

# CONTENTS

|  |     |
|--|-----|
| CHAPTER 1  | 9   |
| Introduction   |     |
| <b>Part A Physical exercise and neurocognitive functioning</b>   |     |
| CHAPTER 2  | 25  |
| Physical exercise and executive functions in preadolescent children, adolescents and young adults: A meta-analysis |     |
| CHAPTER 3  | 53  |
| Physical activity, sedentary behavior and neurocognitive functioning in children                                   |     |
| <b>Part B Neurocognitive functioning in talented soccer players</b>  |     |
| CHAPTER 4  | 81  |
| Visuomotor coordination in youth elite soccer players, amateur soccer players soccer players and non-players       |     |
| CHAPTER 5  | 99  |
| Executive functioning in highly talented soccer players  |     |
| CHAPTER 6  | 125 |
| Explicit and implicit motor learning in youth elite and amateur soccer players                                     |     |
| CHAPTER 7  | 145 |
| Summary and discussion   |     |
| Nederlandse samenvatting   | 171 |
| List of publications   | 181 |
| Dankwoord  | 182 |
| About the author   | 185 |