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Psychosocial and biological aspects of dispositional optimism at old age

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aspects of dispositional optimism
at old age*

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at old age*

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Contents

Preface		6
Chapter 1	The role of dispositional optimism in physical and mental well-being <i>In "Quality of Life: A Positive Psychology Perspective"</i>	9
Chapter 2	Parental longevity correlates with offspring's optimism in two cohorts of community-dwelling older subjects <i>Age</i>	37
Chapter 3	Telomere length and mental well-being in elderly men from the Netherlands and Greece <i>Behavior Genetics</i>	49
Chapter 4	C-reactive protein haplotypes and dispositional optimism in obese and non-obese elderly subjects <i>Inflammation Research</i>	63
Chapter 5	Physical activity, depressive symptoms, and dispositional optimism after myocardial infarction <i>European Journal of Preventive Cardiology</i>	77
Chapter 6	Dispositional optimism and loneliness in older men <i>International Journal of Geriatric Psychiatry</i>	91
Chapter 7	Optimism: identifying a modifiable cognitive marker to promote wellbeing <i>Submitted</i>	105
Chapter 8	General discussion	115
Chapter 9	Summary	127
List of publications		139
Acknowledgements		141
Curriculum Vitae		143

Preface

The starting point of this thesis was the finding of our group of a protective effect of dispositional optimism on all-cause and cardiovascular mortality. Although these results were interesting, the study could not disentangle through which mechanisms optimism decreased mortality risk, or whether a common third variable explained the association.

Dispositional optimism is traditionally seen as a personality trait that is rather stable over time and therefore only little changes in levels of optimism are considered possible. For this reason, we investigated optimism as both predictor and outcome in relation to different biological, lifestyle, and psychosocial factors. Until now, optimism has been mainly studied as a predictor of health, but the influences of different correlates on levels of optimism have barely been investigated. More specifically, we will examine the influences of biological (e.g. telomere length or inflammation) and lifestyle (e.g. physical activity) correlates on levels of optimism over time. In addition, we will also investigate whether levels of optimism predict psychosocial factors (e.g. loneliness) in order to confirm earlier findings. Finally, we will explore the association between optimism and mental imagery, which has been suggested as a useful tool to increase levels of optimism and may have therapeutic potential.

Thesis outline

Chapter 1 provides an overview of the research that has been done in the field of optimism and gives a context to understand the following chapters. In this chapter, the definition of dispositional optimism and its differences in relation to other related concepts are also discussed.

Chapters 2 through 4 describe the cross-sectional and prospective associations between biological factors and levels of optimism. Chapter 2 describes the association between longevity and optimism, using an inter-generational design. This approach does not only allow to confirm earlier findings of a relationship between lifespan and optimism, but also gives some directions on a potential shared heritability of longevity and optimism. In chapter 3, the association of a marker of cellular aging, telomere length, and optimism is examined. Moreover, extending the findings of earlier studies, we also examined this association longitudinally. In chapter 4, the associations between haplotypes of a marker of inflammation, C-reactive protein (CRP), and optimism are explored, taking also the potential modulating effect of obesity into account.

Chapter 5 describes the associations of physical activity with optimism and depressive symptoms. In this study we did investigate both the correlation of changes in physical activity in relation to changes in optimism or depressive symptoms and the predictive value of baseline physical inactivity on levels of optimism or depressive symptoms at the end of the follow-up. In this way, we were able to explore in detail the complex associations between physical activity and psychological well-being and also the potential beneficial effects of physical activity on optimism.

Chapter 6 describes a study that investigated the predictive effect of optimism on loneliness. Furthermore, in this study a clear distinction is made between two subtypes of loneliness: emotional and social loneliness. This distinction is particularly relevant in older samples, such as the one used here. This study sought to confirm the results of earlier studies that have found that levels of optimism influence psychosocial outcomes. Furthermore, the

association between low optimism and loneliness is of particular relevance because both factors predict poorer prognoses in these patients.

Chapter 7 portrays the cross-sectional associations between optimism and mental imagery, which is a property that is thought to be increased in optimistic persons. The elucidation of this association may provide further evidence for experimental studies that aim to develop interventions to increase optimism.

Finally, in the discussion section (chapter 8), the findings described from chapters 2 through 7 are summarized and discussed. Furthermore, methodological considerations and directions for future research will be addressed. Potential implications for public health and clinical practice will be outlined as well.

