TABLE OF CONTENTS

Chapter 1: General introduction ................................................................. 7
Chapter 2: Survey items and data collection .............................................. 15

Part I: HERITABILITY OF REGULAR VOLUNTARY EXERCISE BEHAVIOR ....... 27
Chapter 3: Effect of shared environmental factors on exercise behavior from age 7 to 12 years ................................................................. 29
Chapter 4: Individual differences in exercise behavior: Stability and change in genetic and environmental determinants from age 7 to 18 ....... 47
Chapter 5: The effects of parental education on exercise behavior in childhood and youth: A study in Dutch and Finnish twins ......... 75

Part II: CAUSALITY TESTING USING TWIN DATA ........................................ 111
Chapter 6: A twin-sibling study on the relationship between exercise attitudes and exercise behavior .......................................................... 113
Chapter 7: Regular exercise behavior in youth is not related to current body mass index or body mass index at 7-year follow-up ............. 137

Part III: GENOMICS OF REGULAR VOLUNTARY EXERCISE BEHAVIOR ........... 157
Chapter 8: The dopaminergic reward system and regular voluntary exercise behavior: A candidate allele study ................................. 159

Chapter 9: Summary and general discussion ............................................. 177

References ................................................................................................ 197
Nederlandse samenvatting ........................................................................ 223
Education and training ............................................................................ 231
List of publications .................................................................................... 233

Appendix I: Items assessing exercise behavior in children, parents and adolescents .............................................................. 239
Appendix II: Items assessing traits related to exercise behavior and physical activity in children and adolescents ........................................ 255
Appendix III: Example of personalized feedback to the participants ....... 272

Dankwoord ..................................................................................................... 275