

Contents

Preface	page ix
Acknowledgments	xiii
List of Contributors	xv
1 Research on the Women and Mathematics Issue: A Personal Case History <i>Susan F. Chipman</i>	01
2 The Perseverative Search for Sex Differences in Mathematics Ability <i>Jeremy B. Caplan and Paula J. Caplan</i>	25
3 A Psychobiosocial Model: Why Females Are Sometimes Greater Than and Sometimes Less Than Males in Math Achievement <i>Diane F. Halpern, Jonathan Wai, and Amanda Saw</i>	48
4 Gender Differences in Math: Cognitive Processes in an Expanded Framework <i>James P. Byrnes</i>	73
5 Cognitive Contributions to Sex Differences in Math Performance <i>James M. Royer and Laura M. Garofoli</i>	99
6 Spatial Ability as a Mediator of Gender Differences on Mathematics Tests: A Biological–Environmental Framework <i>Ronald L. Nuttal, M. Beth Casey, and Elizabeth Pezaris</i>	121
7 Examining Gender-Related Differential Item Functioning Using Insights from Psychometric and Multicontext Theory <i>Allan S. Cohen and Robert A. Ibarra</i>	143
	vii

8	The Gender-Gap Artifact: Women's Underperformance in Quantitative Domains Through the Lens of Stereotype Threat <i>Paul G. Davies and Steven J. Spencer</i>	172
9	"Math is hard!" (Barbie™, 1994): Responses of Threat vs. Challenge-Mediated Arousal to Stereotypes Alleging Intellectual Inferiority <i>Talia Ben-Zeev, Cristina M. Carrasquillo, Alison M. L. Ching, Tattiya J. Kliengklom, Kristen L. McDonald, Daniel C. Newhall, Gillian E. Patton, Tiffany D. Stewart, Tonya Stoddard, Michael Inzlicht, and Steven Fein</i>	189
10	The Role of Ethnicity on the Gender Gap in Mathematics <i>Alyssa M. Walters and Lisa M. Brown</i>	207
11	The Gender Gap in Mathematics: Merely a Step Function? <i>Sophia Catsambis</i>	220
12	"I can, but I don't want to": The Impact of Parents, Interests, and Activities on Gender Differences in Math <i>Janis E. Jacobs, Pamela Davis-Kean, Martha Bleeker, Jacquelynne S. Eccles, and Oksana Malanchuk</i>	246
13	Gender Effects on Mathematics Achievement: Mediating Role of State and Trait Self-Regulation <i>Eunsook Hong, Harold F. O'Neil, and David Feldon</i>	264
14	Gender Differences in Mathematics Self-Efficacy Beliefs <i>Frank Pajares</i>	294
15	Gender Differences in Mathematics: What We Know and What We Need to Know <i>Ann M. Gallagher and James C. Kaufman</i>	316
	<i>Author Index</i>	333
	<i>Subject Index</i>	345