

## **Dynamic Pathways to Recovery from Alcohol Use Disorder**

Alcohol use disorder is by far the most prevalent substance use disorder in the general population and is a major contributor to disease worldwide. Recovery from the disorder is a dynamic process of change, and individuals take many different routes to resolve their alcohol problems within their search to achieve a life worth living. Total abstinence is not the only solution, and robust recovery involves more than changing drinking practices. This volume brings together multidisciplinary research on recovery processes, contexts, and outcomes, as well as new ideas about the multiple pathways involved. Experts chart the individual, social, contextual, community, economic, regulatory, policy, and structural influences that are vital to understanding alcohol use disorder and recovery. The book recommends new approaches to conceptualizing and assessing recovery alongside new avenues for research, community engagement, and policy that constitute a major shift in the practice and policy landscape.

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# **Dynamic Pathways to Recovery from Alcohol Use Disorder**

## **Meaning and Methods**

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**CAMBRIDGE**  
UNIVERSITY PRESS

Cambridge University Press

978-1-108-83871-9 — Dynamic Pathways to Recovery from Alcohol Use Disorder

Edited by Jalie A. Tucker, Katie Witkiewitz

Frontmatter

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## CAMBRIDGE UNIVERSITY PRESS

University Printing House, Cambridge CB2 8BS, United Kingdom

One Liberty Plaza, 20th Floor, New York, NY 10006, USA

477 Williamstown Road, Port Melbourne, VIC 3207, Australia

314–321, 3rd Floor, Plot 3, Splendor Forum, Jasola District Centre, New Delhi – 110025, India

103 Penang Road, #05–06/07, Visioncrest Commercial, Singapore 238467

Cambridge University Press is part of the University of Cambridge.

It furthers the University's mission by disseminating knowledge in the pursuit of education, learning, and research at the highest international levels of excellence.

[www.cambridge.org](http://www.cambridge.org)

Information on this title: [www.cambridge.org/9781108838719](http://www.cambridge.org/9781108838719)

DOI: 10.1017/9781108976213

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First published 2022

*A catalogue record for this publication is available from the British Library.*

*Library of Congress Cataloging-in-Publication Data*

Names: Tucker, Jalie A. (Jalie Ann), 1954- editor. | Witkiewitz, Katie, editor.

Title: Dynamic pathways to recovery from alcohol use disorder : meaning and methods / edited by Jalie A. Tucker, University of Florida, Katie Witkiewitz, University of New Mexico.

Description: Cambridge, United Kingdom ; New York, NY : Cambridge University Press, 2022. | Includes bibliographical references and index.

Identifiers: LCCN 2021020782 (print) | LCCN 2021020783 (ebook) | ISBN 9781108838719 (hardback) | ISBN 9781108972260 (paperback) | ISBN 9781108976213 (epub)

Subjects: LCSH: Alcoholism–Relapse–Prevention. | Alcoholics–Rehabilitation.

Classification: LCC HV5275 .D93 2022 (print) | LCC HV5275 (ebook) | DDC 362.292/8—dc23

LC record available at <https://lcn.loc.gov/2021020782>

LC ebook record available at <https://lcn.loc.gov/2021020783>

ISBN 978-1-108-83871-9 Hardback

ISBN 978-1-108-97226-0 Paperback

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To G. Alan Marlatt, our mentor and muse (JAT & KW)

To my son, who found his recovery pathway (JAT)

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## Foreword

Alcohol use disorder (AUD) abounds around the world, and most people who recover (as most indeed do) never receive help from formal treatment or mutual help groups. For most of those who do seek specialist care, their recovery began long before the first treatment contact and continues long afterward. Understanding recovery requires a wide perspective, and that is exactly what this book offers. It spans international contexts, professional and lived experience, biology and economics, clinical and research expertise, and vistas ranging from micro to macro.

I am personally pleased that our field's purview has broadened from treatment to recovery. Whatever clinical services people may receive comprise a very small amount of time within their lifespan. Neither treatment nor recovery is an event, but rather a process that unfolds over time. Treatment for addiction has so often been thought of as an acute episode after which the case is closed, but recovery is developmental and evolving. Like AUD, recovery is not binary: present or absent. It encompasses physical and mental health, social functioning, well-being, and spirituality. Aristotle observed that one swallow or one day does not make a summer, and a drink does not terminate recovery. It is a moment in a life story.

The addiction field has been more generally plagued by dichotomous thinking, often with a moralistic good/bad overtone. Urine samples (and by implication, people) are "clean" or "dirty." Based on an arbitrary cut-off point on a continuum of severity, people are classified as having or not having a disorder. We talk about "success rates" – a concept seldom used in managing chronic conditions like diabetes or hypertension. The concept of relapse is dishonestly binary as well, implying that there are only two possible outcomes: perfection or disaster. In fact, recovery outcomes vary all along a number of continuous dimensions. In AUD treatment samples, about one in four people abstain for at least a year, a discouraging "failure rate," but among the rest alcohol consumption decreases by 86 percent on average with improved health and functioning. Better to broaden the horizon beyond seeing only day or night to appreciate the richly varied hues of recovery.

This book was completed during the COVID-19 pandemic, affording an apt parallel for conceptualizing both the scope and the resolution of AUD. Those with severe symptoms represented a small minority of all who contracted the virus. Mortality was only about 2 percent on average but with the sheer scope of

the pandemic the numbers grew to tragic and almost unimaginable proportions. There were health disparities for people of color. For some, recovery with or without treatment was relatively rapid whereas other survivors suffered long-term complications. Containing the pandemic required a perspective far broader than treating individual cases, and misinformation hobbled prevention.

This volume offers a fresh array of lenses through which to understand recovery. You can try them on much as an optometrist flips through lenses in search of clear resolution. For scientists there is a rich array of methodology for future research. There are interventions and levels of analysis for individuals, families, social contingencies, and communities. It is a suitable menu of perspectives within a public health understanding of AUD. Sample your accustomed areas of interest, and also venture into what are for you less familiar offerings. It's a rich feast.

William R. Miller, Ph.D.  
*University of New Mexico*



## Preface

Based on 50 years of research, the alcohol field has shifted from a monolithic abstinence-oriented view of alcohol problems, treatment approaches, and recovery pathways to a pluralistic view that recognizes the heterogeneous, multi-dimensional nature of these central features of alcohol use disorder (AUD). Positive change is a dynamic process that occurs over time and ranges from reduced alcohol use and associated problems to abstinence and improved functioning and well-being. Although extant recovery definitions vary with respect to the emphasis placed on abstinence, consensus has emerged that successful recovery is broader than beneficial reductions in drinking practices and entails improvements in health, functioning, and well-being. Most individuals who develop an AUD or have sub-clinical problems eventually reduce their risky drinking practices and experience AUD symptom reduction, and some will further achieve and maintain “recovery,” broadly defined as encompassing improved health, well-being, and life circumstances.

This edited book assembles chapters by leading experts whose work informs the current state of knowledge concerning pathways to recovery from AUD, which are diverse and dynamic in nature. The book gathers together knowledge about AUD recovery offered by multiple disciplines and stakeholder groups, including alcohol researchers, service providers, policy-makers, mutual help groups, and persons with AUD. In line with this expanded view of recovery pathways, the book is organized using a socio-ecological model of influences on health and well-being that range from individual to social and community to regulatory, policy, and structural influences. Chapters present recovery research that ranges from micro to meso to macro approaches to understanding, investigating, and promoting positive behavior change and improved well-being. Historically, the bulk of work on recovery was conducted from an individual, often clinical perspective, with emphasis on promoting abstinence. While these contributions are present in the book, additional chapters cover topics that broaden the domains of potential contextual influence to include social, community, economic, and structural variables. The book also extends the focus of assessment in recovery research to include changes in functioning, life circumstances, and well-being, in addition to drinking practices. Chapters on methodologies that have utility for the different levels of investigation are also included and present illustrative examples from AUD research. Methodology chapters are

written for researchers who may consider using the methods and are not necessarily expert methodologists.

Following an introductory chapter that summarizes historical and contemporary views of AUD recovery, the book is divided into three main sections organized around micro, meso, and macro levels of analysis. Each section includes substantive content chapters followed by chapters on methodologies useful for research within each level of analysis.

The micro level chapters share a focus on the individual as change agent, the dominant view of much clinical research and practice. The five content chapters cover individual level research in relevant domains, including biopsychosocial processes of change in AUD recovery (Witkiewitz & Maisto), self-regulation strategies in recovery (Roos, Bowen, & Kober), neuropsychological and biological influences on drinking behavior change (Bates, Price, & Buckman), lifespan developmental perspectives on recovery mechanisms (Lee, Zhao, Britton, Saviano, Kideys, Li, Boulter, Frick, & Sher), and mutual help approaches and mechanisms of change (Tonigan). Two methodology chapters describe quantitative methods useful in micro level research on AUD recovery processes and outcomes, including time-varying effect modeling (Linden-Carmichael, Stull, Scott, & Dennis) and latent variable mixture modeling (Cheong, Wilson, & Lee). Taken together, these chapters contribute to a broader understanding of how individual behaviors and biopsychosocial processes associated with individual behavior change may interact to dynamically influence AUD recovery processes over time.

The meso level chapters share a focus on understanding and promoting individual behavior change within the natural environments in which change occurs across the spectrum of problem severity from mild to moderate to serious. Although the meso level chapters focus on individual change, they move beyond an exclusive focus on the minority of affected persons who seek treatment and consider broader contextual influences on beneficial change in alcohol-related and alcohol-free behavior patterns. The four content chapters variously cover patterns, contexts, and the behavioral economics of natural recovery from AUD, the dominant pathway in the population with problems (Tucker); individual behavioral interventions to incentivize sobriety and enrich the natural environment with appealing alternatives to drinking (Murphy, Dennhardt, & Gex); family and social processes in AUD recovery (Jarnecke, Brown, & Melkonian); and community-based harm reduction approaches for AUD (Collins, Clifasefi, Williams, Black Bear, & The LEAP Community Advisory Board). Three methodology chapters describe assessment tools and quantitative methods useful in meso level research on AUD recovery, including mobile technology to understand and improve recovery (Pearson, Emery, & Schwebel), quantitative methods for measuring and modeling social network data in studies of recovery in social context (Hallgren), and measures assessing substance use contexts and substance-free reinforcement (Yurasek, Acuff, & Berry). Collectively, these chapters contribute to a broader understanding of

the economic, social, and other contextual features that promote recovery within the environments in which individuals seek to change.

The macro level chapters move beyond concern with directly influencing individual behavior change and share a focus on understanding and creating environments, resources, incentives, and policies to promote harm reduction and recovery. Four content chapters describe recovery communities, resources, settings, and “recovery capital” (Best, Hargreaves, Hodgson, & Patton); disparities in alcohol treatment access in rural areas and opportunities for change (Snell-Rood, Bensley, & Schmidt); recovery-oriented systems of care and the organized recovery movement (Ashford); and alcohol control policy and regulations to promote AUD recovery (Kerr & Subbaraman). Three methodology chapters variously describe causal inference approaches to studying recovery (Steinley), a community-academic collaboration to design a mobile application (“SURE Recovery”) for use by people experiencing alcohol and drug problems (Bowen, Getty, Hogan, Lennon, Long, Strang, & Neale) and economic methods to evaluate AUD recovery programs including outcome domains and policy issues (Horn). Together, these chapters contextualize micro and meso level influences on recovery within broader macro environments spanning community organizations and resources, treatment accessibility, economic factors, and drug-related policies.

The chapter authors comprise a diverse multi-disciplinary group of experts on their chapter topic who range from very senior to rising scholars in the field. Their collective body of work covers established and new knowledge about AUD recovery from multiple perspectives and levels of analysis and will guide the path forward for recovery research and application. In our final concluding chapter (Witkiewitz & Tucker), we revisit chapter material and conceptualizations of recovery, identify and describe key measurement domains, and identify unresolved issues and directions for future research. Based on the latest research and topics discussed throughout the book, our main conclusion is that the field is at a critical turning point for understanding and supporting AUD recovery. After nearly a century focused on abstinence as the only possible path to recovery, the broader research, treatment, community, and policy landscape has started to consider extending definitions of recovery to include alternative pathways and a conceptualization of recovery as outlined in the introductory chapter of the book. Correspondingly, new research, assessment, analysis, and community engagement methods are needed to capture nuanced changes in life-health functioning and the dynamic contextual and multilevel influences that will support heterogeneous recovery pathways.

Consistent with the diverse chapter authors and scope of topics, the book is intended for a similarly broad readership, including addiction scholars and practitioners as well as trainees ranging from advanced undergraduates to graduate students to post-doctoral fellows. Given current emphasis on the delivery of evidence-based AUD services, a volume that compiles established and cutting edge findings on how to understand and promote recovery should be useful for

clinical and public health practitioners, health care administrators, policy-makers, legal and drug court personnel, and other professionals who are not addiction scholars and contribute in other vital ways to addressing the societal harm and cost of AUD. However, this book is not directly focused on treatments for AUD and other addictive disorders, about which many books have been written. Far fewer academic texts have been written about recovery, and nearly all of them focus on recovery at the individual level typically in the context of treatment or mutual help group participation. Very few present multi-disciplinary and multi-level scientific approaches to understanding and promoting recovery, and none explicitly cover methodologies important for advancing recovery research.

Overall, the book is intended to advance understanding and empirical work on recovery from an expanded perspective that includes multiple levels of analysis spanning individual to contextual to policy levels and broadens the domains of assessment important for understanding and promoting recovery. The book seeks to represent the best of current scientific work on recovery grounded in the practical realities of reaching persons with AUD for service delivery. In contrast to longstanding views that emphasize the chronic nature of AUD and the essential role of treatment and sustained abstinence in recovery, our hope is to change the narrative to highlight the high likelihood of recovery among both treated and untreated persons with AUD, the importance of achieving improvements in valued areas of living in addition to changing drinking practices, and the overarching importance of helping persons with AUD find a recovery pathway that appeals to and works for them. There are many such pathways, and our recovery-relevant theories, treatments, education, and policies need to be revised accordingly.

## Acknowledgments

We share a common scientist-practitioner and clinical scientist heritage and a longstanding interest in understanding the forces that shape the development and resolution of alcohol-related problems. We have had the privilege of learning from pioneering scientist-practitioners in the alcohol field, including Mark and Linda Sobell, G. Alan Marlatt, and William R. Miller, who posed and made great advances in addressing big picture questions of enduring significance and centrality: Who recovers and who relapses, what is the role of treatment in promoting recovery, what individual characteristics and extra-therapeutic factors help or hinder progress, and how do we characterize and serve the heterogeneity of pathways to positive change that span treatment-assisted and natural recovery and involve outcomes other than sustained abstinence from alcohol?

This book builds on their seminal work and is aimed at the heart of the matter: Who recovers, how do they do it, and how do we investigate and promote it? We stepped away from the longstanding pathology-oriented view of alcohol use disorder and addiction that focuses on problem severity, symptom reduction, abstinence, and preventing relapse; and moved towards a strength-based view that expands the definition of recovery to encompass improvements in functioning, health, life circumstances, and well-being. Early behavioral conceptions of alcohol-related problems included the latter focus, but it has received short shrift in the decades since the 1970s. We argue that the field has matured sufficiently to tackle these issues directly and to reframe recovery as a dynamic process that moves people towards a life worth living and involves myriad changes other than stopping drinking.

We are indebted to these pioneers and other basic and applied behavioral and public health scientists who laid the groundwork for this shift. We also thank the National Institute of Alcohol Abuse and Alcoholism for their research support over the years, and the University of Florida for providing J.A.T. with a sabbatical leave in the Fall of 2019 at the University of New Mexico and Center on Alcohol, Substance use, And Addictions. This gave us the gift of time to develop the book prospectus and was an uncommon opportunity for creativity and collaboration in a natural setting that inspires big thinking. The writing itself was done during the first year of the tragic COVID-19 pandemic. Several of our

contributors endured losses, and most had significant hardships of one kind or another. But this is a resilient, thoughtful, and caring group of expert contributors, and their chapters collectively offer the field a rich multi-disciplinary road-map forward to understand and promote the many pathways to recovery from alcohol use disorder.