The Merrill Counseling Series

4TH EDITION

FOUNDATIONS OF ADDICTIONS COUNSELING

DAVID CAPUZZI MARK D. STAUFFER

Fourth Edition

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David Capuzzi
Walden University
Professor Emeritus, Portland State University

Mark D. Stauffer
Walden University

Pearson

Director and Publisher: Kevin M. Davis
Portfolio Manager: Rebecca Fox-Gieg
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PREFACE

Whether you are entering the field of addictions counseling or are a counselor who wants to be prepared for the screening, assessment, and treatment of addiction in your practice, this text provides a foundational basis. *Foundations of Addictions Counseling* addresses real-life clinical concerns while providing the necessary information to keep up to date with trends. It also addresses the evolving standards of professional organizations, accrediting bodies, licensure boards, and graduate programs and departments. Counselors in school, mental health, rehabilitation, hospital, private practice, and a variety of other settings must be thoroughly prepared to support clients in their quest to be healthy and unimpaired. As the addictions profession has matured, more and more emphasis has been placed on the importance of preparing counselors to work holistically and synthesize knowledge domains from mental health, developmental, and addiction perspectives. The authors provide this knowledge in support of your work on behalf of various clients and diverse communities.

Counselors can expect some of their clients to want to address concerns connected with the use of substances and the development of addictive behavior. This book draws on the specialized knowledge for each contributed chapter. It is written for use in graduate-level preparation programs for counselors. Because of the clarity of the writing and the use of case studies, it may also be adopted in some undergraduate and community college courses. Requirements of the Council for the Accreditation of Counseling and Related Educational Programs (CACREP) and other certification associations have led most university programs in counselor education to require an addictions course for all students, regardless of specialization (school, community, rehabilitation, couples, marriage and family, student personnel, etc.). Addictions counseling is also being offered for CADC I and II certifications, which require undergraduate coursework related to addictions counseling.

NEW TO THIS EDITION

- Extended discussion in the chapters dedicated to substance and process addictions (Chapters 2 and 3, respectively)
- Another major revision of Chapter 16 so that prevention across the lifespan is more comprehensively addressed in this edition
- Additional case studies throughout to further illustrate points and enliven class discussion
- Additional informational sidebars to encourage the visual learner and reader contemplation
- A newly written chapter 13 on maintenance and relapse prevention
- Restructuring of the chapters on professional issues (Chapter 4), assessment and diagnosis (Chapter 6), treatment of comorbid disorders (Chapter 9), addiction pharmacotherapy (Chapter 11), and lesbian, gay, bisexual, transgender, and queer (LGBTQ) affirmative addictions treatment (Chapter 19)
- A new chapter on substance use and families
- Integration of updated and current research from the field's peer-reviewed journals
- A revised instructor's manual that includes updated journaling exercises, group work, and experiential exercises for the online as well as face-to-face classroom.

It is our hope that this fourth edition of *Foundations of Addictions Counseling* will provide the beginning student counselor with the basics needed for follow-up courses and supervised practice in the arena of addictions counseling.

Although the text addresses the history, theories, and research related to addictions counseling, at least half of the book's emphasis is on techniques and skills needed by the practitioner. In addition, guidelines for addictions counseling in family, rehabilitation, and school settings are addressed, as are topics connected with cross-cultural counseling and addictions. Some of the topics that make the text engaging and of high interest to readers are:

- Concrete reference to assessment tools
- Outpatient and inpatient treatment
- Maintenance and relapse prevention
- Counseling with addicted/recovering clients
- Counseling couples and families that are coping with addictions issues
- Addictions prevention programs for children, adolescents, and college students

Writers experienced in addictions counseling were asked to contribute so that the reader is provided with not only theory and research but also with those applications so pertinent to the role of the practicing, licensed, and certified addictions counselor. This text also reflects the view of the editors that counselors must be prepared in a holistic manner, since addiction issues are so often the reason clients seek the assistance of a professional counselor.

The book is designed for students taking a preliminary course in addictions counseling. It presents a comprehensive overview of the foundations of addictions counseling, the skills and techniques needed for addictions counseling, and addictions counseling in specific settings. As editors, we know that one text cannot adequately address all the complex and holistic factors involved in assisting clients who present with issues related to addictive behavior. We have, however, attempted to provide our readers with a broad perspective based on current professional literature and the rapidly changing world we live in at this juncture of the new millennium. The following overview highlights the major features of the text.

OVERVIEW

The format for the co-edited text is based on the contributions of authors who are recognized for their expertise, research, and publications. With few exceptions, each chapter contains case studies illustrating practical applications of the concepts presented. Most chapters refer the reader to Websites containing supplemental information.

The text is divided into the following four parts, with the rehabilitation chapter capping the textbook: (1) Introduction to Addictions Counseling; (2) The Treatment of Addictions; (3) Addictions in Family Therapy, Rehabilitation, and School Settings; and (4) Cross-Cultural Counseling in Addictions.

PART 1 Introduction to Addictions Counseling (Chapters 1–6) begins with information on the historical perspectives and etiological models that serve as the foundation for current approaches to addictions counseling and provides the reader with the contextual background needed to assimilate subsequent chapters. Chapters focused on substance and process addictions, professional issues, an introduction to assessment, and assessment and diagnosis of addictions are included as well.

PART 2 The Treatment of Addictions (Chapters 7–13) presents information about motivational interviewing, other psychotherapeutic approaches, comorbid disorders, group work, pharmacotherapy, 12-step programs, and maintenance and relapse prevention. All chapters provide overviews and introduce readers to the skills and techniques used in the addictions counseling process.

PART 3 Addictions and Family Therapy, Rehabilitation, and School Settings (Chapters 14–16), presents information relative to addiction and families; persons with disabilities; and children, adolescents, and college students. These chapters highlight information that has relevance and application to diverse contexts.

PART 4 Cross-Cultural Counseling in Addictions (Chapters 17–19) discusses ethnic diversity; gender and addictions; and LGBTQ affirmative addictions treatment.

EPILOGUE Some Additional Perspectives consists of a revised chapter 20 on inpatient and outpatient rehabilitation provides the readership with even more information than in the third edition of the text.

We think the additional case studies included in this fourth edition along with the use of sidebars enliven the content and make the text even more user friendly and practitioner oriented.

Every attempt has been made by the editors and contributors to provide the reader with current information in each of the 20 areas of focus. It is our hope that this fourth edition of *Foundations of Addictions Counseling* will provide the beginning student counselor with the basics needed for follow-up courses and supervised practice in the arena of addictions counseling with clients.

ACKNOWLEDGMENTS

We would like to thank the authors who contributed their expertise, knowledge, and experience in the development of this book. We would also like to thank our families, who provided us with the freedom and encouragement to make this endeavor possible. Our thanks are also directed to members of the Pearson production team for their encouragement and assistance with copyediting and, ultimately, the publication of the text.

Special thanks are extended to Cass Dykeman, Professor of Counselor Education at Oregon State University, and Mita Johnson, core faculty in Mental Health Counseling in the School of Counseling at Walden University, for their suggestions on content areas included in this text. Thanks to their input, readers of *Foundations of Addictions Counseling* will benefit from a more comprehensive overview of counseling with clients experiencing addictions issues.

Finally, we would like to thank the reviewers of our manuscript for their comments and insights: Daniel Bishop, Concordia University Chicago; Joanne Munro, California State University, Fullerton; Robert Pace, University of Houston–Clear Lake; Cristen Wathen, Montana State University; and Tricia Witte, The University of Alabama in Huntsville.

CONTRIBUTORS

MEET THE EDITORS

David Capuzzi, PhD, NCC, LPC, is a counselor educator and senior core faculty in Community Mental Health Counseling Program at Walden University and Professor Emeritus at Portland State University. Previously, he served as an affiliate professor in the Department of Counselor Education, Counseling Psychology, and Rehabilitation Services at Pennsylvania State University and Scholar in Residence in counselor education at Johns Hopkins University. He is past president of the American Counseling Association (ACA), formerly the American Association for Counseling and Development, and past Chair of both the ACA Foundation and the ACA Insurance Trust.

From 1980 to 1984, Dr. Capuzzi was editor of *The School Counselor*. He has authored several textbook chapters and monographs on the topic of preventing adolescent suicide and is coeditor and author with Dr. Larry Golden of *Helping Families Help Children: Family Interventions with School Related Problems* (1986) and *Preventing Adolescent Suicide* (1988). He coauthored and edited with Douglas R. Gross *Youth at Risk: A Prevention Resource for Counselors, Teachers, and Parents* (1989, 1996, 2000, 2004, 2008, 2014, and 2019); *Introduction to the Counseling Profession* (1991, 1995,1997, 2001, 2005, 2009, and 2013); *Introduction to Group Work* (1992, 1998, 2002, 2006, and 2010); and *Counseling and Psychotherapy: Theories and Interventions* (1995, 1999, 2003, 2007, and 2011).

In addition to this textbook, Dr. Capuzzi and Dr. Stauffer have published *Career Counseling: Foundations, Perspectives, and Applications* (2006, 2012); *Foundations of Couples, Marriage and Family Counseling* (2015); *Human Growth and Development Across the Life Span: Applications for Counselors* (2016); and *Counseling and Psychotherapy: Theories and Interventions* (2016).

Other texts are *Approaches to Group Work: A Handbook for Practitioners* (2003), *Suicide across the Life Span* (2006), and *Sexuality Issues in Counseling*, the last coauthored and edited with Larry Burlew. He has authored or coauthored articles in a number of ACA-related journals.

A frequent speaker and keynoter at professional conferences and institutes, he has also consulted with a variety of school districts and community agencies interested in initiating prevention and intervention strategies for adolescents at risk for suicide. He has facilitated the development of suicide prevention, crisis management, and postvention programs in communities throughout the United States; provides training on the topics of youth at risk and grief and loss; and serves as an invited adjunct faculty member at other universities as time permits.

An ACA fellow, Dr. Capuzzi is the first recipient of ACA's Kitty Cole Human Rights Award and also a recipient of the Leona Tyler Award in Oregon. In 2010, he received ACA's Gilbert and Kathleen Wrenn Award for a Humanitarian and Caring Person. In 2011, he was named a Distinguished Alumni of the College of Education at Florida State University and, in 2016, he received the Locke/Paisley Mentorship award from the Association for Counselor Education and Supervision. In 2018 he received the Mary Smith Arnold Anti-Oppression Award from the Counselors for Social Justice, a division of ACA, as well as the U.S. President's Lifetime Achievement Award.

Mark D. Stauffer, PhD, NCC, is core faculty in the Community Mental Health Counseling Program at Walden University. He specialized in couples, marriage, and family counseling during his graduate work in the Counselor Education Program at Portland State University where he

received his master's degree. He received his doctoral degree from Oregon State University, Department of Teacher and Counselor Education.

As a clinician, Dr. Stauffer has worked in the Portland Metro Area in Oregon at crises centers and other non-profit organizations working with low income individuals, couples, and families. He has studied and trained in the Zen tradition, and presents locally and nationally on meditation and mindfulness-based therapies in counseling.

Dr. Stauffer is a member of the International Association of Addiction and Offender Counseling. He was a Chi Sigma Iota International fellow and was awarded the ACA's Emerging Leaders Training Grant as well as the U.S. President's Volunteer Service Award. He is past co-chair of the American Counseling Association International Committee and served as President of the Association for Humanistic Counseling (2018–2019).

MEET THE CONTRIBUTORS

Kelly Aissen, PhD, LPC, earned her PhD in Counselor Education in Mental Health Counseling from the University of Florida. She is a Licensed Mental Health Counselor and a Qualified Clinical Supervisor in Florida. Dr. Aissen is also Counseling Adjunct Faculty at Northwestern University, teaching courses in substance abuse and addiction, lifespan development, diagnosis and treatment, and adolescent counseling. She presents at local, regional, and national conferences on impaired professionals in recovery, addiction treatment strategies, concept mapping, and communication skill development. Her current clinical, teaching, and research interests encompass women's issues, the family disease of addiction, life & work transitions, and interpersonal relationships. Additionally, Dr. Aissen has developed corporate trainings for workplace communication and team-building skills; counseled in inpatient/outpatient psychiatric and substance abuse treatment programs; counseled developmentally delayed adults in residential group homes; and has taught independent living skills to foster care children and teens.

Lisa Langfuss Aasheim, PhD, LPC, is Associate Professor in the Counselor Education Department at Portland State University and served as Director of the Community Counseling Clinic and Coordinator of the School Counseling Program at PSU for over a decade. She is a renowned specialist in clinical supervision and is the author of *Practical Clinical Supervision for Counselors: An Experiential Guide* (Springer). Dr. Aasheim specializes in couples and family counseling, addictions counseling, and school counseling and has written textbook chapters and articles on motivational interviewing, counselor development, ethics in the work settings, the therapeutic alliance, family counseling in the schools, and addictions in the school, home, and workplace.

Amy L. Barth, PhD, LPC, is Assistant Professor in the Department of Counselor Education at the University of Wisconsin–Whitewater, where she has taught courses in clinical skills, counseling theories, diagnosis, marriage and family counseling, lifespan development, and practicum and internship. Her research interests include personal guiding theory development, counselor identity development, and supervision. Dr. Barth holds counseling licenses in both Illinois and Wisconsin. She has over 15 years of counseling experience, working with individuals, families, and groups in both agency and university settings. Additionally, she provides clinical supervision to postgraduate counselor trainees.

Malvika Behl, PhD, NCC, received her doctoral degree in Counselor Education and Supervision from the University of Toledo, Ohio. Currently she is Assistant Professor and School Counseling

Program Chair at West Texas A&M University (WTAMU). She currently teaches graduate courses in counseling at WTAMU. Dr. Behl is a Licensed School Counselor (Ohio), Nationally Certified Counselor, and a Licensed Professional Counselor – Intern (Texas). She is currently working as an intern at the counseling center at WTAMU. Her research interests include behavioral supervision, substance abuse counseling in school systems, diagnosing qualification for school counselors, embedded therapy, and trauma-focused cognitive-behavioral therapy.

Cynthia A. Briggs, PhD, LPC, NCC, completed her BS in Psychology at Guilford College, her MAEd in Community Counseling at Wake Forest University, and her PhD in Counseling at Oregon State University. Her first experiences as a counselor were in the addictions field. She observed gaps in treatment, particularly for female clients, that led her to become an advocate and leader in the field. She coauthored a textbook on women and addiction, and has presented on addictions issues with adolescent girls and in the veteran population.

Stephanie A. Calmes, PhD, LPCC-S, LICDC-CS, is the Clinical Director of SUD/Dual Services at Harbor Behavioral Health in Toledo, Ohio. With 15 years of experience in detox, residential, outpatient, and intensive outpatient treatment of individuals with substance use and mental health disorders, she currently directs and supervises all substance use disorder programming and clinical staff. Dr. Calmes obtained her bachelor's in Psychology from Miami University (Oxford, OH), and both her masters in Community Counseling and Doctorate in Counselor Education and Supervision from the University of Toledo.

Richard J. Cicchetti, PhD, LCPC, CRC, SAT-P, is core faculty in the Clinical Mental Health Counseling Program at Walden University. He graduated from Old Dominion University with a doctorate in Counselor Education and Supervision and a Master's degree in counseling with a specialization in rehabilitation counseling from Northeastern Illinois University and completed training in the treatment of sexual addictions at Mid America Nazarene University. Dr. Cicchetti has served in leadership positions in academia as well as in counseling associations. He has published articles and book chapters on counseling, sexual addictions, substance abuse, process addictions, and issues related to grief education and training. Dr. Cicchetti has presented at national and state conferences. He has held faculty positions at Adler School of Professional Psychology, the Chicago School of Professional Psychology, and Grand Canyon University. He also has a private practice in Chicago.

Pamela A. Cingel, PhD, earned her doctoral degree from the University of Toledo in 1992. She has been a full-time counselor educator and psychology instructor for 28 years. She has over 16 years of clinical experience as a counselor. Dr. Cingel was the manager of an inpatient chemical dependency unit for adolescents and provided clinical supervision to various community agencies. She is currently Dean of Biscayne College and Professor in the Psychology Program, Director of a Faculty and Student Research Center, and Director of Dual Enrollment at St. Thomas University. Her research interests include emotional intelligence, adolescents, and gender studies.

Cass Dykeman, PhD, is Associate Professor in the College of Education at Oregon State University. He received a masters in counseling from the University of Washington and a doctorate in counselor education from the University of Virginia. He served as Principal Investigator for a $1.5 million federal school-to-work research project. In addition, he is the author of numerous books, book chapters, and scholarly journal articles. Dr. Dykeman is past president of both the

Washington State Association for Counselor Education and Supervision and the Western Association for Counselor Education and Supervision. His current research interests include math anxiety and corpus linguistics.

Abbé Finn, PhD, is Program Director for the Clinical Mental Health Counseling Programs in the Marieb College of Health and Human Services at Florida Gulf Coast University. She has a PhD from the University of New Orleans Counselor Education Program, has an MA in Counseling from Loyola University in New Orleans, an MEd in Early Childhood Education from Tulane University, and a bachelor's degree in Speech Pathology and Audiology from Tulane University. Dr. Finn has been a university faculty member since 1998. She teaches a variety of courses including addictions, lifespan development, counseling techniques, appraisal, and legal and ethical issues in counseling. She has worked extensively in the mental health field working with individuals as well as groups in counseling. Before joining the university faculty full time, Dr. Finn was an Employee Assistance Counselor with the U.S. Postal Service Employees Assistance Program and worked at a residential treatment facility. She specialized in working with groups in crisis response, survivors of childhood sexual trauma, and with clients in addiction recovery. Dr. Finn volunteers with organizations such as the Red Cross responding to natural and man-made disasters. These include the September 11, 2001, attack on the World Trade Center; the earthquake in Haiti; and Hurricanes Katrina and Rita. Her areas of research include counseling people with addictions, suicide prevention, workplace and school violence prevention, and addiction prevention.

Scott E. Gillig, PhD, earned his doctoral degree from the University of Toledo in 1988. He has been a full-time professor for 28 years. He has over 20 years of clinical experience as a counselor. He has worked with chemically dependent adolescents and adults in a dual-diagnosis chemical dependency treatment residential unit. Dr. Gillig is currently Professor and Director of the Educational Leadership Master's Program at St. Thomas University in Miami, Florida. He teaches undergraduate, masters' and doctoral courses. His research interests include counseling outcomes, depression, chemical dependency, treatment planning, and student mentoring. Dr. Gillig has served as chair on two dozen successful dissertation committees. He is currently coauthoring a book on Puerto Rican student hurricane survival narratives and coauthoring a study on using computer technology for student learning and engagement. He developed and teaches a course in photo psychology both domestically and in Italy.

Laura R. Haddock, PhD, received her doctoral degree in Counselor Education and Supervision from the University of Mississippi and currently serves as a clinical faculty member at Southern New Hampshire University. She has been a counseling professional for over 25 years in both clinical and academic settings. Dr. Haddock is a licensed professional counselor-supervisor, national certified counselor, and approved clinical supervisor. She is an active counseling professional and has served on the Mississippi Licensed Professional Counselors Board of Examiners and the executive boards for the Mississippi Counseling Association and Mississippi Licensed Professional Counselors Association. Dr. Haddock maintains an active research agenda and was the 2017 recipient of the Association of Counselor Education and Supervision Distinguished Service Award–Counselor Educator. Her research interests include counselor wellness and secondary trauma, gatekeeping, sexuality, cultural diversity, and supervision.

Melinda Haley, PhD, received her master's in Counselor Education at Portland State University and her Doctorate in Counseling Psychology from New Mexico State University and was

Assistant Professor at the University of Texas, El Paso, in the Counseling and Guidance Program for 5 years. Dr. Haley currently works as a core faculty member in the Counselor Education and Supervision Doctoral Program at Walden University. She has written numerous book chapters and journal articles on diverse topics related to counseling. She has extensive applied experience working with adults, adolescents, children, inmates, domestic violence offenders, and culturally diverse populations in the areas of assessment, diagnosis, treatment planning, crisis management, and intervention. Dr. Haley's research interests include multicultural issues in teaching and counseling, personality development over the lifespan, personality disorders, the psychology of criminal and serial offenders, trauma and posttraumatic stress disorder, bias and racism, and social justice issues.

Debra A. Harley, PhD, CRC, LPC, is Provost's Distinguished Service Professor in the Department of Early Childhood, Special Education and Rehabilitation Counseling at the University of Kentucky. She completed her doctoral degree at Southern Illinois University at Carbondale. Dr. Harley has published several books, including *Contemporary Mental Health Issues Among African Americans*, *Handbook of LGBT Elders: An Interdisciplinary Approach to Principles, Practices, and Policies*, and *Disability and Vocational Rehabilitation in Rural Settings: Challenges to Service Delivery*. She is past editor of the *Journal of Applied Rehabilitation Counseling* and the *Journal of Rehabilitation Administration*. Dr. Harley's research foci include substance abuse, cultural diversity, and gender issues.

Adrianne L. Johnson, PhD, LPCC-S, is an Associate Professor in the Clinical Mental Health Counseling program at Wright State University in Dayton, Ohio. She earned her Ph.D. in Counselor Education from the University of Arkansas-Fayetteville in 2007. Prior to entering academia full-time, she worked as a crisis counselor and community counselor, and dedicated part of her work to assessing the clinical and substance abuse treatment needs of non-English speaking refugees following Hurricane Katrina. She maintains memberships and holds leadership positions in various counseling and community advocacy organizations, and she has published and internationally presented on various topics related to best practices and approaches in clinical mental health counseling, higher education, and diversity inclusivity.

Mita M. Johnson, EdD, NCC, LPC, LMFT, ACS, LAC, MAC, SAP, is an AAMFT-approved clinical supervisor and core faculty in Walden University's School of Counseling Program. In addition to her primary work of teaching, she maintains a private practice where she provides clinical supervision, counseling, and consultation. She is a Past President of the Colorado Association of Addiction Professionals and currently acts as Ethics Chair and Treasurer for the National Association of Alcohol and Drug Abuse Counselors, where she will serve as President in 2020. Dr. Johnson speaks and trains regionally, nationally, and internationally on topics specific to substance use disorders, counseling, ethics, supervision, and treatment. She was appointed by the Governor of Colorado to two committees working on behavioral health integration, is a consultant to the state regulatory agency, and is a consultant and committee member for public and private professional organizations. Dr. Johnson's passion is empowering students, supervisees, and clinicians to be effective and confident helpers.

Byung Jin Kim, MS, is a doctoral student in the Rehabilitation Counselor Education, Research, and Policy Program at the University of Kentucky. He has published in the areas of counseling, substance abuse and addictions and rural rehabilitation. He received his master's degree in counseling

psychology from Handong Global University in South Korea. His research interests include addiction problems such as substance abuse, gambling problems, and Internet addiction.

Pamela S. Lassiter, PhD, LPCS, LCAS, LMFT, CCS, is Professor in the Department of Counseling and Director of the Addictions Program at the University of North Carolina at Charlotte. She has more than 30 years of work experience as a counselor, clinical supervisor, and administrator in community mental health and substance abuse treatment settings. Her areas of research include multicultural counseling, addictions counseling, gay and lesbian issues, and women's issues in counseling. She is an active presenter at the national, regional, and state levels. Dr. Lassiter is the editor of two books: *Theory and Practice of Addiction Counseling* and *Annual Review of Addictions and Offender Counseling, Volume III: Best Practices*. She is currently the Editor-in-Chief of the *Journal of Addictions and Offender Counseling* and is Past President of the International Association of Addictions and Offender Counseling, a division of the ACA.

John M. Laux, PhD, PCCs, received his PhD from the University of Akron. He is Professor of Counselor Education and Associate Dean at the University of Toledo. He is an Ohio Licensed Professional Clinical Counselor (with supervisory endorsement), an Ohio Licensed Independent Chemical Dependency Counselor, and a psychologist. Dr. Laux's areas of clinical and research interest include substance use disorders, personality disorders, counselor education, and personality assessment. He has clinical experience in a variety of treatment settings, including the Cincinnati Veterans Affairs Medical Center, a community mental health center, a campus counseling center, an inpatient chemical dependence treatment center, prison settings, and in private practice. Dr. Laux has published over 50 peer-reviewed articles and serves on the editorial boards of the *Journal of Addictions and Offender Counseling* and the *Journal of Counseling and Development*.

Taryne M. Mingo, PhD, is Assistant Professor in the Department of Counseling at the University of North Carolina at Charlotte. She has a professional background in elementary school counseling, racial identity development, and advocating for social justice across P–16 settings. Dr. Mingo's research interests at the K–12 level of education include supporting inclusive classrooms and schools, specifically for elementary-age students of color, and promoting an intersectional approach to address the academic, social, and emotional needs of diverse children. In addition, her research interests at the postsecondary level of education include incorporating womanist theory into counselor preparation programs and encouraging counselor educators to adopt an intersectional lens of mentoring women of color doctoral students.

Bethany M. Morgan is a second-year counseling student at the University of Houston–Clear Lake. She received a bachelor's degree in psychology from John Brown University. She is interested in the third-cultural population, addictions counseling, and counseling minors.

Regina R. Moro, PhD, currently serves as Assistant Professor of Counselor Education at Boise State University. She received her PhD in Counseling from the University of North Carolina at Charlotte with an emphasis in Multicultural Counseling, a graduate certificate from UNC Charlotte in Substance Abuse Counseling, and an MS in Community Counseling from Syracuse University. Dr. Moro is a Licensed Professional Counselor (ID), Licensed Mental Health Counselor (FL), Licensed Clinical Addictions Specialist (NC), and National Certified Counselor. Her clinical passion involves work with crisis and trauma, including a focus on addiction with individuals and families.

Cynthia J. Osborn, PhD, LPCC-S, LICDC, is Professor of Counselor Education and Supervision at Kent State University in Ohio. Her clinical background focused on treating adults with co-occurring disorders (substance use disorders and mental illness). Her teaching, supervision, and scholarship focus on addictions counseling, particularly evidence-based practices such as motivational interviewing. Dr. Osborn is a member of the Motivational Interviewing Network of Trainers and has extensive experience in the clinical supervision of counselors-in-training and professional counselors. She is coauthor of three books: *Introduction to Addictive Behaviors* (with Dennis L. Thombs), *Interviewing and Change Strategies for Helpers* (with Sherry Cormier and Paula S. Nurius), and *The Solution-Focused School Counselor* (with Thomas E. Davis).

Mirang Park, MS, is a doctoral student in the Rehabilitation Counselor Education, Research, and Policy Program at the University of Wisconsin-Madison. She has a vocational rehabilitation master's degree from Daegu University in the Republic of Korea (ROK) and also has work experience at a community center for the blind and disability research center in ROK. Her areas of interest and research are in the disability support system, vocational rehabilitation, and transition-age youth with disabilities.

Dilani M. Perera-Diltz, PhD, LPC, MAC, NCC, LCDC, is Counselor Educator at the University of Houston–Clear Lake. She is licensed in both Texas and Ohio as a Professional Clinical Counselor and Chemical Dependency Counselor. She is also a National Certified Counselor and Master Addictions Counselor. Prior to academia, Dr. Perera-Diltz worked as a substance abuse counselor at various locations in Ohio. Her current research interest centers around preservice counselor training. Her publications include psychometrics of a variety of psychological instruments, online teaching issues, and infusing multicultural aspects into training counselors. She is an editorial board member for the *Journal of Addictions and Offender Counseling*.

Jane E. Rheineck, Ph.D., LCPC, NCC, is Associate Professor in the Department of Counseling, Adult and Higher Education at Mount Mary University, where she has taught a variety of courses that include counseling skills, counseling ethics, multicultural counseling, and counseling LGBTQ individuals. She has an ongoing program of research and scholarship that focuses on LGBTQ issues in counseling. Dr. Rheineck is the author or coauthor of several articles published in regional and national journals. She has also published several book chapters with her work on lesbian health issues, being nationally recognized in the field of LGBT counseling practices.

Jennifer Rio, MA, is a PhD student at the University of Toledo in the Counselor Education and Supervision Program. She received her Master of Arts in Counseling with a specialization in Addictions from the University of Detroit Mercy in 2016. She has clinical experience working in both a prison-based residential setting and outpatient substance abuse and mental health settings. Her research interests include substance abuse, and co-occurring disorders, as well as exploring the needs of the offender population.

Jennifer L. Rogers, PhD, is Assistant Professor in the Department of Counseling at Wake Forest University. She received her PhD in Counseling and Counselor Education from Syracuse University, where she was a Doctoral Fellow. Dr. Rogers's clinical and research interests include brief counseling interventions, clinical supervision, and relational approaches to counseling and counselor preparation across ecologically diverse practice contexts. Her current research focuses

on how attachment and cognitive patterns among beginning counselors influence their experiences during clinical supervision.

Chelsea W. Sharpe, PhD, LPC, NCC, CCTP, MAC, received her doctorate in Counselor Education and Supervision with a Specialization in Trauma and Crisis from Walden University. She is a Licensed Professional Counselor, National Certified Counselor, Certified Clinical Trauma Professional and Master Addictions Counselor, reflecting the broad base of her expertise. Dr. Sharpe is in private practice and is a mobile crisis counselor in Georgia. Dr. Sharpe is certified in working with victims of trauma, commercial and sexual exploitation of children and youth, and mental health first aid. Her clinical work, local and national presentations, and writing focus on her interest areas: childhood sexual abuse, at-risk youth, substance abuse, aggression, veteran mental health, grief and loss, and parenting styles.

Deena Shelton, MA, LPC-S, NCC, is a doctoral candidate in the Counselor Education and Supervision Program at Walden University. She received her Master of Arts in Community Counseling from Stephen F. Austin State University and is a Licensed Professional Counselor Supervisor in Texas. She has experience with individual, couples, and family counseling, community advocacy, nonprofit management, and foster/adoptive families. She has served as adjunct faculty for 8 years at LeTourneau University and has a passion for both online and traditional classroom settings. Her research interests include adoption and foster/adoptive family systems, adoptive parent experiences, parent education, first-generation college student experiences, and counseling supervision.

Donna S. Sheperis, PhD, LPC, NCC, earned her doctoral degree in Counselor Education from the University of Mississippi. An Associate Professor Remote in the Mental Health and Marriage, Couple, and Family Counseling Programs at Palo Alto University, she is a Licensed Professional Counselor, National Certified Counselor, Certified Clinical Mental Health Counselor, and Approved Clinical Supervisor with over 25 years of experience in clinical mental health counseling settings. A counselor educator for over 15 years, Dr. Sheperis is actively involved in clinical assessment and research and has served as President of the Association for Assessment and Research in Counseling, a division of ACA.

Elizabeth H. Shilling, PhD, LPC, received her Masters of Arts in Counseling degree from Wake Forest University and her PhD in Counseling and Counselor Education from the University of North Carolina at Greensboro. She has held previous appointments as an adjunct Assistant Professor at Wake Forest University in the Department of Counseling where she taught clinical courses in practicum and internship for more than 3 years and as an Instructor in the Family and Community Medicine Department at Baylor College of Medicine in Houston, Texas. As an integral part of a Substance Abuse and Mental Health Services Administration–funded research team at Baylor, Dr. Shilling brought expertise in motivational interviewing and substance abuse treatment to the grant, which trained more than 400 medical residents on screening, brief intervention, and referral to treatment for substance use problems over the course of 4 years. In addition to her instructor position, Dr. Shilling was Program Director at the Grief Resource Center in The Woodlands, Texas. She has over 8 years of experience in substance abuse treatment and research and more than 9 years of experience in clinical research and graduate-level education.

Anneliese A. Singh, PhD, LPC, is Professor and Associate Dean for Diversity, Equity, and Inclusion in the College of Education at the University of Georgia. She has contributed to many counseling and psychological practice guidelines and competencies, including the recent revision of the ACA *Multicultural and Social Justice Counseling Competencies*, the ASGW *Multicultural and Social Justice Principles for Group Workers*, and the ACA *Competencies for Counseling Transgender People*. Dr. Singh is highly prolific and has written over 100 peer-reviewed articles and chapters and four books in the areas of social justice counseling and LGBTQQ+ counseling, including the *Queer and Trans Resilience Workbook* and the upcoming *Healing from Racism Workbook*. She is a Past President of the Association of LGBT Issues in Counseling. In 2009, Dr. Singh co-founded the Georgia Safe Schools Coalition to work on the intersection of heterosexism, racism, sexism, and other oppressions in Georgia schools. She also founded the Trans Resilience Project to translate findings from her 15 years of research on the resilience that trans and non-binary people develop across the lifespan and across multiple identities to navigate societal oppression. Dr. Singh is Principal Investigator for the first National Institutes of Health–funded longitudinal study of transgender and non-binary people with study sites in Atlanta, New York, and San Francisco.

Joshua D. Smith, MA, NCC, LPCA, LCASA, is a doctoral student in the Department of Counseling at the University of North Carolina at Charlotte. He is a licensed professional counselor associate and licensed clinical addiction specialist associate in North Carolina. He has prior work experience in mental health, medication-assisted treatment, integrated care, and addiction settings. His research interests include addictions counseling, counselor development/training, supervision, and cross-cultural counseling.

Krista D. Speicher, PhD, LMFT, LSW, CAC III, is an AAMFT-approved supervisor. She earned her doctorate in Marriage and Family Therapy from Argosy University and her Masters in Social Work from Columbia University's School of Social Work. She has practiced in community and private practice settings with children, adolescents, and families and provides clinical supervision and consultation. Currently, in addition to Dr. Speicher's role as Program Director at Denver Family Institute, she also serves as Board President for the Colorado Association for Marriage and Family Therapy. Her research interests include adolescents and mentor relationships, sibling relationships and life cycle trends, intergenerational inheritance, substance abuse and family process, and grief and loss.

G. Michael Szirony, PhD, NCC, CRC, is a core faculty member in the Clinical Mental Health Counseling Program at Walden University. Having graduated from Kent State University with a doctorate in counseling and human development and a master's degree in rehabilitation counseling, he completed his training in medical hypnoanalysis at Northeast Ohio Medical University and his doctoral internship at Western Reserve Psychiatric Hospital in Sagamore Hills, Ohio. Dr. Szirony is a recipient of the National Rehabilitation Associations JPD Research Award and has served in leadership positions in academia as well as in counseling associations. In addition, he is a member of the American Counseling Association and the Association for Humanistic Counseling and studied at the Gestalt Institute of Cleveland. Dr. Szirony has published articles and book chapters on counseling, rehabilitation, neuropsychology, and distance education; has presented at national and state conferences; and serves on the editorial board of the journal *Work*. He has held faculty positions at Kent State University, Ohio University, and the University of Arkansas. He also managed a private practice for several years.

Laura J. Veach, PhD, LCAS, LPC, CCS, Professor at Wake Forest School of Medicine in Surgery-Trauma, has her PhD in Counselor Education and Supervision from the University of New Orleans. She serves as the Wake Forest Baptist Health Director of Specialized Counseling Intervention and Training, conducting research and clinical services with over 36 years of work in counseling and supervision, especially in counseling individuals impacted by substance use disorders. Dr. Veach served as Co-Principal Investigator for a Robert Wood Johnson Foundation Grant examining alcohol screening and brief counseling interventions in a prospective clinical trial comparing two counseling interventions. Additional research funding from the Childress Institute for Pediatric Trauma led her to conduct ATV safety interventions with pediatric trauma patients and also violence intervention research with violently injured youth in hospital trauma centers at Wake Forest and Carolinas Medical Center. She is also Founding Director of the M.S. Addiction Research and Clinical Health graduate program.

Kristin A. Vincenzes, PhD, is Assistant Professor and Director of Lock Haven University's 100% Online Master of Science in Clinical Mental Health Counseling Program. She graduated from Walden University with her doctorate in Counselor Education and Supervision specializing in trauma and crisis. She is a licensed professional counselor in Pennsylvania, a National Certified Counselor, and an Approved Clinical Supervisor. Dr. Vincenzes maintains a private practice where she also provides pro bono counseling for veterans and their families through the Give an Hour program. She continues to publish and present at local, regional, and national conferences focusing on veterans and their families, addictions, wellness, online education, and supervision.

BRIEF CONTENTS

PART 1 INTRODUCTION TO ADDICTIONS COUNSELING

Chapter 1 History and Etiological Models of Addiction 1
Chapter 2 Substance Addictions 23
Chapter 3 Process Addictions 51
Chapter 4 Professional Issues in Addictions Counseling 71
Chapter 5 Introduction to Assessment 94
Chapter 6 Assessment and Diagnosis of Substance-Related and Addictive Disorders 118

PART 2 THE TREATMENT OF ADDICTIONS

Chapter 7 Motivational Interviewing 137
Chapter 8 Psychotherapeutic Approaches 158
Chapter 9 Treatment of Comorbid Disorders 185
Chapter 10 Group Counseling for Treatment of Addictions 208
Chapter 11 Addiction Pharmacotherapy 231
Chapter 12 12-Step Facilitation of Treatment 252
Chapter 13 Maintenance and Relapse Prevention 274

PART 3 ADDICTIONS AND FAMILY THERAPY, REHABILITATION, AND SCHOOL SETTINGS

Chapter 14 Substance Addiction and Families 296
Chapter 15 Persons with Disabilities and Substance-Related and Addictive Disorders 318
Chapter 16 Substance Addiction Prevention Programs Across the Lifespan 339

PART 4 CROSS-CULTURAL COUNSELING IN ADDICTIONS

Chapter 17 Cross-Cultural Counseling: Engaging Ethnic Diversity 365
Chapter 18 Gender, Sex, and Addictions 386
Chapter 19 Lesbian, Gay, Bisexual, Transgender, and Queer Affirmative Addictions Treatment 409

EPILOGUE SOME ADDITIONAL PERSPECTIVES

Chapter 20 Inpatient and Outpatient Addiction Treatment 433

CONTENTS

PART 1 INTRODUCTION TO ADDICTIONS COUNSELING

Chapter 1 History and Etiological Models of Addiction 1

by David Capuzzi, Mark D. Stauffer and Chelsea W. Sharpe

Approaches to the Prevention of Addiction in the United States 2

Current Policies Influencing Prevention 5

Models for Explaining the Etiology of Addiction 7

The Moral Model 8

Psychological Models 8

Family Models 10

The Disease Model 11

The Public Health Model 12

The Developmental Model 13

Biological Models 13

Sociocultural Models 14

Multicausal Models 16

Summary and Some Final Notations 17

• Useful Websites 18 • References 19

Chapter 2 Substance Addictions 23

by Elizabeth H. Shilling, Laura J. Veach, Jennifer L. Rogers and Regina R. Moro

Substances of Addiction 24

Depressants 24

Opioids 30

Stimulants 33

Cannabinoids 37

Hallucinogens and Other Psychedelics 38

Neurobiology and the Physiology of Addiction 39

Neurobiological Components of Addiction: Understanding the Reward Pathway 40

Neurobiological Research: Understanding Loss of Control and Continued Use 43

Physiological Components of Addiction 44
Summary and Some Final Notations 45
• Useful Websites 46 • References 46

Chapter 3 Process Addictions 51
by Regina R. Moro, Laura J. Veach, Jennifer L. Rogers and Elizabeth H. Schilling
Gambling Addiction 53
Technology Addiction 56
Internet Gaming Disorder 57
Sexual Addiction 58
Work Addiction 60
Compulsive Buying 64
Food Addiction and Disordered Eating 65
Summary and Some Final Notations 67
• Useful Websites 67 • References 68

Chapter 4 Professional Issues in Addictions Counseling 71
by Melinda Haley and Deena Shelton
Counselor Competence 71
Comorbidity 71
Specific Populations 72
Clinical Knowledge of Polysubstance Disorder 73
Knowledge of Theory, Treatment, and Recovery Models 74
Boundary Violation Issues 75
Multiculturalism 76
Education 76
Counselors in Recovery 77
Counselors Who Have Never Been Users 79
Self-Care 80
Continuing Education 80
Credentialing 81
Certification 81
Licensure 83
Accreditation 84

Treatment and Research Issues 85
Managed Care, Treatment Funding, and Provider Reimbursement 85
Measuring Outcomes and Efficacy of Treatment 86
Future Trends 88
Positive Psychology 88
Unity Among Self-Help Groups 88
Changes in U.S. Drug Laws 88
Summary and Some Final Notations 88
• Useful Websites 89 • References 89

Chapter 5 Introduction to Assessment 94
by Mark D. Stauffer, David Capuzzi and Kelly Aissen
Philosophical Foundations of Addictions Counseling 95
Hope 95
Strengths-Based Approaches 96
Holistic Approaches: Assessing the Whole Person 97
Client Collaboration in Addictions Counseling 102
Multidisciplinary Approach 102
The Role of an Addictions Assessor 102
Key Points About Human Assessment 103
Motivation 103
Internal and External Triggers 104
Internal Consequences of Addiction 104
External Consequences of Addiction 105
Negative and Positive Consequences of Addiction 105
Expectancy 105
Empathic Connection and Rapport 106
Assessment Across the Treatment Process 106
Original Instrument Design and Purpose 106
Communicating Procedures and Results Clearly 107
Addictions Assessment Process 107
Structured, Semi-structured, and Unstructured Interviews 107
Gathering Background and Contextual Information 108
Client Presentation and Functioning 109
Current and Past Use and Addictive Behaviors 111
First and Historical Exposure 112
Prior Addiction and Mental Health Treatments 112

Family Systems, and Peer Relationships 112
Summary and Some Final Notations 113
• Useful Websites 113 • References 114

Chapter 6 Assessment and Diagnosis of Substance-Related and Addictive Disorders 118
by John M. Laux, Dilani M. Perera-Diltz, Stephanie A. Calmes, Malvika Behl, Bethany M. Morgan and Jennifer Rio
Diagnosing Using DSM-5 120
Substance-Related Disorders (SUDs) 120
Gambling Disorder (GD) 121
Why Use Standardized Assessments? 122
Philosophical Underpinning of Instrument Construction 123
How to know which Screen to Use 123
Sensitivity and Specificity 123
Reliability and Validity 124
Time/Cost Efficiency 124
Substance Use Disorder Instruments 124
Self-Administered, Stand-Alone Screening Instruments 124
Counselor-Initiated Comprehensive Substance Abuse Assessment 127
Instruments Designed to Assess Alcohol Misuse During Pregnancy 128
Summary of Substance Use Disorder Screens 129
Gambling Disorder Instruments 130
Other Process Addiction Instruments 132
Summary and Some Final Notations 134
• Useful Websites 135 • References 135

PART 2 THE TREATMENT OF ADDICTIONS

Chapter 7 Motivational Interviewing 137
by Lisa Langfuss Aasheim
Overview: Motivational Interviewing 137
The Stages-of-Change Model 138
Change and Resistance 142
Change 142
Resistance 142
Motivational Interviewing: Helping Clients Achieve Change 143
The Primary Principles of Motivational Interviewing 144

Motivational Interviewing Techniques: Early in the Change Process 145
Five Techniques to Use Early and Often 145
The Role of Resistance in the Change Process 149
The Many Forms of Resistance 149
Reducing Resistance 150
Guiding the Change Process: More Motivational Interviewing Techniques 153
Enhancing Confidence 153
Strengthening Commitment 153
Advantages and Disadvantages of Motivational Interviewing 154
Summary and Some Final Notations 155
• Useful Websites 156 • References 156

Chapter 8 Psychotherapeutic Approaches 158
by Cynthia J. Osborn
Counselor Beliefs and Behaviors 158
Empirically Supported Treatment Approaches 160
Behavioral and Cognitive-Behavioral Assumptions and Practices 161
Functional Analysis 162
Cognitive-Behavioral Interventions that Target Triggers 163
Contingency Management and Behavior Contracting 165
Community Reinforcement Approach 166
Mindfulness-Based Approaches 167
Brief Interventions 168
Solution-Focused Counseling 169
SFC Research and Application to Addictions Treatment 170
Solution-Focused Integration 170
Solution-Focused Assumptions and Practices Useful in Addictions Counseling 171
Harm Reduction 176
Summary and Some Final Notations 179
• Useful Websites 179 • References 180

Chapter 9 Treatment of Comorbid Disorders 185
by Scott E. Gillig and Pamela A. Cingel
How Mental Health Systems have Adapted to Clients with Co-Occurring Disorders 185
Prevalence of Comorbidity 186
Assessment 189
Cultural Issues Related to Assessment 190

Treatment and Care Needs 192
Comorbid Treatment Models 193
Disease Concept Model 193
Alternative Models 195
Other Treatment Issues 196
Multidisciplinary Treatment Team 196
A Brief Description of the Counseling Process that Leads to Treatment Planning 197
Issues-Based Diagnostic Summary 203
Client Strengths 203
Client Issues 203
Treatment Plan: Priority Goals (Other goals are put on the back burner for the time being.) 203
Specific Issues 203
Treatment Objectives 204
Treatment Strategies 204
Treatment Techniques (Give as assignments and use timelines here as well.) 204
Summary and Some Final Notations 204
• Useful Websites 205 • References 205

Chapter 10 Group Counseling for Treatment of Addictions 208
by Laura R. Haddock and Donna S. Sheperis
Theory Behind Group Work 208
Group Treatment of Addiction 209
An Overview of Types of Groups 210
Psychoeducational Groups 210
Psychotherapeutic Groups 211
Self-Help Groups 213
Ethical and Legal Issues with Groups 215
Competence of the Leader 215
Screening of Participants 216
Informed Consent 216
Confidentiality 216
Voluntary versus Involuntary Participation 217
Group Conflict 218
Managing Diversity in Group Settings 218
Ethnicity 219
Gender 219
Sexuality 220
Type of Addiction 221

Group Counseling for Family Members of Addicts 222
Considerations for Psychoeducation Group Leaders 223
Issues Commonly Addressed in Group Counseling 224
Diversity Considerations for Group Leaders 226
Strategies for Effective Group Treatment 227
Summary and Some Final Notations 227
• Useful Websites 228 • References 228

Chapter 11 Addiction Pharmacotherapy 231
by Cass Dykeman
Rationale for a Chapter on Pharmacotherapy of Addiction 231
Terms and Concepts 232
Key Pharmacotherapy Terms 232
Key Concepts of Neurology in Pharmacotherapy 233
Diversity and Pharmacotherapy 234
Key Concepts of Neurotransmitters in Pharmacotherapy 235
Key Concepts of Pharmacokinetics in Pharmacotherapy 236
Key Concepts of Pharmacodynamics in Pharmacotherapy 236
A Biological Theory of Craving 237
The Professional Counselor's Role in Addiction Pharmacotherapy 238
Application Example: Pharmacotherapy of Alcohol Use Disorder 239
Alcohol Withdrawal Pharmacotherapy 240
Alcohol Use Disorder: Mainline Pharmacotherapy 241
Alcohol Use Disorder: Comparative Efficacy of Pharmacotherapies 243
Alcohol Use Disorder: Alternative Health Pharmacotherapy 244
Glossary of Pharmacotherapy Terms 244
Summary and Some Final Notations 247
• Useful Websites 247 • References 247

Chapter 12 12-Step Facilitation of Treatment 252
by Adrianne L. Johnson
History: Development of 12-Step Groups 253
Alcoholics Anonymous 253
Other Groups 253

The Group Process: How 12-Step Groups Work 256
Goals 256
The Twelve Steps and Twelve Traditions 256
Group Dynamics as Applied to 12-Step Groups 258
The Role of Sponsors in Recovery 258
Do 12-Step Programs Really Work? 259
Specific Advantages and Disadvantages of 12-Step Groups 260
Advantages 260
Disadvantages 261
Addressing Spirituality in 12-Step Groups 262
Using the 12-Step Group as Part of Treatment 263
The Role of the Counselor 264
How Can I Learn More About Groups? 268
Consult 268
Research 268
Get Involved 268
Summary and Some Final Notations 269
• Useful Websites 270 • References 270

Chapter 13 Maintenance and Relapse Prevention 274
by Mita M. Johnson
Maintenance 274
Continuum of Care 274
Goals of Early Recovery and Maintenance 275
Pharmacotherapy and Medication Management 276
Lapses and Relapses 277
Conceptualization of Relapse 279
Stages of Relapse 282
Relapse Prevention 283
Relapse Prevention Considerations 285
Developing a Management Plan 288
Cognitive-Behavioral Therapy 289
Mindfulness Training 291
Peer Recovery Support Specialists 291
Technology-Assisted Recovery and RP 292
Summary and Some Final Notations 293
• Useful Websites 293 • References 294

PART 3 ADDICTIONS IN FAMILY THERAPY, REHABILITATION, AND SCHOOL SETTINGS

Chapter 14 Substance Addiction and Families 296

by Krista D. Speicher and Kristin A. Vincenzes

Addiction and the Family 297

Family Counseling 297

Stages in Addicted Family Systems 300

Parenting in an Addicted Family System 301

Substance Use and Addiction and the Couple 302

The Impact of Substance Addiction on Couple Relationships 302

Substance Use and Addiction and Children 306

Behavioral Outcomes 307

Psychosocial Outcomes 307

Counseling Addicted Family Systems 309

Efficacy of Couples and Family Counseling 309

Assessment of Addicted Family Systems 310

Treatment Approaches for Addicted Family Systems 311

Summary and Some Final Notations 313
• Useful Websites 313 • References 313

Chapter 15 Persons with Disabilities and Substance-Related and Addictive Disorders 318

by Debra A. Harley, Mirang Park and Byung Jin Kim

Characteristics and Status of People with Disabilities and Addictions 321

Risk Factors for Persons with Disabilities 325

Health and Medical Risk Factors 325

Psychological Risk Factors 326

Interpersonal and Social Risk Factors 326

Economic and Employment Risk Factors 327

Access Risk Factors 327

Sociocultural Factors 329

Exposure to Trauma 330

Treatment Utilization and Outcomes 331

Summary and Some Final Notations 335
• Useful Websites 336 • References 336

Chapter 16 Substance Addiction Prevention Programs Across the Lifespan 339

by Abbé Finn

Evidence-Based Prevention Programs 340

Prevention Research 340

Program Needs Assessment 342

Substance Use and Addiction by the Numbers 343

Prevention Programs Targeting Children and Adolescents 345

Opioid Prevention 345

Early Treatment for Adolescents with a Co-occurring Psychiatric Disorder 346

Juvenile Court Diversionary Programs 346

Prevention Programs Targeting Schools 347

Operation Prevention 349

Prevention Programs Targeting Higher Education 350

Harm-Reduction Programs 351

Brief Alcohol Screening and Intervention for College Students 352

Prevention Programs Focused on Mass-Media Campaigns Targeting Young Adult Populations 352

Collegiate Recovery Community 353

Prevention and Treatment Programs for Pregnant Adolescents and Adults 353

Home Visitation Programs 354

Prevention Programs Targeting the Military and their Families 355

Military Personnel 356

Veterans and Their Families 356

Prevention Programs Targeting Older Adults 357

Summary and Some Final Notations 359

• Useful Websites 359 • References 360

PART 4 CROSS-CULTURAL COUNSELING IN ADDICTIONS

Chapter 17 Cross-Cultural Counseling: Engaging Ethnic Diversity 365

by Jane E. Rheineck and Amy L. Barth

Why Does Culture Matter in Substance Addiction Treatment? 366

Definitions 367

How Did We Get to This Point? 367

Treatment Needs and Issues for Racial and Ethnic Minorities 368
Disparities in use and Access to Treatment 369
Racial and Ethnic Minorities 369
Theoretical Frameworks 375
Racial and Cultural Identity Models 375
Multicultural and Social Justice Competencies 375
Summary and Some Final Notations 382
• Useful Websites 382 • References 382

Chapter 18 Gender, Sex, and Addictions 386
by Cynthia A. Briggs
Gender and Addiction in the United States 387
Women and Addiction 390
Biological Considerations 390
Psychological Considerations 392
Social Considerations 393
Special Considerations for Addicted Women 393
Men and Addiction 395
Biological Considerations 395
Psychological Considerations 396
Social Considerations 397
Treatment Considerations 398
Treatment Overview and History 398
Gender-Specific Treatment Needs: Women 399
Gender-Specific Treatment Needs: Men 401
Gender-Specific Treatment Needs: Transgender Clients 402
Gender-Specific Treatment Needs: Clients with Disorders of Sex Development (DSD) 404
Treatment Outcomes and Relapse Prevention 404
Summary and Some Final Notations 405
• Useful Websites 405 • References 406

Chapter 19 Lesbian, Gay, Bisexual, Transgender, and Queer Affirmative Addictions Treatment 409
by Anneliese A. Singh, Pamela S. Lassiter and Joshua D. Smith
Common Terms for and Myths about LGBTQ People 411
Coming Out, Cultural Differences, and Addiction 412

LGBTQ-Affirmative Addictions Treatment and Assessment 415
LGBTQ-Specific Assessment of Addiction 417
LGBTQ-Specific Treatment of Addiction 420
Modality Issues 420
Relapse Prevention 421
Role of Addictions Counselors Working with LGBTQ Clients 423
Creating a Safe Environment for LGBTQ People 423
How to Be an Advocate for LGBTQ-Affirmative Treatment 424
Summary and Some Final Notations 427
• Useful Websites 428 • References 428

EPILOGUE SOME ADDITIONAL PERSPECTIVES

Chapter 20 Inpatient and Outpatient Addiction Treatment 433
by G. Michael Szirony and Richard J. Cicchetti
Inpatient Treatment 434
Levels of Care 434
Assessment Dimensions 435
Types of Inpatient Services 436
Clinician Determination of Inpatient Treatment 437
Use of Motivational Interviewing to Assess Readiness to Change 438
Challenges Facing Rehabilitation Centers 439
Client Inpatient Experience 440
Outpatient Treatment 442
Types of Outpatient Drug Treatment 442
Drug and Alcohol Legislation Affecting Treatment 443
Residential Substance Use Disorder Programs 446
Drug Courts 448
Cost to Society 448
Advocacy 449
Summary and Some Final Notations 450
• Useful Websites 450 • References 451

INDEX 453

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CHAPTER

1 History and Etiological Models of Addiction

David Capuzzi
Walden University
Mark D. Stauffer
Walden University

Chelsea W. Sharpe
Licensed Professional Counselor, Athens, Georgia

The specialists serving the highest proportion of clients with a primary addiction diagnosis are professional counselors (20%), not social workers (7%), psychologists (6%), or psychiatrists (3%).
(Lee, Craig, Fetherson, & Simpson, 2013, p. 2)

The history of addictions counseling, a specialization within the profession of counseling, follows a pattern of evolution similar to that witnessed in many of the helping professions (social work, psychology, nursing, medicine). Early practitioners had more limited education and supervision (Astromovich & Hoskins, 2013; Iarussi, Perjessy, & Reed, 2013; White, 2014), were not licensed by regulatory boards, did not have well-defined codes of ethics upon which to base professional judgments, may not have been aware of the values and needs of diverse populations, and did not have access to a body of research that helped define best practices and treatment plans (Hogan, Gabrielsen, Luna, & Grothaus, 2003; Nathan, Conrad, & Skinstad, 2016).

Catching Up with the Competition

It is interesting to watch the evolution of a profession and specializations within a profession. For example, in the late 1950s, the profession of counseling was energized by the availability of federal funds to prepare counselors. The impetus for the U.S. government to provide funds for both graduate students and university departments was Russia's launching of *Sputnik*. School counselors were needed to help prepare students for academic success, especially in math and science, so the United States could "catch up" with its "competitors."

As noted by Fisher and Harrison (2000), in earlier times, barbers who also did "bloodletting" practiced medicine, individuals who were skilled at listening to others and making suggestions for problem resolution became known as healers, and those who could read and write and were skilled at helping others do so became teachers with very little formal education or preparation to work with others in such a capacity. Fifty years ago nursing degrees were conferred without completing a baccalaureate (today a baccalaureate is minimal and a master's degree is rapidly becoming the standard), a teacher could become a school counselor with 12–18 credits of coursework (today a 2-year master's is the norm), and 20 or more years ago an addictions counselor could well be an alcoholic or addict in recovery who used his or her prior experience with substance use as the basis for the addictions counseling done with clients.

The State of Virginia Passed the First Licensure Law

Until the mid-1970s, there was no such thing as licensure for counselors, and those wishing to become counselors could often do so with less than a master's degree. In 1976, Virginia became the first state to license counselors and outline a set of requirements that had to be met to obtain a license as a counselor. It took 33 years for all 50 states to pass licensure laws for counselors; this achievement took place in 2009 when the state of California passed its licensure law for counselors.

The purpose of this chapter is threefold: first, to provide an overview of the history of substance abuse prevention in the United States; second, to describe the most common models for explaining the etiology of addiction; and third, to overview and relate the discussion of the history of prevention and the models for understanding the etiology of addiction to the content of the text.

APPROACHES TO THE PREVENTION OF ADDICTION IN THE UNITED STATES

Alcoholic beverages have been a part of this nation's past since European settlers arrived. Early colonists had a high regard for alcoholic beverages because alcohol was considered a healthy substance with preventative and curative capabilities rather than as an intoxicant. Alcohol played a central role in promoting a sense of conviviality and community (Adrian, 2015) until, as time passed, the production and consumption of alcohol caused enough concern to precipitate several versions of the "temperance" movement (Center for Substance Abuse Prevention, 1993; Freed, 2012). The first of these began in the early 1800s, when clergymen took the position that alcohol could corrupt both mind and body and asked people to take a pledge to refrain from the use of distilled spirits.

Benjamin Rush and the Temperance Movement

In 1784, Dr. Benjamin Rush argued that alcoholism was a disease, and his writings marked the initial development of the temperance movement. By 1810, Rush called for the creation of a "sober house" for the care of what he called the "confirmed drunkard."

The temperance movement's initial goal was the replacement of excessive drinking with more moderate and socially approved levels of drinking. Between 1825 and 1850, thinking about the use of alcohol began to change from temperance-as-moderation to temperance-as-abstinence (White, 1998, 2014). Six artisans and workingmen started the "Washingtonian Total Abstinence Society" in a Baltimore tavern on April 2, 1840. Members went to taverns to recruit members and, in just a few years, precipitated a movement that inducted several hundred thousand members. The Washingtonians were key in shaping future self-help groups because they introduced the concept of sharing experiences in closed, alcoholics-only meetings. Another version of the temperance movement occurred later in the 1800s with the emergence of the Women's Christian Temperance Movement and the mobilization of efforts to close down saloons. Societies such as the Daughters of Rechab, the Daughters of Temperance, and the Sisters of Sumaria are examples

of such groups. (Readers are referred to White's [1998, 2014] discussion of religious conversion as a remedy for alcoholism for more details about the influence of religion in America on the temperance movement.) "Crusades" and protests at public drinking spread across the country in grassroot fashion along railway routes (Richardson, 2018). These movements contributed to the growing momentum to curtail alcohol consumption and the passage of the Volstead Act and prohibition in 1920 (Hall, 2010; Lee, Lee, & Lee, 2010).

The United States was not alone during the first quarter of the 20th century as the temperance movement spread internationally (e.g., Japan; Tomoko, 2017) in adopting prohibition on a large scale; other countries enacting similar legislation included Iceland, Finland, Norway, both czarist Russia and the Soviet Union, the Canadian provinces, and Canada's federal government. The majority of New Zealand voters approved national prohibition referendums two times but never got the legislation to be affected because of 60% thresholds (Benoit & Ruth, 2016; Blocker, 2006). Even though Prohibition was successful in reducing per capita consumption of alcohol, the law created such social turmoil and defiance that it was repealed in 1933. This turmoil was also shared in Canada with its own regional prohibitions and in dealing with the violence of border bootlegging (Wilson, 2016).

Speakeasies Defy Prohibition

Shortly after the passage of the Volstead Act in 1919, which added provisions for treasury department enforcement of the 18th Amendment, "speakeasies" sprang up all over the country in defiance of prohibition (Pearson, 2017). The locations of these establishments were spread by "word of mouth" and people were admitted to "imbibe and party" only if they knew the password. Local police departments were kept busy identifying the locations of such speakeasies and made raids and arrests whenever possible. Often the police were paid so that raids did not take place and so patrons would feel more comfortable in such establishments.

Following the repeal of Prohibition, all states restricted the sale of alcoholic beverages in some way or another to prevent or reduce alcohol-related problems. In general, however, public policies and the alcoholic beverage industry took the position that the problems connected with the use of alcohol existed because of the people who used it and not because of the beverage itself (Nathan et al., 2016). This view of alcoholism became the dominant view and force for quite some time and influenced, until recently, many of the prevention and early treatment approaches used in this country.

Paralleling the development of attitudes and laws for the use of alcohol, the nonmedical use of drugs other than alcohol can be traced back to the early colonization and settlement of the United States. Like alcohol, attitudes toward the use of certain drugs, and the laws passed declaring them legal or illegal, have changed over time and have often had racial/ethnic or class associations based on prejudice and less-than-accurate information (Netherland & Hansen, 2016). Prohibition was in part a response to the drinking patterns of European immigrants, who became viewed as the lower class. Cocaine and opium were legal during the 19th century and favored by the middle and upper class, but cocaine became illegal when it was associated with African Americans following the Reconstruction era in the United States. The use of opium was first restricted in California during the latter part of the 19th century when it became associated with Chinese immigrant workers. Marijuana was legal until the 1930s when it became pejoratively associated by white society with Mexican immigrants. LSD, legal in the 1950s, was illegal in 1967

when it became associated with the counterculture. Oval office tapes from the Nixon presidency demonstrate verbally how the administration wanted to connect "hippies" and African Americans with the ills of marijuana (Hudak, 2016).

The Marijuana Controversy

It is interesting to witness the varying attitudes and laws concerning the use of marijuana. Many view marijuana as a "gateway" drug and disapprove of the medical use of marijuana; others think that the use of marijuana should be legalized and that access should be unlimited and use monitored only by the individual consumer. During the last few years, the sale of marijuana has been approved in several states and the "jury is out" as the impact of its use is being tracked.

It was not until the end of the 19th century (Center for Substance Abuse Prevention, 1993) that concern arose with respect to the use of drugs in patent medicines and products sold over the counter (cocaine, opium, and morphine were common ingredients in many potions). Until 1903, believe it or not, cocaine was an ingredient in some soft drinks. Heroin was even used in the 19th century as a non addicting treatment for morphine addiction and alcoholism. Gradually, states began to pass control and prescription laws and, in 1906, the U.S. Congress passed the Pure Food and Drug Act, designed to control addiction by requiring labels on drugs contained in products, including opium, morphine, and heroin. The Harrison Act of 1914 resulted in the taxation of opium and coca products with registration and record-keeping requirements. It is interesting to note that controlling of substances through legislation or law occurred internationally, as well as illegal transport and trade (Peter, 2017).

Current drug laws in the United States are derived from the 1970 Controlled Substance Act (Center for Substance Abuse Prevention, 1993), under which drugs are classified according to their medical use, potential for abuse, and possibility of creating dependence. Increases in per capita consumption of alcohol and illegal drugs raised public concern so that by 1971 the National Institute on Alcohol Abuse and Alcoholism (NIAAA) was established as President Richard Nixon initiated a "War on Drugs"; by 1974, the National Institute on Drug Abuse (NIDA) had also been created. Both of these institutes conducted research and had strong prevention components as part of their mission. To further prevention efforts, the Anti-Drug Abuse Prevention Act of 1986 created the U.S. Office for Substance Abuse Prevention (OSAP); this office consolidated alcohol and other drug prevention initiatives under the Alcohol, Drug Abuse, and Mental Health Administration (ADAMHA). ADAMHA mandated that states set aside 20% of their alcohol and drug funds for prevention efforts while the remaining 80% could be used for treatment programs. In 1992, OSAP was changed to the Center for Substance Abuse Prevention (CSAP) and became part of the new Substance Abuse and Mental Health Services Administration (SAMSHA) and retained its major program areas. The research institutes of NIAAA and NIDA were then transferred to the National Institutes of Health (NIH). The Office of National Drug Control Policy (ONDCP) was also a significant development when it was established through the passage of the Anti-Drug Abuse Act of 1988. It focused on dismantling drug-trafficking organizations, on helping people to stop using drugs, on preventing the use of drugs in the first place, and on preventing minors from abusing drugs.

Time passed, and Congress declared that the United States would be drug free by 1995; that "declaration" has not been fulfilled. Since the mid-1990s, there have been efforts to control the recreational and nonmedical use of prescription drugs and to restrict the flow of drugs into the

country. Over time, there has been less attention given to prevention, education, and treatment related to drug use and misuse and more attention given to incarcerating offenders (Bowen & Redmond, 2016).

In 2005, Congress budgeted $6.63 billion for U.S. government agencies directly focused on the restriction of illicit drug use. However, as noted later in this text, 13–18 metric tons of heroin are consumed yearly in the United States (U.S. Department of Health and Human Services [DHHS], 2004). In addition, there has been a dramatic increase in the abuse of prescription opioids since the mid-1990s, largely due to initiation by adolescents and young adults. As noted by Rigg and Murphy (2013), the incidence of prescription painkiller abuse increased by more than 400%, from 628,000 initiates in 1990 to 2.7 million in 2000.

There has been an attempt to restrict importation by strengthening the borders and confiscating illegal substances before they enter the United States, as emphasized by President Donald Trump during 2017 and 2018. There has also been an attempt to reduce importation. The U.S. government uses foreign aid to pressure drug-producing countries to stop cultivating, producing, and processing illegal substances. Some of the foreign aid is tied to judicial reforms, antidrug programs, and agricultural subsidies to grow legal produce (U.S. DHHS, 2004).

In an attempt to reduce drug supplies, the government has incarcerated drug suppliers. Legislators have mandated strict enforcement of mandatory sentences, resulting in a great increase in prison populations. As a result, the arrest rate of juveniles for drug-related crimes has doubled in the past 10 years while arrest rates for other crimes have declined by 13%. A small minority of these offenders (2 out of every 1000) will be offered Juvenile Drug Court (JDC) diversionary programs as an option to prison sentences (National Center on Addiction and Substance Abuse at Columbia University, 2004).

Drug Cartels

During the last few years, there has been much media attention focused on the drug cartels in Mexico and the drug wars adjacent to the U.S. border near El Paso, Texas. In April 2010, the governor of Arizona signed into law legislation authorizing the police to stop anyone suspected of being an illegal immigrant and demand proof of citizenship.

Current Policies Influencing Prevention

Addiction today remains as formidable a reality as it ever was, with 23 million Americans in substance abuse treatment and over $180 billion a year consumed in addiction-related expenditure in the United States.
(Hammer, Dingel, Ostergren, Nowakowski, & Koenig, 2012, pp. 713–714)

There are a number of current policies influencing the prevention of addiction that should be noted (McNeese & DiNitto, 2005) and are listed next. Most of these policies emphasize a punitive approach to drug control and have dramatically escalated the size of the prison population in the United States (Bowen & Redmond, 2016).

- All states in the United States set a minimum age for the legal consumption of alcohol and prescribe penalties for retailers who knowingly sell alcohol to minors and underage customers. There are some states that penalize retailers even when a falsified identification is used to purchase liquor.

- Even though the 21st Amendment repealed prohibition, the "dry" option is still open to individual states and some states, mainly in the South, do have dry counties.

"Dry" Counties and the Consumption of Alcohol

Even though a few states still have "dry" counties, residents of those counties can often consume alcohol in restaurants that allow patrons to enter the establishment with a bottle of alcohol, usually wrapped or "bagged." The restaurant then charges a fee for opening the bottle and allowing the liquor to be served. In addition, some counties allow liquor stores to be located just outside the county line, perhaps in a waterway accessed by a short walk across a connecting boardwalk or foot bridge.

- Many state governments influence the price of alcohol through taxation and through the administration of state-owned liquor stores.
- As part of the initial training of U.S. Air Force and Navy recruits, alcohol and tobacco use are forbidden during basic training and for a short time during advanced and technical training. This is because use of these substances usually has a negative effect on military readiness and performance (Bray et al., 2010).
- Besides taxation and the operation of state-owned liquor stores, the government can attempt to regulate consumption by controlling its distribution. It accomplishes this through adopting policies regulating the number, size, location, and hours of business for outlets as well as regulating advertising.
- Perhaps no other area of alcohol policy has been as emotionally charged as the setting of the minimum legal age for consuming alcoholic beverages. Most states have adopted the age of 21 as the minimum legal age for unrestricted purchase of alcohol. This is a point of contention among many because at age 18 the youth are eligible for military service.
- When a legally intoxicated individual (someone with a blood alcohol content [BAC] of 0.08–0.10) drives an automobile, in most states, a crime has been committed. Penalties can range from suspension of the driver's license to a mandatory jail sentence, depending on the frequency of convictions.
- Insurance and liability laws can also be used to influence lower consumption of alcohol because those drivers with DUI convictions may face higher insurance premiums or may be unable to purchase insurance. In addition, in a majority of states, commercial establishments that serve alcoholic beverages are civilly liable to those who experience harm as a result of an intoxicated person's behavior.
- Between 1999 and 2011, patterns of change in state alcohol control policies in the United States show that implementation of politically palatable state policies, such as those targeting youth and alcohol-impaired driving, increased and those that are maximally effective in protecting the public, such as reducing binge drinking and consumption by adults, did not increase or were not implemented. Policies that reduce alcohol sales, for example, are usually opposed by alcohol-related industries (Nelson, Xuan, Blanchette, Heeren, & Naimi, 2015).
- Public policies regarding the use of illicit drugs have not reached the same level of specificity as those regulating the use of alcohol (and, for that matter, tobacco). Since 1981 and the election of Ronald Reagan as president, federal policy has been more concerned with preventing recreational use of drugs than with helping habitual users. The approach chosen

by the George H. W. Bush administration was one of zero tolerance. The administration did increase treatment funding by about 50%. Simultaneously, the Bush administration continued to focus its attention on casual, middle-class drug use rather than with addiction or habitual use. In 1992, presidential candidates George H. W. Bush and Bill Clinton rarely mentioned the drug issue except as related to adolescent drug use. In the year 2000, the major issue in the campaign of George W. Bush was whether he ever used cocaine. The administration of George W. Bush made very few changes in drug policy.

- Of major significance is the fact that SAMHSA was reauthorized in the year 2000 (Bazelon Center for Mental Health Law, 2000). That reauthorization created a number of new programs, including funding for integrated treatment programs for co-occurring disorders for individuals with both mental illness and a substance use disorder.
- Recently, a very controversial option for policy is being considered and discussed by policymakers (Fish, 2013). In short, replacing current assumptions and causal models underlying the war on drugs and punishment of drug users with alternative points of view could lead to a different way of understanding drug use and addiction and to different drug policy options. These alternatives could include refocusing our primary emphasis from attacking drugs to shrinking the black market through a targeted policy of legalization for adults and differentiating between problem users (who should be offered help) and nonproblem users (who should be left alone). We could shift from a policy of punishing and marginalizing problem users to one of harm reduction and reintegration into society and shifting from a mandatory treatment policy to one of voluntary treatment. Abstention need not be the only acceptable treatment outcome because many (but not all) problem users can become occasional, nonproblematic users.

MODELS FOR EXPLAINING THE ETIOLOGY OF ADDICTION

> *Historically, addiction has been understood in various ways—a sin, a disease, a bad habit—each a reflection of a variety of social, cultural, and scientific conceptions. (Hammer et al., 2012, p. 713)*

Substance use and abuse has been linked to a variety of societal issues and problems (crime and violence, violence against women, child abuse, difficulties with mental health, risks during pregnancy, sexual risk-taking, fatal injury, etc.). Given the impact that addiction can have on society in general and the toll it often levies on individuals and families, it seems reasonable to attempt to understand the etiology or causes of addiction so that diagnosis and treatment plans can be as efficacious as possible. There are numerous models for explaining the etiology of addiction (e.g., Hellman, Majamaki, Rolando, Bujalski, & Lemmens, 2015: McNeese & DiNitto, 2005); these models are not mutually exclusive, and none are presented as the correct way of understanding the phenomena of addiction. We also do not suggest that each of these models have the same or equal evidence-based validity because we present several here. At the same time, more evidence and research is needed to more deeply understand the truth of addiction even when there is a good preponderance of evidence with some models. Counselors need to clearly understand various causal attributions and their associated strengths and limitations in order to be aware and appropriately respond to clients, health workers, colleagues, institutions, and cultural groups. The moral, psychological, family, disease, public health, developmental, biological, sociocultural, and some multicausal models are described in the subsections that follow.

The Moral Model

The moral model is based on beliefs or judgments of what is right or wrong, acceptable or unacceptable. Those who advance this model often do not accept that there is a biological basis for addiction; they believe that there is something morally wrong with people who use drugs heavily (Frank & Nagel, 2017). Proponents of the moral model of addiction argue that the person suffering from addiction is doing so because he or she is irresponsible, impulsive, and engages in careless behavior due to weak character.

The moral model explains addiction as a consequence mostly of personal choice, and individuals who are engaging in addictive behaviors are viewed as being capable of making alternative choices. Beginning in preindustrial times and continuing to be influential in some segments of society today was the belief that addicts were to be held morally responsible for their behavior and the appropriate response was to penalize the addict through scorn, isolation, disenfranchisement, or incarceration (Heather, 2017). This model is foundational for certain religious groups and has been subsequently adopted by the legal system because addiction is seen in a dualistic right or wrong manner. For example, in states in which violators are not assessed for chemical dependency and in which there is no diversion to treatment, the moral model guides the emphasis on "punishment." In addition, in communities in which there are strong religious beliefs, religious intervention might be seen as the only route to changing behavior. The moral model for explaining the etiology of addiction focuses on the sinfulness inherent in human nature (Ferentzy & Turner, 2012). Since it is difficult to establish the sinful nature of human beings through empirically-based research, this model has been generally discredited by present-day scholars. It is interesting to note, however, that the concept of addiction as sin or moral weakness continues to influence many public policies connected with alcohol and drug use disorders (McNeese & DiNitto, 2005). This may be part of the reason why evidence-based harm-reduction efforts such as needle/syringe exchange programs have so often been opposed in the United States.

Although the study of the etiology of alcoholism and other addictions has made great strides in moving beyond the moral model (Frank & Nagel, 2017), clients are not immune to social stigma, and other types of addiction have yet to be widely viewed as something other than a choice. But as we move further away from the idea that addiction is the result of moral failure, we move closer to providing effective treatment and support for all those who suffer. Adept counselors understand that mainstream culture carries on the moral model as a consequence of historically predominant explanations. This may be internalized whereby a counselor logically knows that addiction is connected to complex systems but has an attitudinal disposition toward the client that is based on judgment, prejudice, and punishment. Such conflicted qualities within the counselor merit personal therapeutic work.

Psychological Models

Various traditional and modern psychotherapeutic models provide explanations for substance and process addictions. Within various traditions the causes and related solutions for change are dependent on the underlying theory. So if either attachment, behaviors, cognitions, learning processes, or psychic drives are the primary cause of addiction, then treatment comes from addressing those as mechanisms of change (Frone, 2018). Here we examine several different psychological models for explaining the etiology of process- and substance-related addictions, including cognitive-behavioral, learning, psychodynamic, and personality theory models.

COGNITIVE-BEHAVIORAL MODELS Cognitive-behavioral models connect the primary causation of addiction with cognitive and behavioral motivations and reinforcers. For example, people are motivated to take drugs to experience variety (Pickard, Ahmed, & Foddy, 2015; Weil & Rosen, 1993); furthermore, they repeat actions that they enjoy (positive reinforcement). Drug use and process addictions might be associated with a variety of experiences such as self-exploration, religious insights, mood altering, escape from boredom or despair, and enhancement of creativity, performance, sensory experience, or pleasure (Lindgren, Mullins, Neighbors, & Blayney, 2010; Morgan & O'Brian, 2016).

The "Flower Children" and the Use of Mind-Altering Drugs

The use of mind-altering drugs received media attention in the 1960s when "flower children" sang and danced in the streets of San Francisco and other cities, sometimes living together in communities they created. Mainstream press and society saw drug use from a moral-model perspective as hedonism, while many of those in these "alternatives-to-society" movements were motivated along socially, spiritually, and relationally unique paths, including the use of drugs to enhance sensory experience, "expand consciousness," and have breakthroughs. How did stigma and stereotypes cloud the underlying motivations and values of different groups of society at that time?

The desire to experience pleasure is another explanation connected with the cognitive-behavioral model. Alcohol and other drugs are chemical surrogates of natural reinforcers such as eating and sex. Social drinkers and alcoholics often report using alcohol to relax even though studies show that alcohol causes people to become more depressed, anxious, and nervous (McCabe, Veliz, & Schulenberg, 2018; NIAAA, 1996). Dependent behavior with respect to the use of alcohol and other drugs is maintained by the degree of reinforcement the person perceives as occurring; alcohol and other drugs may be perceived as being more powerful reinforcers than natural reinforcers and set the stage for addiction. As time passes, the brain adapts to the presence of the drug or alcohol, and the person experiences unpleasant withdrawal symptoms (e.g., anxiety, agitation, tremors, increased blood pressure, seizures). To avoid such unpleasant symptoms, the person consumes the substance anew and the cycle of avoiding unpleasant reactions (negative reinforcement) occurs and a repetitive cycle is established (Lewis, 2017). In an interesting review of the literature on the etiology of addiction (Lubman, Yucel, & Pantelis, 2004), it was proposed that in chemically addicted individuals, maladaptive behaviors and high relapse rates may be conceptualized as compulsive in nature. Hence a primary criticism of a strictly cognitive-behavioral model is that the apparent loss of control over drug-related behaviors suggests that individuals who are addicted are unable to control the neurobiological reward system similar to those with compulsive disorders (i.e., obsessive-compulsive disorder).

LEARNING MODELS Parents sometimes might precipitate increased risk of drug abuse on their children, not only because of their similar genetic makeup, but also because they provide negative role modeling, especially by using and abusing drugs to cope. Through social learning, children and adolescents may internalize the values and expectations of their parents and acquire maladaptive coping techniques. Indeed, research has demonstrated that early onset of use is also connected to early environmental exposure and has long-term health consequences (Lopes et al., 2017; SAMHSA, 2014).

Learning models are also closely related and somewhat overlap the explanations provided by cognitive-behavioral models. Learning theory assumes that alcohol or drug use results in a decrease in uncomfortable psychological states such as anxiety, stress, or tension, thus providing positive reinforcement to the user. This learned response continues until physical dependence develops and, like the explanation provided within the context of cognitive-behavioral models, the aversion of withdrawal symptoms becomes a reason and motivation for continued use. Learning models provide helpful guidelines for treatment planning because, as pointed out by Bandura (1969), what has been learned can be unlearned; the earlier the intervention occurs the better, since there will be fewer behaviors to unlearn.

PSYCHODYNAMIC MODELS Psychodynamic models link addiction to ego deficiencies, inadequate parenting, attachment disorders, hostility, homosexuality, masturbation, and so on (Kim et al., 2017). As noted by numerous researchers and clinicians, such models are difficult to substantiate through research since they deal with concepts difficult to operationalize and with events that occurred many years prior to the development of addictive behavior. A major problem with psychodynamic models is that the difficulties linked to early childhood development are not specific to alcoholism or addiction but are reported in connection with a variety of other psychological problems (McNeese & DiNitto, 2005). Nevertheless, current thinking relative to the use of psychodynamic models as a potential explanation for the etiology of addiction has the following beliefs in common (Dodgen & Shea, 2000):

1. Substance use and addiction can be viewed as symptomatic of more basic psychopathology.
2. Difficulty with an individual's regulation of affect can be seen as a core problem or difficulty.
3. Disturbed object relations may be central to the development of substance use disorders.

Readers are referred to Chapter 12 of *Slaying the Dragon: The History of Addiction Treatment and Recovery in America* by William L. White (1998) for a more extensive discussion of psychodynamic models in the context of the etiology of addiction.

PERSONALITY THEORY MODELS These theories make the assumption that certain personality traits predispose the individual to substance and process addictions (Haverfield, Theiss, & Leustek, 2016; Tutenges, Kolind, & Uhl, 2015). An "alcoholic personality" is often described by traits such as being dependent, immature, impulsive, highly emotional, having low frustration tolerance, unable to express anger, and confused about their sex-role orientation (Catanzaro, 1967; Milivojevic et al., 2012; Schuckit, 1986; Trucco et al., 2016).

Although many tests have been constructed to attempt to identify the personality traits of a drug-addicted person, none have consistently distinguished the traits of the addicted individual from those of the nonaddicted individual. One of the subscales of the Minnesota Multiphasic Personality Inventory does differentiate alcoholics from the general population, but it may only be detecting the results of years of alcohol abuse rather than underlying personality traits (MacAndrew, 1979). The consensus among those who work in the addictions counseling arena seems to be that personality traits are not of much importance in explaining addiction because an individual can become drug dependent irrespective of personality traits (Raisitrick & Davidson, 1985).

Family Models

As noted in Chapter 14, during the infancy of the field of addictions counseling, addictions counselors were used to working only with the addict. Family members were excluded. However, it

soon became clear that family members were influential in motivating the addict to get sober or in preventing the addict from making serious changes (Selbekk, Sagvaag, & Fauske, 2015).

There are at least three models of family-based approaches to understanding the development of substance use disorders: behavioral, family systems, and family disease (Dodgen & Shea, 2000).

BEHAVIORAL MODEL A major theme of the family behavioral model is that within the context of the family, there is a member (or members) who reinforces the behavior of the abusing family member. A spouse or significant other, for example, may make excuses for the family member or even prefer the behavior of the abusing family member when he or she is under the influence of alcohol or another drug. Some family members may not know how to relate to a particular family member when he or she is not "under the influence."

FAMILY SYSTEMS MODEL There have been many studies demonstrating the role of the family in the etiology of drug use and addiction (Baron, Abolmagd, Erfan, & El Rakhawy, 2010; Selbekk et al., 2015). The family systems model focuses on the way roles in families interrelate (Tafa & Baiocco, 2009). Some family members may feel threatened if the person with the abuse problem shows signs of wanting to recover since caretaker roles, for example, would no longer be necessary within the family system if the member began behaving more responsibly. The possibility of adjusting roles could be so anxiety producing that members of the family begin resisting all attempts of the "identified patient" to shift relationships and change familiar patterns of day-to-day living within the family system.

FAMILY DISEASE MODEL This approach points to the family as the source of addiction; that addiction is not only passed on genetically but maintained environmentally by the entire family. Advocates suggest that treatment with the individual alone is not enough to end addiction. Because the family as an entity has a disease, all must enter counseling or therapy for improvement to occur even when there is only one identified user in the family (Wiens & Walker, 2015). This is very different from approaches to systemic family counseling, in which the counselor will work with one or several members of a family in relation to family work needing to be done. Criticisms of this approach suggest that it puts undue blame for problems on members of the family with less power and culpability for family problems when counselors inappropriately apply this theory.

The Disease Model

> *The disease concept follows the medical model and posits addiction as an inherited disease that chemically alters the body in such a way that the individual is permanently ill at a genetic level.*
> *(Lee et al., 2013, p. 4)*

E. M. Jellinek (1960) is generally credited with introducing this controversial and initially popular model of addiction in the late 1930s and early 1940s (Stein & Foltz, 2009). However, it is interesting to note that, as early as the later part of the 18th century, the teachings and writings of Benjamin Rush, the Surgeon General of George Washington's revolutionary armies, actually precipitated the birth of the American disease concept of alcoholism as an addiction (White, 1998). In the context of this model, addiction is viewed as a primary disease rather than being secondary to another condition (reference the discussion, earlier in this chapter, of psychological models). Jellinek's disease model was originally applied to alcoholism but has been generalized to addiction to other drugs. In conjunction with his work, Jellinek also described the progressive

stages of the disease of alcoholism and the symptoms connected with each stage. These stages (prodromal, middle or crucial, and chronic) were thought to be progressive and not reversible. Consistent with this concept of irreversibility is the belief that addictive disease is chronic and incurable. Once the individual has this disease, according to the model, it never goes away, and there is no treatment method that will enable the individual to use again without the high probability that the addict will revert to problematic use of the drug of choice (Wiens & Walker, 2015). One implication of this philosophy is that the goal for an addict must be abstinence, which is the position taken by Alcoholics Anonymous (Fisher & Harrison, 2005). In addition, the idea that addiction is both chronic and incurable is the reason that addicts who are maintaining sobriety refer to themselves as "recovering" rather than as "recovered."

Recovery and the Disease Model

The word *recovery* was first used by Alcoholics Anonymous in 1939. It is significant because we use the term *recovery* in the context of disease or illness rather than in connection with moral failure or character deficits. This reinforces using the disease model to explain the etiology of addiction.

Interestingly, although Jellinek's disease model of addiction has received wide acceptance (Ferentzy & Turner, 2012), the research from which he derived his conclusions has been questioned (Lewis, 2017).

Jellinek's (1960) data were gathered from questionnaires. Of the 158 questionnaires distributed, 60 were discarded; no questionnaires from women were used. The questions about the original research, which led to the conceptualization of the "disease" model, have led to controversy. On the one hand, the articulation of addiction as a disease removes the moral stigma attached to addiction and replaces it with an emphasis on treatment of an illness, results in treatment coverage by insurance carriers, and sometimes encourages the individual to seek assistance much like that requested for diabetes, hypertension, or high cholesterol. On the other hand, the irreversible progression of addiction through stages does not always occur as predicted, and the disease concept may promote the idea for some individuals that one is powerless over the disease, is not responsible for behavior, may relapse after treatment, or may engage in criminal behavior to support the "habit."

The Public Health Model

The public health model holds that addiction results from societal influences. Consider how public education, laws, social taboo, or even social norms and roles might prevent or encourage a person from engaging in various addictive behaviors. The public health model did not originally focus on psychobehavioral problems and disorder, but rather focused on promoting healthy behaviors. With time this changed to large-scale epidemiology efforts. Consider the important role of public health organizations such as the Substance Abuse and Mental Health Services Administration (SAMHSA), the World Health Organization (WHO), or the Centers for Disease Control and Prevention (CDC). One can point to historical differences in societal cohorts in support of this model. For example, in a study of 64,000 youth from 1976 to 2004, it was found that historical time or historical variables affecting social roles (onset of marriage, parenting, etc.) and legal drinking age is important to individual differences in binge drinking.

As noted by Ferentzy and Turner (2012), the 20th-century psychiatrist Paul Lemkau, founding chairperson of the Mental Hygiene Department in the Johns Hopkins University School of Public Health, was one of the first to apply a public health model to mental disorders. Lemkau promoted the establishment of community, rather than residential, treatment centers because he believed that mental health, including the treatment of addiction, was a public rather than a private issue. Lemkau believed that when individuals did not engage in healthy behaviors and became addicted, it was because of the impact of social issues. He viewed addiction as a societal disease, in direct contrast to the more dominant, individualistic conceptions associated with the disease model.

The Developmental Model

As noted by Sloboda, Glantz, and Tarter (2012), the etiology of addiction can also be explicated by applying a developmental framework to understand the factors that increase or decrease risks for the individual to use or misuse drugs. They posited that vulnerability is never static or unchanging but varies across the lifespan. Supporting the developmental model, one can point to how early use during dynamic developmental periods (early and late adolescents) can influence long-term health, well-being, and addictive neurobiological pathways (e.g., cocaine use; Lopes et al., 2017). A developmental researcher might ask, "During what precise age range is the onset of marijuana use most risky for adult use, and does this age range vary across sex?"

Sloboda and her colleagues (2012) examined some of the key developmental competencies associated with the following developmental stages: prenatal through early childhood, middle childhood, adolescence, late adolescence/early adulthood, and adulthood. This research provided detailed examples of competencies that must be mastered during each of these developmental stages to decrease the possibility of engaging in risky behavior that includes the use and misuse of drugs. Readers interested in exploring the developmental model for understanding the etiology of addiction will find the Sloboda and colleagues' article an excellent starting point for additional study as well as Richard Gill's (2014) edited volume, *Addictions from an Attachment Perspective: Do Broken Bonds and Early Trauma Lead to Addictive Behaviours?* Eiden and colleagues (2016) also published some interesting research on the developmental model.

Biological Models

Biophysiological and genetic theories assume that addicts are constitutionally predisposed to develop dependence on drugs. These theories or models support a medical model of addiction, apply disease terminology, and often place the responsibility for treatment under the purview of physicians, nurses, and other medical personnel. Usually, biological explanations branch into genetic and neurobiological discussions.

GENETIC MODELS Although genetic factors have never really been established as a definitive cause of alcoholism, the statistical associations between genetic factors and alcohol use disorders are very strong (Farris et al., 2015; Lebowitz & Appelbaum, 2017). For example, it has been established that adopted children more closely resemble their biological parents than their adoptive parents when it comes to their use of alcohol (Dodgen & Shea, 2000; Goodwin, Hill, Powell, & Viamontes, 1973); alcoholism occurs more frequently in some families than others (Cotton, 1979); concurrent alcoholism rates are higher in monozygotic twin pairs than in dizygotic pairs (Kaij, 1960); and children of alcoholics can be as much as seven times more likely to be addicted than children

whose parents are not alcoholic (Koopmans & Boomsina, 1995). Because of such data, some genetic theorists have posited that an inherited metabolic defect may interact with environmental elements and lead, in time, to alcoholism. Some research points to an impaired production of enzymes within the body and yet other lines of inquiry point to the inheritance of genetic traits that result in a deficiency of vitamins (probably the vitamin B complex), which leads to a craving for alcohol as well as the accompanying cellular or metabolic changes.

There have been numerous additional lines of inquiry that have attempted to establish a genetic marker that predisposes a person toward alcoholism or other addictions (Bevilacqua & Goldman, 2010). Studies that examined polymorphisms in gene products and DNA, the D2 receptor gene, and even color-blindness as factors have all been conducted and then later more or less discounted. Genetic research on addiction shows potential, but is a complex activity given the fact that each individual carries genes located on 23 pairs of chromosomes. The Human Genome Project, which is supported by the National Institutes of Health and the U.S. Department of Energy, is conducting some promising studies (NIAAA, 2000).

NEUROBIOLOGICAL MODELS Neurobiological models are complex (Jacob, 2013) and have to do with the neurotransmitters in the brain that serve as its chemical messengers (Hammer et al., 2012; Kranzler & Li, 2008; Wilcox, Gonzales, & Miller, 1998). Almost all addictive drugs, as far as we know, seem to have primary transmitter targets for their actions (Kwako, Momenan, Litten, Koob, & Goldman, 2016). The area of the brain in which addiction occurs is the limbic system or the emotional part of the brain. The limbic part of the brain refers to an inner margin of the brain just outside the cerebral ventricles, and the transmitter dopamine is key in its activity in the limbic system and the development of addiction. As a person begins to use a drug, changes in brain chemistry in the limbic system begin to occur and lead to addiction. Current thinking is that these changes can also be reversed by the introduction of other drugs in concert with counseling and psychotherapy.

Sociocultural Models

Sociocultural models have been formulated by making observations of the differences and similarities between cultural groups and subgroups. As noted by Goode (1972), the social context of drug use strongly influences drug definitions, drug effects, drug-related behavior, and the drug experience. These are contextual models and can only be understood in relation to the social phenomena surrounding drug use. A person's likelihood of using drugs, according to these models, the way he/she behaves, and the way drug use and addiction are defined are all influenced by the sociocultural system surrounding the individual (Frings, Albery, & Monk, 2017).

SUPRACULTURAL MODELS The classic work of Bales (1946) provided some hypotheses connecting culture, social organization, and the use of alcohol. He believed that cultures that create guilt, suppress aggression and sexual tension, and support the use of alcohol to relieve those tensions will probably have high rates of alcoholism. Bales also hypothesized that the culture's collective attitude toward alcohol use could influence the rate of alcoholism. Interestingly, he categorized these attitudes as favoring (1) abstinence, (2) ritual use connected with religious practices, (3) convivial drinking in a social setting, and (4) utilitarian drinking (drinking for personal reasons). The fourth attitude (utilitarian) in a culture that produces high levels of tension is the most likely to lead to high levels of alcoholism; the other three attitudes lessen the probability of high alcoholism rates. Another important aspect of Bales's thinking is

the degree to which the culture offers alternatives to alcohol use to relieve tension and to provide a substitute means of satisfaction. A culture that emphasizes upward economic or social mobility will frustrate individuals who are unable to achieve at such high levels, increasing the possibility of high alcoholism rates.

In 1974, Bacon theorized that high rates of alcoholism were likely to exist in cultures that combine a lack of indulgence toward children with demanding attitudes toward achievement and negative attitudes toward dependent behavior in adults. An additional important factor in supracultural models is the degree of consensus in the culture regarding alcohol and drug use. In cultures in which there is little agreement, a higher rate of alcoholism and other drug use can be expected. Cultural ambivalence regarding the use of alcohol and drugs can result in the weakening of social controls, which allows the individual to avoid being looked upon in an unfavorable manner.

CULTURE-SPECIFIC MODELS Culture-specific models of addiction are simultaneously fascinating and hampered by the possibilities inherent in promoting stereotypes and overgeneralizing about the characteristics of those who "seem" to fit the specific culture under consideration (Hellman et al., 2015). For example, there are many similarities between the French and Italian cultures since both are predominantly Catholic and both support wineries and have populations that consume alcohol quite freely (Levin, 1989). The French drink both wine and spirits, with meals and without, at home as well as away from the family. The French often consider it bad manners to refuse a drink, and the attitudes toward drinking too much are usually quite liberal. The Italians drink mostly wine, with meals and at home, and they strongly disapprove of public misconduct due to the overconsumption of wine. They do not pressure others into accepting a drink.

The Impact of Culture on Alcohol Consumption

In some Italian American families, children over the age of about 10 can drink wine with dinner but are admonished never to drink large amounts of wine; wine is to be enjoyed in social situations and is never to be consumed in excess. As a result, these children usually become adults who drink wine in moderation and never have problems derived by too much consumption of alcoholic beverages.

As the reader might expect from prior discussion, the rate of alcoholism in France is much more problematic than that which exists in Italy. Although the authors would agree that the prevailing customs and attitudes relating to the consumption of alcohol in a specific culture can provide insight and have usefulness as a possible explanation of the etiology of addiction in the culture under consideration, readers should be cautious about cultural stereotyping and make every attempt to address diversity issues in counseling as outlined in the current version of the *Code of Ethics* of the American Counseling Association (ACA) as well as the ACA guidelines for culturally competent counseling practices. (See the ACA website at www.counseling.org.)

SUBCULTURAL MODELS It should also be briefly noted that there have been many investigations of both sociological and environmental causes of addiction and alcoholism at the subcultural level. Factors related to age, gender, ethnicity, socioeconomic class, religion, and family background can create different patterns within specific cultural groups (McNeese & DiNitto, 2005;

White, 1998, 2014). They can also be identified as additional reasons why counselors and other members of the helping professions must vigilantly protect the rights of clients to be seen and heard for who they really are rather than who they might be assumed to resemble.

Multicausal Models

The great challenge to understanding the etiology of drug use and drug use disorders is the complexity of the phenomenon itself. (Sloboda et al., 2012, p. 954)

At this point in your reading you may be wondering which of these etiological models or explanations of addiction are the correct model. As you may have already surmised, although all of these models are helpful and important information for counselors beginning their studies in addictions counseling, no single model adequately explains why some individuals become addicted to a substance and others do not. An important advance in the study of addiction is the realization that addiction is probably not caused by a single factor, and the most likely models for increasing our understanding and our development of treatment options are multivariate (Buu et al., 2009; McNeese & DiNitto, 2005; Stevens & Smith, 2005). Even though there may be some similarities in all addicted individuals, the etiology and motivation for the use of drugs varies from person to person. For some individuals, there may be a genetic predisposition or some kind of a physiological reason for use and later addiction to a drug. For others, addiction may be a result of an irregularity or disturbance of some kind in their personal development without a known genetic predisposition or physiological dysfunction. The possible debate over which model is the correct model is valuable only because it assists the practitioner to see the importance of adopting an interdisciplinary or multicausal model.

An interesting example of a multicausal model that has been proposed is the *syndrome model* of addiction (Shaffer et al., 2004). This model suggests that the current research pertaining to excessive eating, gambling, sexual behaviors, shopping, substance use, and so on does not adequately capture the origin, nature, and processes of addiction. The researchers believe that the current view of addictions is very similar to the view held during the early days of AIDS awareness, when rare diseases were not recognized as opportunistic infections of an underlying immune deficiency syndrome. The syndrome model of addiction suggests that there are multiple and interacting antecedents of addiction that can be organized in at least three primary areas: (1) shared neurobiological antecedents, (2) shared psychosocial antecedents, and (3) shared experiences and consequences. Another promising example of a multicausal model is the *integral model* (Amodia, Cano, & Eliason, 2005). This approach examines substance addiction etiology and treatment from a four-quadrant perspective adapted from the work of Ken Wilbur. It also incorporates concepts from integrative medicine and transpersonal psychology. Readers are referred to the references cited in this subsection for more complete information about both the syndrome and integral models.

The multicausal model is similar to the public health model recently adopted by health care and other human service professionals. This model conceptualizes the problem of addiction as an interaction among three factors: the "agent" or drug, the "host" or person, and the "environment," which may be comprised of a number of entities. When the agent or drug interacts with the host, it is important to realize that there are a variety of factors within the host—including the person's genetic composition, cognitive structure and expectations about drug experiences, family background, and personality traits—that must be taken into consideration as a treatment plan is developed. Environmental factors that need to be considered include social, political, cultural,

and economic variables. When a counselor or therapist uses a multicausal model to guide the diagnosis and treatment planning process, the complex interaction of several variables must be taken into consideration.

Summary and Some Final Notations

This chapter provided an overview of the historical evolution of approaches to the prevention of addiction in the United States. It chronicled the movement from the rudimentary and unregulated approaches of early practitioners to the more carefully regulated, credentialed, and evidence-based methods in use today. The social and political influences on the attitudes toward the use of drugs for both recreational and medical purposes were also addressed. A brief review of the federal government's role in funding agencies focused on the prevention of substance use and addiction as well as the provision of treatment for addicted individuals provided the background for some of the current policies influencing the prevention of addiction. Descriptions of the moral, psychological, family, disease, public health, developmental, biological, sociocultural, and multicausal models for understanding the etiology of addiction provided the reader with the background to understand topics covered in subsequent chapters of the text.

In addition to this first chapter on history and etiological models of addiction, Part 1 of this text, *Introduction to Addictions Counseling*, includes chapters on substance and process addictions, professional issues, and assessment and diagnosis of addiction. These introductory chapters provide the background for Part 2, *The Treatment of Addictions*, which provides a thorough examination of current treatment modalities. The seven chapters in this section address motivational interviewing, psychotherapeutic approaches, co-occurring disorders and addictions treatment, group work and addictions, pharmacological treatment of addictions, 12-step facilitation of treatment, and maintenance and relapse prevention. Part 3, *Addictions in Family Therapy, Rehabilitation, and School Settings*, provides the reader with needed perspectives regarding variations in treatment modalities so necessary for competent counseling in specific settings. The chapters in this section discuss interventions with couples and families, persons with disabilities and addictions, and prevention programs for children, adolescents, and college settings. Part 4, *Cross-Cultural Counseling in Addictions*, addresses ethnic diversity, gender and addictions, and lesbian, gay, bisexual, transgender, and questioning affirmative addiction treatment.

The final chapter presents an interesting discussion of the characteristics and issues connected with both inpatient and outpatient treatment of addiction.

Although it is impossible to include every conceivable topic that would be helpful to a counselor or therapist beginning the study of addictions counseling in a single text, we believe the information in this text is comprehensive enough in scope and sufficiently detailed to provide an excellent foundation for follow-up courses as well as supervised practicum and internship experiences for those wishing to develop a specialization in addictions counseling.

Useful Websites

The following websites provide additional information relating to the chapter topics.

FUNDING OPPORTUNITIES

Health Resources & Services Administration (HRSA)
www.hrsa.gov/grants

National Institute on Alcohol Abuse and Alcoholism (NIAAA)
www.niaaa.nih.gov

National Institutes of Health (NIH) Grants and Funding Opportunities
www.grants.nih.gov/grants/index.cfm

National Institute on Drug Abuse (NIDA) Funding
www.drugabuse.gov/funding/

National Institute of Mental Health (NIMH)
www.nimh.nih.gov/funding/index.shtml

U.S. Department of Health and Human Services (DHHS), Enhancing Practice Improvement in Community-Based Care for Prevention and Treatment of Drug Abuse or Co-occurring Drug Abuse and Mental Disorders
www.samhsa.gov/grants

FUNDING SOURCES FOR PREVENTION PROGRAMS

The Catalog of Federal Domestic Assistance (CFDA)
www.beta.sam.gov
A database of all federal programs available to state and local governments (including the District of Columbia); federally recognized Indian tribal governments; territories (and possessions) of the United States; domestic public, quasi-public, and private profit and nonprofit organizations and institutions; specialized groups; and individuals.

Federal Register (FR)
www.federalregister.gov
The *Federal Register* is the official daily publication for all federal agency funding notices. The bound version can be viewed at a local or university library.

The Foundation Center
www.foundationcenter.org/find-funding
The Foundation Center's mission is to support and improve institutional philanthropy by promoting public understanding of the field and helping grant-seekers succeed.

Foundations & Grantmakers Directory
www.foundations.org/grantmakers.html
This directory lists foundations and grant makers by name.

The Grantsmanship Center
www.tgcigrantproposals.com
This resource is designed to help nonprofit organizations and government agencies write better grant proposals and develop better programs. A starting point for accessing grant-related information and resources on the Internet.

GuideStar
www.guidestar.org
GuideStar is a free information service on the programs and finances of more than 600,000 charities and nonprofit organizations. The database of nonprofit organizations is searchable by several different criteria. The site also offers news on philanthropy and other resources for donors and volunteers.

The Research Assistant
www.theresearchassistant.com/funding/index.asp
Resources for new and minority drug use researchers.

The Robert Wood Johnson Foundation (RWJF)
www.rwjf.org
RWJF, the largest U.S. foundation devoted to improving the health and health care of all Americans, funds grantees through both multisite national programs and single-site projects.

U.S. Department of Education (DOE)
www.ed.gov/topics/topics.jsp?&top=Grants+%26+Contracts
DOE only posts those grants currently open for competition on this site.

U.S. Department of Housing and Urban Development
www.hud.gov/program_offices/spm/gmomgmt/grantsinfo

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CHAPTER

2 Substance Addictions

Elizabeth H. Shilling
Wake Forest School of Medicine
Laura J. Veach
Wake Forest School of Medicine
Jennifer L. Rogers
Wake Forest University
Regina R. Moro
Boise State University

Many tears are shed by those struggling with addiction. Tears are often accompanied by anger, frustration, fear, guilt, love, and loss. Think of this composite case: Jerry's struggle with addiction eventually cost him his life and brought ongoing grief to his splintered family, which is torn apart by an illness they can barely grasp. Jerry had been a star athlete, kind brother, great son—now gone at 21, lost to our world. So many questions remain: Why did he get addicted? Why didn't he recover? Why couldn't we help him? So many whys, yet so few answers. The nature of addiction continues to baffle not just Jerry's surviving loved ones, but many other loved ones worldwide who have lost so much due to addiction. It is equally baffling to differentiate key recovery predictors, making is difficult to determine which variables separate individuals who recover from individuals who do not. Looking for answers brings us to this chapter, where we describe the search for knowledge about drugs, the brain, and addiction disorders.

Current estimates indicate that the extent of addiction disorders, with the exclusion of tobacco addiction, involves approximately 20.1 million people age 12 or older (Substance Abuse and Mental Health Services Administration [SAMHSA], 2017). The American Psychiatric Association (APA, 2013) estimates that in any given year, approximately 8.5% of Americans age 18 years or older meet new diagnostic criteria for an alcohol use disorder, 1.5% for cannabis use disorder, and approximately 0.3% for cocaine stimulant use disorder. Throughout history, humans have used drugs to achieve desired changes or experiences; even ancient warriors "fortified themselves with alcohol before battle to boost their courage and decrease sensitivity to pain" (Weil & Rosen, 1983, p. 20). For some people, the ingestion of chemicals results in a substance use disorder, which is discussed at length in this chapter. For others, certain behaviors, such as gambling, may trigger a process addiction, which is reviewed in Chapter 3. The use of the term *addiction* rather than *dependency* or *habit* provides clarity to the understanding of substance use disorders: "By emphasizing the behavioral aspects of compulsive substance use, addiction captures the chronic, relapsing, and compulsive nature of substance use that occurs despite the associated negative consequences" (Kranzler & Li, 2008, p. 93).

This chapter provides an overview of the literature about substances of addiction and the neurobiological, physiological, and psychological factors contributing to substance use, abuse, dependence, withdrawal, and addiction recovery.

SUBSTANCES OF ADDICTION

There are many chemical substances with addictive properties. The most recent data in the United States regarding patterns of illicit drug use point upward (National Institute on Drug Abuse [NIDA], 2015). Drugs are also increasingly available at higher concentration levels. Substances are classified into the following categories: depressants, stimulants, cannabinoids, hallucinogens, and opioids. Table 2.1 shows a NIDA chart of commonly abused illicit and prescription drugs and the Drug Enforcement Agency (DEA) Schedule regulating each drug, listing its route of administration, effects, and health risks (NIDA, 2018a). It is important to understand the most commonly abused substances that jeopardize the health and well-being of an individual.

Depressants

ALCOHOL By far, the most abused mood-altering substance today is *ethanol*, or *ethyl alcohol*, with approximately 70% of people in the United States over age 18 reporting alcohol consumption within the previous 12 months in 2012 (National Institute on Alcohol Abuse and Alcoholism [NIAAA], 2017) and about 43% of drinkers reporting binge alcohol use in the past 30 days (Center for Behavioral Health Statistics and Quality, 2015). Note the alcohol consumption per capita values displayed in Figure 2.1. The NIAAA (2017) states that excessive drinking is a major cause of death, ranking third in the United States in preventable causes of death. This translates to one preventable fatality that is alcohol related every 50 minutes, and nearly $44 billion annually in total costs for alcohol-related crashes (Centers for Disease Control and Prevention [CDC], 2017a). In 2013, 57.7% of whites age 12 and above reported current alcohol use, followed by 47.4% of persons reporting two or more races, 43.6% of African Americans, 43.0% for persons of Hispanic descent, 38.4% of Native Hawaiians or Other Pacific Islanders, 37.3% of persons identified as American Indians or Alaska Natives, and 34.5% for those identified as Asian (SAMHSA, 2013). The SAMHSA data further showed the highest rate of binge-drinking patterns was noted in Native Hawaiians or Other Pacific Islanders (24.7%).

Historians generally believe alcohol was discovered about 10,000 years ago, after berries or fruits left too long in the sun began fermenting, resulting in a crude version of wine (Erickson, 2001; Siegal & Inciardi, 2004). Distilling alcohol to get higher potency began around 800 A.D. in Arabia. While searching for an alchemy formula, Jabir ibn Hayyan (also known as Geber) burned impurities in wine and thus discovered distilled spirits (Spicer, 1993). Distillation, however, was not popular until the 13th century, when a university professor in France, Arnaud de Villeneuve, promoted this new type of alcohol as a cure for diseases (Spicer, 1993). Alcohol is classified as a depressant to the central nervous system (CNS). As such, it was often used as an anesthetic or sleep aid. Drinking to achieve relaxation and euphoria contributed to the reputation of alcohol as a desirable social lubricant due to its disinhibition effects. However, alcoholism leads to critical areas of damage to key executive brain functioning with a "profound untoward effect on the cerebrum and cerebellum" (Sullivan & Pfefferbaum, 2005, p. 590).

The critical ingredient in all forms of alcohol is ethanol. It is important for counselors working with clients who are discussing their drinking to address the common misconception that some alcoholic beverages are safer or less addicting than others. Some individuals have rationalized that since beer, for example, can be as low as 4–5% ethanol, it is less harmful, and hence less addicting. What is important to understand is that "the same quantity of alcohol is consumed if someone drinks either a 12-ounce can or bottle of beer, a three- to four-ounce glass of wine, or a mixed drink made with one and one-half ounces of distilled spirits" (Siegal & Inciardi, 2004, p. 75).