

# CONTENTS

1.	Introduction	9		
<b>PART I: METHODOLOGICAL ASPECTS</b>		26		
2.	Automated approach for quantifying the repeated sit-to-stand using one body fixed sensor in young and older adults	27		
3.	Validation of seat-off and seat-on in repeated sit-to-stand movements using a single-body-fixed sensor	37		
4.	Intra-rater, inter-rater and test-retest reliability of an instrumented Timed Up and Go (iTUG) test in patients with Parkinson's disease	55		
<b>PART II: CLINICAL VALUE</b>		72		
5.	The Instrumented Sit-to-Stand Test (iSTS) has greater clinical relevance than the manually recorded Sit-to-Stand Test in older adults	73		
6.	Older adults with low muscle strength stand up from a sitting position with more dynamic trunk use	97		
7.	A new scoring method to quantify the instrumented Sit-to-Stand test in older adults	115		
			<b>PART III: ASSOCIATION PHYSICAL PERFORMANCE – PHYSICAL ACTIVITY</b>	136
8.	Physical performance and physical activity in older adults: associated but separate domains of physical function in old age	137		
			<b>PART IV: GENERAL DISCUSSION AND SUMMARY</b>	160
9.	General discussion	161		
10.	Summary / Samenvatting	171		
			<b>PART V: APPENDICES</b>	174
11.	Acknowledgements / Dankwoord	175		
12.	List of publications	185		
13.	Curriculum Vitae	191		