Handbook of Personality and Self-Regulation

Edited by Rick H. Hoyle

WILEY Blackwell

Contents

Part III: Individual Differences

12 Working Memory Capacity and Self-Regulation

13 Regulatory Focus in a Demanding World

Handbook of Personality and Self-Regulation

Edited by

Rick H. Hoyle

WILEY Blackwell

respective owners. The publisher is not associated with any product or vendor mentioned in this book.

Limit of Liability/Disclaimer of Warranty: While the publisher and author have used their best efforts in preparing this book, they make no representations or warranties with respect to the accuracy or completeness of the contents of this book and specifically disclaim any implied warranties of merchantability or fitness for a particular purpose. It is sold on the understanding that the publisher is not engaged in rendering professional services and neither the publisher nor the author shall be liable for damages arising herefrom. If professional advice or other expert assistance is required, the services of a competent professional should be sought.

Cover image: © Images.com/Corbis
Cover design by Richard Boxall Design Associate

About the Editor

Rick H. Hoyle, PhD, is Professor of Psychology and Neuroscience at Duke University. He is a Fellow of the American Psychological Association (Divisions 5, Evaluation, Measurement, and Statistics, and 9, Society for the Psychological Study of Social Issues) and a Fellow and Charter Member of the Association for Psychological Science. Dr Hoyle has served as Associate Editor of the *Journal of Personality and Social Psychology, Journal of Personality*, and *Self and Identity*, and Editor of *Journal of Social Issues*. Among his book projects are, *Selfhood: Identity, Esteem, Regulation* (coauthored with Michael Kernis, Mark Leary, and Mark Baldwin) and the *Handbook of Individual Differences in Social Behavior* (coedited with Mark Leary).

List of Contributors

Claire E. Adams, Department of Psychology, Louisiana State University, Baton Rouge

Roy F. Baumeister, Department of Psychology, Florida State University, Tallahassee

Clancy Blair, Department of Applied Psychology, New York University

Erin K. Bradfield, Department of Psychology and Neuroscience, Duke University, Durham, NC

Aleah Burson, Department of Psychology, University of Michigan, Ann Arbor

Susan Calkins, Department of Psychology, University of North Carolina at Greensboro

Jennifer Crocker, Department of Psychology, University of Michigan, Ann Arbor

Edward L. Deci, Department of Clinical and Social Psychology, University of Rochester, NY

C. Nathan DeWall, Department of Psychology, University of Kentucky, Lexington

Alison Edwards, Department of Psychology, Arizona State University, Tempe

Natalie D. Eggum, Department of Psychology, Arizona State University, Tempe

Nancy Eisenberg, Department of Psychology, Arizona State University, Tempe

Randall W. Engle, School of Psychology, Georgia Institute of Technology, Atlanta

Nathan A. Fox, Department of Human Development, University of Maryland, College Park

Matthew T. Gailliot, Department of Social Psychology, University of Amsterdam

William G. Graziano, Department of Psychological Sciences, Purdue University, West Lafayette, IN

James J. Gross, Department of Psychology, Stanford University, CA

E. Tory Higgins, Department of Psychology, Columbia University, New York

Stephan Horvath, Institute of Psychology, University of Bern

Rick H. Hoyle, Department of Psychology and Neuroscience, Duke University, Durham, NC

Malgorzata Ilkowska, School of Psychology, Georgia Institute of Technology, Atlanta

Nils B. Jostmann, Department of Social Psychology, Vrije Universiteit Amsterdam

Paul Karoly, Department of Psychology, Arizona State University, Tempe

Sander L. Koole, Department of Social Psychology, Vrije Universiteit Amsterdam

Lisa Kopp, Department of Human Development and Family Studies, Pennsylvania State University, University Park

Arie W Kruglanski, Department of Psychology, University of Maryland, College Park

Mark R. Leary, Department of Psychology and Neuroscience, Duke University, Durham, NC

Corinna E. Löckenhoff, Department of Human Development, Cornell University, Ithaca, NY

James E. Maddux, Department of Psychology, George Mason University, Fairfax, VA

Eran Magen, Robert Wood Johnson Health and Society Scholars Program, University of Pennsylvania

Robert R. McCrae, Baltimore, MD

Jennifer M. McDermott, Department of Human Development, University of Maryland, College Park

Scott Moeller, Department of Psychology, University of Michigan, Ann Arbor

Carolyn C. Morf, Institute of Psychology, University of Bern

Christopher P. Niemiec, Department of Clinical and Social Psychology, University of Rochester, NY

Edward Orehek, Department of Psychology, University of Maryland, College Park

Antonio Pierro, Department of Social and Developmental Psychology, University of Rome "La Sapienza"

Richard M. Ryan, Department of Clinical and Social Psychology, University of Rochester, NY

Julie Sallquist, Department of Psychology, Arizona State University, Tempe

Carol Sansone, Department of Psychology, University of Utah, Park City

Abigail A. Scholer, Department of Psychology, Columbia University, New York

David R. Schurtz, Department of Psychology, University of Kentucky, Lexington

Idit Shalev, Department of Psychiatry, University of Florida, Gainesville

Jessi L. Smith, Department of Psychology, Montana State University, Bozeman

Timothy J. Strauman, Department of Psychology and Neuroscience, Duke University, Durham, NC

Eleanor B. Tate, Department of Psychology and Neuroscience, Duke University Durham, NC

Dustin B. Thoman, Department of Psychology, University of Utah, Park City

Renée M. Tobin, Department of Psychology, Illinois State University, Normal

Michelle R. vanDellen, Department of Psychology, University of Georgia, Athens

Jeffrey Volkmann, Department of Psychology, George Mason University Fairfax, VA

Wilkie A. Wilson, Department of Medicine, Duke University Medical Center, Durham, NC

Preface

It is perhaps not surprising that self-regulation and related constructs began moving toward center stage in psychological science in the 1990s. The increased attention coincided with emerging evidence that Americans were beginning to realize the consequences of the excesses of the 1980s. For instance, US consumers' revolving credit debt, which stood at $54 billion in the late 1970s, had risen to more than $600 billion by the end of the 1990s; it now approaches $1 trillion. Whereas in 1990 no US state had a prevalence rate above 15% for obesity, by 2007 only one state had a prevalence rate less than 20%, and 30 states had a prevalence rate of 25% or more. The Centers for Disease Control and Prevention reported that in 2000, obesity, physical inactivity and tobacco use accounted for more than one-third of all deaths in the US. Another 8% of deaths were attributable to a cluster of behavioral causes—alcohol consumption, motor vehicle crashes, incidents involving firearms, sexual behaviors, and use of illicit drugs—principally characterized by inadequate self-regulation. As this book is going to press, millions of Americans are reeling in the face of an economic crisis attributable in part to excessive borrowing and lending and high-risk investments made with little or no concern for potential long-term consequences. As the costs of these unregulated behaviors mount, psychological scientists have reacted by drawing attention to the causes and consequences of inadequate self-regulation and means by which self-regulation might be improved.

  The goal of this handbook is to showcase some of the best psychological science on self-regulation, with a specific focus on programs of research that examine self-regulation

in the context of normal personality. Each chapter integrates empirical findings on one or more basic personality traits with findings inspired by emerging models of self-regulation. The focus is *programs* of research; thus, each chapter reviews multiple research studies, sometimes carried out over decades, by the authors. Although findings from most of these studies have been published previously, their value is increased through inclusion in integrative accounts that focus on themes across multiple studies and perhaps highlight implications of the findings that were not apparent when originally published.

The primary audience for the book is social and behavioral scientists with an interest in dynamic models of personality and self-regulation. Many of the chapters present findings from research conducted in settings or with populations that are of potential value to practitioners (e.g., counseling and clinical psychologists, psychiatric social workers, financial advisors) who serve individuals who could benefit from more effective self-regulation. Because of the relevance of self-regulation to discussions of the broader, more philosophical question of how a society regulates the behavior of its members, this handbook might also be of interest to some sociologists, economists, political scientists, and philosophers.

A subset of the chapters in this handbook began as articles in a special issue of *Journal of Personality* on personality and self-regulation (Volume 7'4, Issue 6, December 2006). The number and length of contributions in that outlet were necessarily restricted. It became apparent early in the process of editing that special issue that there were more contributors than an issue of the journal could accommodate, and that contributors had more to say than page limits would allow. A subset of the authors whose contribution initially appeared in that special issue were invited to expand and update their journal article to be

included as a chapter in this handbook. To this core set of contributions were added chapters that address temperament, as well as chapters that extend the range of personality traits and individual differences represented in the special issue of *Journal of Personality*.

This handbook is organized in three parts. In Part I, the chapters focus on the emergence of aspects of temperament and personality relevant to self-regulation. Chapters in Part II provide accounts of self-regulation as it influences and is influenced by basic personality processes in normal adults. Part III is the largest, comprising 10 of the 21 chapters. Chapters in this part focus on individual differences that contribute to or reflect variability in the components, styles, and effectiveness of self-regulation. Collectively, these contributions offer a rich account of the state of the science in research on personality and self-regulation.

Acknowledgments

1

Personality and Self-Regulation

Rick H. Hoyle*

Because people are not in complete control of the physical and social environments they encounter in daily life, it is inevitable that discrepancies arise between what their identities, goals, and preferences lead them to expect or desire in specific situations and what transpires in those situations. People generally find such discrepancies at least mildly and temporarily unsettling, because they call into question their understanding of how the world works (or could work) or their understanding of their own goals, motives, or behavior. When these discrepancies arise, they generally are met with swift and decisive actions aimed at aligning expectations or desires and reality. These actions, collectively referred to as self-regulation, are the natural, often automatic response of healthy individuals to salient discrepancies between expectation and reality as they perceive it. They may involve cognition or behavior, and almost always are attended by affect.

Effective self-regulation is the bedrock of healthy psychological functioning. People who routinely are successful at self-regulation benefit from a sense of psychological stability and personal control that allows them to manage their perceptions of themselves and how they are perceived by others. Their behavior typically reflects salient goals and adopted standards of behavior. Departures

from these desired states are handled smoothly and effectively. People who routinely fail at self-regulation enjoy none of the psychological benefits that derive from a sense of psychological stability and control and struggle with mild to severe forms of psychopathology. Effective self-regulation, by which people control their thoughts, feelings, and behaviors, is essential for adaptive functioning.

The recognition that self-regulation is of central importance in adaptive functioning has inspired a large literature on the antecedents, correlates, and consequences of effective and ineffective self-regulation. Contributors to this literature represent the full range of subdisciplines within psychological science as well as other disciplines concerned with human behavior (e.g., sociology, education). In the psychological sciences, different perspectives and streams of research on self-regulation have been showcased in a number of edited volumes published within the last decade (e.g., Baumeister & Vohs, 2004; Boekaerts, Pintrich, & Zeidner, 2000; Cameron & Leventhal, 2003; de Ridder & de Wit, 2006; Heckhausen & Dweck, 1998).

Despite the impressive size and breadth of the literature on self-regulation in psychological science and related disciplines, relatively little research or theorizing (especially in the adult literature) has targeted the intersection of self-regulation and personality processes. As such, research on personality structure and process rarely reflects the rich detail of models of self-regulatory processes, and research on the self-regulatory processes rarely addresses the fact that some portion of those processes is a reflection of stable tendencies of individuals. The primary aim of this handbook is to bridge the personality and process-oriented literatures on self-regulation by showcasing programs of research that draw from and speak to both perspectives.

In this opening chapter, I begin by discussing personality and information-processing perspectives on self-regulation.

Next, I describe ways in which the personality and information-processing perspectives might be integrated. These range from methodological approaches, in which constructs representing the two perspectives are examined through integrated data-analytic strategies, to conceptual approaches, in which the two perspectives are unified in a holistic theoretical model of self-regulation. In the final section of the chapter, I preview the individual contributions that constitute the remainder of the handbook, which is organized in three conceptually coherent but overlapping parts: the emergence and early expression of variability in self-regulation; self-regulation as a process that plays out in the context of normal adult personality; and individual differences in the components, styles, and effectiveness of self-regulation.

Temperament and Personality Perspectives

The characteristic means by which people self-regulate and the routine success or failure they experience are reflected in personality traits. Many of these traits are rooted in temperament, which manifests early in life. Despite the obvious continuity between temperament and personality, the literatures on these two manifestations of personhood are relatively distinct; thus, they are summarized separately in this section.

Temperament Constructs

The basic elements of the self-system and the capacity to self-regulate begin to emerge early in life. For example, variation in the ability to inhibit behavior stabilizes by about one year of age (Kagan, 1997). The ego—the psychological

structure and processes through which people relate to their social and physical environment—undergoes differentiation and change as young children mature (Loevinger, 1976). In terms of self-regulation, the developing individual becomes increasingly more able to delay gratification and increasingly less prone to act impulsively or in response to external pressure (Hy & Loevinger, 1996). With the emergence of self-awareness and internalized standards of behavior comes the capacity to self-regulate.

A temperament construct with clear implications for self-regulation is effortful control, defined as the "ability to inhibit a dominant response to perform a subdominant response, to detect errors, and to engage in planning" (Rothbart & Rueda, 2005, p. 169). Although specific constructs and labels vary across models of temperament, most include two broad factors that reflect the tendency toward a dominant response of approach or avoidance. Through the exercise of effortful control, children are able to inhibit these dominant responses when they would conflict with an activity in which they are engaged. Individual differences in effortful control begin to emerge by two years of age and by four years of age are temporally stable (Kochanska, Murray, & Harlan, 2000). Effortful control is a precursor to the constraint dimension in adult models of personality.

A related temperament construct is behavioral inhibition, which focuses on variation in children's reactions to unfamiliar or unexpected stimuli. In the presence of such stimuli, children as young as one year of age who are behaviorally inhibited exhibit stress and behavioral restraint. The neurophysiology of behavioral inhibition indicates overactivity in brain regions associated with fear (Fox, Henderson, Marshall, Nichols, & Ghera, 2005). Thus behaviorally inhibited children are faced with the regulatory challenge of managing fear and anxiety in the face of the

unexpected. Because a stimulus for self-regulation is unexpected feedback from the environment (Duval & Wicklund, 1972), behaviorally inhibited individuals face the challenge of managing such feedback while also managing the fear and anxiety such stimuli invoke.

These and other temperament constructs influence the emergence and development of self-regulation and underlie personality traits relevant to adult self-regulation. Although a large number of personality traits have some relevance for adult self-regulation, those that follow most clearly from temperament and are most likely to appear in major models of personality can be grouped under the general headings of conscientiousness and impulsivity.

Conscientiousness and Related Constructs

Among the higher-order dimensions of personality, conscientiousness is the most clearly relevant for self-regulation. Although defined somewhat differently in lexical and psychometric models, conscientiousness generally concerns the ways in which people characteristically manage their behavior. People who are high on conscientiousness are confident, disciplined, orderly, and planful, whereas people who are low on conscientiousness are not confident in their ability to control their behavior, and are spontaneous, distractible, and prone to procrastinate (Costa & McCrae, 1992). In research linking conscientiousness to behavior, the more narrowly focused facets underlying the domain are emphasized (Paunonen & Ashton, 2001). The facets—competence/self-efficacy, orderliness, dutifulness, achievement striving, self-discipline, and deliberation/cautiousness—reflect different behavioral tendencies characteristic of successful self-

regulation (Roberts, Chernyshenko, Stark, & Goldberg, 2005).

A related higher-order dimension of personality is constraint, which reflects well the temperament trait of behavioral inhibition (Tellegen, 1982). Facets of constraint focus on the tendency to inhibit the expression of impulse and emotion (control), behavior at odds with social convention (traditionalism), and risk taking (harm avoidance). As with conscientiousness, in research on self-regulation constraint is best considered in terms of its facets.

Impulsivity and Related Constructs

As a trait, impulsivity is the tendency to act without thought or planning. It is evident in early childhood (Clark, 1993) and has a strong neurobiological signature (Spinella, 2004). Impulsive behaviors typically are quick, often inappropriate, and frequently risky. People who are highly impulsive are prone to a host of high-risk behaviors characterized by poor self-control (e.g., Hoyle, Fejfar, & Miller, 2000; Krueger, Caspi, Moffitt, White, & Slouthamer-Loeber, 1996; Wulfert, Block, Ana, Rodriguez, & Colsman, 2002). Although impulsivity can be assessed, and often is studied, as a trait, it also appears as a constituent of broader traits and domains of personality such as extraversion and psychoticism in the P-E-N model (Psychoticism, Extraversion, and Neuroticism; Eysenck, 1990), conscientiousness in the five-factor model (Costa & McCrae, 1992), impulsive sensation seeking in the alternative five-factor model (Zuckerman, Kuhlman, Joireman, Teta, & Kraft, 1993), and the behavioral approach system in Gray's (1994) neurophysiological model. Impulsivity typically is cast as a behavioral liability; however, in conditions that do not allow