job talk. There is no one formula for a successful job talk, but there are elements that are common to many successful job talks.

- *The job talk is a performance.* Remember that when you speak you are performing. Good performances always require a great deal of preparation. If you give the talk off the cuff, it will show. And you most likely will not get the job. Some professionals appear very spontaneous. In fact, it is their enormous amount of practice that enables them to *appear* to be spontaneous.
 - *Keep your audience in mind.* You may know the meanings of all the jargon-words you use in the talk. Typically, though, the audience for a talk is quite broad, including many people who have only a vague knowledge of the area in which you work. Therefore, prepare for a general audience. Usually, the audience will have good background in general psychology, but not necessarily in your specialty. On the one hand, you don't want to insult the audi-
- ence by being too elementary. But you are much more likely to lose the audience than to insult it. Therefore, explain all terms that are not generally known and make sure the talk is comprehensible to almost everyone.
 - *Motivate the talk.* Don't expect your audience to know why your work is interesting or important. You need to motivate your talk up front by explaining why you are doing what you are doing and why anyone in his or her right mind should want to learn about it! Starting off your talk with a concrete example of the phenomenon about which you will be talking often helps. Often, speakers get or lose their audience in the first minute or so. Therefore, start strong.
 - *Be clear on what question or questions you are addressing.* Always be clear about what question or questions you are addressing. If you are not, your audience is likely to be confused about what you are trying to do, and why.
 - *Rehearse, rehearse, rehearse.* I generally encourage job candidates to give the job talk at least three times before presenting it for real. Virtually no one gives their best presentation the first time they present. The more similar your audience is to the audience to which you will present your job talk, the better. Often, lab groups scheduled research meetings provide a forum for practice talks.
 - *Time yourself.* It is embarrassing to finish a job talk with too much time to spare. You look under-prepared. It is no better to have much too much material, and either to stop in the middle of the talk or to start rushing at the end. Rushing does not work. And remember to allow time for interruptions.
 - *Organize.* A good talk is like a story, with a beginning, a middle, and an end (at least, the end up to wherever you are in the story). Say what you are going to say, say it, and then, at the end, say it again. Make sure that anyone in the audience can follow your talk. Disorganized talks often bespeak disorganized minds, and given the choice, most institutions would prefer to hire people who think in an organized way.
 - *Be enthusiastic.* Enthusiasm often is contagious. If you are enthusiastic about your work,

others may well be. But if you sound bored, others are likely to be bored, no matter how intrinsically interesting the work may be.

- *Cite relevant work, especially of people in the audience.* Audiences expect you to be aware of the relevant literature in your field, and of the intellectual antecedents of the work you have done. Therefore, be sure to cite near the beginning of the talk past work that led up to yours. If someone in the audience has done work that is relevant, it is essential that you cite that work. It makes no sense to insult someone who might have a potential say in your being hired!
- *Be prepared for questions.* Sometimes, job candidates give a good talk, only to blow their chances of getting the job during the question period. By rehearsing your talk, you can get a sense of what kinds of questions you are likely to get. Have answers prepared to the tough ones. But there may always be questions that are unexpected. Therefore, you need to be prepared for the unexpected. It is very rare that a question demolishes a talk. (It has happened to me once in my career, and it was truly a drag.) Chances are no one will demolish you. But some people may try. Never respond defensively; it makes you, not the questioner, look bad. But do not feel like you have to agree with everything everyone says, just because you are on a job interview. People who capitulate too easily appear to lack spine. Give an honest, constructive response. If you just cannot answer a question, tell the truth. People usually can tell if you are faking it. You may be able to think of an answer later, and then to respond. I often start off my talks by saying that, during the talk, I welcome questions of clarification, but prefer that questions that go beyond clarification wait until the end. If people ask whatever comes to mind during the talk, the risk is that you will finish very little of what you prepared, no matter how well you timed the talk in advance.
- *Never demean or insult a questioner or give a flip answer.* Inevitably, you will sometimes receive questions that undermine your faith in humankind. How could anyone ask a question that stupid? Never, ever demean or insult a questioner. There are several reasons for this. First, you probably do not know who the questioner is. I'm sorry to say that when I applied for my first job, I got a question from a member of the audience—who looked like a graduate student—that I thought was quite silly. I gave a flip answer. Unfortunately, the questioner was a senior faculty member in the area to which I was applying for a job. I didn't get the job. Second, what for you may seem like a stupid question may not seem to be a stupid question to the questioner or others in the audience. A flip or insulting answer may therefore be viewed as quite inappropriate. Third, you portray yourself in an unflattering light when you react in a flip or insulting way.
- *Do not be a slave to your audiovisuals.* Over the course of a career, almost everything that can go wrong, will. There will be Powerpoint projectors that do not work. There will be problems with lighting and microphones. There will be rooms that are too small or too large. You need to be prepared for all eventualities. I usually try to make sure I have backup. So if Powerpoint does not work, I have handouts in reserve. Or I can manage with no audiovisuals at all. One would like to believe that major screw-ups never happen during job talks because the talks are so important. But they happen with some frequency. You can lose valuable time if you are not prepared. So be ready for the unexpected and don't be totally reliant on one source of audiovisual aids.
- *Get the level of detail right.* The right level of detail for a talk is sometimes hard-to-find middle ground. When you go into great levels of detail about your participants, materials, procedures, and so forth, you bore people; but when you give insufficient details, you lose them. In a talk, it is important to distinguish the forest from the trees, but to make sure that you tell enough about the trees so that people can understand the nature of forest.
- *Have a clear take-home message.* Make sure that, at the end of the talk, people leave with a clear take-home message regarding what you

tried to show, what you did show, what it means, and why they should care.

The Conversations

Although the center of the job interview is the job talk, another important aspect of it is the series of informal conversations one typically has with potential future colleagues, such as faculty members or practicing psychologists, sometimes with graduate students, and sometimes, with administrators outside the unit in which one is to work. These conversations, almost as much as a job interview, can make or break a job offer. Therefore, keep in mind some important tips about the conversations:

- *Find out about your potential future colleagues in advance.* People almost inevitably are flattered when you know about them and their work; some people, especially more senior ones, may be insulted when you do not. Before you go to the interview, learn as much as you can about the people you are likely to talk to, and then show your knowledge (unobtrusively) in your conversations with them.
- *Show your interest in the work of the people with whom you speak.* One of the worst but most frequent errors of job candidates is to appear self-preoccupied and interested only in their own work. Egocentric people make bad colleagues, and are not prime candidates to be hired. By showing an interest in the work of others and in what you can contribute to it, you not only paint a flattering portrait of yourself, but you also open yourself up to learning experiences you might otherwise never have.
- *Show your interest in the institution.* You want to show that you know the institution to which you are applying, and that you would be thrilled to receive a job offer. Communicating the message that you do not really want to go to a place is a pretty good way of not getting a job: No institution wants to be turned down!
- *Be modest but not self-effacing.* No one likes a show-off. So maintaining an appropriate level of modesty helps show that you have a per-

spective on yourself and your work. But do not belittle yourself: If you do not have confidence in yourself, you may find that others will not either.

- *Disagree if you must, but don't lose your cool.* Most likely, one or more of your conversational partners will challenge some of your work, especially if you talk to people after the job talk. Conversations during job interviews are terrible places to lose your temper. You do not have to be disingenuous and pretend to agree with others when you do not.
- *Be yourself.* People can tell when you are faking it.

The Perspectives of the Search Committee

It would be nice if there were secrets that would crack open the deliberation process of the search committee. There are no such secrets, because different search committees value different things. Moreover, hiring decisions typically go to a faculty vote, at which point anything can happen. However, I think the main issues are these, with different weights for different search committees.

- *General fit to department.* Departments want someone who will fit in—who shares their values, who meets their teaching and research needs, who will be a good colleague. A candidate could be strong on many dimensions, but if the individual does not seem to fit with the department, the candidate is likely not to get hired. If you want to know what people are looking for, you might try simply asking them what is important to them. If what they value is not what you value, you probably are in the wrong place!
- *Specific fit to job.* Beyond general fit, departments typically have a search image in mind. It might be limited to an area (such as social psychology) or even to a particular specialty within an area (such as social cognition). If you do not do what the department is looking for, you have a tougher sell ahead of you.
- *Potential for research.* Especially at the entry levels of the academic job market, you are selling not so much who you have been but

who you will be. You need to convince the committee that you are someone with a wonderful future in front of you.

- *Teaching.* Departments vary greatly in how much they value teaching, but almost all departments want someone who is at least a good teacher, if not necessarily a great one. Typically, your job talk and letters of reference are the main information departments get regarding your teaching.
- *Willingness to give as well as to take.* It is surprising how many candidates appear to be focused only on themselves and their own research. Showing interest in the work of others and in other people, more generally, can make a big difference to a final outcome.

Questions to Ask on a Job Interview

The questions you ask on a job interview will vary with the issues that concern you. You should consult the department's web site for general information. However, here are some questions that candidates often ask (see Table 25.1). Often, the most appropriate person to ask is the Chair, although it sometimes is interesting to obtain a variety of perspectives.

Negotiations

If you are fortunate enough to get a job offer, there is room for negotiation! Here are the things that are most commonly negotiated:

- *Salary.* At the junior level, there is often some but not much room for negotiation. Sometimes having a competitive offer helps. But you should be very low-key in such negotiations.
- *Start-up funds.* Many universities will give start-up funds. You should find out the range of start-up funds available, if any are available at all. Then you may wish to prepare a budget.
- *Employment opportunities for significant others.* Many, but not all universities are willing to help find employment for significant others.
- *Lab space.* Many universities will provide lab space if you wish it.

Table 25.1 Sample questions to ask on a job interview^a

General questions

- What is the size of the department?
- What is the structure of the department (different tracks, disciplines, etc.)?
- What is the number of faculty at each rank?
- What are the department's future expansion (or contraction) plans?
- What is the department's standing within the university?
- How are graduate students matched with faculty?
- How are graduate admissions handled, in general?
- How long does it typically take for graduate students to finish the program?
- Does the graduate program have both masters and doctoral students, or just one or the other?
- For clinical psychologists, what is the relative emphasis on research vs. clinical work?
- What is the relationship between subdisciplines or areas within the department?
- What is the relationship between psychology and other departments?
- Are any of the faculty in private practice? Are there any guidelines with respect to private practice or consulting?

Responsibilities

- What is the teaching load?
- Is there any reduction in teaching load during the first year?
- Is there any reduction in teaching load for departmental service? For grants?
- Can you buy out of teaching with grants?
- Is summer teaching expected?
- What is the proportion of junior faculty that is tenured?
- What are the expectations for tenure?
- What are the expectations with regard to committee work?

Resources

- How much lab space can you expect? Where will it be?
- How are research assistants and teaching assistants assigned?
- How are resources like secretaries, photocopying, postage, long-distance calling, and parking handled?
- What kinds of computer equipment and support can one expect?
- What library services are available?
- What kinds of mentorship are available for junior faculty?

Benefits

- What kinds of travel funds are available from the department?
 - What kinds of medical, dental, and retirement plans are offered by the university?
 - Are there opportunities for summer funding?
 - What is a typical starting salary?
-

(continued)

Table 25.1 (continued)*Grants/research*

What are university's expectations with regard to obtaining outside grant funding?

What kinds of internal grant funding are available?

What kinds of participant populations are available? Is there a subject pool?

Is there an office of sponsored research in the university or college?

How much time is typically available for research?

What is the quality of the students, and might they reasonably become involved in research?

Location

What are the real estate opportunities available?

What is the cost of living?

Is there any university assistance with mortgages?

Faculty relations

Are relations between junior faculty and senior faculty cordial?

Is collaboration among faculty encouraged (or discouraged)?

Why do people decide to come to the university? Why do some people not decide to come?

^aQuestions provided by Mitch Prinstein

- *Teaching load.* Some universities will negotiate a reduced teaching load in the first year. But they will generally not make a special arrangement beyond that.

Conclusions

You cannot guarantee yourself the job you want, or even a good job. But there is a lot you can do to improve your chances of getting the job you want. Preparing early for your eventual foray into the job market will improve your chances of effectively marketing yourself. By following the suggestions in this chapter, you will find yourself a step ahead in getting your ideal job. But if you do not get that job, all is not lost. Many people start off with jobs that were not what they hoped for, and either find that they are much happier than they expected they would be, or that, within a few years, they can move to a job that represents a better match to what they want. So, if you are patient, chances are quite good that sooner or later, you will end up in a position that makes you happy.

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Jessica L. Kohout and William E. Pate II

In 2003 Barker and Kohout assembled a chapter for the previous version of *Portable Mentor* that considered the following questions. How are new psychology doctorates faring when seeking their first professional position? What are the criteria by which applicants are judged? Is there any point to trying to get a job in academe? Are practice jobs easier to come by? What about consulting? The authors relied upon a variety of data sources to answer these questions. This update will rely on similar sources, with a focus on secondary data. Among these are a number of surveys published by the American Psychological Association (APA): the biennial *APA Doctorate Employment Survey* (DES), *Salaries in Psychology*, *Faculty Salaries in Graduate Departments of Psychology*, and the *2008 APA Survey of Psychology Health Service Providers* (Michalski, Mulvey, & Kohout, 2010). Other sources include the National Science Foundation (NSF), the US Department of Education, and the US Bureau of Labor Statistics (BLS). The goal of this chapter is to sketch a picture of the employment situation for psychology doctorates in the USA. To do this, we address demographics, employment status, employment settings and positions, salaries, perceptions of the marketplace, time to employment, and any changes in

these over time among new doctorates, as data permit. This is followed by information on challenges, opportunities, and trends in the field.

We include some discussion of employment prospects for those students now in the psychology education pipeline and the need for a thorough workforce analysis. Most of the chapter focuses on doctoral-level psychologists. Figures and text will clearly indicate whether we are discussing all doctoral-level psychologists or if we are focusing on some subgroup within this (e.g., PhDs, PsyDs). Periodically, we will review data on doctoral-level personnel regardless of field. As noted in the first chapter, this is a consequence of the fact that we must rely on different sources of information and that these sources gather, analyze, and present their data differently. We will clearly indicate when the discussion concerns those trained in psychology below the doctorate level.

Demographics

What is the face of the new psychology doctorate today? It continues to evolve and reflect the larger society and ongoing financial exigencies. In 2009, new doctorates were largely female (75%) up 18% from just 20 years before (Michalski, Kohout, Wicherski, & Hart, 2011). These APA data indicate a slightly higher percentage of women among new graduates than do NSF data (71%) from 2008 (National Science Foundation, Division of Science Resources Statistics, 2009b).

Note: With thanks to Kathleen Barker, PhD, Daniel Michalski, MA, ABD and Marlene Wicherski.

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About one-fourth of respondents were members of a minority group and this proportion held for both APA and NSF data. By contrast, in 1999, minorities accounted for less than 17% of new doctorates. (National Science Foundation, Division of Science Resources Statistics, 2001b; Michalski et al., 2011)

Approximately 71% were younger than 35 years with 19% between 35 and 44 years of age (Michalski et al., 2011). Although the average age remained consistent over the past decade the percentage of new doctorates younger than 35 years has increased 13%. Ninety-one percent of respondents stated that they were heterosexual, 7% were gay or lesbian with a little less than 2% bisexual.

APA collects data on degree type and in 2009 fully three-fourths of new doctorates earned PhDs with 25% earning a PsyD (Michalski et al., 2011). In the mid-1980s, PsyDs comprised less than 8% of new doctorates (Kohout & Wicherski, 2003). Psychology degrees are also awarded through Schools of Education and numbers for these can be located in the NSF data at <http://www.nsf.gov/statistics/>. Today's new doctorates were more likely to have completed a postdoctorate than was the case 20 and 30 years ago and they face a greater burden of debt than did their predecessors.

Psychology remains one of the most popular undergraduate majors. In 2010, psychology students earned 92,587 baccalaureate degrees, 21,431 master's degrees and 5,124 doctoral degrees (including PsyD degrees) for a total of 119,142 degrees (U. S. Department of Education, National Center for Education Statistics, 2011). The growth in degree production over the past four decades has been consistent and impressive. This growth reflects more than a 400% plus increase in bachelor's degrees from 16,966 in 1966. During the same time, master's degrees increased more than 700% from 2,423 to 21,431 and doctorates grew steadily from 1,139 in 1966 to 5,124 in 2010, increasing more than 300% (National Science Foundation, Division of Science Resources Statistics, 2001). Among those earning doctorates in the health service provider subfields, 79% earned a PhD, 18% a PsyD,

and 3% an EdD (Michalski et al., 2011). It is important to note that employment in psychology as a "psychologist" is predominantly reserved for those with graduate degrees. In 2008, approximately 8,000 individuals with associates and bachelor's degrees were among the 172,000 employed "as psychologists" (Michalski, 2011).

New Doctorates

Employment Status

Are new doctorates likely to find employment? How long does it take? How has this changed? In 2009, less than two-thirds of new doctorates were working full time, about 8% were employed part time, while 24% were working on postdoctorates and 6% were unemployed; two-thirds of whom were seeking work (Michalski et al., 2011). Over the past 20 years the proportion working full time has declined while that working part time has stayed steady. The shift has been in the proportion of new psychology doctorates away from full-time employment to postdoctorate positions, more than tripling from 6 to 24% between 1986 and 2009 (Michalski et al.; Pion & Wicherski, 1989). This shift toward postdoctorate work immediately following receipt of the doctorate holds for all new psychology doctorates regardless of subfield. NSF data are in agreement with those from APA, pointing to an increase in the numbers of PhDs pursuing postdoctorates over time. Why do new doctorates choose to take a postdoctorate position? For those pursuing research training, we found that the three reasons given most often were to increase employability, complement research knowledge and skills in the same subfield, and to work with a particular scientist or research group. For those aimed at clinical service, the top reasons were to obtain supervised hours to sit for the licensing exam, become more employable, and to obtain specialized clinical training. Although unemployment has remained low for the new doctorate in psychology, the 6% reported in the 2009 DES report is an increase from previous years (Michalski et al., 2011).

Time to Job, Satisfaction and Perception of the Market

Is it taking longer to find work? Do new doctorates like their work? Do they feel underemployed? The most recent *DES* from APA (Michalski et al., 2011) indicated that over one-third had a professional job before they completed the doctorate and that just under a third found work within 3 months of receiving the degree. A small percent (6%) had the job they reported while in the doctorate program. Conversely, around a quarter of respondents took 4 months or longer to find a job (almost 16% indicated that it took between 4 and 6 months to land a job and just over a tenth took more than half a year). There appears to be little change in time to job over the past decade.

Sixty percent or better indicated that they were satisfied with various aspects of their current positions. Income/salary and opportunities for promotion were less likely to be rated positively than were the other aspects of the jobs such as benefits, personal development, recognition, supervisor, coworkers, and working conditions. Coworkers and supervisors were least likely to be rated negatively.

Almost three-fourths of new doctorates obtained their first choice job and fully three-fourths did not feel that they were underemployed. Just over one-third felt that the job market was *fair*, almost 40% responded that it was *good* or *excellent*, and just under 23% held a *bleak* or *poor* perception. The 2009 data revealed a decline from 1999 in the percent of doctorates who responded *good* or *excellent* accompanied by an increase in those stating that they felt the market to be *poor* (Kohout & Wicherski, 2003). These data are consistent with 2008 data from the APA membership that looked at percentages of members indicating decreases in various areas of their professional lives (Finno, Hart, Kohout, & Wicherski, 2008). The percentage of members indicating a decrease in salary/income, employment security, and number of clients and opportunities for career advancement grew between 2008 and 2009.

When asked if their current position was appropriate across a number of dimensions the responses proved intriguing. Eighty-nine percent of respondents did feel that the position was related to their

field of study (Michalski et al., 2011). Almost 80% thought it was commensurate with their level of training. Just under 79% felt that it matched their level of experience and 73% found it to be professionally challenging. However only 54% said that the current position was what they expected when they started their doctoral program.

Employment Settings

Because the world of work changes slowly, looking at where current doctorates find employment can provide direction to those currently in the educational pipeline contemplating a career in psychology. Although most of the new doctorates responding to the 2009 *Doctorate Employment Survey* (72%) indicated that they were working in one position only, a solid fifth was working in more than one job. The survey revealed that the two leading categories of primary full-time employment were university settings and business, government, and other settings representing almost 21%, each, of new doctorates. Just over 14% could be found in hospitals, over a tenth were in other human service settings (e.g., counseling centers, specialized health services, rehabilitation facilities, outpatient clinics and the like), managed care settings were at 6%, schools and other educational settings claimed 8%, and independent practice almost 6%. Four-year colleges employed just 5% of new doctorates, medical schools got 4%, and 2% were located in other academic settings.

In summary, almost a third of new doctorates were employed in higher education while another 8% were employed in schools or other educational settings. Organized health care settings, including hospitals, managed care, and other human service settings accounted for just under 31%, while business, government, and other settings accounted for almost 21%. Independent practice was the smallest category of employment at just under 6%. It appears that slightly higher percentages found work in higher education in 2009 than 10 years prior, with slightly fewer employed in organized health care settings than in 1999 (Kohout & Wicherski, 2003).

Employment Setting by Subfield

It is important to remember that in psychology as in many other fields, employment settings vary by the emphasis pursued by a new graduate during doctoral study. In psychology, the distinction is based on whether the new doctorate pursued a health services versus a research emphasis and even within these broad categories, one can find variability. In 2009, the *DES* found that two-thirds of new doctorates were granted in the health service provider subfields with the remaining third in research subfields (Michalski et al., 2011). Graduates in the health service provider subfields were employed primarily in organized health care settings (47%), with 21% in hospital settings. Not surprisingly, most school psychologists were employed in schools and district office settings (61%) and forensic psychologists were most apt to be located in business, government, and other settings (71%).

Graduates in the research fields were found most often in higher education (universities and colleges, 52%) while just under a third worked in business, government, and other settings (31%). Doctorates in industrial organizational psychology were most apt to be located in business, government, and other settings (69%) while just over half of those with doctorates in social psychology tended toward university employment. At least half of cognitive, developmental, educational, experimental, and quantitative doctorates were working in universities or 4-year colleges. Doctorates in neuroscience on the other hand sorted into medical schools to a greater extent than did graduates in other research subfields.

Employment Among Psychologists

Employment Status and Patterns

In 2009, APA's Center for Workforce Studies (CWS) compiled data from the NSF that addressed the employment of Psychology PhDs. Of the 102,280 PhDs counted, fully 89% were employed (National Science Foundation, Division of Science Resources Statistics, 2009a). Almost

69% of the employed psychologists worked full time and 21% worked part time. Almost 8% of all psychologists were retired, and we can expect this percent to increase as the population ages in the USA. Two percent were not seeking employment while less than 1% was seeking. NSF data highlight the low unemployment rate among doctoral-level psychologists. In 2006, the unemployment rate was 1% for doctoral-level psychologists, compared to 4% for those in sociology and economics, and more than 5% in both political science and other social science fields.

Using data from the 2008 APA Directory, CWS reported on employment characteristics of psychology PsyDs. The data indicated that 97% were employed, with 71% employed full time, and almost 19% working part time. Another 3% were pursuing postdoctorates and around 4% did not specify type of employment. A little over 1% was retired, and less than 1%, each, was "unemployed, seeking new employment" or "unemployed, not seeking." Across both degree types, the trend is consistent and unemployment remains low.

Employment Settings and Activities

In 2003, Barker and Kohout noted a higher than average rate of self-employment for psychologists vis-a-vis professional workers in other occupations. In 2002, this rate was at 40%. In 2009, this rate was estimated at 34% (Bureau of Labor Statistics, 2009; Hipple, 2010). The data from the most recent APA *Doctorate Employment Survey*, along with those from NSF and BLS, support the observation that self-employment remains a feasible alternative for psychologists and one that they are utilizing, regardless of subfield.

The NSF reported 96,570 employed PhD psychologists in 2006 (National Science Foundation, Division of Science Resources Statistics, 2009a). A little less than 36% were working in higher education including 4-year colleges, universities, and medical school settings. Just over 6% were employed in other education settings which includes precollege education such as community and 2-year colleges. Almost a tenth were in nonprofit arrangements, another 4% found work in the federal government, while 5% were located

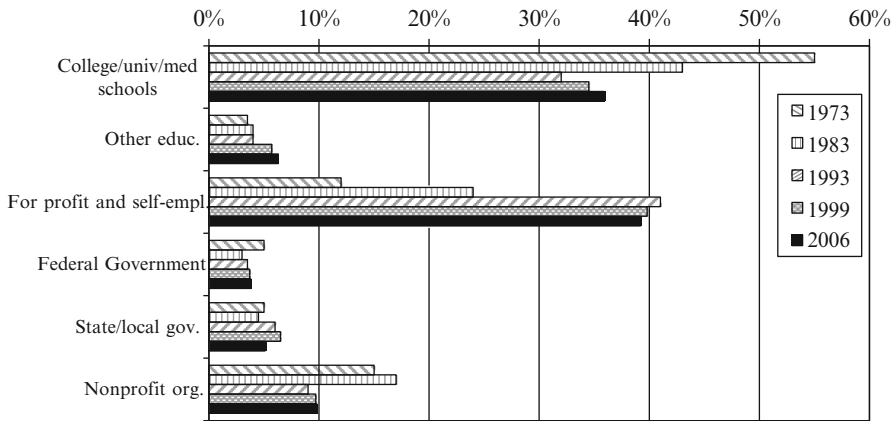


Fig. 26.1 Employment settings for PhD psychologists: 1973, 1983, 1993, 1999, 2006. *Source:* Survey of Doctorate Recipients, 1973, 1983, 1993, 1999, 2006.

National Science Foundation. Compiled by APA Center for Workforce Studies, March 2001 and Ad Hoc Analytics, 2012

in state and local government offices. The largest proportion was working in *for-profit settings* (39%), followed by just under 19% in private for profit (including self employed and incorporated), and another 20% in self employed/business owner but not incorporated.

How has the face of employment in psychology changed over the past 40 years? With the growth in opportunities for psychologists to provide services that emerged in the 1960s and 1970s, the proportion of psychologists in for-profit settings (e.g., practice) grew from 12% in 1973 to 39% in 2006, a threefold increase (National Science Foundation, Division of Science Resources Statistics, 2009a; see Fig. 26.1). Over half (55%) of PhD psychologists were in college and university settings in 1973. By 2006, this proportion had fallen to 36%, with psychologists in the traditional academic research subfields, industrial organizational and general psychology continuing more often in academe than those psychologists in the health service subfields. The representation of psychologists grew slightly in other educational settings such as community and 2-year colleges, but declined somewhat in federal and nonprofit locations. The representation in state governments has remained low and steady. Psychology at the doctoral level has evolved from a predominantly academic profession to one with a strong and enduring human service focus.

What do these individuals do in these varied settings? NSF reported out primary and secondary activities for PhD psychologists in 2006 (National Science Foundation, Division of Science Resources Statistics, 2009a). Just over one-third was engaged in research, over half in applied research. A small proportion (2%) was working with computers. Over a fourth (29%) was teaching. Almost 45% were engaged in management, sales, or administration and almost half (49%) provided professional services.

Salaries

Over the years, data from the NSF *Survey of Doctorate Recipients* series have shown that salaries earned by PhD Psychologists were lower than those earned by PhDs in the other science and engineering fields. And in fact, federal data and other national data sources have indicated similar patterns for those with psychology bachelor's and master's degrees and for new psychology graduates when compared with graduates in other science, engineering, and health fields. The reasons for this at the bachelor's and master's levels are fairly straightforward. In psychology, the entry-level degree has long been the doctorate for independent practice, college and university teaching and for successful competition for research funds.

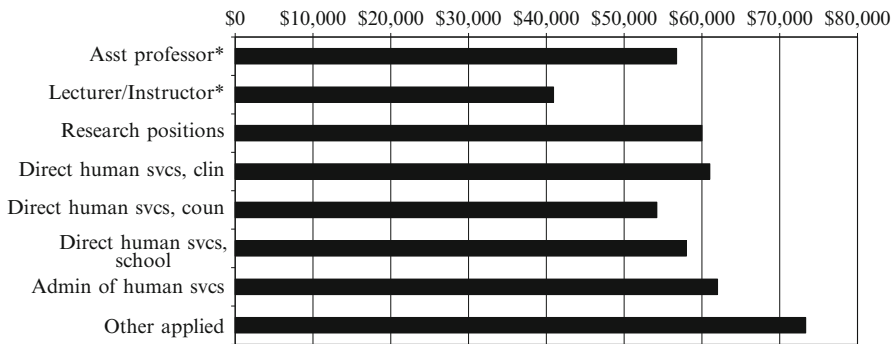


Fig. 26.2 Median starting salaries for full-time employment positions: 2009 doctorates recipients in psychology. *Source:* 2009 Doctorate Employment Survey. APA Center

for Workforce Studies, 2011. * Salaries are reported for a 9–10-month academic year. To calculate 11–12-month equivalent, multiply by 11/9

Hence, degrees below this level do not provide access to higher paying professional jobs in the field. Data from NSF's *Survey of Earned Doctorates* (National Science Foundation, Division of Science Resources Statistics, 2010) indicated that salaries for new PhDs varied by employment setting such that those in business and industry earned the highest median salaries, followed by those in government, nonprofit settings, and lastly academe. This pattern held for psychology as well. New psychology PhDs in academic settings reported median incomes that were on a par with those reported in other fields of science and engineering. However, the median salaries for new Psychology PhDs in employment settings outside academe were lower than those reported by new PhDs in the other science, engineering, and health fields. As has long been the case, salaries for those who are more experienced tend to be highest in settings in which the individual has some control over compensation such as consulting or practice settings. Salaries also tend to be higher in private as opposed to public and in business rather than nonprofit settings. Those in management or administration in business and applied settings tend to make higher salaries than those in management in organized health care settings such as community health centers or clinics. Salaries paid to psychologists in government settings especially at the federal level

will usually be higher as the pay scales are pegged to education and experience.

Additionally, because government pay scales are generally public information they tend to be relatively uniform within pay grade and location. The same can be said of salaries paid in public institutions other than government such as clinics and colleges or universities. As noted in 2003, and remains true today, salaries for those in academic settings have not kept pace with inflation and are affected by factors such as type of institution, location and background of the individual. The continuing trend toward greater reliance on contracts, contingent faculty, and less use of tenure in higher education suggests that secure and well-paying positions will require strong bargaining skills (Barker & Kohout, 2003). Figure 26.2 contains data on the median salaries reported by new doctorates in various settings, while Fig. 26.3 presents salary data for more established doctoral-level psychologists and draws from the *Salaries in Psychology* survey and the *Faculty Salaries in Graduate Departments of Psychology* surveys, both published by APA (<http://www.apa.org/workforce/publications/index.aspx>). Individuals with doctorates in Industrial Organizational Psychology in applied settings (business) reported the highest median levels of compensation, followed by individuals in research and educational administration, and full professors.

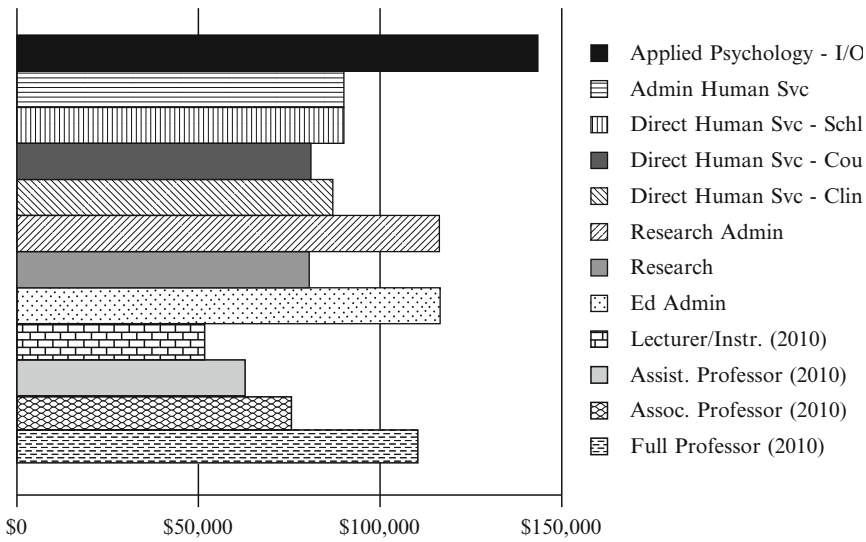


Fig. 26.3 Median full-time salaries of doctoral-level psychologists by employment position: 2009, 2010. *Source:* 2010–2011 Faculty Salaries in Psychology, 2009 Salaries in Psychology Survey. APA Center for Workforce

Studies, APA. <http://www.apa.org/workforce/publications/index.aspx>. Faculty salaries are reported for a 9–10-month academic year. To convert salaries to 11–12 months, multiply by 11/9

Trends in Employment: Academe

The 2003 chapter by Barker and Kohout used a wealth of information from the National Survey of Postsecondary Faculty to detail major shifts in the structure of academic work in general and for psychology, specifically. The survey has been discontinued and current data are no longer available but many of the trends noted in that earlier chapter are in evidence today. These included “emergence of nonstandard work in academe (i.e., work that substantially departs from traditional notions of permanent or full-time employment, including part-time jobs, temporary part-time jobs, and temporary full-time jobs)” which accounted “for a substantial proportion of academic positions” and which was increasing (Barker & Kohout, 2003). Nonstandard jobs include temporary positions, hired for on a semester or project by project basis, with no guarantee of continuation. Recent data from NSF indicated that psychology and the social sciences were the only fields that did not reflect an increase in the proportion of the labor force with a tenure or tenure-track appointment as postdoctorate work experience increased (National Science

Board, 2012). This same report indicated that between 1973 and 2008, the proportion of full-time faculty among Science and Engineering doctorate holders who were employed in higher education declined in all fields. Psychology and the social sciences endured the largest relative losses. The report pointed to an increase in the growth of part-time positions and nontraditional or other full-time (adjuncts, lecturers) positions as an explanation for the proportion full-time positions in psychology.

As noted earlier, the percent of new psychology doctorates working full time has declined over the past several decades, while the proportions working part time and pursuing postdoctorates have increased. Respondents gave various reasons for engaging in postdoctorate study. Among these was the desire to become more employable, the most frequent of all reasons selected, especially among those in the traditional research subfields (Michalski et al., 2011). These data recall the discussion of the competitive nature of the post-degree job market from the Barker and Kohout (2003) chapter and suggest that competition remains a factor for new doctorates today.

Although Psychology has made progress in diversifying its academic workforce, that progress has been slow in light of rapid changes in the population and among students in the educational pipeline. Data from a recent APA Faculty Salary survey indicated that minority faculty were almost 15% of all graduate faculty and this ranged from 8% of full professors to nearly 23% among assistant professors (Wicherski et al., 2010a). The majority of full-time minority faculty was working in public settings, while most part-time minority faculty were employed in private settings. This pattern of employment held for doctoral-level departments regardless of race/ethnicity, suggesting that public doctoral settings would be more apt to offer full-time opportunities than would private settings. Similarly, the largest proportions of full-time faculty were employed in traditional academic settings while the largest proportions of part-time faculty were found in professional school settings. Patterns for master's-level departments differed from those noted at the doctoral level with the majority of both full- and part-time faculty found in public settings (Hart, Wicherski, & Kohout, 2011). Data from the 2009–2010 *Faculty Salaries in Graduate Departments of Psychology* allow a comparison of tenure patterns across public and private settings for graduate departments of psychology (Wicherski et al., 2010a). Thirty percent of full-time faculty in private institutions did not have access to a tenure system compared to less than 2% of faculty in public settings. When comparing gender and tenure status across public and private settings, we found that both men and women were less likely to be tenured or on the tenure track in private settings than in public. Further, the decline was larger for women than for men. Both men and women were less likely to be on the tenure track in private institutions than in public and the increase in faculty with no tenure system available (i.e., not applicable) in private compared with public settings was substantial, jumping from less than 2% to almost a third.

The largest single proportion of each racial ethnic group among full-time faculty in graduate departments of psychology was tenured. This

was the case for 62% of White and American Indian faculty, almost 48% of African American/Black faculty, just under 46% of Hispanic faculty, and a little less than 44% of Asian faculty. The second largest proportion for each group was in tenure-track positions. Tenure was not available or applicable for about one-fifth of African American faculty, 16% of Hispanic faculty, 14% of White faculty, 12% of Asian faculty, and 3% of American Indian faculty.

Women were just under 45% of full-time faculty in graduate departments of psychology in 2009–2010 (Wicherski et al., 2010b). They were less likely than men to be tenured (51% vs. 67%), more apt to be on tenure track (30% vs. 21%), but were also found more often in positions with no tenure track when compared to men (11% vs. 5%). So although women were in the tenure pipeline, there were substantial numbers that would not be in a position to seek tenure.

As noted earlier in discussing salaries by employment settings, careers in higher education are not known for being the most financially remunerative; so beyond enjoying teaching, what would lead a person to seek such work? Simply put, faculty positions have historically offered stability. This was particularly true once one earned tenure. Is this still the case?

There is extensive coverage of the emergence of a contingent workforce in the literature (Barker, 1995, 1998, 2002; Barker & Christensen, 1998a, 1998b) and this was addressed directly in the Barker and Kohout (2003) chapter in which they discussed a number of major transitions in higher education and their implications for those working in academe. Over time, institutions offered tenure less frequently and nonstandard academic jobs were becoming more common. All the data pointed to a strong relationship between standard academic jobs and tenure. Echoing the 2003 chapter, remember that women are be employed in institutions that offer tenure but end up in positions in which tenure is not an option. This may have been partly a function of the larger proportion of woman both in the educational pipeline and as candidates for faculty positions in the employment pool, especially at

junior ranks, but it was also a consequence of shifts in academe that resulted in greater opportunities in nonstandard academic positions and positions in which tenure was not an option. Newcomers to this situation, recent doctorates, must be diligent in determining the nature of the job they are seeking and how tenure and jobs are handled at the institutions to which they are applying. For example, the proportion of part-time or adjunct faculty in a department can impact the workload of full-time faculty. Although a department can bring in more students who are taught by faculty in these nonstandard positions, the responsibility for advising the students and for committee work remains largely with full-time faculty, who may have difficulty juggling the demands of advising, teaching, research, and committee work while preparing for tenure.

In 1997, Burgan specifically stressed the importance of educating oneself about tenure policies and availability at any department and institution in which one might be interested. Although certain subfields in psychology may not be experiencing a downturn in which tenured jobs have declined, overall, a decrease in tenure-eligible jobs, a decrease in the number of tenured faculty, and an increase in standards required for tenure make it critical for new entrants to become knowledgeable about larger structural and societal issues that may affect higher education and their intended employment. Some of these may include national and state economies, changes in laws regarding unions, opportunities for funding, changes in one's own field and others, innovations in technology, and more. Awareness of current trends allows one to be better informed, more nimble and hence more likely to survive and thrive in a changing world.

Trends in Employment: Health Services

Data from both the APA and the NSF can be used to look at psychologists working in health service provision or practice. Data from the 2009 APA Doctorate Employment Survey indi-

cated that 66% of new doctorates were awarded in health service provider subfields with over half of these in Clinical psychology alone (Michalski et al., 2011). At 47%, human service settings were the dominant employer of new doctorates in the practice subfields. Recent NSF reports found that almost 49% of new PhDs in psychology were awarded in the health service provider subfields (National Science Foundation, Division of Science Resources Statistics, 2009b) and that 39% of doctoral-level psychologists were either self employed or in for-profit settings (National Science Foundation, Division of Science Resources Statistics, 2009a). Since the 1970s, the number of doctoral programs whose primary function was the education of health service provider psychologists has burgeoned. As providers of behavioral health services have grown in number and variety, psychologists in health service provision increasingly face competition from providers in other disciplines, including psychiatry, social work, marriage and family therapy, school psychology, clinical nursing, counseling, psychosocial rehabilitation, and clinical sociology. Data from the various disciplines were reported most recently in *Mental Health United States, 2008* (Substance Abuse and Mental Health Services Administration, 2010). The various estimates and counts included at least 432,194 providers of behavioral health services in psychology, psychiatry, clinical nursing, social work, counseling, and marriage and family therapy. Other estimates, which included more of the behavioral health disciplines, placed the number of providers over 500,000. Competition within fields among providers at different levels of degree and in different subfields as well as across disciplines remains a major concern for both providers and policymakers.

Managed care strategies impact the provision of behavioral health services and are worthy of attention as they can determine who can provide services, for what needs, to which clients. The independent, licensed provision of health services has come to be increasingly regulated, greatly reducing the provider's professional

autonomy. This trend toward the increasing power of a “middleman” and loss of autonomy and authority, and its consequence for psychologists in both practice and academe was discussed by Barker and Kohout (2003) and is a prevalent factor in work today.

The latest *Mental Health, United States* (2010) noted three “recent” trends that were felt to be important in any discussion and understanding of the environment surrounding the provision of behavioral health services.

Specifically related to this chapter, the *Mental Health, United States* report noted that the use of nonspecialty (general practitioners) providers in the provision of behavioral health services has increased. Nonspecialty providers are not particularly trained to diagnose or treat behavioral and mental health disorders. The argument has also been made that the nonspecialty provider does not spend a sufficient amount of time with a patient to recognize what may be serious problems, aside from the ailment that brought the person into the provider or health care office. The reliance on nonspecialty providers to recognize and treat mental health needs can result in a delay of services or a failure to meet the patient’s needs.

Fortunately, a trend toward collaboration noted in a recent survey of health service provider psychologists is encouraging and refutes what may be the perception of providers as isolated private practitioners (Michalski et al., 2011). Over a third of respondents indicated that they collaborated once a week or more while 30% said daily. Over half of those collaborating noted that this involved work with other psychologists, psychiatrists, primary care physicians, and social workers but also attorneys, court systems, and law enforcement. Activities involved in these collaborations ran the gamut from service provision and assessment to forensic consultation and medication referral. Why is collaboration critical? Collaboration opens up opportunities for work including a greater integration with health care providers in a variety of settings.

What does a psychology health service provider look like in 2012? Much of these data can be found at the APA website <http://www.apa.org/workforce>

in current publications including the *2008 Survey of Health Service Providers* and the *Doctorate Employment Surveys*. In 2008, 58% of health service providers were female and the median age was 55 (Michalski et al., 2010). However, among health service providers who were new doctorates we find women at 75% and the median age at 32 (Michalski et al., 2011). Minority representation among new health service provider doctorates at just under a third is over three times that found for more established health service providers. PsyD degrees have gained in number since the 1970s and now represent 18% of degrees held by psychology health service providers overall and 29% of degrees reported by new doctorates in the health service subfields. In 2008–2009, data from *APA’s Graduate Study in Psychology* indicated that almost 57% of the Clinical doctorates awarded were PsyDs, while 43% were PhDs. Professional schools accounted for 63% of the Clinical doctorates granted in 2008–2009. Clinical is the largest health service provider subfield and the largest single subfield across all psychology, accounting for a third of all PhDs granted and 95% of all PsyDs awarded (Kohout & Wicherski, 2010). Most health service providers work full time (72%) and over a third (38%) hold two or more positions. Successful psychologists will understand that it is who you know and that networking is critical. It was the top method by which new doctorates in 2009 obtained their positions, followed by electronic resources.

Data from the *2008 Survey of Psychology Health Service Providers* (Michalski et al., 2010) revealed that the top work settings were private practice, organized human service settings, educational settings, school systems, business, and government. In these settings, psychologists provided direct client care, conducted practice management, clinical supervision, and clinical and community consultation and prevention services. Psychologists practice in many types of settings and serve broad roles and functions in these settings. However, data on geographic location, training, and client populations continue to underline the fact that many practitioners in psychology

do not appear to be working with underserved populations and areas. Further, data indicate that although the population in the USA has diversified and the educational pipeline in psychology is more diverse, it is not the case that the pool of psychology health service providers is itself sufficiently diverse or culturally competent to meet the service needs of the population.

The successful psychologist will spend substantial amounts of time learning about the larger structural and social issues influencing the field of psychology and education and work in psychology. For the practitioner, some of these areas of focus would include being aware of how legal changes may impact one's work, knowledge of the advocacy activities of one's professional organization, knowledge of and use of the data on evidence-based practice, information on insurance policies and practices, data on needs and opportunities for service, changes in service delivery, and how advances in technology could be used to support service delivery. Competition from within the field and other disciplines remains a concern.

Challenges, Opportunities, and Trends

The unemployment rate for psychologists has been and remains very low. In 2006 it was less than 1% among PhD psychologists. In 2008 APA data indicated less than 1% of psychology PsyDs was unemployed and seeking. It is the case that we have experienced several years of economic recession so newer data may reveal increases in these numbers, but historical data on psychologists indicates that they have weathered past downturns handily. Recent data from a report on employment by college major indicate that unemployment varies by major and by level of degree, so that recent baccalaureates in psychology reported a "relatively" low rate of unemployment (7.3%; Carnevale, Cheah, & Strohl, 2012). The authors reported that unemployment rates drop across the board as degree levels increase.

Data from 2009 on new psychologists did not reveal any substantial changes in employment,

underemployment, or time to job. Of those new doctorates working, and not in postdoctorate positions, most (73%) have found employment before completing the program or within three months of doing so and most get their first choice of job (72%) and most do not feel underemployed (75%). These percentages are consistent with those from earlier years (Michalski et al., 2011). On the surface the situation looks very positive for the discipline and for those working in psychology. Are there reasons for concern?

Challenges

The next section addresses some of the challenges and opportunities and trends facing psychology today. Rather than lions and tigers and bears, psychologists have their own set of challenges, and these will be discussed briefly below followed by some information on opportunities and the skills psychologists bring to their work and careers. This will be followed by a summary of current trends influencing psychology. These forces face both new doctorates and those already established in the field, but they may manifest differently for each group and for other groupings such as women, minorities, providers, or researchers; and they require both individual and group attention and action.

Defining psychology is an ongoing exercise. Psychology is a dynamic and very broad discipline with a variety of areas of work and activity. Whether these all belong to or can be covered under one designation is beyond the scope of this chapter, but it is important to be aware of all the various and emerging streams and opportunities for work and collaboration. Looking at skill sets broadly defined is more productive than going by titles.

As we have noted, changes in the way work is organized has affected psychologists in academic and practice settings as well as in other business and professional settings. From the increase in nonstandard positions, temporary and adjunct faculty in academe, to greater regulation and oversight of practices to the need for demonstrable skills and certifications in business settings,

psychologists will have to adapt to survive. Resources are available through many psychological and training organizations to assist in this process, which increasingly is a lifelong or “career-long” process. Encouragingly, opportunities for work in new settings have emerged. One of these that has great promise is the involvement of psychology health service providers in multidisciplinary practices as a permanent member of the primary care team rather than as a “referral” or “consult” after the fact. The challenge is to recognize these emerging opportunities and determine how psychology can use them.

An ongoing challenge is figuring out how to feed the education pipeline appropriately so that it attracts and retains individuals who do truly represent the populations with which psychologists work. It is critical to have not only diversity of face and person but also of thought, theory, and approach. Diversifying the psychology pipeline and workforce strengthens the discipline by creating a voice and place for research and practice that is relevant to the larger world. Irrelevance is not a desirable condition and threatens the health of the field.

The number of individuals earning master’s degrees in psychology has not slowed over the years. And in 2008–2009, over half were awarded in the health-service provider subfields. These individuals have largely found professional homes in organizations outside the APA. They represent a large and active block of researchers, educators, and practitioners and compete directly with doctoral-level psychologists in many arenas, representing a challenge to the full employment of those at the doctoral level.

Although it is common to focus on the larger, perhaps more impressive numbers in a distribution when discussing data and results, it is troublesome that a substantial proportion—almost one-fourth of new psychology doctorates reports being underemployed (Michalski et al., 2011) and it is the case that this has persisted for some time. What does this say about the education and training these individuals have received? Is it appropriate to what is needed? How is psychology perceived by those providing jobs? How are the new doctorates defining underemployment?

Are the doctorates taking jobs for which a master’s-level person could be hired? This is a topic worthy of further study.

Salaries, as noted, were lower in psychology than in other science and engineering fields. This has been the case for many years, long before women entered the field in large numbers. In the *2009 Doctorate Employment Survey*, fully 33% of respondents indicated dissatisfaction with salary (Michalski et al., 2011). Recent data indicate that salaries for new doctorates in psychology working in academe actually were comparable with those paid in other science and engineering fields, but this pattern weakens as experience levels increase. Psychologist’s median annual salaries were most directly comparable to the salaries of other scientists and engineers in three settings. These included other educational institutions, which includes 2-year and community and technical colleges, self employed but not incorporated, and state and local governments. These salaries were for the respondent’s principal job (National Science Foundation, Division of Science Resources Statistics, 2009a). It was not uncommon for psychologists to report having more than one position or source of income. Certainly the increased reliance on nonstandard faculty (temporary, contract, and adjunct) will also have an impact on income and stability. It would be useful to further analyze available salary data by socio-demographic variables such as gender, race/ethnicity, age, degree subfield, setting, and so on to tease out more specific trends. For the practitioner whose income is tied to levels of reimbursement that are set by a third party, this discussion is particularly meaningful. Indeed it may be that the reimbursement allowed by insurance companies contributes directly to the perception of underemployment.

Unfortunately, no discussion of challenges is complete without some mention of the debt incurred by psychology graduate students. In 2009, 78% of new doctorates in the health service provider subfields reported some level of debt compared to 48% of those in research and other subfields. The debt levels for graduate students and new doctorates in the health service provider subfields are substantially higher in comparison

to those of students and new doctorates in the research/other subfields. The median level of debt owed by new doctorates in the practice-HSP subfields was \$80,000, in comparison, those in the research subfields had a median debt level of \$32,000 upon completion of their programs (Michalski et al., 2011). It is critical that students look at all the costs involved in graduate education and ask about total financial obligation and opportunities to lessen that burden before they commit to a graduate program. Debt and loan repayment and forgiveness programs do exist for those who provide health services. Some of these include the National Health Service Corps, US Department of Veterans' Affairs, National Center on Minority Health and Disparities, National Institutes of Health, the Federal Student Loan Forgiveness Program, and the Army Reserve Medical Corps. For those in the research fields or in more traditional academic settings, it is often possible to obtain teaching or research assistantships and tuition waivers to help offset the cost of education. Information on this topic can be found at the American Psychological Association of Graduate Students (APAGS) website: <http://www.apa.org/apags/index.aspx>.

The internship imbalance or "crisis" as some have called it continues as a major challenge for organized psychology and for the students in the health service provider subfields facing this imbalance. Degrees in the health service provider subfields, especially among PsyDs, have continued to increase. Intern applicant numbers have increased beyond the capacity of internship opportunities to meet these demands. In 2010, 23% of those students seeking internships did not match. In 2011, following two match cycles, 21% of students in the applicant pool failed to match. Failure to match can result in delays in graduating, additional expenses, and more student debt. APA has joined with psychology training organizations to directly address the imbalance. Information on the steps that are being taken is available online at the APA website and also through the *Training and Education in Professional Psychology* (TEP) journal. As reported by the *APA Monitor on Psychology* (Munsey, 2011) strategies included a psychology

internship development toolkit and a greater emphasis on truth in advertising—encouraging students to review the placement rates for doctoral programs they may be considering. APA accredited doctoral programs are required to post their internship placement rates so that they are available to the public. Further, doctoral programs that continue to have a high percentage of unmatched students will be required to develop more internship programs and slots or reduce the number of students they admit. Other changes that have been discussed would involve systemic changes to the training model currently in place. Information and resources are available through the APA Education Directorate as well as the APAGS (<http://www.apa.org/apags/issues/internship.aspx>) and an article from the APAGS chair in November 2011 about steps students can take to support formal efforts (Mattu, 2011).

Opportunities

What are some of the opportunities that face psychology today? In 2009, the Partnership for Public Service compiled resources and information aimed at hiring agencies, schools and universities, and graduates to provide leads about where employment opportunities in government could be found. Two web sites are <http://our-publicservice.org/OPS/programs/calltoserve/> and specifically <http://www.makingthedifference.org/index.shtml>. These positions are appropriate for service providers, researchers as well as those interested in organizational management and administration.

As was discussed earlier, we have evidence that psychologists in health service provision are collaborating with providers from other fields. Health care reform is ongoing and as currently structured provides incentives to include behavioral health care providers as members of a primary care team. Through collaborative work, professionals in other fields come to better understand that psychologists are trained in the use of psychotropic medications for the treatment of some behavioral health issues. Many physicians have not received this training. Collaboration can

result in a more holistic approach to treatment which considers the patient's physical, social, and mental conditions when deciding on a treatment plan. This is rarely the case when the sole provider is a physician or a nurse practitioner. Finally, the collaboration with other providers recognizes that comorbidity is common. An individual may have a physical ailment as well as being depressed. Addictions and depression can present together. Without the intervention of the psychologist to recognize and diagnose the psychological or behavioral aspect of illness, the treatment would only be partial and less likely to be successful. With the graying of the population and an increase in diseases and ailments related to age, the involvement of the psychologist along with physicians, nurses, and others in determining care will be important. Many older adults need psychological care and do not get it. On the plus side, psychologists can work with older adults to help them recognize possible problems and design ways to remain psychologically and mentally nimble.

Slowly, but surely, state laws are changing to allow psychologists to become licensed to prescribe medications. Five states allow psychologists to prescribe, others are considering the change. Mobility or the ability to practice in one state when licensed in another remains a major concern as does close scrutiny on what types of supervised experience can count toward a license. There is not always consistency between states and the various laws governing licensure.

An interest in and focus on evidence-based practice in psychology has implications for research and funding streams in each of the three areas identified in the 2005 Board of Director's report and each of these represents opportunities for research (Levant, 2005). These areas were identifying and studying: psychological treatments with established efficacy, clinical expertise of the provider and patient characteristics. The goal was to "enhance the delivery of services to patients within an atmosphere of mutual respect, open communication, and collaboration among all stakeholders, including practitioners, researchers, patients, health care managers, and policy-makers (p. 18)." It is critical to realize that by

engaging in this process, organized psychology intended to take control of the process of defining what was EBP in Psychology rather than leaving this up to the determination of insurance companies and managed care companies.

In the earlier section, the escalating numbers of the elderly in our population was noted as an area of need where collaboration across health care delivery disciplines could be a boon to both the client and the employment of psychologists. Unfortunately, the list of the underserved never seems to get shorter. This list now includes individuals in correctional facilities, the chronically mentally ill, veterans and military families, youth and children, and the young aging "baby boomers." Infusing this list with even greater poignancy is that fact that increasingly many of the individuals in these groups will not necessarily be white English-speaking Americans. The cultural changes occurring in the USA provide both a challenge and an opportunity for psychology.

Along with collaborative efforts and working on medical teams, health service psychologists also were practicing telepsychology, which is providing services to clients in situations when the client and provider were physically separated at the time the service was delivered. In 2008, over 87% of those asked had used telepsychology to deliver services, mostly by phone, email, and a little videoconferencing. What sorts of services were provided? The services involved a great deal of scheduling, resource provision and referrals, which is not surprising. However, over 30% stated that they had provided psychotherapy and 20% provided counseling, or direct health services. Although this is an opportunity to reach clients and individuals who may be in remote areas and therefore improves accessibility and efficacy, there were concerns. The concerns address the laws governing service delivery as well as insurance reimbursement policies. Concerns also were raised regarding maintaining client confidentiality and privacy while using electronic media such as cell phones and email (Michalski et al., 2010).

Opportunities are realized through the skills and experiences that psychology doctorates obtain while in graduate school, during postdoctorates,

and internships. These skills are those desired by employers and ones that new doctorates have stated that they have found useful. This convergence of opinion is encouraging. The first bulleted list is for graduates in all subfields while the second applies more directly to graduates in the health service provider subfields. Most of these are drawn from past APA CWS research with new doctorates, reviews of employers' comments, and speaking with psychologists.

- Collaborate with colleagues from other disciplines/fields
- Communicate clearly with non-psychologists via workshops/public speaking/writing
- Previous work experience (before and during graduate education), internships for I/O, practice, volunteer
- Administrative skills, budgeting, management, program planning
- Quantitative skills, applied statistics, methods, field research
- Networking skills/willingness to mentor
- Teaching skills
- Bilingual-able to work in more than one language
- Technologically savvy—what it is, how to use it to do your work
- Communicate how psychology applies/self-promotion
- Proactive/forward thinking. Staying current with development in psychology

For health service provider graduates the following seem particularly appropriate.

- Business and Management, e.g., starting a practice and keeping it going
- Marketing and Selling Oneself/proactive
- Short-term/brief therapy knowledge skills
- Working/communicating with MCOs, insurance companies: knowing how to get on panels, time efficiency, insurance, documentation, taxes
- Knowledge of health care delivery systems: A system-level understanding of how it works and where it might be going
- Understanding of and knowledge about medical system/medical outcomes
- Communicating with Primary Care Providers
- Practical experiences (MCOs and elsewhere)

- Knowledge about integrated community service provisions/cross-disciplinary work/multiple wraparound services/how to work with multidisciplinary teams

Trends

Turning to trends and careers, the past two decades have been busy ones for psychology and for the USA. Twenty years ago in *The Changing Face of American Psychology* the APA's Committee of Employment and Human Resources noted societal changes and how psychology was being impacted by these changes (Howard et al., 1986). They heralded the "maturing of the baby boom" generation, the rapid expansion of the college age population and the subsequent explosion of participation in higher education; the movement of women into the labor force, and an "increasing concern with the self." In 2003, Barker and Kohout acknowledged that these trends had been realized and went on to discuss trends they saw affecting the next decade. Today, we see some of the earlier trends continuing and new ones developing. The two most influential trends in the past 20 years include the drive to control costs and increase efficiency of operations, and the rapid expansion of all varieties of technology into all aspects of life. The drive to control costs, championed in part by state governments, universities, and insurance companies, has led to the greater reliance on temporary and nonstandard faculty as well as restrictions on health service provision. Both of these are experienced by psychologists as a loss of autonomy. Technology and the internet are ubiquitous and their influences are felt throughout society and the world. Concerns for privacy and security are in the forefront. Technology is having a major impact on how education is delivered (distance education via virtual campuses) as well as how psychologists deliver health services (e.g., telepsychology). Psychology remains a very popular major and women are the majority among the student populations, and among younger professionals. In fact, alarms have been raised about the dearth of men and how to attract more of them to the field. Psychology has made some progress in

attracting minorities to the field but has some way to go. Managing the costs related to health care provision has continued to impact psychology and health care in general, prescription privileges have continued to gain ground, as has a reliance on evidence-based practices and the involvement of psychologists in primary care teams. A trend toward emphasizing prevention in health service delivery has supported the involvement of psychologists in primary care.

The reliance by higher education on adjunct and part-time faculty has continued unabated and attacks on unionization among faculty are troublesome. There will be retirements among faculty over the next decade but as noted earlier, will those retiring be replaced by full-time faculty with tenure or by contract, adjunct, and temporary faculty?

An emphasis on part-time or adjunct faculty has consequences for compensation, stability of employment, autonomy, and a host of professional activities traditionally expected by and of faculty. Individuals interested in a career in academe need to be aware of the impacts of these changes on their work. Will they make enough as an educator to survive or will they need other work? Will they have time to write and do research? Debates about tuition costs and high levels of debt become even more meaningful as we consider compensation and salaries.

We will continue to experience the development and evolution of 2-year colleges and master's-level programs. The 2-year colleges provide an affordable alternative for many students and are a pathway for students who might not otherwise succeed in college right out of high school to gain needed study and language skills. Frequently, community colleges are no longer simply commuter campuses but provide housing for resident students. Some in fact have developed 4-year degree programs. Community colleges and master's-level programs fill a need by providing education and training to individuals to meet ongoing professional certification and CE requirements and to keep up on technology. Hence, their missions have expanded. Distance education and virtual campuses will continue to be part of the scene in higher education in psychology.

Careers in industry and business can be rewarding both financially and professionally and given the numbers in these careers, it appears that the stigma attached to nonacademic work is less powerful than in previous times. Individuals with an interest in practical applications of knowledge to real-life solutions and working with individuals from different fields would find this work rewarding. Positions in government, military, human resource offices, nonprofit organizations, market research, and development all belong in this category. Technology continues to impact this area with new applications and opportunities for improving human interactions with computers and software. Much of the work in industry or business involves research into how individuals interact with products or their conduct in their organizational settings. Backgrounds in social psychology, psychometrics, research methods, IT, and industrial organizational psychology all have application. As noted in the earlier chapter (Barker & Kohout, 2003) training in human factors, cognition, perception, and sensation are applicable in business settings.

Consulting remains a viable career path but it requires certain skills and abilities. It is one thing to be well trained in a specific area of psychology but it is also helpful to have some formal training in consulting. Much as health service providers find training in practice management to be useful, so too do psychologists interested in consulting benefit from formal instruction. However, this is rare. Increasingly, consultants are expected to have additional certifications or training beyond the doctorate. On the downside, consultants may experience fluctuations in income and will have to handle issues such as health coverage independently. On the other hand, consultants enjoy great professional independence.

In 2003, Barker and Kohout noted that it was useful to be knowledgeable of federal and state agencies so as to be aware of how changes in regulations may provide opportunities for work. It may be that some natural event or disaster results in a change of regulation or the need for further study to see how the situation could be better managed.

Moving Forward

So, given this largely positive overview, what is the employment outlook for the field and what is needed? The data indicate that the outlook for psychology is positive. Primarily, this is a consequence of the natural reach and diversity of the field. It remains broadly relevant to much of what is happening in our lives. As psychology moves forward perhaps a more proactive approach to developing its educational pipeline and workforce is called for. Simply put, the best course of action involves a coherent, broad approach to workforce analysis that investigates the relationships among work settings in each of several areas (practice, research/business, and academe), populations served (clients/patients, students, research topics), and the training, location, and availability of those trained in psychology. It may be simplest to envision a workforce analysis that focuses on health service provision in psychology than to consider that needed for research or academe but these too are areas in which organized psychology should be considering its workforce needs.

The first step is to generate an accurate count or census of all psychologists of interest, as well as professionals in other fields with whom psychologists may be seen as competing. It is also necessary to keep an eye on what is coming through the educational pipeline. Second, the entities representing these various groups need to have frank and open discussions about the content of education and training that each profession receives. What does the curriculum look like? The next step in a workforce analysis involves identifying, measuring, and defining need for certain services. Need is not synonymous with demand and is generally more broad. Need includes all those unserved and underserved populations that continue to persist despite our best efforts. Ideally, determining what members of a profession are taught and defining need in a population will allow the discussion to move to the next stage; that is, identifying which individuals can best (most efficaciously and efficiently), in terms of outcome, meet the particular needs

identified (needs vary and will likely require different providers and numbers of providers). Finally, knowing how many providers there are, what they can do and who can best work with specific needs, the discussion can turn to how many in each profession at each level are required to meet the needs of the population. Ultimately, this approach answers the call for active steps in reducing costs (unemployment, underemployment, internship crisis, debt, health care provision, etc.) Further, for these purposes, “providers” refers to all individuals trained in psychology regardless of degree level (this rule applies as well to any other professions being included in the discussion).

However complex this may appear on paper, it is equally challenging in reality. Starting in 2006, APA began the move toward creating a Center for Workforce Studies. Structural reorganizations, budgetary restrictions, and economic downturns intervened and little progress was made toward a true workforce analysis. The remainder of this chapter will consider briefly just what is involved with workforce analyses and the forecasting that seems to be a natural outgrowth of these analyses. Some cautionary notes are in order. From 1991 we have “Making predictions about future employment opportunities for psychologists, as well as for any other occupational group, is akin to gazing at crystal balls and reading Tarot cards” (Pion, 1991) and “Forecasts should never be interpreted as what will happen but what would happen if the assumed trends continue” (Bartholomew & Forbes, 1979). We also have “Estimating the size of the MHW (Mental Health Workforce) is difficult because it is not a unitary entity. Instead it is a chaotic amalgam of separate disciplines with ambiguous boundaries, and overlapping roles and scopes of practice, whose practitioners both collaborate and compete with each other” (Robiner, 2006). This last quote succinctly sets the stage for subsequent observations regarding the current state of workforce analysis.

What are the problems faced when doing workforce analyses? Most of the problems are system issues. For a start, data sources are too varied. The data are gathered from different settings, using different methods, and for different

purposes. Individual's work efforts vary and there is no coordination across professions. Psychologists, social workers, and school psychologists provide counseling but they are not necessarily interchangeable. A full-time tenured faculty member teaches as does the adjunct faculty member—but what about committee work, advising, writing, and overseeing research or individuals? Do you really need a doctoral-level psychologist in a particular position in your business? There is limited funding to conduct workforce analyses and data collection is often one of the first areas where funds are cut. Data collection that is coordinated across organizations as well as within organizations is a very effective and efficient process, yet coordinated efforts are difficult to realize given varying organizational and professional cultures (Robiner, 2006).

So what do we need? Effective workforce analyses require increased collaboration and coordination to maximize use of existing resources and knowledge. This needs to happen within organizations so the left hand knows what the right is doing, as well as across organizational boundaries to ease communication and data sharing. Obviously, more data and the resources to gather those data are critical. This requires an organizational commitment to providing adequate resources for workforce analyses. An ongoing and supported system of workforce analysis will provide the information that will move us toward efficiently meeting the needs of the underserved, meeting the needs of students and interns on the educational pathways within and between disciplines, and informing those who have not yet stepped onto the pathway and those who are working in the discipline.

Notes

Salary data are available at the NSF, NORC, and APA web sites. These first two provide data predominantly at the doctoral level although NSF does collect and report salary data for BA and MA degree holders. APA provides data at the master's and doctorate levels. <http://www.nsf.gov/statistics/showpub.cfm?TopID=14&SubID=38>, [\[www.nsf.gov/statistics/nsf11306/appendix/pdf/tab45.pdf\]\(http://www.nsf.gov/statistics/nsf11306/appendix/pdf/tab45.pdf\), and <http://www.apa.org/workforce>.](http://</p>
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Other sources for salary data for those in psychology include the Department of Labor, Bureau of Labor Statistics <http://www.bls.gov/>; search using “salaries psychology.” It is important to be aware of the fact that salary ranges reported by private data gathering firms and by the Department of Labor tend to range high. If these are used by new doctorates or others in salary negotiations it is prudent to aim at the middle of the range rather than taking the higher end. Of course, there are numerous personal factors that are important in any salary negotiation.

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