

The Cambridge Handbook of the Development of Coping

Despite broad interest in how children and youth cope with stress and how others can support their coping, this is the first Handbook to consolidate the many theories and large bodies of research that contribute to the study of the development of coping. The Handbook's goal is field building – it brings together theory and research from across the spectrum of psychological, developmental, and related sciences to inform our understanding of coping and its development across the lifespan. Hence, it is of interest not only to psychologists but also to neuroscientists, sociologists, and public health experts. Moreover, work on stress and coping touches many areas of applied social science, including prevention and intervention science, education, clinical practice, and youth development, making this Handbook a vital interdisciplinary resource for parents, teachers, clinical practitioners, social workers, and anyone else interested in improving the lives of children.

ELLEN A. SKINNER is a professor in the Developmental Science and Education concentration in the Department of Psychology at Portland State University, USA. She is a leading expert on the development of motivation, coping, and academic identity in school. She conducts research and publishes widely in the developmental and educational sciences, including numerous articles and book chapters, three books, two edited volumes, and several special issues. With Dr. Zimmer-Gembeck, she has coauthored multiple seminal works on the development of coping, including several reviews, the first annual review chapter on the topic, and a recent book.

MELANIE J. ZIMMER-GEMBECK is a professor in the School of Applied Psychology and the Centre for Mental Health at Griffith University, Australia. After being inspired to study development when she was a PhD student working with Dr. Skinner, she has now attracted more than AUD\$25 million in research funding and has published more than 300 articles, books, and book chapters. She co-leads the Griffith Centre for Mental Health and is Director of the Family Interaction Program, which has a history of over 20 years of evaluating innovative parenting programs that have helped to improve the family relationships of thousands of Australians.

Cambridge Handbooks in Psychology

Series Editor for Developmental Psychology

NANCY EISENBERG, *Arizona State University*

The Cambridge Handbook of the Development of Coping

Edited by

Ellen A. Skinner

Portland State University

Melanie J. Zimmer-Gembeck

Griffith University



CAMBRIDGE
UNIVERSITY PRESS

Cambridge University Press & Assessment
978-1-108-93292-9 — The Cambridge Handbook of the Development of Coping
Ellen A. Skinner, Melanie J. Zimmer-Gembeck
Frontmatter
[More Information](#)



Shaftesbury Road, Cambridge CB2 8EA, 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 Cambridge University Press & Assessment, a department of the University of Cambridge.

We share the University's mission to contribute to society through the pursuit of education, learning and research at the highest international levels of excellence.

www.cambridge.org
Information on this title: www.cambridge.org/9781108932929

DOI: 10.1017/9781108917230

© Cambridge University Press & Assessment 2023

This publication is in copyright. Subject to statutory exception and to the provisions of relevant collective licensing agreements, no reproduction of any part may take place without the written permission of Cambridge University Press & Assessment.

First published 2023
First paperback edition 2024

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

Library of Congress Cataloging-in-Publication data

Names: Skinner, Ellen A., editor. | Zimmer-Gembeck, Melanie J., editor.

Title: The Cambridge handbook of the development of coping / edited by Ellen A. Skinner, Portland State University, Melanie J. Zimmer-Gembeck, Griffith University, Queensland.

Description: Cambridge, United Kingdom ; New York, NY : Cambridge University Press, 2023. |

Series: Cambridge handbooks in psychology | Includes bibliographical references and index.

Identifiers: LCCN 2022054285 (print) | LCCN 2022054286 (ebook) | ISBN 9781108831420 (hardback) | ISBN 9781108932929 (paperback) | ISBN 9781108917230 (epub)

Subjects: LCSH: Adjustment (Psychology) | Stress (Psychology) | Developmental psychology.

Classification: LCC BF335 .C354 2023 (print) | LCC BF335 (ebook) | DDC 155.2/4–dc23/eng/20230310

LC record available at <https://lcn.loc.gov/2022054285>

LC ebook record available at <https://lcn.loc.gov/2022054286>

ISBN 978-1-108-83142-0 Hardback

ISBN 978-1-108-93292-9 Paperback

Cambridge University Press & Assessment has no responsibility for the persistence or accuracy of URLs for external or third-party internet websites referred to in this publication and does not guarantee that any content on such websites is, or will remain, accurate or appropriate.

Contents

| | |
|--|------------------|
| <i>List of Contributors</i> | <i>page</i> viii |
| <i>Preface</i> | xi |
| 1 A Systems Perspective on the Development of Coping: “We’re Going to Need a Bigger Boat” | |
| ELLEN A. SKINNER AND MELANIE J. ZIMMER-GEMBECK | 1 |
| Part I Theoretical Perspectives on the Development of Coping | |
| 2 Toward a Lifespan Theory of Coping Development: A Social Ecological Approach | |
| CAROLYN ALDWIN, MARIA KURTH, AUSTIN BROCKMANN, AND HYE SOO LEE | 59 |
| 3 Attachment, Regulation, and the Development of Coping | |
| SOPHIA W. MAGRO, FAITH VANMETER, AND GLENN I. ROISMAN | 79 |
| 4 Social Context, Psychological Needs, and the Development of Coping | |
| JACQUELYN N. RAFTERY-HELMER AND WENDY S. GROLNICK | 109 |
| 5 Processes of Stress Resistance and Stress Resilience: The Role of Behavioral Control and the Medial Prefrontal Cortex | |
| MICHAEL V. BARATTA AND STEVEN F. MAIER | 128 |
| Part II Methods for Studying the Development of Coping | |
| 6 Capturing Coping: Innovative Designs and Considerations for Studying the Topography of Adolescents’ Coping | |
| KATHRYN L. MODECKI, MEGAN DUVENAGE, MELANIE J. ZIMMER-GEMBECK, SAMANTHA ROBINS, AND BEP UINK | 157 |
| 7 Resilience and Coping in Development: Pathways to Integration | |
| FANITA A. TYRELL AND ANN S. MASTEN | 183 |
| Part III Neurophysiological and Experiential Bases of the Development of Coping | |
| 8 The Development of Neurobiology Underlying Stress and Coping | |
| EMILY M. COHODES, ELIZABETH R. KITT, LUCINDA M. SISK, AND DYLAN G. GEE | 207 |

| | | |
|----|--|-----|
| 9 | Biological Systems Underlying the Development of Adaptive Functioning and Coping | 235 |
| | CHRISTINE SIGRIST, JULIAN F. THAYER, AND JULIAN KOENIG | |
| 10 | Childhood Adversity and the Development of Coping | 246 |
| | DANTE CICHETTI AND JASON JOSÉ BENDEZÚ | |
| 11 | Adolescence, Physiological Adaptation, and the Development of Stress Responses | 276 |
| | KAREN D. RUDOLPH, WENDY TROOP-GORDON, AND ZIHUA YE | |
| | Part IV Psychological Foundations of the Development of Coping | |
| 12 | Attention, Temperament, Self-Regulation, and the Development of Coping | 305 |
| | ÁNGELA HOYO, ÁNGELA CONEJERO, AND M. ROSARIO RUEDA | |
| 13 | The Development of Emotion Regulation and Coping in Early Childhood | 325 |
| | PAMELA M. COLE, TAWNI B. STOOP, AND GABRIELLE S. CARDWELL | |
| 14 | Toward a More Inclusive, Contextualized Approach to Studying Executive Functions and Self-Regulation in the Context of Coping | 351 |
| | JELENA OBRADOVIĆ, LILY STEYER, AND MICHAEL J. SULIK | |
| 15 | The Development of Accommodative Coping: Conditions and Consequences from a Lifespan Perspective | 382 |
| | WERNER GREVE AND CATHLEEN KAPPES | |
| 16 | The Development of Temperament, Personality Traits, and Coping in Childhood and Adolescence | 401 |
| | REBECCA L. SHINER, TESSA VAN DEN BERG, MARCEL A. G. VAN AKEN, AND ODILIA M. LACEULLE | |
| | Part V Social Contexts and the Development of Coping | |
| 17 | Coping Development as an Everyday Interpersonal Process: Broadening Definitions and Investigations of Coping | 427 |
| | SUNHYE BAI AND RENA L. REPETTI | |
| 18 | Parenting, Socialization of Emotion, and the Development of Coping | 447 |
| | TRACY L. SPINRAD, XIAOYE XU, NANCY EISENBERG, ANGEL DUNBAR, AND FANTASY LOZADA | |
| 19 | Temperament, Family Context, and the Development of Coping | 468 |
| | LILIANA J. LENGUA, LISA SHIMOMAEDA, MICHELE R. SMITH, STEPHANIE F. THOMPSON, AND KRYSTAL H. PARRISH | |

| | | |
|--|--|-----|
| 20 | Interparental Conflict, Parental Relationship Dissolution, and the Development of Children's Coping KAREY L. O'HARA, IRWIN N. SANDLER, SHARLENE A. WOLCHIK, AND C. AUBREY RHODES | 489 |
| 21 | Autonomy, Self-Determination, and the Development of Coping in Adolescence STIJN VAN PETEGEM, NELE FLAMANT, BART SOENENS, AND MAARTEN VANSTEENKISTE | 510 |
| 22 | Peer Stressors and Peer Relationship Dynamics in the Development of Coping MELANIE J. ZIMMER-GEMBECK, ALEX A. GARDNER, AND THOMAS A. KINDERMANN | 538 |
| 23 | Income, Income Inequality, Community, and the Development of Coping: The Reformulated Adaptation to Poverty-Related Stress Model MARTHA E. WADSWORTH, JARL A. AHLKVIST, ALLISON PEQUET, AND CHELSEA O. MAYO | 560 |
| 24 | Culture, Diversity, Context, and the Development of Coping: A Phenomenological Perspective BRONWYN NICHOLS LODATO, JENNIFER HALL, AND MARGARET BEALE SPENCER | 581 |
| Part VI Application and the Development of Coping | | |
| 25 | Social Media Use and Misuse, Stress, and the Development of Coping NAUSIKAÄ BRIMMEL, ANNELEEN MEEUS, AND STEVEN EGGERMONT | 597 |
| 26 | Clinical Treatments for Child Emotional Disorders and the Development of Coping: The Case of Irritability MARIA KANGAS AND RONALD M. RAPEE | 612 |
| 27 | Fostering the Development of Academic Coping: A Multi-level Systems Perspective ELLEN A. SKINNER AND KRISTEN E. RAINE | 641 |
| 28 | Youth Programs and the Development of Coping SYDNEY C. SIMMONS, JULIA M. AUGENSTERN, AND PATRICK H. TOLAN | 680 |
| | <i>Index</i> | 702 |

Contributors

JARL A. AHLKVIST, Pennsylvania State University, USA
CAROLYN ALDWIN, Oregon State University, USA
MARCEL A. G. VAN AKEN, Utrecht University, The Netherlands
JULIA M. AUGENSTERN, University of Virginia, USA
SUNHYE BAI, Pennsylvania State University, USA
MICHAEL V. BARATTA, University of Colorado, USA
JASON JOSÉ BENDEZÚ, University of Minnesota, USA
TESSA VAN DEN BERG, GGz Centraal and Utrecht University, The Netherlands
NAUSIKAÄ BRIMMEL, KU Leuven, Belgium
AUSTIN BROCKMANN, Oregon State University, USA
GABRIELLE S. CARDWELL, Pennsylvania State University, USA
DANTE CICHETTI, University of Minnesota, USA
EMILY M. COHODES, Yale University, USA
PAMELA M. COLE, Pennsylvania State University, USA
ÁNGELA CONEJERO, University of Granada, Spain
ANGEL DUNBAR, University of Maryland, USA
MEGAN DUVENAGE, Griffith University, Australia
STEVEN EGGERMONT, KU Leuven, Belgium
NANCY EISENBERG, Arizona State University, USA
NELE FLAMANT, Ghent University, Belgium
ALEX A. GARDNER, Griffith University, Australia
DYLAN G. GEE, Yale University, USA
WERNER GREVE, University of Hildesheim, Germany
WENDY S. GROLNICK, Clark University, USA
JENNIFER HALL, Columbia University, USA

- ÁNGELA HOYO, University of Granada, Spain
MARIA KANGAS, Macquarie University, Australia
CATHLEEN KAPPES, University of Hildesheim, Germany
THOMAS A. KINDERMANN, Portland State University, USA
ELIZABETH R. KITT, Yale University, USA
JULIAN KOENIG, University of Cologne, Germany
MARIA KURTH, Oregon State University, USA
ODILIA M. LACEULLE, Utrecht University, The Netherlands
HYE SOO LEE, Yonsei University, Korea
LILIANA J. LENGUA, University of Washington, USA
BRONWYN NICHOLS LODATO, University of Chicago, USA
FANTASY LOZADA, Virginia Commonwealth University, USA
SOPHIA W. MAGRO, University of Minnesota, USA
STEVEN F. MAIER, University of Colorado, USA
ANN S. MASTEN, University of Minnesota, USA
CHELSEA O. MAYO, Pennsylvania State University, USA
ANNELEEN MEEUS, KU Leuven, Belgium
KATHRYN L. MODECKI, Griffith University, Australia
JELENA OBRADOVIĆ, Stanford University, USA
KAREY L. O'HARA, Arizona State University, USA
KRYSTAL H. PARRISH, University of Washington, USA
ALLISON PEQUET, Pennsylvania State University, USA
JACQUELYN N. RAFTERY-HELMER, Worcester State University, USA
KRISTEN E. RAINE, Portland State University, USA
RONALD M. RAPEE, Macquarie University, Australia
RENA L. REPETTI, University of California, Los Angeles, USA
C. AUBREY RHODES, Arizona State University, USA
SAMANTHA ROBINS, Griffith University, Australia
GLENN I. ROISMAN, University of Minnesota, USA

- KAREN D. RUDOLPH, University of Illinois, USA
M. ROSARIO RUEDA, University of Granada, Spain
IRWIN N. SANDLER, Arizona State University, USA
LISA SHIMOMAEDA, University of Washington, USA
REBECCA L. SHINER, Colgate University, USA
CHRISTINE SIGRIST, University of Cologne, Germany
SYDNEY C. SIMMONS, University of Virginia, USA
LUCINDA M. SISK, Yale University, USA
MICHELE R. SMITH, University of Washington, USA
BART SOENENS, Ghent University, Belgium
MARGARET BEALE SPENCER, University of Chicago, USA
TRACY L. SPINRAD, Arizona State University, USA
LILY STEYER, Stanford University, USA
TAWNI B. STOOP, Pennsylvania State University, USA
MICHAEL J. SULIK, Stanford University, USA
JULIAN F. THAYER, Ohio State University, USA
STEPHANIE F. THOMPSON, University of Washington, USA
PATRICK H. TOLAN, University of Virginia, USA
WENDY TROOP-GORDON, Auburn University, USA
FANITA A. TYRELL, University of Maryland, USA
BEP UINK, Murdoch University, Australia
FAITH VANMETER, University of Minnesota, USA
STIJN VAN PETEGEM, Université libre de Bruxelles, Belgium
MAARTEN VANSTEENKISTE, Ghent University, Belgium
MARTHA E. WADSWORTH, Pennsylvania State University, USA
SHARLENE A. WOLCHIK, Arizona State University, USA
XIAOYE XU, Arizona State University, USA
ZIHUA YE, University of Illinois, USA

Preface

Working on this Handbook has been like taking a master class in the development of coping, a master class taught by experts all across the fields of stress neurophysiology, regulation, coping, interpersonal relationships, and resilience. Our goal for the Handbook is field building – we want to bring together theory and research from across the spectrum of psychological and developmental sciences that can inform our understanding of how coping develops across childhood, adolescence, and early adulthood. Stress and coping cut across many subareas within psychology and related areas of science, and so this Handbook draws upon and should be of interest to a broad swath of psychologists (including those focusing on clinical, counseling, developmental, educational, personality, social, and neurophysiological psychology), as well as clinicians, public health experts, sociologists, and neuroscientists. In fact, research on “coping” represents one of the most popular topics in psychology over the last 50 years and one that is still of major interest today – not only in other areas of science but also to the media and general public.

An important segment of work on stress and coping focuses on children, adolescents, and young adults. Issues involved in their coping also touch many areas of applied social science, including prevention and intervention science, and are relevant to practitioners interested in parenting, education, clinical practice, social work, and teaching. Despite broad interest in coping among children and young people, and despite broad consensus that developmental level shapes everything about how they are able to cope with stress, this is the first Handbook to focus in depth on theories and research on the development of coping. This Handbook explores the interface between coping and the many content areas related to it, ranging from brain development to social relationships to overarching community structures.

In our own efforts in this area (e.g., Skinner & Zimmer-Gembeck, 2007, 2016), we have been struck by how much relevant and fascinating work is happening *outside* research on coping proper. This work illuminates key facets of the coping process, its underlying constituents, and its social contexts. In each of these areas are strands of work that focus on development. Hence, the Handbook includes chapters not only from researchers whose substantive areas of expertise sit squarely within the territory circumscribed by coping but also from experts in areas that do not even use the term “coping” but whose concerns nevertheless overlap with issues relevant to coping and its development. So, for example, the Handbook includes chapters from researchers who do not consider their work to focus primarily on coping itself. These authors address the question, “What would you like colleagues interested in the development of coping to know about research in your area?” Other authors, clearly experts in coping, do not consider their work to focus primarily on its development; they

answer the question, “What would you like colleagues interested in development to know about your research on coping?”

We owe an enormous debt to all the authors in this Handbook and especially to those who were writing outside their comfort zones. In each chapter you will see thoughtful and generative contributions to theory and research relevant to the development of coping. Authors were eager to learn more about mainstream coping research and generous in their thinking about its development. In fact, as the chapters came in, we were so impressed by their ideas and insights that we started asking authors to include a table of “take-home messages” for researchers interested in the development of coping. We felt that they, like us, would continue to use this Handbook as a reference for future research in the area. In this way, we hope the Handbook can build conceptual and empirical bridges between coping and the many other areas of psychology it touches, including most especially work on the development of regulation and resilience.

Organization of *The Cambridge Handbook of the Development of Coping*

This Handbook is organized around a developmental systems view of coping as an integrated multi-level system that operates on the level of action, but draws on underlying processes from neurophysiological and psychological levels; and is embedded in higher-level social, interpersonal and societal contexts that shape its functioning and development. We organized the Handbook and recruited authors according to that multi-level systems model, with a special focus on researchers studying regulation, resilience, and social relationships.

Connections to Regulation

Developmental models often define coping simply as “action regulation under stress” (Compas et al., 1999; Eisenberg et al., 2009; Skinner & Zimmer-Gembeck, 2007). Because stress activates multiple subsystems, including attention, emotion, behavior, motivation, volition, and cognition, developmentalists argue that coping is both less and more than regulation (Compas et al., 2014). On the one hand, it is less than regulation because it only examines the subset of regulatory activities taking place under stressful conditions. On the other hand, it is more than any one kind of regulation (e.g., attention regulation or emotion regulation), because it involves the coordination of all of these kinds of stress reactions.

Dual process models of regulation can help parse coping into (1) stress reactivity (or action readiness) and (2) action regulation, in which “action” refers to the amalgam of goal-directed emotion-infused attention and behavior that appear on the ground during transactions with stressful events. That emergent action, or coping, reflects the balance between stress reactivity and regulation, with adaptive strategies the result of low reactivity and/or strong regulatory capacities, and maladaptive (or stress-affected) coping the product of high reactivity and/or immature or disabled regulatory capacities. Hence, central to the study of coping are theories

and research on stress reactivity and regulation of all kinds. Of special interest to developmentalists is work that focuses on how and why such reactive and regulatory processes develop or show age-graded qualitative shifts.

Connections to Resilience

Coping can be considered an adaptive process that contributes to how adversity shapes the development of children and youth. Specifically, coping encompasses a set of processes children and young people can deploy when dealing with the proximal stressors created by adversity. Under stressful conditions, coping can make a material difference, sometimes warding off or protecting youth from negative outcomes and building coping resources for dealing with future events. Hence, episodes of coping can contribute to the development of resilience, and programs designed to promote resilience can consider coping as a potential intervention lever to boost adaptation under stressful conditions. As a result, frameworks designed to capture resilience, and especially multi-level developmental systems frameworks (e.g., Masten et al., 2021), provide a natural home for the study of coping. Of special interest to developmentalists are ways in which age-graded changes in coping capacities contribute to resilience during different developmental periods.

Coping as a Site of Development

Coping itself, operating on the plane of action, is also a location where development takes place – where regulatory capacities can be practiced and consolidated, and from which resilience resources emerge. The coping system comprises a set of adaptive processes designed to detect and respond to challenges and threats, which can be broken into multiple tasks, including (1) *radar*, or detection and appraisal of challenges and threats; (2) *reactivity and readiness*, or preparation and coordination of responses to threat or challenge; (3) *regulation*, or sequential adaptation of the complex actions urged by reactivity and readiness to changes in ongoing conditions during interactions with stressful events; (4) *recovery*, or deactivation and resetting of stress responses and rejuvenation of coping resources; and (5) *re-evaluation*, or processes through which coping episodes are debriefed and lessons are learned for future encounters. Each of these steps show development (e.g., radar comes to anticipate threats and not just to react to those that arrive) and all of their development is shaped by ongoing coping interactions.

Social Contexts and Development

Since coping entails the arc of transactions between individuals' actions and stressors over time, it carries with it the seeds of development on many fronts. It is observable and salient to other people in the lives of children and youth, and it is also influenced by the social context, including interpersonal resources and supports, relationships, and the participation of other people. Hence, social partners, settings, and higher-order contexts (e.g., poverty and racism) can be considered parts of the larger coping system.

Of special interest to developmentalists are the ways in which children learn to cope by coping, and in which the contributions of social contexts to coping may also show age-graded changes and shifts. In the grand scheme of things, we hope to begin creating a framework that bridges areas that study developmental changes in how children and adolescents deal with adversity, contributing to the area of resilience and linking it all the way down to research on the many kinds of regulation.

Overview of the Sections and Chapters in this Handbook

The Handbook contains 28 chapters, beginning with an introductory chapter (Skinner & Zimmer-Gembeck; Chapter 1) designed to provide some context for the chapters that follow. Our chapter starts with a historical accounting of stress and coping theory and research, especially the transactional theory of stress and coping, which has dominated the field for at least the past 40 years (Folkman & Moskowitz, 2004; Lazarus, 2000; Lazarus & Folkman, 1984, 1987). We show how developmental systems conceptualizations of coping, which incorporate and expand on transactional perspectives, can scaffold our understanding of the development of coping (Skinner & Zimmer-Gembeck, 2007, 2016; Zimmer-Gembeck, 2021). We lay out five big ideas of a developmental systems view and show how they open pathways for examining age-graded transformations in coping. We then explain how together these ideas suggest that the human coping system undergoes successive reorganizations as the *means* of coping – the coping equipment available to individuals – changes from birth to late adolescence. We end with an overview of the implications of a developmental systems approach for prevention and remediation efforts, highlighting especially the role of coping transactions themselves as sites for the development of robust stress neurophysiology, regulatory resources, stress resistance, and resilience.

The 27 chapters that follow have been organized into six sections, or parts. The first part includes four chapters on *Theoretical Perspectives on the Development of Coping*. Following on, we include two chapters on *Methods for Studying the Development of Coping* and then the content shifts to specific topics, presented in 17 chapters, that cut across three areas: *Neuropsychological* research on the developing human stress system, characteristics at the *Psychological* level that are interwoven into stress and coping processes and development, and *Social Contexts*, including interpersonal relationships and higher-order societal forces, that shape coping and development across the lifespan. We end with a section on *Application and the Development of Coping*, which includes four chapters addressing the interface of stress and coping with social media, clinical treatments, education, and programs for positive youth development.

Theoretical Perspectives on the Development of Coping

In the first section on theoretical perspectives, we encounter complex ideas about how coping develops throughout childhood, adolescence, and adulthood. Each chapter in this section makes its contribution by applying a distinct theoretical lens

to describe and explain coping and its development – including lifespan developmental theory, attachment theory, self-determination theory, and theories of control. In the first of these chapters, Aldwin et al. (Chapter 2) provide a comprehensive developmental introduction to our topic by drawing together coping research conducted within many specific age groups and articulating a general lifespan (meta) theory of coping development. This chapter also highlights key complexities of coping, such as raising the possibility that the development of coping is nonlinear, describing how coping is embedded within many layers of social context, and arguing that coping is rarely an individual endeavor but depends on coping partners (e.g., dyadic coping).

Following this chapter by Aldwin et al., three chapters introduce us to widely influential theories of social and behavioral development that can be used to frame the developmental study of coping. Taken together, these chapters draw from hundreds of theoretically-derived studies of development to summarize what this research reveals about the interface of stress and coping development with parent–child attachment (Magro et al.), psychological needs and social contexts (Raferty-Helmer & Grolnick), and perceptions of control (Baratta & Maier). Magro et al. (Chapter 3) illustrate how themes of stress and coping are interwoven throughout attachment theory and research (Ainsworth et al., 1978/2015; Bowlby, 1982). Thus, this chapter is unequivocal in arguing that the development of coping is a product of social relationships, especially relationships with caregivers alongside experiences of early-life stress. Moreover, they also provide a comprehensive empirical case as well, by reporting the results of a systematic review of the associations of coping with observational, representational, and self-report measures of attachment.

Raferty-Helmer and Grolnick (Chapter 4) rely on self-determination theory (Deci & Ryan, 1985; Ryan & Deci, 2017) to guide their consideration of the role of social contexts in children’s stress appraisals and coping responses. They focus specifically on the roles of parents and teachers in meeting children’s needs for autonomy, relatedness, and competence. Drawing on research on parenting, teacher–student relationships, and stress and coping, they then unpack how elements of the social context (i.e., parent and teacher behaviors) that meet or thwart children’s needs can contribute to children’s primary stress appraisals of threat versus challenge, and their coping responses. Finally, in this section, Baratta and Maier (Chapter 5) take us on a deep dive into animal studies of controllability to consider processes that contribute to stress resistance (higher threshold of reactivity) and resilience (quicker recovery) to adverse events. After introducing the study of control in animal research, they address many important questions regarding how stressful experiences have differential impacts on neurobiology and behavior depending on their controllability. This is methodical research, which they then apply to human stress and coping, showing why efforts to exert control, as seen in coping and emotion regulation, may buffer against stressor impact and help protect individuals against harmful long-term effects of stress exposure.

Overall, the authors of the chapters in this first part identify commonalities in conceptualizations and operationalizations between the ideas at the heart of each

theory and issues central to coping in childhood, adolescence, and adulthood. The broad scope of this research, with methods ranging from observational studies to survey research to controlled animal studies, was surprising in its coherence – drawing similar conclusions about how coping is shaped by social and physical contexts and often mediated by neurophysiological responses and (in human studies) by individual appraisals, expectations, values, and beliefs. The chapters in this section remind us how much we can learn about the development of coping if we pay close attention to these theories and the empirical research testing them. They also reveal many new possibilities for future study of the development of coping that can be generated from existing developmental theories.

Methods for Studying the Development of Coping

The second section turns to methodology, with two chapters touching on substantive questions about stress and coping, while also raising ideas for new research designs and ways to answer important empirical questions about stress, emotion, coping, adaptation, and development. In this part, authors of the first chapter (Modecki et al.; Chapter 6) cover the many methodological and design challenges (and opportunities) facing researchers who want to study the development of coping. This chapter directs our attention to the advantages and accompanying challenges of attempting to study coping as an unfolding developmental process, highlighting intensive approaches to data collection and the growing use of passive data collection from smartphones and other devices to operationalize concepts related to stress and coping.

The core methods chapter by Modecki et al. is followed by a chapter from experts on resilience (Tyrell & Masten; Chapter 7). They draw upon their expertise in these expansive domains to propose ways that this research could be productively integrated with theories and research on stress and coping. The authors argue that bidirectional scientific communication could enhance the research of those interested in resilience and those interested in stress and coping. This chapter is particularly helpful for considering how to use designs common in studies of resilience to address important questions about coping and its development. The authors do this while also raising important issues such as discrimination and dynamics at many levels. Overall, the two chapters in this section move us closer to addressing some of the big developmental questions of how to best describe and explain diverse pathways of adaptation and maladaptation, keeping in the mind the ultimate purpose of optimizing developmental trajectories across the lifespan.

Multiple Levels of the Development of Coping: Neurophysiological, Psychological, Interpersonal, and Societal Foundations

Parts III, IV, and V include 17 comprehensive and thought-provoking chapters, which start with a focus on the role of human neurophysiology in the development of

coping and move outward to incorporate the roles of psychological processes, and then social environments, both micro (e.g., family, peers, schools) and macro (neighborhood, community). Part III covers *Neurophysiological and Experiential Bases of the Development of Coping* with four chapters (Chapters 8–11). Part IV covers *Psychological Foundations of the Development of Coping* with five chapters (Chapters 12–16). Part V covers *Social Contexts and the Development of Coping* with eight chapters (Chapters 17–24). Each chapter includes an in-depth consideration of its topics and we were inspired by how these chapters not only bring together core findings, but also build on them to propose many new ideas for integrative theories and future research. Thus, the chapters, as a whole, are more than the sum of their parts. We are especially enthusiastic about the chapters' complementarity: Chapters from one area can be used to expand on topics raised only briefly in chapters from another area, while individual chapters can be used to answer important questions that arise from discussions in other chapters.

Neurophysiological and Experiential Bases of the Development of Coping: Within Part III, the four chapters consider neurobiological systems involved in stress responding and regulation within the body *and* the importance of experiences taking place outside the body in shaping the development of coping and adaptation more generally. Cohodes et al. (Chapter 8) and Sigrist et al. (Chapter 9) focus most on development within the body by describing the details of neurobiological developments related to the human stress system (Cohodes et al.) and the dynamical biological systems framework of human adaptation (Sigrist et al.). They explain how bodily systems are involved in stress reactivity and regulatory responses (coping), describing development of the hypothalamic-pituitary-adrenal axis, the autonomic nervous system, the central nervous system, and integrated neurovisceral systems. Yet, each chapter also acknowledges the central importance of social experience early in life, by showing how human biological systems and their development are shaped by experiences of caregiving, deprivation, and other resources and adversities.

Such programming via early experience is thoroughly explored in the next chapter by Cicchetti and Bendežú (Chapter 10). They address how and why child maltreatment is so detrimental to human development, concentrating on its impact on the stress system. They carefully lay out these complex literatures, and then thoughtfully present essential details and make important connections to the development of stress reactivity and coping. The last chapter in this section, by Rudolph et al. (Chapter 11), considers the physiological and psychological changes of adolescence, but also pays close attention to changing social experiences and contexts and their roles in adolescents' coping with stress (and other stress responses). This chapter draws on the substantial research base focusing on this period of life as a time of reorganization and change in stress appraisals, regulation, and coping. The authors summarize the many physiological changes that have been documented in the stress system over the pubertal transition and beyond, which are so important to later life pathways. They also emphasize the importance of social contexts and interactions,

given the many experiences of new stressors and shifts in regulation and coping abilities that are features of adolescents' lives. Overall, each chapter in this section pays explicit attention to important ideas about developmental timing as crucial to a complete mapping of the development of coping and related patterns of adaptation or maladaptation.

Psychological Foundations of the Development of Coping: For the five chapters in Part IV, we asked authors to summarize and then apply their expertise on important psychological foundations of development that we argue are closely connected to the development of coping (see Skinner & Zimmer-Gembeck, 2016). Thus, five chapters in this section review person-level psychological factors and highlight their importance for understanding coping, proposing a range of new research ideas along the way. These chapters carefully detail relevant theory and research on attention (Hoyo et al.; Chapter 12), emotion regulation (Cole et al.; Chapter 13), executive functioning (Obradović et al.; Chapter 14), accommodative coping (Greve & Kappes; Chapter 15), and personality (Shiner et al.; Chapter 16).

Social Contexts and the Development of Coping: Eight chapters make up Part V, with all authors asked to apply their expertise on social contextual influences to the development of coping. The chapters in this part are organized to address micro-social system influences first. Bai and Repetti (Chapter 17) start off this part with a very developmental chapter that gives us one of the most comprehensive summaries available on how the social context can influence stress, physiological responses to stress, and coping processes. They also address theory, methodology (especially ecological momentary assessment and observations), research, and applied interventions. The next four chapters focus on the important social contexts of parenting and family. Each enriches our understanding of the development of coping by integrating research on emotion socialization (Spinrad et al.; Chapter 18), child temperament (Lengua et al.; Chapter 19), interparental conflict (O'Hara et al.; Chapter 20), and autonomy in adolescents (Van Petegem et al.; Chapter 21). Next, a chapter appears on the interface of peer stress and peer relationships with the development of emotion and coping (Zimmer-Gembeck et al.; Chapter 22).

Although many of these first six chapters in Part V also simultaneously consider higher-level societal contexts that have an impact on parenting, families, and peer relationships (e.g., culture, gender socialization, and work), the last two chapters explicitly direct their attention to macrosocial system influences. These chapters address income inequality and poverty (Wadsworth et al.; Chapter 23) and culture and diversity (Nichols Lodato et al.; Chapter 24), thoroughly considering how community and societal conditions can amplify the influence of stress and coping or change how stressful experiences occur and unfold. Of course, focusing only on person-level factors or only on social contexts (or only on *one* social context) in any single chapter turned out to be impossible, so each chapter in Part V (as well as the chapters in Part IV) gifts us with many innovative ideas for how to conceptualize and investigate multiple levels of influence that can help describe and explain the development of coping.

Application and the Development of Coping

Finally, Part VI is the icing on the multi-level cake of the development of coping, with each of the four chapters addressing *Application and the Development of Coping*. Given that most of the researchers who work in the areas addressed in this Handbook are all essentially concerned with improving the development of children and youth, we wanted to end the Handbook by coming back to why the study of the development of coping is so important. Thus, each chapter in this part considers what is known about stress and coping in specific applied areas of research. The aim here was to reveal possibilities for how we can support healthy developmental pathways through research on how children and adolescents cope and expand their coping skills in multiple venues: through resources and interactions available online (Brimmel et al.; Chapter 25) or through clinical interventions (Kangas & Rapee; Chapter 26), experiences in educational settings (Skinner et al.; Chapter 27), and youth development programs (Simmons et al.; Chapter 28). The authors consider these issues by addressing how empirical studies directed at improving children's and adolescents' lives often target coping and, thus, can be informative about how coping develops. Across the whole of Part VI, we were encouraged to see how research on stress and coping can be applied to improve multiple outcomes (e.g., social support, well-being, mental health, or academic success) in multiple settings, including mental health interventions, schools, and programs that support children and youth.

Conclusion

In sum, we view each chapter in this volume as indispensable for any researcher, practitioner, educator, or student who wants an updated account of cutting-edge research on the development of coping broadly construed – the unfolding of children's and adolescents' experiences as they attend to, react to, manage, regulate, think about, come to understand, and learn from their responses in the face of stress. These chapters also provide all of us with a map to follow in conducting future research – in many directions – that identifies and addresses the unknowns that still remain about coping as a developmental process of adaptation and change, and how to turn the experience of stress and coping away from risks for mental and physical health problems and toward supporting learning and growth along constructive pathways of development.

References

- Ainsworth, M. D. S., Blehar, E., Waters, E., & Wall, S. (1978/2015). *Patterns of attachment*. Erlbaum.
- Bowlby, J. (1982). Attachment and loss: Retrospect and prospect. *American Journal of Orthopsychiatry*, 52(4), 664–678. <https://doi.org/10.1111/j.1939-0025.1982.tb01456.x>
- Compas, B. E., Connor, J. K., Saltzman, H., Thomsen, A. H., & Wadsworth, M. (1999). Getting specific about coping: Effortful and involuntary responses to stress in development. In M. Lewis & D. Ramsay (Eds.), *Soothing and stress* (pp. 229–256). Erlbaum.

- Compas, B. E., Jaser, S. S., Dunbar, J. P., Watson, K. H., Bettis, A. H., Gruhn, M. A., & Williams, E. K. (2014). Coping and emotion regulation from childhood to early adulthood: Points of convergence and divergence. *Australian Journal of Psychology*, *66*(2), 71–81. <https://doi.org/10.1111/ajpy.12043>
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. Plenum. <https://doi.org/10.1007/978-1-4899-2271-7>
- Eisenberg, N., Valiente, C., & Sulik, M. J. (2009). How the study of regulation can inform the study of coping. In E. A. Skinner & M. J. Zimmer-Gembeck (Eds.), *Coping and the development of regulation* (pp. 75–86). Jossey-Bass. A volume for the series, R. W. Larson & L. A. Jensen (Eds.-in-Chief), *New directions in child and adolescent development*. <https://doi.org/10.1002/cd.241>
- Folkman, S., & Moskowitz, J. T. (2004). Coping: Pitfalls and promise. *Annual Review of Psychology*, *55*, 745–774. <https://doi.org/10.1146/annurev.psych.55.090902.141456>
- Lazarus, R. S. (2000). Toward better research on stress and coping. *American Psychologist*, *55*(6), 665–673. <https://doi.org/10.1037/0003-066X.55.6.665>
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. Springer.
- Lazarus, R. S., & Folkman, S. (1987). Transactional theory and research on emotions and coping. *European Journal of Personality*, *1*(3), 141–169. <https://doi.org/10.1002/per.2410010304>
- Masten, A. S., Lucke, C. M., Nelson, K. M., & Stallworthy, I. C. (2021). Resilience in development and psychopathology: Multisystem perspectives. *Annual Review of Clinical Psychology*, *17*, 521–549. <https://doi.org/10.1146/annurev-clinpsy-081219-120307>
- Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness*. Guilford Press. https://doi.org/10.1207/s15327922par0404_1
- Skinner, E. A., & Zimmer-Gembeck, M. J. (2007). The development of coping. *Annual Review of Psychology*, *58*, 119–144. <https://doi.org/10.1146/annurev.psych.58.110405.085705>
- Skinner, E. A., & Zimmer-Gembeck, M. J. (2016). *The development of coping from birth to emerging adulthood: Neurophysiological and social underpinnings, qualitative shifts, and differential pathways towards psychopathology and resilience*. Springer.
- Zimmer-Gembeck, M. J. (2021). Coping flexibility: Variability, fit, and associations with efficacy, emotion regulation, decentering, and responses to stress. *Stress and Health*, *37*(5), 846–861. <https://doi.org/10.1002/smi.3043>