# CONTENTS

**CHAPTER 1**  General introduction  7

**PART 1 Empirical articles**

**CHAPTER 2**  Sex differences in goal orientation in adolescents aged 10-19: The older boys adopt work-avoidant goals twice as often as girls  19

**CHAPTER 3**  Dominant goal orientations predict differences in academic achievement during adolescence through metacognitive self-regulation  31

**CHAPTER 4**  Coding task performance in early adolescence: A large-scale controlled study into sex differences  45

**CHAPTER 5**  Neuromyths in education: Prevalence and predictors of misconceptions among teachers  57

**CHAPTER 6**  Teaching about ‘Brain & Learning’ in high school biology classes: Effects on teachers’ knowledge and students’ theory of intelligence  71

**PART 2 A neuropsychological intervention for educational practice**

**CHAPTER 7**  The need for a neuropsychological intervention  87

**CHAPTER 8**  A neuropsychological intervention: *Brain Lessons*  93

**CHAPTER 9**  Implementation in educational practice: Approach  101

**CHAPTER 10**  *Brain Lessons* in educational practice: Cognitive outcomes  109

**CHAPTER 11**  *Brain Lessons* in educational practice: Qualitative evaluation  119

**CHAPTER 12**  Reflection on *Brain Lessons*  133

**CHAPTER 13**  Concluding remarks  141

**REFERENCES**  147

**SUMMARY**  159

**SAMENVATTING**  163

**PUBLICATIONS**  171

**CURRICULUM VITAE**  173

**DANKWOORD**  175