

The Cambridge Handbook of Intelligence



Edited by

ROBERT J. STERNBERG

Oklahoma State University

SCOTT BARRY KAUFMAN

New York University



CAMBRIDGE
UNIVERSITY PRESS

Contents

<i>Contributors</i>	<i>page xi</i>
<i>Preface</i>	xv
PART I: INTELLIGENCE AND ITS MEASUREMENT	
1. History of Theories and Measurement of Intelligence <i>N. J. Mackintosh</i>	3
2. Tests of Intelligence <i>Susana Urbina</i>	20
3. Factor-Analytic Models of Intelligence <i>John O. Willis, Ron Dumont, and Alan S. Kaufman</i>	39
4. Contemporary Models of Intelligence <i>Janet E. Davidson and Iris A. Kemp</i>	58
PART II: DEVELOPMENT OF INTELLIGENCE	
5. Intelligence: Genes, Environments, and Their Interactions <i>Samuel D. Mandelman and Elena L. Grigorenko</i>	85
6. Developing Intelligence through Instruction <i>Raymond S. Nickerson</i>	107
7. Intelligence in Infancy <i>Joseph F. Fagan</i>	130
8. Intelligence in Childhood <i>L. Todd Rose and Kurt W. Fischer</i>	144

9. Intelligence in Adulthood 174
Christopher Hertzog

PART III: INTELLIGENCE AND GROUP DIFFERENCES

10. Intellectual Disabilities 193
Robert M. Hodapp, Megan M. Griffin, Meghan M. Burke, and Marisa H. Fisher
11. Prodigies and Savants 210
David Henry Feldman and Martha J. Morelock
12. Intellectual Giftedness 235
Sally M. Reis and Joseph S. Renzulli
13. Sex Differences in Intelligence 253
Diane F. Halpern, Anna S. Beninger, and Carli A. Straight
14. Racial and Ethnic Group Differences in Intelligence in the United States 273
Lisa A. Suzuki, Ellen L. Short, and Christina S. Lee
15. Race and Intelligence 293
Christine E. Daley and Anthony J. Onwuegbuzie

PART IV: BIOLOGY OF INTELLIGENCE

16. Animal Intelligence 309
Thomas R. Zentall
17. The Evolution of Intelligence 328
Liane Gabora and Anne Russon
18. Biological Basis of Intelligence 351
Richard J. Haier

PART V: INTELLIGENCE AND INFORMATION PROCESSING

19. Basic Processes of Intelligence 371
Ted Nettelbeck
20. Working Memory and Intelligence 394
Andrew R. A. Conway, Sarah J. Getz, Brooke Macnamara, and Pascale M. J. Engel de Abreu
21. Intelligence and Reasoning 419
David F. Lohman and Joni M. Lakin
22. Intelligence and the Cognitive Unconscious 442
Scott Barry Kaufman
23. Artificial Intelligence 468
Ashok K. Goel and Jim Davies

PART VI: KINDS OF INTELLIGENCE

24. The Theory of Multiple Intelligences 485
Katie Davis, Joanna Christodoulou, Scott Seider, and Howard Gardner
25. The Theory of Successful Intelligence 504
Robert J. Sternberg

26. Emotional Intelligence	528
<i>John D. Mayer, Peter Salovey, David R. Caruso, and Lillia Cherkasskiy</i>	
27. Practical Intelligence	550
<i>Richard K. Wagner</i>	
28. Social Intelligence	564
<i>John F. Kihlstrom and Nancy Cantor</i>	
29. Cultural Intelligence	582
<i>Soon Ang, Linn Van Dyne, and Mei Ling Tan</i>	
30. Mating Intelligence	603
<i>Glenn Geher and Scott Barry Kaufman</i>	

PART VII: INTELLIGENCE AND SOCIETY

31. Intelligence in Worldwide Perspective	623
<i>Weihua Niu and Jillian Brass</i>	
32. Secular Changes in Intelligence	647
<i>James R. Flynn</i>	
33. Society and Intelligence	666
<i>Susan M. Barnett, Heiner Rindermann, Wendy M. Williams, and Stephen J. Ceci</i>	
34. Intelligence as a Predictor of Health, Illness, and Death	683
<i>Ian J. Deary and G. David Batty</i>	

PART VIII: INTELLIGENCE IN RELATION TO ALLIED CONSTRUCTS

35. Intelligence and Personality	711
<i>Colin G. DeYoung</i>	
36. Intelligence and Achievement	738
<i>Richard E. Mayer</i>	
37. Intelligence and Motivation	748
<i>Priyanka B. Carr and Carol S. Dweck</i>	
38. Intelligence and Creativity	771
<i>James C. Kaufman and Jonathan A. Plucker</i>	
39. Intelligence and Rationality	784
<i>Keith E. Stanovich, Richard F. West, and Maggie E. Toplak</i>	
40. Intelligence and Wisdom	827
<i>Ursula M. Staudinger and Judith Glück</i>	
41. Intelligence and Expertise	847
<i>Phillip L. Ackerman</i>	

PART IX: MOVING FORWARD

42. Where Are We? Where Are We Going? Reflections on the Current and Future State of Research on Intelligence	863
<i>Earl Hunt</i>	

<i>Author Index</i>	887
<i>Subject Index</i>	936