Contents

Part I Theory/Context

1 What Is Cognitive Readiness? .............................................................. 3
   Harold F. O’Neil, Joan (Yuan-Chung) Lang, Ray S. Perez,
   Donna Escalante, and F Sutter Fox

2 The Evolving Definition of Cognitive Readiness
   for Military Operations .............................................................. 25
   J.D. Fletcher and Alexander P. Wind

3 Learning and Assessment: Twenty-First Century Skills
   and Cognitive Readiness ........................................................... 53
   Eva L. Baker

4 A Model for Instruction and Assessment
   of Cognitive Readiness ............................................................. 71
   Robert J. Sternberg

5 Situational Load and Personal Attributes: Implications
   for Cognitive Readiness, Adaptive Readiness, and Training .......... 93
   Stephen J. Zaccaro, Eric J. Weis, Tiffani R. Chen,
   and Michael D. Matthews

6 The Development and Assessment of Cognitive Readiness:
   Lessons Learned from K-12 Education ...................................... 117
   Joan L. Herman

7 Cognitive Readiness for Solving Equations ..................................... 135
   Gregory K.W.K. Chung and Girlie C. Delacruz

8 What Problem Solvers Know: Cognitive Readiness
   for Adaptive Problem Solving ................................................... 149
   Richard E. Mayer
9 A Theoretically Based Approach to Cognitive Readiness and Situation Awareness Assessment ................................................... 161
Cheryl A. Bolstad, Mica R. Endsley, and Haydee M. Cuevas

10 Adaptive Expertise and Cognitive Readiness: A Perspective from the Expert-Performance Approach ................... 179
K. Anders Ericsson

Part II Cognitive Readiness Applications

11 Creative Thinking Abilities: Measures for Various Domains ........... 201
Eunsook Hong

12 Using Analogies as a Basis for Teaching Cognitive Readiness .......... 223
Keith J. Holyoak and Lindsey E. Richland

13 Simulation Assessment of Cognitive Readiness ............................ 239
Klaus Breuer and Siegfried Streufert

14 Assessing Cognitive Readiness in a Simulation-Based Training Environment ................................................................. 253
William L. Bewley, John J. Lee, Barbara Jones, and Hongwen Cai

15 Software Support for Teaching and Measuring Cognitive Readiness ................................................................. 279
Allen Munro

16 Cognitive Readiness for Complex Team Performance ....................... 301
Clint Bowers and Janis Cannon-Bowers

17 Impact of Individual Game-Based Training on Team Cognitive Readiness ................................................................. 325
Talib S. Hussain, Clint Bowers, and Holly Blasko-Drabik

Index ................................................................................................................... 355
Teaching and Measuring Cognitive Readiness
O'Neil, H.F.; Perez, R.S.; Baker, E.L. (Eds.)
2014, XV, 369 p., Hardcover
ISBN: 978-1-4614-7578-1