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VOLUME 2

Group Processes

Mario Mikulincer and Phillip R. Shaver, *Editors-in-Chief*

John F. Dovidio and Jeffry A. Simpson, *Associate Editors*

American Psychological Association • Washington, DC

This book is dedicated to my students, who have helped and inspired me throughout my career and who have taught me (and continue to teach me) so much.
—*John F. Dovidio*

This book is dedicated to my family—Cindy, Chris, Natalie, Susan, and Ryan—for their love and inspiration.
—*Jeffry A. Simpson*

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Editorial Board

Contributors

Hillie Aaldering, MS, Department of Psychology, University of Amsterdam, the Netherlands

Dominic Abrams, PhD, School of Psychology, University of Kent, Canterbury, England

Joshua M. Ackerman, PhD, Sloan School of Management, Massachusetts Institute of Technology, Cambridge

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Adam A. Augustine, PhD, Department of Clinical and Social Sciences in Psychology, University of Rochester, Rochester, NY

Özlem Ayduk, PhD, Department of Psychology, University of California, Berkeley

Renée Baillargeon, PhD, Department of Psychology, University of Illinois at Urbana-Champaign

Benjamin Baird, Doctoral Candidate, Department of Psychological and Brain Sciences, University of California, Santa Barbara

Daniel Balliet, PhD, Department of Social and Organizational Psychology, VU University Amsterdam, the Netherlands

Manuela Barreto, PhD, School of Psychology, University of Exeter, England; and Lisbon University Institute (CIS/ISCTE-IUL), Lisbon, Portugal

Kim Bartholomew, PhD, Department of Psychology, Simon Fraser University, Burnaby, British Columbia, Canada

Lucy A. Bates, PhD, Centre for Social Learning and Cognitive Evolution, University of St. Andrews, Fife, Scotland

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

Lindsey A. Beck, PhD, Department of Communication Sciences and Disorders, Emerson College, Boston, MA

Lane Beckes, PhD, Department of Psychology, University of Virginia, Charlottesville

Verónica Benet-Martínez, PhD, ICREA and Universitat Pompeu Fabra, Barcelona, Spain

Lin Bian, Doctoral Candidate, Department of Psychology, University of Illinois at Urbana-Champaign

This contributor listing includes chapter authors across all four volumes.

Rezarta Bilali, PhD, Department of Applied Psychology, New York University, New York

Irene V. Blair, PhD, Department of Psychology and Neuroscience, University of Colorado, Boulder

Eugene Borgida, PhD, Department of Psychology, University of Minnesota, Minneapolis

Pablo Briñol, PhD, Facultad de Psicología, Universidad Autónoma de Madrid, Spain

David M. Buss, **PhD**, Department of Psychology, University of Texas, Austin

Richard W. Byrne, PhD, Centre for Social Learning and Cognitive Evolution, University of St. Andrews, Fife, Scotland

Lorne Campbell, PhD, Department of Psychology, University of Western Ontario, London, Ontario, Canada

W. Keith Campbell, PhD, Department of Psychology, University of Georgia, Athens

Amy Canevello, PhD, Department of Psychology, University of North Carolina, Charlotte

Rodrigo J. Carcedo, PhD, Department of Developmental and Educational Psychology, University of Salamanca, Spain

Charles S. Carver, PhD, Department of Psychology, University of Miami, Coral Gables, FL

Tomas Chamorro-Premuzic, PhD, Department of Psychology, University College London, England; and Department of Psychology, New York University, New York

Sapna Cheryan, PhD, Department of Psychology, University of Washington, Seattle

James A. Coan, PhD, Department of Psychology, University of Virginia, Charlottesville

Rebecca J. Cobb, PhD, Department of Psychology, Simon Fraser University, Burnaby, British Columbia, Canada

Dov Cohen, **PhD**, Department of Psychology, University of Illinois at Urbana-Champaign

Jennifer Crocker, PhD, Department of Psychology, Ohio State University, Columbus

Alyssa Croft, **MA**, Department of Psychology, University of British Columbia, Vancouver, Canada

William Cupach, PhD, School of Communication, Illinois State University, Normal

Nilanjana Dasgupta, PhD, Department of Psychology, University of Massachusetts, Amherst

Carsten K. W. de Dreu, PhD, Department of Psychology, University of Amsterdam, the Netherlands

Roland Deutsch, PhD, Department of Psychology, Technische Universitaet Dresden, Germany

Colin G. DeYoung, PhD, Department of Psychology, University of Minnesota, Minneapolis

Lisa M. Diamond, PhD, Department of Psychology, University of Utah, Salt Lake City

Ed Diener, PhD, Department of Psychology, University of Illinois at Urbana-Champaign

M. Brent Donnellan, PhD, Department of Psychology, Michigan State University, East Lansing

Bruce P. Doré, **Doctoral Candidate**, Department of Psychology, Columbia University, New York, NY

David Dunning, PhD, Department of Psychology, Cornell University, Ithaca, NY

Donald G. Dutton, PhD, Department of Psychology, University of British Columbia, Vancouver, British Columbia, Canada

Alice H. Eagly, PhD, Department of Psychology, Northwestern University, Evanston, IL

Paul W. Eastwick, PhD, Department of Human Development and Family Sciences, University of Texas, Austin

Nicholas R. Eaton, PhD, Department of Psychology, State University of New York, Stony Brook

Jiska Eelen, PhD, Amsterdam School of Communication Research, University of Amsterdam, the Netherlands

Victoria M. Esses, PhD, Department of Psychology, University of Western Ontario, London, Ontario, Canada

Allison K. Farrell, Doctoral Candidate, Department of Psychology, University of Minnesota, Minneapolis

Beverley Fehr, PhD, Department of Psychology, University of Winnipeg, Manitoba, Canada

Diane Felmlee, PhD, Department of Sociology, Pennyslvania State University, University Park

Eli J. Finkel, PhD, Departments of Psychology and Management and Organizations (MORS), Northwestern University, Evanston, IL

Susan T. Fiske, PhD, Department of Psychology and Woodrow Wilson School of Public and International Affairs, Princeton University, Princeton, NJ

Julie Fitness, PhD, Department of Psychology, Macquarie University, Sydney, New South Wales, Australia

Gráinne M. Fitzsimons, PhD, Department of Psychology and Fuqua School of Business, Duke University, Durham, NC

William Fleeson, PhD, Department of Psychology, Wake Forest University, Winston-Salem, NC

Rob Foels, PhD, Department of Psychology, Richard Stockton College, Galloway, NJ

Marc A. Fournier, PhD, Department of Psychology, University of Toronto Scarborough, Ontario, Canada

R. Chris Fraley, PhD, Department of Psychology, University of Illinois at Urbana-Champaign

David C. Funder, PhD, Department of Psychology, University of California, Riverside

Adam D. Galinsky, PhD, Management Department, Columbia University, New York, NY

Patrick Gallagher, PhD, Altisource, Winston-Salem, NC

Danielle Gaucher, PhD, Department of Psychology, University of Winnipeg, Manitoba, Canada

Brittany Gentile, PhD, Department of Psychology, University of Georgia, Athens

Erik J. Girvan, JD, PhD, School of Law, University of Oregon, Eugene

Jack Glaser, PhD, Richard and Rhoda Goldman School of Public Policy, University of California, Berkeley

Marci E. J. Gleason, PhD, Department of Human Development and Family Sciences, University of Texas, Austin

Samuel D. Gosling, PhD, Department of Psychology, University of Texas, Austin

Jeff Greenberg, PhD, Department of Psychology, University of Arizona, Tucson

Vladas Griskevicius, PhD, Carlson School of Management, University of Minnesota, Minneapolis

Ana Guinote, PhD, Department of Cognitive, Perceptual, and Brain Sciences, University College, London, England

Leila Guller, MS, Department of Psychology, University of Kentucky, Lexington

Samer Halabi, PhD, School of Behavioral Sciences, Tel-Aviv Jaffa Academic College, Jaffa, Israel

William Hall, MA, Department of Psychology, University of British Columbia, Vancouver, Canada

David L. Hamilton, PhD, Department of Psychological and Brain Sciences, University of California, Santa Barbara

Leah Hamilton, PhD, Department of Management, Mount Royal University, Calgary, Alberta, Canada

Martie G. Haselton, PhD, Department of Communication Studies, University of California, Los Angeles

Nick Haslam, PhD, School of Psychological Sciences, University of Melbourne, Parkville, Victoria, Australia

S. Alexander Haslam, PhD, School of Psychology, University of Queensland, Brisbane, St. Lucia, Australia

Zijing He, PhD, Department of Psychology, Sun Yat-sen University, Guangzhou, Guangdong, China

Todd F. Heatherton, PhD, Department of Psychological and Brain Sciences, Dartmouth College, Hanover, NH

Vicki S. Helgeson, PhD, Department of Psychology, Carnegie Mellon University, Pittsburgh, PA

Sarah D. Herrmann, Doctoral Candidate, Department of Psychology, Arizona State University, Tempe

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

Patrick L. Hill, PhD, Department of Psychology, Carleton University, Ottawa, Ontario, Canada

Aline Hitti, PhD, Department of Psychology, Tulane University, New Orleans, LA

Sara D. Hodges, PhD, Department of Psychology, University of Oregon, Eugene

Robert Hogan, PhD, Hogan Assessment Systems, Fernandina Beach, FL

Ryan Y. Hong, PhD, Department of Psychology, National University of Singapore

E. J. Horberg, PhD, Department of Psychology, Stanford University, Stanford, CA

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

William Ickes, PhD, Department of Psychology, University of Texas, Arlington

Masumi Iida, PhD, School of Social and Family Dynamics, Arizona State University, Tempe

Priya A. Iyer-Eimerbrink, PhD, Department of Psychiatry, Indiana University School of Medicine, Indianapolis

Lauri A. Jensen-Campbell, PhD, Department of Psychology, University of Texas, Arlington

Kyong-sun Jin, Doctoral Candidate, Department of Psychology, University of Illinois at Urbana-Champaign

John T. Jost, PhD, Department of Psychology, New York University, New York

Benjamin R. Karney, PhD, Department of Psychology, University of California, Los Angeles

Liam C. Kavanagh, Doctoral Candidate, Department of Psychology, University of California, San Diego

Aaron C. Kay, **PhD**, Fuqua School of Business and Department of Psychology and Neuroscience, Duke University, Durham, NC

Dacher Keltner, **PhD**, Department of Psychology, University of California, Berkeley

Melanie Killen, **PhD**, Department of Human Development and Quantitative Methodology, University of Maryland, College Park

Laura A. King, **PhD**, Department of Psychological Sciences, University of Missouri, Columbia

Jennifer M. Knack, **PhD**, Department of Psychology, Clarkson University, Potsdam, NY

Robert F. Krueger, **PhD**, Department of Psychology, University of Minnesota, Minneapolis

Virginia S. Y. Kwan, **PhD**, Department of Psychology, Arizona State University, Tempe

Mark J. Landau, **PhD**, Department of Psychology, University of Kansas, Lawrence

Natalia Lapshina, **MA**, Department of Psychology, University of Western Ontario, London, Ontario, Canada

Randy J. Larsen, **PhD**, Department of Psychology, Washington University, St. Louis, MO

Howard Lavine, **PhD**, Department of Political Science, University of Minnesota, Minneapolis

Colin Wayne Leach, **PhD**, Department of Psychology, University of Connecticut, Storrs

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

Jenna Lee-Dussud, **PhD**, Department of Psychology, University of Washington, Seattle

John M. Levine, **PhD**, Department of Psychology, University of Pittsburgh, Pittsburgh, PA

Karyn L. Lewis, **Doctoral Candidate**, Department of Psychology, University of Oregon, Eugene

Milton Lodge, **PhD**, Department of Political Science, State University of New York, Stony Brook

Timothy J. Loving, **PhD**, Department of Human Development and Family Sciences, University of Texas, Austin

Richard E. Lucas, **PhD**, Department of Psychology, Michigan State University, East Lansing

Diane M. Mackie, **PhD**, Department of Psychological and Brain Sciences, University of California, Santa Barbara

Joe C. Magee, **PhD**, Department of Management and Organizations, New York University, New York

Erika Manczak, **Doctoral Candidate**, Department of Psychology, Northwestern University, Evanston, IL

E. J. Masicampo, **PhD**, Department of Psychology, Wake Forest University, Winston-Salem, NC

Dan P. McAdams, **PhD**, Department of Psychology, Northwestern University, Evanston, IL

Stelian Medianu, **MS**, Department of Psychology, University of Western Ontario, London, Ontario, Canada

Rodolfo Mendoza-Denton, **PhD**, Department of Psychology, University of California, Berkeley

Sandra Metts, PhD, School of Communication, Illinois State University, Normal

Sarah Molouki, MA, Booth School of Business, University of Chicago, Chicago, IL

Joann M. Montepare, PhD, The RoseMary B. Fuss Center for Research on Aging and Intergenerational Studies, Lasell College, Newton, MA

D. S. Moskowitz, PhD, Department of Psychology, McGill University, Montreal, Quebec, Canada

Michael D. Mrazek, Doctoral Candidate, Department of Psychological and Brain Sciences, University of California, Santa Barbara

Kelly Lynn Mulvey, PhD, Department of Educational Studies, University of South Carolina, Columbia

Arie Nadler, PhD, School of Psychological Sciences, Tel Aviv University, Ramat-Aviv, Israel

Steven L. Neuberg, PhD, Department of Psychology, Arizona State University, Tempe

Paula Niedenthal, PhD, Department of Psychology, University of Wisconsin, Madison

Bernard A. Nijstad, PhD, Department of Human Resource Management and Organizational Behaviour, University of Groningen, the Netherlands

Kevin N. Ochsner, PhD, Department of Psychology, Columbia University, New York, NY

M. Minda Oriña, PhD, Department of Psychology, St. Olaf College, Northfield, MN

Elizabeth Page-Gould, PhD, Department of Psychology, University of Toronto, Ontario, Canada

Stefano Pagliaro, PhD, Department of Psychology, Seconda Università di Napoli, Italy

Sampo V. Paunonen, PhD, Department of Psychology, University of Western Ontario, London, Ontario, Canada

Lars Penke, PhD, Georg Elias Müller Institute of Psychology, Georg August University, Göttingen, Germany

Elise J. Percy, PhD, Department of Psychology, University of Western Ontario, London, Ontario, Canada

Daniel Perlman, PhD, Department of Human Development and Family Studies, University of North Carolina, Greensboro

Richard E. Petty, PhD, Department of Psychology, Ohio State University, Columbus

Paula R. Pietromonaco, PhD, Department of Psychology, University of Massachusetts, Amherst

Jennifer C. Pink, Master's Candidate, Department of Psychology, University of Western Ontario, London, Ontario, Canada

Michael J. Platow, PhD, Research School of Psychology, The Australian National University, Canberra, Australia

Victoria C. Plaut, PhD, School of Law, University of California, Berkeley

Felicia Pratto, PhD, Department of Psychology, University of Connecticut, Storrs

Emily Pronin, PhD, Department of Psychology, Princeton University, Princeton, NJ

Tom Pyszczynski, PhD, Department of Psychology, University of Colorado, Colorado Springs

Ted Reichborn-Kjennerud, MD, Norwegian Institute of Public Health, University of Oslo, Norway

Stephen D. Reicher, PhD, School of Psychology, University of St. Andrews, Fife, Scotland

Jennifer A. Richeson, PhD, Department of Psychology and Institute for Policy Research, Northwestern University, Evanston, IL

Brent W. Roberts, PhD, Department of Psychology, University of Illinois at Urbana-Champaign

Richard W. Robins, PhD, Department of Psychology, University of California, Davis

Michael D. Robinson, PhD, Department of Psychology, North Dakota State University, Fargo

Alexander J. Rothman, PhD, Department of Psychology, University of Minnesota, Minneapolis

Derek D. Rucker, PhD, Department of Marketing, Northwestern University, Evanston, IL

Gerard Saucier, PhD, Department of Psychology, University of Oregon, Eugene

Özüm Saygi, MS, Department of Psychology, University of Amsterdam, the Netherlands

David A. Sbarra, PhD, Department of Psychology, University of Arizona, Tucson

Mark Schaller, PhD, Department of Psychology, University of British Columbia, Vancouver, Canada

Toni Schmader, PhD, Department of Psychology, University of British Columbia, Vancouver, Canada

Abigail A. Scholer, PhD, Department of Psychology, University of Waterloo, Ontario, Canada

Jonathan W. Schooler, PhD, Department of Psychological and Brain Sciences, University of California, Santa Barbara

Julia Schüler, PhD, Institute of Sport Science, University of Bern, Switzerland

Norbert Schwarz, PhD, Department of Psychology and Marshall School of Business, University of Southern California, Los Angeles

Rose M. Scott, PhD, School of Social Sciences, Humanities, and Arts, University of California, Merced

Suzanne C. Segerstrom, PhD, Department of Psychology, University of Kentucky, Lexington

Peipei Setoh, Doctoral Candidate, Department of Psychology, University of Illinois at Urbana-Champaign

Kennon M. Sheldon, PhD, Department of Psychological Sciences, University of Missouri, Columbia

J. Nicole Shelton, PhD, Department of Psychology, Princeton University, Princeton, NJ

Steven J. Sherman, PhD, Department of Psychological and Brain Sciences, Indiana University, Bloomington

Rebecca L. Shiner, PhD, Department of Psychology, Colgate University, Hamilton, NY

Yuichi Shoda, PhD, Department of Psychology, University of Washington, Seattle

Jeffry A. Simpson, PhD, Department of Psychology, University of Minnesota, Minneapolis

Stephanie Sloane, Doctoral Candidate, Department of Psychology, University of Illinois at Urbana-Champaign

Eliot R. Smith, PhD, Department of Psychological and Brain Sciences, Indiana University, Bloomington

Gregory T. Smith, PhD, Department of Psychology, University of Kentucky, Lexington

Timothy W. Smith, PhD, Department of Psychology, University of Utah, Salt Lake City

Brittany C. Solomon, Doctoral Candidate, Department of Psychology, Washington University, St. Louis, MO

Susan C. South, PhD, Department of Psychological Sciences, Purdue University, West Lafayette, IN

Susan Sprecher, PhD, Department of Sociology and Anthropology, Illinois State University, Normal

Sanjay Srivastava, PhD, Department of Psychology, University of Oregon, Eugene

Sarah C. E. Stanton, Doctoral Candidate, Department of Psychology, University of Western Ontario, London, Ontario, Canada

Chadly Stern, Doctoral Candidate, Department of Psychology, New York University, New York

Flannery G. Stevens, PhD, Eccles School of Business, University of Utah, Salt Lake City

Nan L. Stevens, PhD, Behavioural Science Institute, Radboud University Nijmegen, the Netherlands

Fritz Strack, PhD, Department of Psychology, Universitaet Würzburg, Germany

Daniel Sullivan, PhD, Department of Psychology, University of Arizona, Tucson

Courtney Bearns Tablante, Doctoral Candidate, Department of Psychology, Princeton University, Princeton, NJ

Shelley E. Taylor, PhD, Department of Psychology, University of California, Los Angeles

R. Scott Tindale, PhD, Department of Psychology, Loyola University of Chicago, Chicago, IL

Kaitlin Toner, PhD, Institute for Energy and Environment, Vanderbilt University, Nashville, TN

Linda R. Tropp, PhD, Department of Psychology, University of Massachusetts, Amherst

Timothy J. Trull, PhD, Department of Psychological Sciences, University of Missouri, Columbia

Jean M. Twenge, PhD, Department of Psychology, San Diego State University, San Diego, CA

Tom R. Tyler, PhD, Law School and Department of Psychology, Yale University, New Haven, CT

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

Laura E. VanderDrift, PhD, Department of Psychology, Syracuse University, Syracuse, NY

Anita L. Vangelisti, PhD, Department of Communication Studies, University of Texas, Austin

Paul A. M. Van Lange, PhD, Department of Social and Organizational Psychology, VU University Amsterdam, the Netherlands

Martijn van Zomeren, PhD, Department of Social Psychology, University of Groningen, the Netherlands

Simine Vazire, PhD, Department of Psychology, Washington University, St. Louis, MO

Kathleen D. Vohs, PhD, Marketing Department, University of Minnesota, Minneapolis

Dylan D. Wagner, PhD, Department of Psychological and Brain Sciences, Dartmouth College, Hanover, NH

Nate Way, PhD, Department of Psychological and Brain Sciences, University of California, Santa Barbara

Donna D. Whitsett, PhD, Department of Psychology, University of Washington, Seattle

Thomas A. Widiger, PhD, Department of Psychology, University of Kentucky, Lexington

Joseph Wielgosz, **Doctoral Candidate**, Department of Psychology, University of Wisconsin, Madison

Benjamin M. Wilkowski, **PhD**, Department of Psychology, University of Wyoming, Laramie

Paula G. Williams, **PhD**, Department of Psychology, University of Utah, Salt Lake City

Nicole L. Wilson, PhD, Department of Psychology, University of Washington, Seattle

Piotr Winkielman, **PhD**, Department of Psychology, University of California, San Diego

Di Wu, PhD, Department of Psychology, Cedarville University, Cedarville, OH

Tal Yarkoni, PhD, Department of Psychology, University of Texas, Austin

Vivian Zayas, PhD, Department of Psychology, Cornell University, Ithaca, NY

Leslie A. Zebrowitz, PhD, Department of Psychology, Brandeis University, Waltham, MA

Noam Zerubavel, **Doctoral Candidate**, Department of Psychology, Columbia University, New York, NY

Volume 2 Introduction: Group and Intergroup Processes—Past, Present, and Future

Groups are fundamental to human existence. As Caporael and Brewer (1991) explained, "Individuals whose cognitive and motivational capacities are well suited for coordinated group life have a better chance of survival in that environment" (p. 191). Interest in groups also contributed directly to the early development of social psychology as a discipline. This introduction reviews the past, present, and future of the social psychological study of groups. It distinguishes two different threads of scholarship. One thread focuses on intragroup processes—dynamics within groups. Work on intragroup processes has emphasized the importance of leadership, influence and power within groups, loyalty, cohesiveness, cooperation, and performance. The study of group dynamics is of primary interest to the fields of industrial–organizational psychology and clinical psychology as well as to social psychology. The second thread centers on intergroup relations—the ways members of different groups orient toward each other. Research on intergroup relations focuses on social identity, symbolic and realistic conflict between groups, and interventions that can reduce intergroup conflict. This line of scholarship has direct implications for peace studies, education, and politics.

This introduction features three main sections. The first section presents an overview of the history of the study of group processes and intergroup relations in psychology. The second section considers recent developments in the study of groups, highlighting the particular contribution of each of the chapters in this volume. The third section is devoted to identifying promising directions for future research, including scholarship that expands the scope of the study of groups and that integrates an understanding of intragroup and intergroup processes more fully.

THE PAST: A BRIEF HISTORY OF GROUPS IN PSYCHOLOGY

Two treatises by French sociologists—Durkheim's *The Rules of the Sociological Method* (1895/1966) and LeBon's *The Crowd: A Study of the Popular Mind* (1895/1969)—stimulated the scientific study of groups in psychology (Levine & Moreland, 2012). By the beginning of the twentieth century, sociology clearly recognized the importance of groups to the identity and existence of human beings. Cooley (1902), in *Human Nature and the Social Order*, wrote that "there is no individual who may not be regarded as a particular view of social groups.

He has no separate existence.. . . in his life a man is bound into the whole in which he is a member" (p. 3). Simmel (1908/1955) considered fundamental differences in interactions within groups of various sizes. Sumner (1906) is credited with coining the terms "in-group" and "out-group," and his pioneering work on ethnocentrism has had profound historical influence. In addition, Triplett's (1898) classic empirical research on how being in a group compared with being alone affects the performance of bicyclists not only identified the phenomenon of social facilitation, which has had a long and influential history in social psychology, but also helped establish the experimental method as a core tool of psychology. By the turn of the century, the study of groups had a solid foundation to play a prominent role as psychology developed as a discipline.

Nevertheless, perhaps because of the dominant cultural emphasis within the United States on individualism and the resulting empirical focus on processes within people rather than between groups of people, the study of group processes and particularly work on intergroup relations languished on the periphery of the field, which was dominated by U.S. researchers, for many years. Brewer and Brown (1998) observed,

> A casual sampling of the first recognizable textbooks of social psychology, which appeared in the first three decades of the twentieth century, reveals that it [the topic of intergroup relations] was seldom, if ever, considered a legitimate field of inquiry. . . . One can search in vain the indices and contents pages of McDougall (1908), Ross (1908), and F. Allport (1924)—to cite but three classic texts—for references to intergroup relations. Even in the 1935 version of the *Handbook of Social Psychology*, edited by Murchison, barely a page is devoted to intergroup prejudice in Allport's (1935) chapter on attitudes. (p. 554)

More influential research on small groups, however, began to emerge in the 1930s (see Levine & Moreland, 2012). The famous Hawthorne effect, in which people systematically change their behavior when they know they are being studied, was first documented in an observational study of the productivity of people working alone or in groups at a Western Electric plant (Mayo, 1949). Newcomb's (1943) important study of changes in social and political attitudes of women across their college years began in the 1930s. In 1935, Sherif published his classic paper, using the autokinetic effect, on the development and maintenance of social norms in groups, and in 1939, Lewin, Lippitt, and White published their work on the effects of democratic, autocratic, and laissez-faire leadership styles on group functioning.

Research on intergroup relations also began to attract attention in the field during this period. Katz and Braly (1933) initiated a line of research using stereotype checklists to study how Whites (specifically White Princeton students) characterized members of different racial and ethnic groups, finding clear evidence of pervasive cultural stereotypes and bias. LaPiere's (1934) research demonstrating the discrepancy between expressed behavioral intentions and behavior was a study of intergroup attitudes. During a time of strong anti-Asian sentiment, which participants often openly expressed, he took a young Chinese couple on a 10,000-mile trip by car to visit more than 250 restaurants, campgrounds, and hotels across the United States. The Chinese couple was refused service only once. Dollard, Doob, Miller, Mowrer, and Sears (1939) tested the implications of their frustration-aggression hypothesis in an intergroup context: They examined the relationship between economic conditions and violence against Blacks in the South. Even though some of the specific

empirical conclusions of the classic studies of group processes (Strube, 2005) and intergroup relations (Green, Glaser, & Rich, 1998) have been challenged, these studies conducted before World War II helped establish the importance of groups in social psychology and have left an enduring legacy in the field.

Stimulated by the practical importance of intragroup and intergroup relations observed within the military during World War II, the immediate postwar period through the 1950s has been recognized as the "golden age of group research" (Levine & Moreland, 2012; see also Dovidio, Newheiser, & Leyens, 2012). Research in the 1950s moved the study of group processes and intergroup relations into the center of social psychology. Lewin's Research Center for Group Dynamics promoted the careers of scholars who soon would redefine the field of social psychology. This list of prominent researchers includes Dorwin Cartwright, Leon Festinger, Kurt Back, Stanley Schachter, and John Thibaut. Work by these and other scholars focused on critical aspects of group processes, such as social comparison, group cohesiveness, leadership, social power, social exchange, stages of group development, communication networks, conformity, and group problem solving.

In 1954, Sherif and his colleagues conducted a classic field study of both intragroup and intergroup processes in an area adjacent to Robbers Cave State Park in Oklahoma, United States (Sherif, Harvey, White, Hood, & Sherif, 1961). In this study, twenty-two 12-year-old boys attending summer camp were assigned randomly to two groups (who subsequently named themselves Eagles and Rattlers). When the groups engaged in a series of competitive activities (a tug-of-war and baseball and touch football games), intergroup bias and conflict quickly developed. Group members regularly exchanged verbal insults (e.g., "sissies," "stinkers," "pigs," "bums," and "cheaters"), and each group conducted raids on the other's cabins that resulted in the destruction and theft of property. Only after the investigators altered the functional relations between the groups by introducing a series of superordinate goals—ones that could not be achieved without the full cooperation of both groups and which were successfully achieved—did the relations between the two groups become harmonious.

In 1954, G. W. Allport also published his classic volume, *The Nature of Prejudice*, in which he identified issues (e.g., the pervasiveness of intergroup bias) and processes (e.g., social categorization) that set the agenda for new generations of researchers studying prejudice (see Dovidio, Glick, & Rudman, 2005). Although G. W. Allport generally is credited with introducing the contact hypothesis, which identifies the conditions under which intergroup contact can promote positive relations between groups, his critical contribution was mainly in integrating various empirical findings (Bramfield, 1946; Lett, 1945), observations of social dynamics among troops in World War II (Stouffer, 1949), and ideas from various fields (R. M. Williams, 1947) to reformulate the contact hypothesis for social psychological inquiry. For the past 60 years, intergroup contact has been considered one of psychology's most promising and effective strategies for improving intergroup relations and reducing bias and conflict (Pettigrew & Tropp, 2011).

Interest in groups, however, markedly declined toward the end of the decade (Wittenbaum & Moreland, 2008). In an influential article entitled "What Ever Happened to the Group in Social Psychology?" Steiner (1974) observed, "By the late 1950s social psychology turned inward. It had largely renounced or postponed its concern for larger social systems, and had centered its attention on internal states and processes: dissonance, attitudes, attributions" (p. 98). Steiner (1974) further noted that "by the 1960s social psychology had become much more individualistic. Interest in the group as a system had waned and research was generally

focused on intraindividual events or processes that mediate responses to social situations" (p. 94). Steiner warned that such a strict individualistic focus could not capture the transcendent influence of group processes on social life. Indeed, Steiner's comments were especially prophetic for the field of intergroup relations. Empirically, prejudice is related only modestly to discrimination ($r = .26$ to $.32$) and stereotypes have an even weaker relationship to discrimination ($r = .16$; see Dovidio, Brigham, Johnson, & Gaertner, 1996; Talaska, Fiske, & Chaiken, 2008).

Levine and Moreland (2012) suggested several reasons for the decline in scholarly interest in intragroup and intergroup processes. First, as McGrath (1984) proposed, theory in theses areas lagged behind the rapidly accumulating empirical evidence, obscuring new directions for research in these areas. Second, group research was proving more costly—involving more participants and requiring more complicated data analysis—than other types of research, making it less accessible for many researchers (Zander, 1979). Third, intergroup conflict became a less dominant social issue than in the intense cold war period of the 1950s and early 1960s, and researchers focused on other social phenomena (Steiner, 1974). Like many areas of psychology that moved away from a strong adherence to behaviorism (Skinner, 1972), attention shifted to intrapsychic processes, such as how people made causal attributions for the actions of others and their own behavior. The "cognitive revolution" in social psychology, which began in the 1960s and represented a dominant theme in social psychology through the 1970s, pushed the study of groups into the periphery of the field again.

In the 1980s, the pendulum swung back. Interest in groups was reinvigorated in part by the integration of concepts and methods from social cognition to the study of groups. This perspective in the study of groups has had significant momentum since then. For instance, research on problem solving in groups currently considers "socially shared cognition," involving the way people process information in collaboration (Levine, Resnick, & Higgins, 1993; Tindale, Meisenhelder, Dykema-Englblade, & Hogg, 2001). Work on transactive memory (Wegner, 1987) investigates how other people can serve as memory aids for one another, and people can rely on others to provide different types of knowledge when required in collaborations. In addition, group researchers continue to study how people often automatically and unconsciously engage in "social tuning" in which they adopt the attitudes or beliefs of another (Sinclair, Lowery, Hardin, & Colengelo, 2005) or the mimicry of specific behaviors (e.g., posture or gestures; Cheng & Chartrand, 2003), and how they contribute to social solidarity, harmony, and coordination.

In the 1980s, work in the area of intergroup relations moved away from defining stereotypes as erroneous and irrational, conceptualizing them more generally as cognitive schemas that facilitate information processes, memory, and retrieval (Fiske & Taylor, 1991, 2007). This perspective rekindled interest in stereotyping, producing more than a thousand new papers on the topic in the 1980s. It also expanded the scope of research in this area, which has had lasting impact. Focusing on social–cognitive processes in intergroup relations in this decade laid the foundation for work on implicit attitudes that became a dominant theme in the study of prejudices beginning in the 1990s. Traditionally, stereotypes and prejudice had been conceived as explicit responses—beliefs and attitudes people know they hold, subject to deliberate (often strategic) control in their expression (see Fazio & Olson, 2003). In contrast to these explicit, conscious, and deliberative processes, implicit prejudices and stereotypes involve a lack of awareness and unintentional activation. The mere presence of the attitude object may activate the associated stereotype and attitude automatically and without awareness.

In addition to adopting the theoretical perspectives and methodologies of social cognition, research on group processes and intergroup relations was stimulated by novel theoretical developments from Europe. Social psychologists in the United States, enamored by the reductionistic approach and the scientific precision of newly emerging techniques for studying the psychology of the individual, did little to heed Steiner's warning at that time. A new and vibrant interest in collective identity and intergroup behavior, however, was arising in the European social psychology community. This work was led primarily by the ideas and research of Henri Tajfel. Tajfel's work on the minimal intergroup paradigm revolutionized how the field of social psychology understood intergroup relations. Whereas previous research considered the importance of distinguishing in-groups from out-groups (Allport, 1954) and whether groups were cooperatively or competitively interdependent (Sherif et al., 1961), Tajfel demonstrated that the mere classification of people into in-groups and out-groups was sufficient to initiate intergroup bias.

Tajfel developed his ideas further, in collaboration with John Turner, in the form of social identity theory (Tajfel & Turner, 1979). Social identity theory differentiates personal identity, the elements of self-identity derived from individual traits and interpersonal relationships, from social identity, the elements of self-identity derived from social group membership. According to social identity theory, individuals have a repository of personal and social identities available to them, with each identity informing the individual of who he or she is and what the respective identity entails. This perspective suggests that a person defines the self along a continuum that ranges, at one extreme, from the self as a distinct individual with personal motives, goals, and achievements, to the self as the embodiment of a social collective or group at the other extreme. At each extreme, self-interest is represented by the pronouns "I" and "we," respectively. When personal identity is salient, the individual relates to others on an interpersonal level. When social identity is salient, however, the behavior between individuals assumes an intergroup quality because each person is a representative of his or her respective in-group.

Recognition of Tajfel and Turner's work on social identity and intergroup bias grew rapidly over the next decades (Dumont & Louw, 2009). Social identity theory and positions derived from it (such as self-categorization theory; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987) have guided thousands of empirical studies. Jump-started by developments in social cognition and social identity, research on groups, which had shown a steady decline through the late 1970s and the beginning of the 1980s, showed a sharp reversal. By the mid-1990s, research in group and intergroup processes was being published at a "disproportionately accelerating rate compared to the increase in social psychology as a whole" (Abrams & Hogg, 1998, p. 7).

The study of groups in social psychology—both intragroup and intergroup processes—is currently vibrant and expansive. Much of the growth in interest in groups, however, has focused on intergroup relations. Wittenbaum and Moreland (2008) surveyed publications on groups and noted,

> More than half (57%) of the papers focused on intergroup relations, which included work on social identity (14%), conflict between groups (17%), and stereotyping (26%). Two topic areas that interested many researchers were (a) group performance (14%), which included leadership (3%), productivity (4%), and group decision making (7%), and (b) conflict in groups (13%), which included social dilemmas (3%), negotiation (3%), majority/minority influence

(6%), and power (1%). The other major topic areas, namely group structure (6%), group composition (5%), and the ecology of groups (5%) were studied much less often. (pp. 194–195)

Dovidio, Hewstone, Glick, and Esses (2010) further documented the growth in scholarly interest in research on prejudice and stereotyping in particular, with the number of publications in this area

roughly doubling or tripling from each decade to the next, from only 29 works in the 1930s to 1,829 from 2000 through 2008. . . . From 1965 through 1984, 1–2% of the articles in [the leading] journals examined prejudice or stereotypes. Beginning in 1985, interest jumped; in recent years, almost 10% of the articles published in these mainstream journals study these phenomena. (p. 4)

The timing for a volume on group and intergroup processes could not be better. The area is in a highly generative period; it is an opportune time to reflect on the current state of scholarly work on the topic and identify the most promising new directions for the future. The next section is about the present, the current state of research on group processes and intergroup relations.

THE PRESENT: OVERVIEW OF THE CHAPTERS IN THE VOLUME

This section provides a brief overview of each chapter in the current volume to help readers understand the present landscape of research and theory on group and intergroup processes. Each chapter tackles core issues on a specific topic, providing an up-to-date, theoretically integrated review of the literature.

The topics covered by the chapters in this volume, however, do not consider all the meritorious topics on intragroup and intergroup processes. There are far too many important topics in the area at this time. Instead, the topics were selected to reflect some of the most active and promising areas in the study of group processes and intergroup relations. They blend core areas with new methodological and conceptual advances. Each chapter also illustrates the relevance of work in the area to other areas and to issues of practical importance, such as social justice, immigration, and collective action. In addition, each chapter outlines an agenda for future research. The authors were invited not only because of their accomplishment and expertise in the area but also because of their scholarly vision and imagination.

Chapter 1, "Social Influence in Groups," tackles a topic of enduring interest in the study of groups. The focus of the chapter is on the processes of majority and minority influence. Although the basic finding in this area is straightforward and not surprising—in the authors' words, "on the whole, majorities have an easier time producing public influence than do minorities" (p. 20)—Levine and Tindale distinguish between processes involved in decision making and those implicated in attitude change. The authors also examine how different contextual features, such as whether there is direct interaction, affect the processes and influence the outcomes. Although various theoretical positions have been proposed in recent years to capture the dynamics of majority and minority influence, Levine and Tindale argue that the classic distinction between informational social influence (influence based on increases in knowledge provided by others) and normative social influence (influence rooted in pressures to conform) still offers the most comprehensive explanation of social influence in groups.

Chapter 2, "Creativity in Groups," examines the question of whether people working alone or in groups are more creative. This issue is also one of longstanding interest in the field; it represents one facet of the general question of whether working in groups is more or less productive than working alone. This topic has been of particular interest recently because of the emphasis on team activities in modern organizations. Although traditional face-to-face groups generally do produce less creative solutions than people working independently, Nijstad considers how factors such as the diversity of the group and introduction of new members to a group can facilitate creativity. He also emphasizes, however, that a climate of effective cooperation is needed to realize the creative potential of groups. Nijstad presents a strong case for why broader theoretical perspectives are needed to explain how and when groups can be more creative than individuals.

Chapter 3, "Leadership: Theory and Practice," reviews the literature on how the personal qualities of individuals and the context shape who will assume positions of leadership in a group. S. A. Haslam, Reicher, and Platow further emphasize the importance of "followership" in this process, discussing the newer identity perspective that "sees leadership as a relational process that centers on the group-based bonds between leaders and followers" (p. 68). The authors also raise provocative broader issues about (a) adopting multiple methods for studying leadership; (b) changing the frame in which leadership is seen, from a focus on the leader to recognition of the relationship between leaders and followers; and (c) understanding the politics of leadership. The data and ideas in this chapter map a new course for the study of leadership.

Chapter 4, "Social Justice," explains the central importance of perceptions of fairness in social life. Perceptions of justice determine people's thoughts and feelings in response to events, play an important role in establishing cooperative relations with others, and motivate people to behave in ways beyond immediate self-interest. Tyler identifies four basic dimensions by which justice is measured: (a) outcome relative to perceived standards (relative deprivation), (b) the fairness of the allocation of resources among people (distributive justice), (c) the fairness of the procedures used for making judgments (procedural justice), and (d) the appropriateness of punishment for people who break rules (retributive justice). Tyler also considers the ways perceptions of justice contribute to group commitments and stability, and reciprocally how group membership affects perceptions of social justice.

Complementing the chapter on social justice, Chapter 5, "Groups and Morality," expands the study of morality, which traditionally has focused on individuals, to recognize the role of groups. Morality is a basic dimension on which groups are judged and is a basis for trustworthiness, which "is at the heart of the human experience" (p. 143). Leach, Bilali, and Pagliaro further propose that morality is a primary determinant of the nature of relations within and between groups. The authors review theory and research on morality regarding in-groups, and their analysis demonstrates that morality is a critical element in the formation of in-group identity, development of positive esteem, and initiative for social action. The authors also reveal how morality affects the ways other groups are perceived and treated.

Chapter 6, "Conflict and Negotiation Within and Between Groups," reviews classic and contemporary theory and research on the origins of intergroup competition and conflict. These processes are directly relevant to the topics of several other chapters in this volume. de Dreu, Aaldering, and Saygi consider the ways humans regulate intergroup competition and conflict and observe that "intergroup competition and conflict serve other functions than just mere destruction" (p. 151). The chapter introduces a multilevel perspective that

provides novel insights into negotiations among members of a group and of different groups that includes both top-down and bottom-up influences. Top-down influences involve how broader group relations influence negotiations, whereas bottom-up influences relate to how the processes and outcomes of negotiations shape group processes and relations. The authors build on this framework to identify productive avenues for new research.

Chapter 7, "Social Development and Intergroup Relations," identifies the most important new trends, which have emerged rapidly over the past two decades, on this topic. Killen, Hitti, and Mulvey explain how understanding the developmental origins of intergroup attitudes and stereotypes, as well as the cognitive mechanisms children employ when making judgments in intergroup contexts, "can clarify how and why adult forms of prejudice, bias, and discrimination manifest, and what it is that makes such biases deeply entrenched" (p. 177). The authors show how children's predisposition toward sociality contributes to the development of fairness and justice, which acts as a force to be inclusive and to treat others equally, and how their predisposition for group affiliation fosters group alliances, identity, and a sense of social community. Killen and her colleagues also identify the social relationships (with peers and adults) and the social cognitive skills that enable children to give priority to fairness as well as the factors that contribute to prejudice and bias.

Chapter 8, "Social Identity and Intergroup Relations," examines how social identity critically determines the ways people think about, feel about, and act toward members of their own group and other groups. Abrams presents social identity theory as "a metatheoretical lens through which both intergroup and intragroup phenomena can be viewed" (p. 218) and as a framework that links "societal structures and intergroup differences with individuals' behavior" (p. 203). The chapter outlines the motivations that relate social identity to intergroup behavior, including self-esteem, distinctiveness, and uncertainty reduction. Abrams focuses on three key elements of social identity processes: (a) how people manage situations in which there are multiple social identities in play, (b) how social identity is implicated in collective influence and action, and (c) how responses to deviant group members involve social identity. The importance of social identity processes is a cross-cutting theme among the chapters in this volume.

Chapter 9, "Convergence and Divergence in Perceptions of Persons and Groups," probes fundamental questions about basic processes in social perception and cognition. This chapter builds on Hamilton and Sherman's (1996) seminal work on this topic and evaluates their premise that "the basic mechanisms used in processing information about persons and groups are the same, but they are engaged to differing degrees for the two types of targets" (pp. 230–231). In this chapter, Hamilton, Sherman, Way, and Percy conclude that perceivers both assume and perceive a level of consistency in individuals that exceeds the actual consistency in the individuals' behavior. The ways groups are judged are influenced largely by the perceived unity (or entitativity) of the group. Enititavity facilitates stereotyping of the group and leads to stronger attributions of group motives and goals. The authors also introduce the concept of personativity, which represents differences among perceivers in the extent to which individuals are perceived as possessing unity and coherence in their actions, and its implications for person perception.

Chapter 10, "Intergroup Emotions," reviews research on this topic, which has attracted considerable scholarly attention in recent years. Mackie and Smith conceive intergroup emotion as a truly group-level rather than individual-level phenomenon: It "is a product of social identity, generated by an evaluation or recognition of the relevance of objects and events for the particular conception of self that is currently salient" (p. 285). The authors consider

not only the role of group-based emotions in fueling intergroup conflict but also, alternatively, the power of intergroup emotions to undermine prejudice and to repair and restore interactions between groups. Group-based emotions can motivate one group to intervene on behalf not just of the in-group but also of other victimized groups (see also Chapter 19, this volume). Mackie and Smith further examine how theorizing and research about group-based emotions is raising new questions about intergroup perception, the meaning of group membership, and the nature of the bonds between group members and groups.

Chapter 11, "Dehumanization and Intergroup Relations," explores the significant influence of perceptions of humanness on how people relate to others. This topic has stimulated considerable scholarly interest over the past decade, and the resulting work has extended the range of phenomena studied to consider the diversity of targets and a variety of new theoretical concepts and research methodologies. Perceptions of humanness are critical in assessments of social justice and in moral considerations (also see Chapters 4 and 5, this volume). N. Haslam notes that whereas dehumanization was once considered to be an extreme phenomenon, the "new look" at dehumanization reveals an assortment of milder, subtler, and more everyday variants. The chapter focuses on five key questions concerning (a) how people dehumanize others, (b) why people dehumanize others, (c) who tends to be dehumanized, (d) who tends to dehumanize, and (e) the implications or outcomes of dehumanization. Haslam concludes with suggestions for future research on humanness in self-perception, sexual objectification, dehumanization from the perspective of the dehumanized, dehumanizing language, and humanness in the perception of animals.

Chapter 12, "'The World Isn't Fair': A System Justification Perspective on Social Stratification and Inequality," focuses on the broad influence of system justification motives on group processes. Jost, Gaucher, and Stern posit that "the system justification motive drives individuals to exaggerate their system's virtues, downplay its vices, and see the societal status quo as more fair and desirable than it actually is" (p. 321). System-justifying motives lead to "an inherently conservative tendency to maintain the status quo" (p. 321). Jost and his colleagues systematically review basic postulates of the theory, present relevant research evidence, and propose next steps for research on the topic. They also offer provocative observations about how system justification motives encourage people "subtly or not so subtly, to excuse those aspects of the social system, such as the ever-widening gap between the rich and poor, that otherwise might inspire us to demand a world that is, among other things, fair and sustainable" (p. 335).

Chapter 13, "The Hidden Dynamics of Discrimination: How Ideologies Organize Power and Influence Intergroup Relations," emphasizes the dynamic, reciprocal relation between social ideologies and intergroup power. Foels and Pratto explain how social ideologies influence structural aspects of intergroup power relations (e.g., hierarchical relations between groups, differential access to resources; see also Chapter 12, this volume). In addition, the authors discuss how the nature of intergroup power can influence the contents, level of endorsement, and use of social ideologies, and in particular, they (a) explain the hidden properties of ideologies and the transformative properties of power, (b) discuss how ideologies can organize power, and (c) identify contemporary ideologies in the U.S. and other Western societies. The authors conclude that understanding the relation between power and ideology makes the critical role of hierarchy in society more apparent and shifts attention in explanations of inequality from cognitive or personality factors occurring within individuals to structural and cultural influences.

Chapter 14, "Helping Relations and Inequality Between Individuals and Groups," examines the shift in social–psychological research from a focus on help giving as an expression of solidarity to helping interactions as expressions of inequality between helper and recipient, both for individuals and for groups. Nadler and Halabi organize the chapter around three concepts that link helping and social inequality: (a) prestige and reputation gained, or lost, by giving or receiving help; (b) the effects of helping or being helped on feelings of self-worth; and (c) helping relations as maintaining or challenging structural status relations between groups. They also explore how context (e.g., the security of status relationships) and the characteristics of the help (autonomy or dependency oriented), of the recipient, and of the helper affect the readiness of a person or group to seek and receive help. This chapter provides important insights about how seemingly "prosocial" behavior can contribute subtly to a status quo of social inequality (see also Chapters 12 and 13, this volume) or be an element of social change.

Chapter 15, "Interacting Across Racial Lines," further investigates and illuminates the complex dynamics of intergroup interactions—specifically, interracial exchanges. Shelton and Richeson observe that people not only form negative impressions of out-group interaction partners but also often develop negative perceptions of how out-group interaction partners perceive them. These perceptions and meta-perceptions can have short- and long-term implications for individuals' affect, behavior, and cognition during interracial interactions. Shelton and Richeson consider the roles of categorization processes, self-regulatory processes, and asymmetrical concerns and experiences in these outcomes. In particular, they describe three current, influential approaches to the study of interracial interactions: the (a) relational approach, (b) stress and coping approach, and (c) motivational mind-sets approach. The authors also identify new directions for research in this area, considering for example, multiple identities and differences across various in-group–out-group dimensions.

Chapter 16, "Psychological Perspectives on Immigration and Acculturation," integrates research on intragroup and intergroup processes around a timely international issue: immigration. Esses, Medianu, Hamilton, and Lapshina focus their work on psychology's three largest contributions to the study of immigrants and immigration: (a) determinants of the decision to migrate, (b) attitudes and behavior toward immigrants and immigration by members of the host society, and (c) acculturation from the perspective of both immigrants and host societies. The authors apply social psychological principles and knowledge to answer questions relating to factors influencing the decision to migrate, relations between immigrants and host communities, and identity change and persistence. They conclude the chapter with concrete suggestions about new areas of interest in international migration and the role that psychological research can play in addressing pressing questions about immigration policy.

Chapter 17, "Stereotype Threat in Intergroup Relations," considers the responses of members of stigmatized groups to making their collective identities salient. Schmader, Hall, and Croft highlight the profound influence of cultural stereotypes and the self-perpetuating power of these stereotypes. Drawing on the substantial literature on stereotype threat, the authors explain how even subtle reminders of these cultural expectancies can lead to underperformance, particularly for individuals motivated to achieve in these domains. In addition to the traditional emphasis in this literature on the experience of members of stigmatized groups, the authors examine the intergroup consequences. They discuss the important but understudied societal effects as members of nonstigmatized groups attempt

to understand continued group-based gaps in advancement even after institutional barriers to success have been removed. The authors show how small changes in framing or context "can clear the air of stereotype threat" (p. 466) and improve the performance of those who are stigmatized.

Chapter 18, "Experiencing and Coping With Social Stigma," tackles broad issues in the way people respond and sometimes adjust to stigmatization of their group. Barreto discusses the kinds of factors that can trigger stereotype threat, and takes the perspective of those who are stigmatized and reviews research examining (a) perceptions of prejudice, (b) its impact on individual targets, (c) the strategies that are used to cope with stigma, and (d) what is currently known about their costs and benefits. Barreto reveals how the factors that have been shown to affect perceived discrimination can intervene before prejudice or discrimination are encountered (e.g., prejudice expectations) or as the prejudiced event unfolds (e.g., contextual cues). Some of these factors affect perceptions of discrimination by modifying cognitive processing (e.g., information availability), whereas others shape the perceiver's motivation to see (or not to see) themselves or their group as targets of prejudice, while yet others function through a combination of cognitive and motivational processes (e.g., group identification). Barreto also identifies emerging trends, such as recent work demonstrating the importance of dominant group allies in combating discrimination and still-unanswered questions about the conditions under which allies are recruited, what might motivate them to support members of socially stigmatized groups, and how allies are perceived and received by others.

Chapter 19, "Psychological Processes in Social Action," addresses issues, complementing the previous chapter, concerning collective action in response to stigmatization and inequality. van Zomeren presents an up-to-date overview of the different motivations that individuals have when undertaking social action, and he integrates this research conceptually and offers a new research agenda. He also explains the multimotivational nature of humans and its relevance to the literature on motivations for social action. Social action is motivated by emotions, such as anger and outrage about collective disadvantage, beliefs relating to perceptions of efficacy about achieving social change, and identification with the disadvantaged group. van Zomeren expands the traditional focus on social action as a response of disadvantaged-group members to consider distinctive influences, such as sympathy (also see Chapter 10, this volume) and beliefs about moral violations (also see Chapter 5, this volume), that also can motivate members of advantaged groups to initiate social action to benefit disadvantaged groups.

Chapter 20, "Contact Between Groups," reviews the current state of research on intergroup contact theory. As noted earlier in the review of the history of group research, intergroup contact theory has been one of the most influential approaches in psychology for improving intergroup attitudes and relations. This chapter focuses on majority–minority relations between groups, whereas Chapter 1 examined majority–minority influence within groups. Tropp and Page-Gould summarize the vast literature on intergroup contact, with careful consideration of the boundary conditions. They distinguish between conditions under which intergroup contact reduces prejudice and the circumstances under which it may increase it. The chapter also identifies pathways through which contact confers beneficial intergroup outcomes. In addition, Tropp and Page-Gould discuss the challenges of intergroup contact, which are often evident in the initial moment of contact (also see Chapter 15, this volume), while also showing how achieving close relationships with a member of another group can have especially profound effects on reducing intergroup prejudice. The authors conclude by

identifying psychological processes that explain these different potential effects, and they conceptually integrate the different processes that critically determine the dynamic nature and outcomes of intergroup contact.

Each of the chapters in this volume includes cogent analysis of productive new research directions on each topic. The next section of this introductory chapter offers an additional perspective on future research in the study of groups by identifying select new directions for the study of groups more broadly. It discusses both methodological and conceptual opportunities for advancing the study of groups.

THE FUTURE: NEW DIRECTIONS IN GROUP PROCESSES AND INTERGROUP RELATIONS

The study of group processes and intergroup relations represents a potential bridge between social psychology and disciplines that study more microlevel aspects of human behavior, such as neuroscience, and those that emphasize more macrolevel processes, such as economics, sociology, and political science. This section discusses two general thrusts for future research on groups. One is to increase the span of research on group and intergroup processes to synthesize the study of groups with the perspectives of other disciplines. The other general direction is to fortify the bridge itself by integrating more strongly work in intragroup and intergroup processes.

Increasing the Span: Levels of Analysis

The study of groups in psychology typically has involved small groups. Research in this area, as described in earlier sections of this chapter, has produced deep knowledge about how these groups function and how they relate to each other. This section considers future directions for expanding the paradigm and theoretical perspective for studying group processes. It identifies specific ways to link current work on groups with topics and techniques at more micro- and more macrolevels of analysis; it selectively presents examples that offer relatively immediate opportunities because of the availability of relevant techniques and mutual interest—the proverbial "low-hanging fruit."

Microlevel analysis.   A number of promising new directions, such as behavioral genetics (involving the genetic inheritance of behavioral traits) and epigenetics (the study of how gene expression can be modified by factors such as environmental influences), have long-term potential for illuminating group processes. This part of the chapter, however, focuses on work in neuroscience, neuroendocrinology, and psychophysiology that offers more immediate possibilities. Group phenomena involve exchanges between individuals and coordinated aggregates of individuals, whereas neuroscience, neuroendocrinology, and psychophysiology typically are conceived of as intraindividual processes. Nevertheless, understanding the role of neuropsychological and psychophysiological processes in group processes and intergroup relations can offer mutually valuable new insights.

As noted earlier, groups play a critical role in human existence, both evolutionarily and in current functioning. Feeling part of a group increases people's sense of well-being (Walton & Cohen, 2011) and security (Correll & Park, 2005). Thus, the consequences of being included or excluded from a group have been of central interest historically in the study of groups. Recent developments in neuroscience, however, have produced several relevant findings, creating immediate opportunities to bridge the fields.

Although the attention of social neuroscientists has focused largely on brain-imaging techniques (Amodio & Lieberman, 2009), hormonal changes also influence group processes. Oxytocin, a hormone that facilitates maternal bonding, plays a role in both intragoup and intergroup processes. Administration of oxytocin promotes trust and cooperation among members of a group (Kosfeld, Heinrichs, Zak, Fischbacher, & Fehr, 2005). These effects, however, appear specifically directed at in-group members, not out-group members. In fact, ocytocin contributes to intergroup bias by motivating in-group favoritism and, to a lesser degree, out-group derogation (de Dreu, Greer, Van Kleef, Shalvi, & Handgraaf, 2011). Another hormone, progesterone, is associated with affiliative motivation. After being excluded from a group, individuals who are given opportunities to reaffiliate exhibit increases in progesterone, whereas those who are concerned about further rejection (i.e., those high in social anxiety) show decreased levels (Maner, Miller, Schmidt, & Eckel, 2010). Even though the study of neuroendocrine influences in group processes is still an emerging area, it has considerable promise.

Another topic connecting neuroscience and the study of groups is pain. As psychologists have demonstrated amply, being excluded from a group—even a temporary exclusion in a virtual game of catch on a computer (cyberball)—is painful (Eisenberger, Lieberman, & Williams, 2003). Recent investigations that bridge group research and neuroscience demonstrate that social pain resembles physical pain in fundamental ways (MacDonald & Leary, 2005). In fact, based on current research, social pain appears to be virtually identical in terms of brain activation to physical pain (Eisenberger, 2012). Approaching this topic from the complementary perspectives of group processes and neuroscience offers new insights to both areas. Neuroscience typically has conceived of neural activation as a response of an individual to immediate stimuli, but recent studies demonstrate substantial social effects. For instance, people display neural activation of pain when observing someone else who is experiencing social or physical pain (Lamm, Decety, & Singer, 2011), particularly when the person is someone with whom they have a meaningful social connection (Beeney, Franklin, Levy, & Adams, 2011).

Although feelings of belonging to a group can have tangible psychological and social benefits, being a member of a stigmatized—a socially devalued group—also has costs. One such cost is social identity threat, a psychological state that occurs when a person fears being judged through the lens of a negative group stereotype or devalued on the basis of group membership (see Chapter 17, this volume). Social identity threat is aversive, leading to increased physiological stress responses, including increases in blood pressure, skin conductance, and cortisol. Even in the absence of discrimination, situational cues that make social identity threat salient can increase stress, which adversely affects emotional, cognitive, and physiological responses (for a review, see Schmader, Johns, & Forbes, 2008). For example, when women experienced social identity threat associated with stereotypes about women's limited abilities in mathematics, they showed less activation of neural networks associated with mathematical performance and greater activation of a neural region associated with social and emotional processing, compared with women who did not have identity threat aroused (Krendl, Richeson, Kelley, & Heatherton, 2008).

Membership in socially devalued groups can also have long-term negative physiological and health consequences (see Major, Mendes, & Dovidio, 2013). Self-reported experiences of chronic or acute discrimination are related to poorer mental and physical health (for reviews, see Pascoe & Smart Richman, 2009; D. R. Williams & Mohammed, 2009). Increased stress associated with being or perceiving oneself to be a target of negative

stereotypes, prejudice, and discrimination can negatively affect health through several pathways. Worry, rumination, distrust, and uncertainty about anticipated mistreatment can lead to acute increases in blood pressure, reduced heart rate variability, and higher cortisol levels, and ultimately may exacerbate physical health problems (e.g., Guyll, Matthews, & Bromberger, 2001; Mendes, Major, McCoy, & Blascovich, 2008). Repeated patterns of activation of stress systems in response to acute discrimination, over time, can accumulate to damage the body. In addition to its effects on cardiovascular responses, discrimination affects health through other biological pathways, including repeated activation and ultimately dysregulation of the hypothalamic pituitary adrenal cortical system (McEwen, 2004) and interference with the body's restorative processes (e.g., by interfering with sleep and relaxation; Beatty et al., 2011). As a consequence, self-reported experiences of discrimination are related to poorer physical health outcomes, such as hypertension, diabetes, respiratory problems, self-reported ill health, low-birth-weight infants, and cardiovascular disease.

More generally, perceiving oneself and others in terms of group membership profoundly changes the way people think and feel about others (see Dovidio & Gaertner, 2010). The processes involved in distinguishing different group memberships of others and delineating the in-group from the out-group are basic to human existence, historically as well as in contemporary life. Nonhuman primates, such as capuchin and rhesus monkeys, show similar biases, favoring members of social in-groups and being wary of members of their species from other social groups (de Waal, Leimgruber, & Greenberg, 2008; Mahajan et al., 2011). Neuroscience research further shows distinctive brain activity when people are exposed to others who are members of an in-group or an out-group (Van Bavel, Packer, & Cunningham, 2008). As noted earlier, when people observe others, they tend to activate neural networks associated with the same actions and expressions, which increases social sensitivity, empathy, and ultimately responsiveness toward others (Gonzalez-Liencres, Shamay-Tsoory, & Brüne, 2013). This response, however, also occurs primarily for other in-group members, not for out-group members (Gutsell & Inzlicht, 2010).

By contrast, other areas of the brain are more likely to be activated by out-group than by in-group members. The amygdala continuously scans for information from the senses for signs of potential threat. Although there are pathways between the amygdala and the cortex, activation of the amygdala does not require deep or complex thought. People are significantly more likely to display amygdala activation when exposed to members of out-groups than in-groups (Hart et al., 2000). Although this activation generally occurs spontaneously, it is stronger among people with greater biases against the out-group (Cunningham, Raye, & Johnson, 2004; Phelps et al., 2000). Shifting the dimension that forms the basis on in-group–out-group categorization in a particular context, for example, from race to team membership, systematically can alter the pattern of neural activation (Van Bavel et al., 2008; see also Van Bavel & Cunningham, 2010). This finding from social neuroscience reinforces the view of many evolutionary psychologists that racism is not inherent in human thinking but rather that people are attuned, neurally as well as psychologically, to information about whether others are likely cooperators or competitors (Cosmides, Tooby, & Kurzban, 2003).

Taken together, there are a number of new and potentially research-generative points of contact between the study of groups and neuroscience. New research on these topics can help illuminate how group and intergroup processes affect the ways people respond immediately as well as the long-term effects on well-being. Studying the intersections between groups and neuroscience also can push neuroscience researchers to understand the importance of group contexts for intraindividual responses.

Macrolevel analysis.   Social neuroscience has attracted considerable attention in the field and offers exciting new avenues for research on groups, but the study of group and intergroup processes also benefits from its connections to disciplines that traditionally employ more macrolevels of analysis, such as sociology; political science; and, more recently, economics. In fact, if social psychology becomes too distracted by neuroscientific approaches, it may cede its scholarly position with respect to macro issues to other disciplines.

Current work in political psychology already integrates research on group processes and intergroup relations in psychology with theoretical perspectives and topics from political science. This work incorporates recognition of historical, political, cultural, and structural forces. Chapters 12 and 13 in this volume represent the interplay of psychological and societal influences related to justification of inequality. At the societal level, psychological tendencies to defend, bolster, and justify aspects of the status quo shape the worldviews of those who are most invested in the social system. These different influences are complementary, operating in concert to affect attitudes, beliefs, aspirations, and behaviors in ways that contribute to the stratification of social life (see also Costa-Lopes, Dovidio, Pereira, & Jost, 2013).

Other productive interdisciplinary alliances are possible. Experimental economics, which is growing rapidly and attracting more public attention, addresses many issues that traditionally have been in the domain of group processes in psychology. Much of the research in experimental economics uses simulations for resource exchange, such as the dictator game in which participants choose how much of a resource they will share with another person. Psychologists studying group processes traditionally have relied heavily on a range of research allocation paradigms, involving social dilemmas, to study cooperation, competition, and trust within dyads and groups. Social dilemmas involve a tension between maximizing personal and collective gain.

Resource allocation simulations using social dilemmas have provided a methodological foundation for the study of group processes in psychology for several decades (see Chapter 6, this volume). More recently, these techniques have been extended to explore in-group–out-group effects. Specifically, group membership fundamentally shapes feelings of trust and perceptions of others' trustworthiness. Foddy, Platow, and Yamagishi (2009), for example, informed people that previous in-group and out-group participants had been given money to distribute between themselves and an unknown other person in any way they chose (similar to a dictator game). People simply had to choose between an opportunity to receive money from either an in-group or an out-group member. Participants in this research were significantly more likely to choose to receive money from an in-group than from an out-group stranger, suggesting that they trusted the in-group member more. Moreover, people display greater distrust when they interact with the out-group collectively than with an individual out-group member (Wildschut & Insko, 2007). Current initiatives in experimental economics thus offer additional intersections of interest that provide timely opportunities for interdisciplinary collaboration and exchange of ideas that can illuminate how macrolevel influences affect group processes and intergroup relations.

In addition, partly because of its emphasis on general principles of human behavior but also in part because of the area's methodological reliance on laboratory experiments using convenience samples (Henry, 2008), social psychological research has devoted limited attention to how culture, history, and social structure influence behavior. In contrast to sociology, socioeconomic or regional demographic differences of participants largely remain unanalyzed in articles on group processes. Except for research specifically designed to be

cross-cultural, geographic influences—in terms of the background of the participants or the location of the study—rarely are considered systematically in group research.

These factors, as other disciplines amply demonstrate, can have critical implications for the psychological study of group processes. For instance, group dynamics differ markedly in cultures that are individual oriented compared with those that are group oriented. Cultures with a Northern European heritage are the most representative individual-oriented cultures. In individual-oriented cultures, individual rights, self-determination, and the pursuit of self-interest are emphasized (Markus, Mullally, & Kitayama, 1997). East Asian cultures are most representative group-oriented societies. Group-oriented cultures stress interdependence between the self and in-groups, roles, positions, and hierarchical relations within a group, group decisions, and group norms (Triandis, 1994). Moreover, this individual- compared with group-oriented cultural difference can shape intergroup, as well as intragroup, relations. Because individual-oriented cultures promote personal choice and distinctive initiative, whereas group-oriented cultures emphasize interdependence and conformity among in-group members (Gardner & Seeley, 2001; see also Markus & Kitayama, 1991), individual-oriented cultures tend to be more accepting of group and intergroup diversity (Shin, Dovidio, & Napier, 2013).

Recognizing fundamental cross-cultural differences in group dynamics has direct implications for understanding how and why members of groups within the same country respond as a function of cultural heritage or historical treatment within the society (Jones, 2003). These topics recently have received more attention in psychology. The importance of place, however, which is the staple of work in geography, remains largely unappreciated in psychology.

Place matters with respect to group processes. Hopkins's (2010) review of "policitized places" revealed how increases in local rates of immigration and national rhetoric about immigration combine to influence the threat experienced by White Americans in response to immigration. In addition, based on work revealing how mistrust of the medical community among Blacks adversely affects utilization of medical services and adherence to medical recommendations (Penner et al., 2013), Reid, Dovidio, Ballester, and Johnson (in press) found that interventions to reduce the risk of HIV for Black participants were less effective in communities in which Whites' attitudes toward Blacks were negative and racial segregation was high.

The diverse sources of information available through geographic information systems and the development of integrative databases now provide researchers with the types of data needed to understand how structural and psychological factors jointly operate to affect dynamics within and between groups. Experimentally, new online participant-recruiting resources and platforms for conducting research online make it more possible (a) to conduct research on group and intergroup relations at multiple cites selected because the locations differ systematically on structural dimensions, and (b) potentially to include more representative samples of the population to increase the external validity of the work (Chang & Krosnick, 2009).

Besides interactions in real time and space, "virtual" exchanges are increasingly important. Much of social life now occurs in electronically mediated ways. People increasingly are initiating and sustaining relationships with others online; more than 70% of respondents in a recent survey reported that they had explored a relationship with someone they first met over the Internet (Stephure, Boon, MacKinnon, & Deveau, 2009). Developments in communication technology and in social networking media have profoundly changed the way people

interact and the nature of social relationships. Communication technology allows members of affinity groups who are isolated geographically to interact regularly and act collectively, accelerates the development of intimacy, facilitates social coordination, and limits personal identifiability (Bargh & McKenna, 2004).

Although the examination of group processes conducted over the Internet has precedent (Glaser, Dixit, & Green, 2002), the study of intergroup and intragroup processes in electronic media still has substantial unrealized potential. The combination of increasing practical relevance and the opportunity to discover the generalizability or boundaries of existing theory in relation to electronically mediated social relationships makes this an exceptionally promising new direction. It also permits the study of longitudinal processes with the kinds of populations (such as blatant racists) that traditionally have been limited in college introductory psychology pools. Thus, the seeming challenges to conventional paradigms and resources for studying the ways intergroup and intragroup processes relate over time can accelerate the adoption of new paradigms and the development of more comprehensive frameworks that address the current (and future) realities of social life.

The case for the benefits of expanding the scope of research on groups to consider both micro- and macrolevels of analysis and allying more closely with related disciplines may seem apparent. Indeed, the selected examples offered in this section were intended to make that value obvious. But, in addition to looking outward, the study of groups also can benefit substantially by looking inward and integrating more fully insights concerning intragroup dynamics with insights concerning intergroup processes.

Fortifying the Bridge: Integrating Within- and Between-Group Dynamics

Despite common intellectual roots, lines of research on intragroup and intergroup processes have followed separate paths in recent years. Reviewing the relationship between these two themes of group research, Dovidio (2013) noted that only a minute percentage—less than 1%—of the studies published on groups in psychology empirically investigated both within- and between-group processes. Even with the renewed interest in both group processes and intergroup relations since the 1980s, which was stimulated by the same social issues and scholarly developments (social cognition and social identity), work in these areas has been pursued with largely independent, and sometimes divergent, perspectives. Nevertheless, ample evidence indicates that the two sets of phenomena are intertwined, practically and conceptually.

Research on the effects of external threat clearly illustrates the reciprocal relationship between intergroup relations and group processes. External threat increases people's sense of social identity and commitment to their group's distinctive qualities and symbols. After the terrorist attacks of September 11, the increased national identification in the United States was visibly evident: 25% of Americans were flying the U.S. flag prior to September 11, but 65% were flying the flag shortly after the terrorist attacks (Morin & Deane, 2002). Stronger identification with the in-group reduces feelings of uncertainty (Hogg, 2010) and promotes greater cohesiveness, cooperation, and other instrumental behaviors that help the group function more effectively (Worchel, Rothgerber, Day, Hart, & Butemeyer, 1998). Under threat, people become generally more suspicious of out-group members (Esses, Dovidio, & Hodson, 2002). In addition, intolerance for unfair treatment of in-group members increases (Dovidio et al., 2004), but so too does intolerance for the failure of group members to conform to the standards that define group identity or that are important for group functioning (Greenberg, Landau, Kosloff, & Solomon, 2009).

A number of the chapters in this volume discuss theoretical developments over the past 25 years that conceptually integrate the interrelationship between intergroup and intragroup processes. From the perspective of self-categorization theory (Turner et al., 1987; see also Chapter 8, this volume), greater external threat increases the nature and salience of the group prototype and the importance of conformity to it. Deviance from that prototype is punished, and in-group members who negatively deviate from it may be responded to even more negatively than out-group members who behave similarly (the black sheep effect; Marques & Paez, 1994). More generally, theories of general societal organization, functioning, and bias, such as system justification theory (Jost & Hunyady, 2002; see also Chapter 12, this volume) and social dominance theory (Sidanius & Pratto, 1999; see also Chapter 13, this volume) consider both intergroup and intragroup processes. These theories, in fact, suggest that the boundary between intergroup research and group processes may be artificial, unnecessary, and conceptually misleading.

Focusing on the relationship between intergroup and intragroup processes suggests new directions for understanding and improving intergroup relations (see also Dovidio, 2013). Much of the research on intergroup relations considers the in-group in a relatively static way. Indeed, when minimal group designs are used, this is intentional—the purpose of the minimal group paradigm is to strip the situation of functional relations. Although researchers commonly focus on the absence of functional relations (e.g., cooperative or competitive) *between* groups, the minimal group paradigm also restricts relations *within* groups—it is as much a minimal *intra*group paradigm as it is a minimal *inter*group paradigm. Thus, as valuable as the minimal intergroup research has been in so many ways, it obscures the role of intragroup relations in determining intergroup bias.

One of the most robust findings in the group processes literature concerns the stages of group development that apply to a wide range of groups (Agazarian & Gantt, 2003; Bennis & Shepard, 1956). The stage at which a group is in its development can systematically affect the degree and nature of intergroup bias. For instance, Agazarian and Gantt (2003) proposed that the first phase of group development, in which group members strive to bond with the group and its members, often leads to members "externalizing conflicts onto 'them'" (p. 241). In the second phase, in which the goal is to develop intimacy within the group, group members emphasize similarities to other members of the group. In this stage, group members may be particularly likely to make the kinds of intergroup social comparisons, described in social identity theory, that create feelings of positive distinctiveness and promote bias. When a group is in the third phase of development, in which interdependence is emphasized, group members may feel both empowered and morally superior, which can lead to overt discrimination toward other groups and toward subgroups that are viewed as deviant and as obstacles to efficient group functioning (Haslam & Reicher, 2007). Stages of group development (intragroup processes) likely critically influence how the group and its members relate to other groups (intergroup relations).

In addition, as Worchel, Coutant-Sassic, and Wong (1993) proposed, intergroup orientations systematically can influence processes associated with stages of within-group development. For example, intergroup circumstances that allow groups in the first authority stage of development to identify a threatening out-group can accelerate the progression into the intimacy and interdependence stages. It is also possible that these intragroup processes related to stages of group development and intergroup relations can have reciprocal effects, increasing group cohesion and allegiance and then reinforcing these by stimulating competition and conflict between groups.

Integrating intragroup and intergroup processes also can help to develop more effective interventions to improve intergroup relations. Much of the research on improving intergroup relations has been guided by intergroup contact theory (Pettigrew & Tropp, 2011; Tausch & Hewstone, 2010; see also Chapter 20, this volume). Understanding the role of social networks, a topic traditionally studied as an intragroup process, can shed important light on how intergroup contact can reduce bias (see also Chapter 15, this volume).

Social network analysis conceives of social relationships in terms of nodes, representing specific individuals, and ties, reflecting the strength of relationships (e.g., organizationally or in kinship) between individuals. It is a powerful tool for assessing the amount and direction of communication and influence among interrelated individuals. Some evidence for the relevance of social network analysis for understanding intergroup contact effects comes from findings concerning friendship. The development of a single cross-group friendship has a profound impact, significantly improving attitudes toward the out-group as a whole (see Davies, Tropp, Aron, Pettigrew, & Wright, 2011). Research on the extended contact hypothesis (Wright, Aron, McLaughlin-Volpe, & Ropp, 1997) has further implicated the importance of social networks. This hypothesis, which now is supported by substantial evidence, states that the mere knowledge that an in-group member has a close, positive relationship with an out-group member can reduce intergroup bias (Dovidio, Eller, & Hewstone, 2011).

Integrating the methods, analyses, and ideas associated with social network research can allow further investigation of how different points of contact between members occupying different positions within their respective group networks can differentially affect the way this contact can affect the attitudes of other members of their groups, and how broadly and rapidly the effects occur. Whereas intergroup research on indirect contact suggests the promise of vicarious contact for improving intergroup relations, studying a core topic in intragroup dynamics—social networks—can provide deeper theoretical insight into the ways limited episodes of intergroup contact can have significant effects on intergroup relations more generally.

CONCLUSION

This chapter has provided a broad context for the chapters that follow in this volume. The chapter consisted of three discrete sections, representing the past, present, and future of this topic. The first section reviewed the history of research on group and intergroup processes in social psychology. It discussed the ebb and flow of interest in group processes from the very beginning of the field of social psychology to the present and identified critical studies that deflected the trajectory of the field. The section also illustrated how new methodologies and enthusiasm about emerging areas of psychology, such as social cognition and other intraindividual processes, initially weakened interest in groups but then strengthened scholarly inquiry in this area as research on groups assimilated these perspectives. At the same time, the study of group processes has spawned new theoretical perspectives, such as social identity theory, that have dramatically influenced social psychology more broadly. The study of group processes has frequently prospered as a central focus in social psychology, but it also has benefited from the times it has been on the sidelines, allowing for the fermentation of new conceptual and methodological innovation and integration.

The second section of this chapter surveyed the contemporary landscape of the study of group processes through the lens of the chapters in this volume. The authors of each chapter are international experts, selected for their comprehensive knowledge of the particular topic

of study and their unique scholarly vision. Brief summaries of each chapter were presented, and common or complementary themes across chapters were identified.

The third main section of the chapter considered the future of research on group and intergroup processes. It discussed what is *not* included in the chapters of this volume. The study of group and intergroup processes offers a bridge between work on microlevel processes, such a neuroscience, and macrolevel processes, such as structural influences in society, which have been the province of economics, political science, and sociology. In addition, although the paths of research on intragroup processes and intergroup relations have led in somewhat different directions in recent years, there are new opportunities for theoretical synthesis. The section on the future of group research also highlighted new areas for the study of groups, such as technologically mediated interaction. Social networking media have rapidly changed social life; without embracing this aspect of social life, the study of group process will miss new opportunities to develop theoretically and to contribute conceptually and practically to society.

As the increase in interest in group processes since the 1980s demonstrates, the study of group processes is a vibrant area of psychology. Collectively, the chapters in this volume offer a valuable opportunity to chronicle what is known in psychology about groups and to identify what still needs to be known. This volume is thus more than a handbook describing the current state of knowledge on group processes. With a team of international experts as guides, the volume presents an opportunity to explore the future of the field.

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John F. Dovidio
Associate Editor

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References

Abrams, D., & Hogg, M. A. (1998). Prospects for research in group processes and intergroup relations. *Group Processes and Intergroup Relations*, *1*, 7–20. doi:10.1177/1368430298011002

Agazarian, Y., & Gantt, S. (2003). Phases of group development: Systems-centered hypotheses and their implications for research and practice. *Group Dynamics*, 7, 238–252. doi:10.1037/1089-2699.7.3.238

Allport, G. W. (1954). *The nature of prejudice.* Cambridge, MA: Addison-Wesley.

Amodio, D. M., & Lieberman, M. D. (2009). Pictures in our heads: Contributions of fMRI to the study of prejudice and stereotyping. In T. D. Nelson (Ed.), *Handbook of prejudice, stereotyping, and discrimination* (pp. 347–365). New York, NY: Psychology Press.

Bargh, J. A., & McKenna, K. Y. A. (2004). The Internet and social life. *Annual Review of Psychology*, *55*, 573–590. doi:10.1146/annurev.psych.55.090902.141922

Beatty, D. L., Hall, M. H., Kamarck, T. A., Buysse, D. J., Owens, J. F., Reis, S. E., . . . Matthews, K. A. (2011). Unfair treatment is associated with poor sleep in African American and Caucasian adults: Pittsburgh Sleep SCORE Project. *Health Psychology*, *30*, 351–359. doi:10.1037/a0022976

Beeney, J. E., Franklin, R. G., Jr., Levy, K. N., & Adams, R. B. (2011). I feel your pain: Emotional closeness modulates neural responses to empathically experienced rejection. *Social Neuroscience*, *6*, 369–376. doi:10.1080/17470919.2011.557245

Bennis, W. G., & Shepard, H. A. (1956). A theory of group development. *Human Relations*, *9*, 415–437. doi:10.1177/001872675600900403

Bramfield, T. (1946). *Minority problems in the public schools*. New York, NY: Harper & Brothers.

Brewer, M. B., & Brown, R. J. (1998). Intergroup relations. In D. T. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), *The handbook of social psychology* (Vol. 2, pp. 554–594). New York, NY: McGraw-Hill.

Caporael, L., & Brewer, M. B. (1991). Reviving evolutionary psychology: Biology meets society. *Journal of Social Issues*, 47, 187–195. doi:10.1111/j.1540-4560.1991.tb01830.x

Chang, L., & Krosnick, J. A. (2009). National surveys via RDD and telephone interviewing versus the Internet. *Public Opinion Quarterly*, 73, 641–678. doi:10.1093/poq/nfp075

Cheng, C. M., & Chartrand, T. L. (2003). Self-monitoring without awareness: Using mimicry as a nonconscious affiliation strategy. *Journal of Personality and Social Psychology*, 85, 1170–1179. doi:10.1037/0022-3514.85.6.1170

Cooley, C. (1902). *Human nature and the social order*. New York, NY: Charles Scribner's Sons.

Correll, J., & Park, B. (2005). A model of the in-group as a social resource. *Personality and Social Psychology Review*, 9, 341–359. doi:10.1207/s15327957pspr0904_4

Cosmides, L., Tooby, J., & Kurzban, R. (2003). Perceptions of race. *Trends in Cognitive Sciences*, 7, 173–179. doi:10.1016/S1364-6613(03)00057-3

Costa-Lopes, R., Dovidio, J. F., Pereira, C. R., & Jost, J. T. (2013). Social psychological perspectives on the legitimation of social inequality: Past, present, and future. *European Journal of Social Psychology*, 43, 229–237. doi:10.1002/ejsp.1966

Cunningham, W. A., Raye, C. L., & Johnson, M. K. (2004). Implicit and explicit evaluation: fMRI correlates of valence, emotional intensity, and control in the processing of attitudes. *Journal of Cognitive Neuroscience*, 16, 1717–1729. doi:10.1162/0898929042947919

Davies, K., Tropp, L. R., Aron, A., Pettigrew, T. F., & Wright, S. C. (2011). Cross-group friendships and intergroup attitudes: A meta-analytic review. *Personality and Social Psychology Review*, 15, 332–351. doi:10.1177/1088868311411103

de Dreu, C. K. W., Greer, L. L., Van Kleef, G. A., Shalvi, S., & Handgraaf, M. J. J. (2011). Oxytocin promotes human ethnocentrism. *Proceedings of the National Academy of Sciences, USA, 108*, 1262–1266. doi:10.1073/pnas.1015316108

de Waal, F. B. M., Leimgruber, K., & Greenberg, A. R. (2008). Giving is self-rewarding for monkeys. *Proceedings of the National Academy of Sciences, USA, 105*, 13685–13689. doi:10.1073/pnas.0807060105

Dollard, J., Doob, L., Miller, N. E., Mowrer, O., & Sears, R. (1939). *Frustration and aggression*. New Haven, CT: Yale University Press. doi:10.1037/10022-000

Dovidio, J. F. (2013). Landmark article: Bridging intragroup processes and intergroup relations. Needing the twain to meet. *British Journal of Social Psychology*, 52, 1–24. doi:10.1111/bjso.12026

Dovidio, J. F., Brigham, J. C., Johnson, B. T., & Gaertner, S. L. (1996). Stereotyping, prejudice, and discrimination: Another look. In C. N. Macrae, M. Hewstone, & C. Stangor (Eds.), *Foundations of stereotypes and stereotyping* (pp. 276–319). New York, NY: Guilford Press.

Dovidio, J. F., Eller, A., & Hewstone, M. (2011). Improving intergroup relations through direct, extended, and other forms of indirect contact. *Group Processes and Intergroup Relations*, 14, 147–160. doi:10.1177/1368430210390555

Dovidio, J. F., & Gaertner, S. L. (2010). Intergroup bias. In S. T. Fiske, D. Gilbert, & G. Lindzey (Eds.), *Handbook of social psychology* (5th ed., Vol. 2, pp. 1084–1121). New York, NY: Wiley.

Dovidio, J. F., Glick, P., & Rudman, L. A. (Eds.). (2005). On the nature of prejudice: Fifty years after Allport. Malden, MA: Blackwell. doi:10.1002/9780470773963

Dovidio, J. F., Hewstone, M., Glick, P., & Esses, V. M. (2010). Prejudice, stereotyping, and discrimination: Theoretical and empirical overview. In J. F. Dovidio, M. Hewstone, P. Glick, & V. M. Esses (Eds.), *Handbook of prejudice, stereotyping, and discrimination* (pp. 3–28). London, England: Sage. doi:10.4135/9781446200919.n1

Dovidio, J. F., Newheiser, A.-K., & Leyens, J. P. (2012). A history of intergroup relations research. In A. W. Kruglanski & W. Stroebe (Eds.), *Handbook of the history of social psychology* (pp. 407–429). New York, NY: Psychology Press.

Dovidio, J. F., ten Vergert, M., Stewart, T. L., Gaertner, S. L., Johnson, J. D., Esses, V. M., . . . Pearson, A. R. (2004). Perspective and prejudice: Antecedents and mediating mechanisms. *Personality and Social Psychology Bulletin*, 30, 1537–1549. doi:10.1177/0146167204271177

Dumont, K., & Louw, J. (2009). A citation analysis of Henri Tajfel's work on intergroup relations. *International Journal of Psychology*, *44*, 46–59. doi:10.1080/00207590701390933

Durkheim, E. (1966). *The rules of sociological method* (S. Salovay & J. Mueller, Trans.). New York, NY: Free Press. (Original work published 1895)

Eisenberger, N. I. (2012). The pain of social disconnection: Examining the shared neural underpinnings of physical and social pain. *Nature Reviews Neuroscience*, *13*, 421–434. doi:10.1038/nrn3231

Eisenberger, N. I., Lieberman, M. D., & Williams, K. D. (2003). Does rejection hurt? An fMRI study of social exclusion. *Science*, *302*, 290–292. doi:10.1126/science.1089134

Esses, V. M., Dovidio, J. F., & Hodson, G. (2002). Public attitudes toward immigration in the United States and Canada in response to the September 11, 2001 "Attack on America." *Analyses of Social Issues and Public Policy*, *2*, 69–85. doi:10.1111/j.1530-2415.2002.00028.x

Fazio, R. H., & Olson, M. A. (2003). Implicit measures in social cognition research: Their meaning and uses. *Annual Review of Psychology*, *54*, 297–327. doi:10.1146/annurev.psych.54.101601.145225

Fiske, S. T., & Taylor, S. E. (1991). *Social cognition*. New York, NY: McGraw-Hill.

Fiske, S. T., & Taylor, S. E. (2007). *Social cognition: From brains to culture*. New York, NY: McGraw-Hill.

Foddy, M., Platow, M. J., & Yamagishi, H. (2009). Group-based trust in strangers: The role of stereotypes and expectations. *Psychological Science*, *20*, 419–422. doi:10.1111/j.1467-9280.2009.02312.x

Gardner, W. L., & Seeley, E. A. (2001). Confucius, "Jen," and the benevolent use of power: The interdependent self as psychological contract preventing exploitation. In A. Y. Lee-Chai & J. A. Bargh (Eds.), *The use and abuse of power* (pp. 263–280). Philadelphia, PA: Psychology Press.

Glaser, J., Dixit, J., & Green, D. P. (2002). Studying hate crime with the Internet: What makes racists advocate racial violence? *Journal of Social Issues*, *58*, 177–193. doi:10.1111/1540-4560.00255

Gonzalez-Liencres, C., Shamay-Tsoory, S. G., & Brüne, M. (2013). Towards a neuroscience of empathy: Ontogeny, phylogeny, brain mechanisms, context and psychopathology. *Neuroscience and Biobehavioral Reviews*, *37*, 1537–1548. doi:10.1016/j.neubiorev.2013.05.001

Green, D. P., Glaser, J., & Rich, A. (1998). From lynching to gay bashing: The elusive connection between economic conditions and hate crime. *Journal of Personality and Social Psychology*, *75*, 82–92. doi:10.1037/0022-3514.75.1.82

Greenberg, J., Landau, M., Kosloff, S., & Solomon, S. (2009). How our dreams of death transcendence breed prejudice, stereotyping, and conflict: Terror management theory. In T. D. Nelson (Ed.), *Handbook of prejudice, stereotyping, and discrimination* (pp. 309–332). New York, NY: Psychology Press.

Gutsell, J. N., & Inzlicht, M. (2010). Empathy constrained: Prejudice predicts reduced mental simulation of action during observation of out-groups. *Journal of Experimental Social Psychology*, *46*, 841–845. doi:10.1016/j.jesp.2010.03.011

Guyll, M., Matthews, K. A., & Bromberger, J. T. (2001). Discrimination and unfair treatment: Relationship to cardiovascular reactivity among African American and European American women. *Health Psychology*, *20*, 315–325. doi:10.1037/0278-6133.20.5.315

Hamilton, D. L., & Sherman, S. (1996). Perceiving persons and groups. *Psychological Review*, *103*, 336–355. doi:10.1037/0033-295X.103.2.336

Hart, A. J., Whalen, P. J., Shin, L. M., McInerney, S. C., Fischer, H., & Rauch, S. L. (2000). Differential response in the human amygdala to racial out-group vs. in-group face stimuli. *NeuroReport*, *11*, 2351–2355. doi:10.1097/00001756-200008030-00004

Haslam, S. A., & Reicher, S. (2007). Beyond the banality of evil: Three dynamics of an interactionist social psychology of tyranny. *Personality and Social Psychology Bulletin*, *33*, 615–622. doi:10.1177/0146167206298570

Henry, P. J. (2008). College sophomores in the laboratory redux: Influences of a narrow data base on social psychology's view of the nature of prejudice. *Psychological Inquiry*, *19*, 49–71. doi:10.1080/10478400802049936

Hogg, M. A. (2010). Human groups, social categories, and collective self: Social identity and the management of self-uncertainty. In R. Arkin, K. C. Oleson, & P. J. Carroll (Eds.), *Handbook of the uncertain self* (pp. 401–420). New York, NY: Psychology Press.

Hopkins, D. (2010). Politicized places: Explaining where and when immigrants provoke local opposition. *American Political Science Review*, *104*, 40–60. doi:10.1017/S0003055409990360

Jones, J. M. (2003). TRIOS: A psychological theory of African legacy in American culture. *Journal of Social Issues*, *59*, 217–242. doi:10.1111/1540-4560.t01-1-00014

Jost, J. T., & Hunyady, O. (2002). The psychology of system justification and the palliative function of ideology. In W. Stroebe & M. Hewstone (Eds.), *European review of social psychology* (Vol. 13, pp. 111–153). Hove, England: Psychology Press/Taylor & Francis.

Katz, D., & Braly, K. (1933). Racial stereotypes in one hundred college students. *Journal of Abnormal and Social Psychology*, *28*, 280–290. doi:10.1037/h0074049

Kosfeld, M., Heinrichs, M., Zak, P. J., Fischbacher, U., & Fehr, E. (2005). Oxytocin increases trust in humans. *Nature*, *435*, 673–676. doi:10.1038/nature03701

Krendl, A. C., Richeson, J. A., Kelley, W. E., & Heatherton, T. F. (2008). The negative consequences of threat: A functional magnetic resonance imaging investigation of the neural mechanisms underlying women's underperformance in math. *Psychological Science*, *19*, 168–175. doi:10.1111/j.1467-9280.2008.02063.x

Lamm, C., Decety, J., & Singer, T. (2011). Meta-analytic evidence for common and distinct neural networks associated with directly experienced pain and empathy for pain. *NeuroImage*, *54*, 2492–2502. doi:10.1016/j.neuroimage.2010.10.014

LaPiere, R. T. (1934). Attitudes vs. actions. *Social Forces*, *13*, 230–237. doi:10.2307/2570339

LeBon, G. (1969). *The crowd: A study of the popular mind*. New York, NY: Viking Press. (Original work published 1895)

Lett, H. A. (1945). *Techniques for achieving interracial cooperation. Proceedings of the Institute on Race Relations and Community Organization*. Chicago, IL: University of Chicago and American Council on Race Relations.

Levine, J. M., & Moreland, R. L. (2012). A history of small group research. In A. W. Kruglanski & W. Stroebe (Eds.), *Handbook of the history of social psychology* (pp. 383–405). New York, NY: Psychology Press.

Levine, J. M., Resnick, L. B., & Higgins, E. T. (1993). Social foundations of cognition. *Annual Review of Psychology*, *44*, 585–612. doi:10.1146/annurev.ps.44.020193.003101

Lewin, K., Lippitt, R., & White, R. K. (1939). Patterns of aggressive behavior in experimentally created social climates. *Journal of Social Psychology*, *10*, 269–299. doi:10.1080/00224545.1939.9713366

MacDonald, G., & Leary, M. R. (2005). Why does social exclusion hurt? The relationship between social and physical pain. *Psychological Bulletin*, *131*, 202–223. doi:10.1037/0033-2909.131.2.202

Mahajan, N., Martinez, M. A., Gutierrez, N. L., Diesendruck, G., Banaji, M. R., & Santos, L. R. (2011). The evolution of intergroup bias: Perceptions and attitudes in rhesus macaques. *Journal of Personality and Social Psychology*, *100*, 387–405. doi:10.1037/a0022459

Major, B., Mendes, W. B., & Dovidio, J. F. (2013). Intergroup relations and health disparities: A social psychological perspective. *Health Psychology*, *32*, 514–524. doi:10.1037/a0030358

Maner, J. K., Miller, S. L., Schmidt, N. B., & Eckel, L. S. (2010). The endocrinology of exclusion: Rejection elicits motivationally tuned changes in progesterone. *Psychological Science*, *21*, 581–588. doi:10.1177/0956797610362676

Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, *98*, 224–253. doi:10.1037/0033-295X.98.2.224

Markus, H. R., Mullally, P., & Kitayama, S. (1997). Selfways: Diversity in modes of cultural participation. In U. Neisser & D. A. Jopling (Eds.), *The conceptual self in context: Culture, experience, self-understanding* (pp. 13–61). Cambridge, England: Cambridge University Press.

Marques, J. M., & Paez, D. (1994). The "black sheep effect": Social categorization, rejection of in-group deviates, and perception of group variability. *European Review of Social Psychology*, 5, 37–68. doi:10.1080/14792779543000011

Mayo, E. (1949). *Hawthorne and Western Electric Company: The social problem of industrial civilization*. London, England: Routledge & Kegan Paul.

McEwen, B. S. (2004). Protective and damaging effects of the mediators of stress and adaptation: Allostasis and allostatic load. In J. Schulkin (Ed.), *Allostasis, homeostasis, and the costs of physiological adaptation* (pp. 65–98). New York, NY: Cambridge.

McGrath, J. E. (1984). *Groups: Interaction and performance*. Englewood Cliffs, NJ: Prentice-Hall.

Mendes, W. B., Major, B., McCoy, S., & Blascovich, J. (2008). How attributional ambiguity shapes physiological and emotional responses to social rejection and acceptance. *Journal of Personality and Social Psychology*, *94*, 278–291. doi:10.1037/0022-3514.94.2.278

Morin, R., & Deane, C. (2002, March 11). Poll: Strong backing for Bush, war: Few Americans see easy end to conflict. *Washington Post,* p. A01.

Newcomb, T. M. (1943). *Personality and social change: Attitude formation in a student community*. New York, NY: Dryden Press.

Pascoe, E. A., & Smart Richman, L. (2009). Perceived discrimination and health: A meta-analytic review. *Psychological Bulletin*, *135*, 531–554. doi:10.1037/a0016059

Penner, L. A., Hagiwara, N., Eggly, S., Gaertner, S. L., Albrecht, T. L., & Dovidio, J. F. (2013). Racial healthcare disparities: A social psychological analysis. *European Review of Social Psychology, 24*, 70–122. doi:10.1080/10463283.2013.840973

Pettigrew, T. F., & Tropp, L. R. (2011). *When groups meet: The dynamics of intergroup contact*. New York, NY: Psychology Press.

Phelps, E. A., O'Connor, K. J., Cunningham, W. A., Funayama, E. S., Gatenby, J. C., Gore, J. C., & Banaji, M. R. (2000). Performance on indirect measures of race evaluation predicts amygdala activation. *Journal of Cognitive Neuroscience*, *12*, 729–738. doi:10.1162/089892900562552

Reid, A. E., Dovidio, J. F., Ballester, E., & Johnson, B. T. (in press). HIV prevention interventions to reduce sexual risk for African Americans: The influence of community-level stigma and psychological processes. *Social Science and Medicine*.

Schmader, T., Johns, M., & Forbes, C. (2008). An integrated process model of stereotype threat effects on performance. *Psychological Review*, *115*, 336–356. doi:10.1037/0033-295X.115.2.336

Sherif, M., Harvey, O. J., White, B. J., Hood, W. R., & Sherif, C. W. (1961). *Intergroup conflict and cooperation: The Robbers Cave experiment*. Norman: University of Oklahoma Book Exchange.

Shin, H., Dovidio, J. F., & Napier, J. L. (2013). Cultural differences in targets of stigmatization between individual- and group-oriented cultures. *Basic and Applied Social Psychology*, *35*, 98–108. doi:10.1080/01973533.2012.746604

Sidanius, J., & Pratto, F. (1999). *Social dominance: An intergroup theory of social hierarchy and oppression*. New York, NY: University Press. doi:10.1017/CBO9781139175043

Simmel, F. (1955). *Conflict*. Glencoe, IL: Free Press. (Original work published 1908)

Sinclair, S., Lowery, B. S., Hardin, C. D., & Colengelo, A. (2005). Social tuning of automatic racial attitudes: The role of affiliative motivation. *Journal of Personality and Social Psychology*, *89*, 583–592. doi:10.1037/0022-3514.89.4.583

Skinner, B. F. (1972). *Beyond freedom and dignity*. New York, NY: Vintage Books.

Steiner, I. D. (1974). Whatever happened to the group in social psychology? *Journal of Experimental Social Psychology*, *10*, 94–108. doi:10.1016/0022-1031(74)90058-4

Stephure, R. J., Boon, S. D., MacKinnon, S. L., & Deveau, V. L. (2009). Internet initiated relationships: Associations between age and involvement in online dating. *Journal of Computer-Mediated Communication*, *14*, 658–681. doi:10.1111/j.1083-6101.2009.01457.x

Stouffer, S. A. (1949). *The American soldier*. Princeton, NJ: Princeton University Press.

Strube, M. J. (2005). What did Triplett really find? A contemporary analysis of the first experiment in social psychology. *American Journal of Psychology*, *118*, 271–286.

Sumner, W. (1906). *Folkways*. New York, NY: Ginn.

Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. G. Austin & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 33–48). Monterey, CA: Brooks/Cole.

Talaska, C. A., Fiske, S. T., & Chaiken, S. (2008). Legitimating racial discrimination: Emotions, not beliefs, best predict discrimination in a meta-analysis. *Social Justice Research*, *21*, 263–396. doi:10.1007/s11211-008-0071-2

Tausch, N., & Hewstone, M. (2010). Intergroup contact. In J. F. Dovidio, M. Hewstone, P. Glick, & V. M. Esses (Eds.), *Handbook of prejudice, stereotyping, and discrimination* (pp. 544–560). London, England: Sage. doi:10.4135/9781446200919.n33

Tindale, R. S., Meisenhelder, H. M., Dykema-Englblade, A. A., & Hogg, M. A. (2001). Shared cognition in small groups. In M. A. Hogg & R. S. Tindale (Eds.), *Blackwell handbook of social psychology: Group processes* (pp. 1–30). Malden, MA: Blackwell.

Triandis, H. C. (1994). Theoretical and methodological approaches to the study of collectivism and individualism. In U. Kim, H. C. Triandis, C. Kagitçibasi, S. C. Choi, & G. Yoon (Eds.), *Individualism and collectivism. Theory, method, and applications* (pp. 19–40). Thousand Oaks, CA: Sage.

Triplett, N. (1898). The dynammogenic factors in pacemaking and competition. *American Journal of Psychology*, *9*, 507–533. doi:10.2307/1412188

Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., & Wetherell, M. S. (1987). *Rediscovering the social group: A self-categorization theory*. Oxford, England: Basil Blackwell.

Van Bavel, J. J., & Cunningham, W. A. (2010). A social neuroscience approach to self and social categorization: A new look at and old issue. *European Review of Social Psychology*, *21*, 237–284. doi:10.1080/10463283.2010.543314

Van Bavel, J. J., Packer, D. J., & Cunningham, W. A. (2008). The neural substrates of in-group bias: A functional magnetic resonance imaging investigation. *Psychological Science*, *19*, 1131–1139. doi:10.1111/j.1467-9280.2008.02214.x

Walton, G. M., & Cohen, G. L. (2011). A brief social-belonging intervention improves academic and health outcomes of minority students. *Science*, *331*, 1447–1451. doi:10.1126/science.1198364

Wegner, D. M. (1987). Transactive memory: A contemporary analysis of the group mind. In B. Mullen & G. R. Goethals (Eds.), *Theories of group behavior* (pp. 185–208). New York, NY: Springer. doi:10.1007/978-1-4612-4634-3_9

Wildschut, T., & Insko, C. A. (2007). Explanations of interindividual-intergroup discontinuity: A review of the evidence. *European Review of Social Psychology*, *18*, 175–211. doi:10.1080/10463280701676543

Williams, D. R., & Mohammed, S. A. (2009). Discrimination and racial disparities in health: Evidence and needed research. *Journal of Behavioral Medicine*, *32*, 20–47. doi:10.1007/s10865-008-9185-0

Williams, R. M., Jr. (1947). *The reduction of intergroup tensions*. New York, NY: Social Science Research Council.

Wittenbaum, G. M., & Moreland, R. L. (2008). Small-group research in social psychology: Topics and trends over time. *Social and Personality Psychology Compass*, 2, 187–203. doi:10.1111/j.1751-9004.2007.00065.x

Worchel, S., Coutant-Sassic, D., & Wong, F. (1993). Toward a more balanced view of conflict: There is a positive side. In S. Worchel & J. Simpson (Eds.), *Conflict between people and groups: Causes, processes, and resolutions* (pp. 76–89). Chicago, IL: Nelson-Hall.

Worchel, S., Rothgerber, H., Day, E. A., Hart, D., & Butemeyer, J. (1998). Social identity and individual productivity within groups. *British Journal of Social Psychology*, *37*, 389–413. doi:10.1111/j.2044-8309.1998.tb01181.x

Wright, S. C., Aron, A., McLaughlin-Volpe, T., & Ropp, S. A. (1997). The extended contact effect: Knowledge of cross-group friendships and prejudice. *Journal of Personality and Social Psychology*, *73*, 73–90. doi:10.1037/0022-3514.73.1.73

Zander, A. (1979). The study of group behavior during four decades. *Journal of Applied Behavioral Science*, *15*, 272–282. doi:10.1177/002188637901500303

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