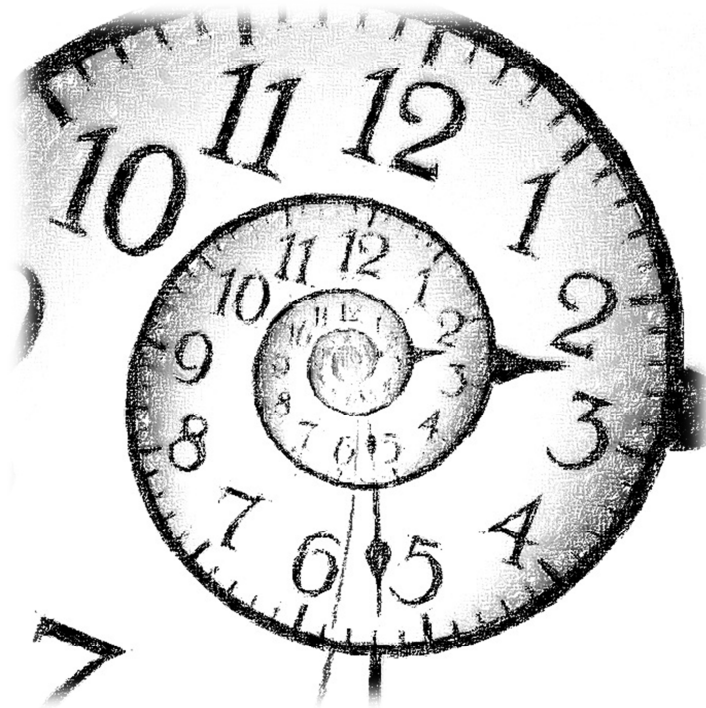




WAGENINGEN **UR**
For quality of life

Healthy Ageing

*The Development of Sense of Coherence and
Mental Health Among Dutch older persons*



Gelre-IJssel

| | |
|-----------------|-----------------------------|
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I. PREFACE

This master thesis is entitled *“Healthy ageing: The development of Sense of Coherence and mental health among Dutch older persons”*. It is written in the context of my graduation of the master science Applied Communication Science, specialization Health & Society at the Wageningen University. From February till December 2016 I was conducting the research and writing this thesis.

I applied for this subject because I find the concept Salutogenesis very interesting and I wanted to know much more about it. I have a background in nursing and I’m used to look mainly through the pathogenesis view. Salutogenesis opens up new doors for me. Besides this, I love analyzing data. So I really wanted to learn more about how to conduct a data analysis, since this is hardly applied during the master program.

Together with my supervisor, prof. dr. Maria Koelen, I formulated the four research questions for this study. I conducted this study through literature and empirical research. I had a lot of trouble cleaning the data and conducting the data analysis. But it has been worth all the hard work, since I found answers to my research questions. And I have learned a lot, which makes this a good preparation for my future job!

I want to especially thank prof. dr. Maria Koelen and dr. Elly Korendijk for the excellent guidance, great support and information they provided, which enabled me to continue working on this study. Furthermore, I want to thank Judith Heinrich of *GGD Gelre-IJssel* for preparing and sharing the databases, which are used for this study. Without the help of Maria, Elly and Judith, I could not have finished this thesis.

I also thank my friends for their coffee time and listening ear when I was in the middle of struggles. Last but not least, I thank my parents and family for supporting me and being there for me whenever I needed moral support.

I hope you will enjoy reading this thesis.

Elvira Rienstra

Wageningen, 8th of December 2016

II SUMMARY

Worldwide, the amount of older persons is increasing at a faster rate compared to any other age group. With increasing age, also the prevalence of disabilities increases. Healthy ageing therefore is becoming an important concept.

The aim of this study is to give insight into the development of healthy ageing among Dutch older persons. The Sense of Coherence score can give insight into how older persons age over time, and whether they can still see their life as *manageable*, *comprehensible* and *meaningful*. The higher the SOC, the better a person can combat stressors of life.

Antonovsky (1987) assumes that the Sense of Coherence (SOC) of people will develop until the age of 30, remains stable until retirement age, and then will decrease. This assumption however is not supported empirically in earlier research. Next to this, he states that the Sense of Coherence dimension '*Meaningfulness*' is the important one of the three dimensions.

In the newest definition of health from Huber et al. (2011), especially older persons encounter much more difficulties in adapting to and compensating for the changing abilities of self-care and changing (socially) environment. This in turn, can affect the mental health of older persons. Sense of Coherence and mental health seem to be two concepts that are of great importance for older persons.

This study consists of two parts. The first part looks at what the literature tells about the development of the Sense of Coherence among older persons. And if the Sense of Coherence and mental health are related to each other. This literature research is conducted by using 3 databases. The second part of this study is concerned with the data analysis. It gives an insight into how the Sense of Coherence develops among Dutch older persons and shows which SOC dimension contributes the most to the SOC score. And lastly, whether Sense of Coherence and mental health is shown to be related to each other. The data, from 554 participants, are analysed by using the Repeated Measures ANOVA, Independent Samples t-tests and correlations.

The *literature* research shows (1) that the Sense of Coherence in older persons are stronger, slightly stronger or at least of the same level as compared to younger aged. And (2) that SOC and mental health are two related concepts.

The *empirical* research shows that the Sense of Coherence overall is decreasing among the Dutch older persons, and that the Sense of Coherence and (perceived) mental health are two positive related concepts.

Finally, this study comes to the conclusion that the Sense of Coherence among Dutch older persons is decreasing over time, which stands for a decrease in their ability to age in a healthy way. SOC and mental health are shown to be two related concepts, which entails that if the Sense of Coherence decreases, the mental health is also decreasing. In this study, the three dimensions of the Sense of Coherence showed to be equally important to contribute to the SOC score.

TABLE OF CONTENTS

| | |
|---|------------|
| I. Preface | i |
| II. Summary..... | iii |
| 1. Introduction | 1 |
| 2. Literature Research | 7 |
| 2.1 Results literature research..... | 9 |
| 2.1.1 Research question 1: What is known in the literature about the development of the Sense of Coherence in older persons? | 9 |
| 2.1.2 Conclusion literature study research question 1 | 10 |
| 2.1.3 Research question 2: What is known in the literature about the relation between the SOC and perceived mental health? | 10 |
| 2.1.4 Conclusion literature study research question 2..... | 12 |
| 3. Empirical research..... | 13 |
| 3.1 Data analysis of empirical data..... | 14 |
| 3.1.1 The Sample | 14 |
| 3.1.2 The method of empirical research | 16 |
| 3.2 Results of the empirical research | 18 |
| 3.2.1 How does the Sense of Coherence develop over time? | 18 |
| 3.2.2 How much does the dimensions of Sense of Coherence contribute to the SOC score? | 21 |
| 3.2.3 Conclusion research question 3 | 22 |
| 3.2.4 Are Sense of Coherence and mental health correlated? | 22 |
| 3.2.5 Conclusion research question 4 | 26 |
| 4. Discussion..... | 27 |
| 4.1 Limitations..... | 29 |
| 4.2 Strengths | 29 |
| 4.3 Recommendations..... | 30 |
| 5. Conclusion | 31 |
| References | 33 |
| Appendix 1: Literature Table Research Questions 1 and 2 | 37 |
| Appendix 2: Questionnaire ‘Research on older persons 2008 (Ouderenonderzoek 2008)’ | 49 |
| Appendix 3: Cronbach’s Alpha | 75 |

1. INTRODUCTION

Across the world, figures show that the proportion of older persons, aged, 60+ is increasing at a faster rate compared to any other age group. This can be explained by both decreasing fertility rates and increasing development of age (WHO, 2016; UNPF, 2015). It is expected that the amount of people aged 60+ will be doubled between the years 2000 and 2050 (WHO, 2015a). Increase in the development of age can be assigned to advances in medicine such as knowledge of diseases, disease control and early detection screening programmes, but also to improved quality of nutrition, housing and sanitation standards (Staehelin, 2005; Mittelmark et al., 2016).

According to the WHO's Global Burden of Disease Report (2004), the prevalence of disability increases with age. Meaning that more than 46% of the people aged 60+ are having disabilities in functioning capacity such as mobility, cognition, hearing and vision. From the older persons aged 60+, 70% has a chronic disease which entails that the burden of disease intensifies (Nationaal Kompas Volksgezondheid, 2014; Koelen, 2011). In the population older persons in the Netherlands, problems of loneliness, overweight, psychological problems and depression, falling incidence, care-given burden and mobility related problems bear an important influence on their health status (Naaldenberg, 2011). Since special attention is needed for healthy ageing, this study will concern the population older persons. In order to properly attain to the research questions for this study, the concepts health, health and ageing, healthy ageing and mental health and the perspectives on health and disease will be first described.

What is health?

Opinions about what constitutes good health vary over time. Likewise, is somebody who has a disease automatically unhealthy? Traditionally, health was described as nothing more than '*the absence of disease*'. This is a narrow view since it is focused on only the physical aspect. In 1948 the WHO defined health as: "*a state of complete physical, social and mental wellbeing, and not merely the absence of disease or infirmity*" (WHO, 1946). This definition has a broader view of health. It refers to the interaction of body and mind, social and physical environment, which is positive, although the state of completeness seems very hard to reach. Nowadays health is seen much more from a holistic point of view. Health is not the end, but a means. It is not seen as the objective of living, but as a resource for everyday life, that enables people to lead an individually, socially and economically productive life (Koelen & van den Ban, 2004). Today, health is defined as: "*The ability to adapt and to self-manage, in the face of social, physical and emotional challenges*" (Huber et al., 2011). This adapting and self-managing may be a challenge for the population older persons, since predominantly the older persons are dealing with losses in health.

Health and ageing

What factors influence health and what happens when people age? Health can be influenced and explained through three groups of the so-called determinants of health: [1] endogenous determinants, [2] exogenous determinants and [3] the prevalent system of health care (Ruwaard, Kramers, Van den Berg Jets & Achterberg (Eds), 1994). Endogenous determinants are biological factors like hereditary or acquired factors build up through the life course, whereas exogenous determinants refer to factors in the physical and social environment and lifestyle factors. The third category consists of health services to prevent, care and cure. The determinants of health interact with each other. Together they influence the health status of an individual or population (Koelen & van den Ban, 2004). Effects of ageing can also be explained by these determinants of health.

Healthy ageing and mental health

What is healthy ageing? The often used definition is: *“the process of slowing down, physically and cognitively, while resiliently adapting and compensating in order to optimally function and participate in all areas of one’s life (physical, cognitive, social and spiritual)”* (Hanson-Kyle, 2005, p.52).

Mental health is an integral and important part of overall health. It is defined as: *“a state of well-being in which an individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and is able to make a contribution to his or her community”* (WHO, 2014). According to the U.S. department of Health & Human Services (HHS), mental health is about our emotional, psychological and social well-being. It influences how we feel, act and think. Mental health also helps to determine how we handle stress, how we relate to others and how we make choices. Mental health is important throughout life, from child till adulthood. Moreover, mental health has an impact on physical health and vice versa. For example, an older person with physical health conditions such as heart disease has higher rates of mental health problems than those who are medically well. Contrariwise, an untreated mental health problem of an older person with heart disease can negatively affect the outcome of the physical disease (WHO, 2015b). This indicates that there is a link between mental and physical health.

As mentioned earlier, ageing comes with losses. The challenges, in health, that a person encounters while getting older are wide ranged. They force older persons to constantly adjust and adapt to a changing physical and social environment. Some older persons might be finding a range of strategies to deal with these changes, while others cannot (Dykstra, 2009). However, with increasing age, the options to resources and abilities become smaller, and this can impact the mental health of an older person (Dykstra, 2009). This refers to the great importance of mental health for the older persons, which will therefore also be a focus point of this study.

Perspectives on health and disease

There are two visions on health and disease. The dominant way that we look at health is through a bio-medical approach (Pathogenesis), which focuses on the causes of disease and reducing their risks. Pathogenesis is explained in five stages; the cure or treatment of diseases, health protection, disease prevention, health education and in the end health promotion (ETC-PHHP team, 2016). A complementary approach is Salutogenesis, which focuses on the causes of health. On how health is developed.

Salutogenesis focuses on the relationship between health, stress and coping. It aims to explain why people stay well, despite stressful situations (Antonovsky, 1987; Mittelmark et al., 2016) and, above all, how people are capable to improve their health (Eriksson, 2007).

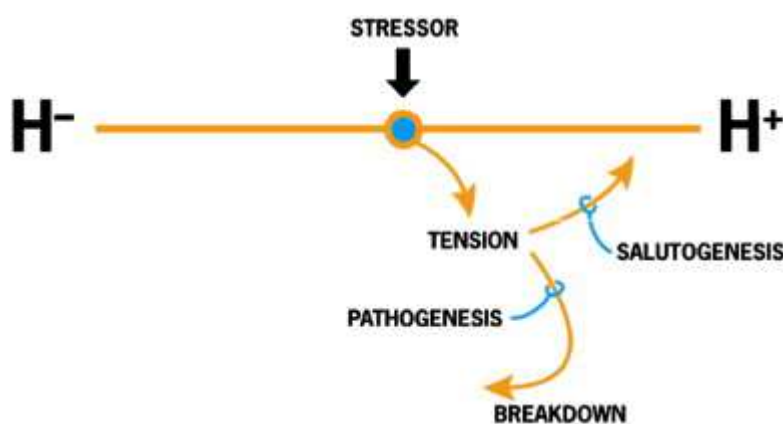


Figure 1 Health ease-disease continuum
(Lindström & Eriksson, 2010, p.13)

The definition of Salutogenesis is: *"The process of movement toward the health end of a health ease/disease continuum"* (Antonovsky, 1993). The health continuum is ranging from 'disease' to 'ease', as shown in figure 1. Every individual is continually moving along somewhere on this continuum towards the 'ease' or 'disease' side (Antonovsky, 1987).

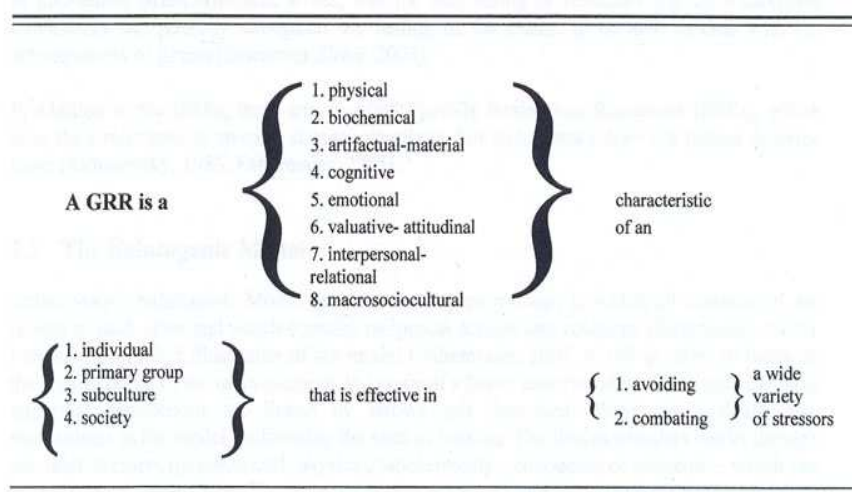
Salutogenesis is based on two core concepts, namely, the *'Sense of Coherence'* (SOC) and the *'Generalized Resistance Resources'* (GRRs) (Antonovsky, 1987). The SOC reflects a person's view of life and the capacity to respond to stressful situations. It is a resource that enables people to deal with tension, reflect about their external and internal resources, to identify and use them. The definition of SOC is: *"a global orientation that expresses the extent to which one has a pervasive, enduring though dynamic feeling of confidence that [1] the stimuli from one's internal and external environments in the course of living are structured, predictable, and explicable [2] the resources are available to one to meet the demands posed by these stimuli and [3] these demands are challenges, worthy of investment and engagement"* (Antonovsky, 1987, p.19). The SOC exists of three related dimensions: Comprehensibility, Manageability and Meaningfulness.

Comprehensibility stands for making “cognitive sense” of events in a persons’ life. For the confidence that things happen in an orderly and predictable way. In a sense that the person can understand events occurring in life and somewhat predict what will happen in the future. *Manageability* is about a persons’ perception of having the resources needed to cope with the stresses of life.

Meaningfulness refers to the belief that the stressors in life are interesting and satisfactory. It is worthy and a good reason to take care about what happens (Antonovsky, 1987; Mittelmark et al., 2016).

With a strong SOC, people are able to view life as comprehensible, coherent, manageable and meaningful. This provides confidence and inner trust to identify resources within themselves and the direct environment, and the ability to use and reuse the resources in a health promoting way.

GRRs are resources, bound to peoples’ person and capacity, or their direct and distant environment, which can be material or non-material. It enables people to make a movement towards health possible (Antonovsky, 1987; Lindström & Eriksson, 2010). See *figure 2* for the definition of a GRR.



*Figure 2 Definition of a ‘Generalized Resistance Resource’
(Antonovsky, 1979, p.103)*

In order to age in a healthy way (Hanson-Kyle, 2005; Huber et al., 2011), abilities and resources are needed to make a movement towards the ‘ease’ on the health continuum. And to get to these resources, the SOC score is of great importance. The higher the SOC, the better a person can recognize GRRS and use it to combat stressors (Antonovsky, 1987). As mentioned earlier, the options to resources and abilities become smaller with increasing age, and this can impact the mental health of an older person.

Sense of Coherence and mental health

From what Dykstra (2009) states follows that the development of SOC and mental health are closely linked to each other. Despite this, there is a lack of knowledge (knowledge gap) on the connection between SOC and mental health, while both are of great importance in developing and maintaining health. What is known is that SOC correlates with perceived mental health (Eriksson & Lindström, 2007).

Because of this knowledge gap, this current study will focus on the development of the Sense of Coherence and its relationship to mental health in the population older persons. Antonovsky (1987) assumes that the SOC of people will develop until the age of 30, and remains stable until retirement age, and then will decrease. However, this assumption is not supported empirically in earlier research (Lindström & Eriksson, 2010). Researches showed contradictory outcomes on the SOC among the older persons: according to some studies it decreases or stays stable (Nilsson, Holmgren, Stegmayr & Westman, 2003), whereas other studies indicate an increase (Helvik, Engedal, & Selbæk, 2013; Eriksson & Lindström, 2005). It should be noted that most of the results are based on cross-sectional surveys, which cannot show change of SOC over time. To be able to detect change or stability, a *longitudinal* study is needed. For this study, therefore, the following research questions are formulated.

RESEARCH QUESTIONS

1. What is known in the literature about the development of the Sense of Coherence in older persons?
2. What is known in the literature about the relation between the Sense of Coherence and perceived mental health?
3. How does the Sense of Coherence develop in Dutch older persons aged 65+? And how much does the SOC dimension 'Meaningfulness', 'Comprehensibility' and 'Manageability' contributes to the SOC score?
4. Are Sense of Coherence and (perceived) mental health related to each other?

Bearing the definition of health from Huber et al. (2011) in mind, especially older persons encounter much more difficulties in adapting to and compensating for their always ever changing abilities of self-care and the (socially) changing environment, compared to other age groups. This may harm the mental health of older persons. The Sense of Coherence score can give insight into how older persons age over time, and whether they can still see their life as manageable, comprehensible and meaningful. The possible relation between SOC and mental health can provide some understanding in how well the older persons are, mentally. The aim of this study is to give an insight into the development of healthy ageing among Dutch older

persons.

This insight can be used to inform healthcare and health policy makers concerned with the elderly care in the Netherlands. This study is explorative. Since there are limited numbers of studies using longitudinal data, it can lead to new insights. Finally, this study will contribute to developing salutogenic theories and healthy ageing.

The first and second research question will be studied by literature review, described in Chapter 2. The third and fourth research question will be analysed by empirical research, which can be found in Chapter 3. In Chapter 4, the outcomes, limitations and strengths of this study will be discussed. The conclusions can be found in Chapter 5.

2. LITERATURE RESEARCH

This chapter describes how the literature research is conducted and which results are found. The focus of this study is on the development of Sense of Coherence and 'mental health' in the population older persons. The aim of this study is to give insight in the development of healthy ageing among Dutch older persons, and to contribute to developing salutogenic theories and healthy ageing. For this study, four research questions are formulated, namely: (1) *What is known in the literature about the development of the Sense of Coherence in older persons?* (2) *What is known in the literature about the relation between the Sense of Coherence and perceived mental health?* (3) *How does the Sense of Coherence develop in the Dutch older persons aged 65+?* And how much does each dimension contribute to the SOC score? (4) *Are Sense of Coherence and perceived mental health related to each other?* The literature research is aimed at answering research question 1 and 2.

The following queries were developed to find appropriate literature, see *table 1*.

For an overview of the amount of articles found, see the literature scheme in *figure 3*.

Table 1 Queries used for the literature research

| Database used ↓ | Query used → | Query for Research question 1 | Query for Research question 2 |
|-----------------------|--------------|--|--|
| PubMed | | (Eldery* OR old OR older OR senior? OR adult? OR "ageing population?") AND ("Sense of Coherence" OR "SOC score?") AND (Manageability OR Comprehensibility OR Meaningfulness) AND Salutogenesis. | "mental health" AND relation? AND "sense of coherence" |
| Google Scholar | | (Elder* OR old OR older OR "senior? OR "ageing population?" OR "aging population") AND ("Sense of Coherence" OR "SOC score?") AND (Manageability OR Comprehensibility OR Meaningfulness) AND Salutogenesis | "perceived mental health" AND (relational? OR connection?) AND "sense of coherence". |
| WUR library | | (Elder* OR old* age* OR old* people OR senior* citizen? OR old* adult? OR old* person? OR age* population?) AND (Sense of Coherence develop* OR SOC score? OR Manageability OR Comprehensibility OR Meaningfulness) AND Salutogenesis. | (mental health OR "mental wellbeing" OR "psychological wellbeing") AND ("sense of coherence") AND (relation OR relationship) |

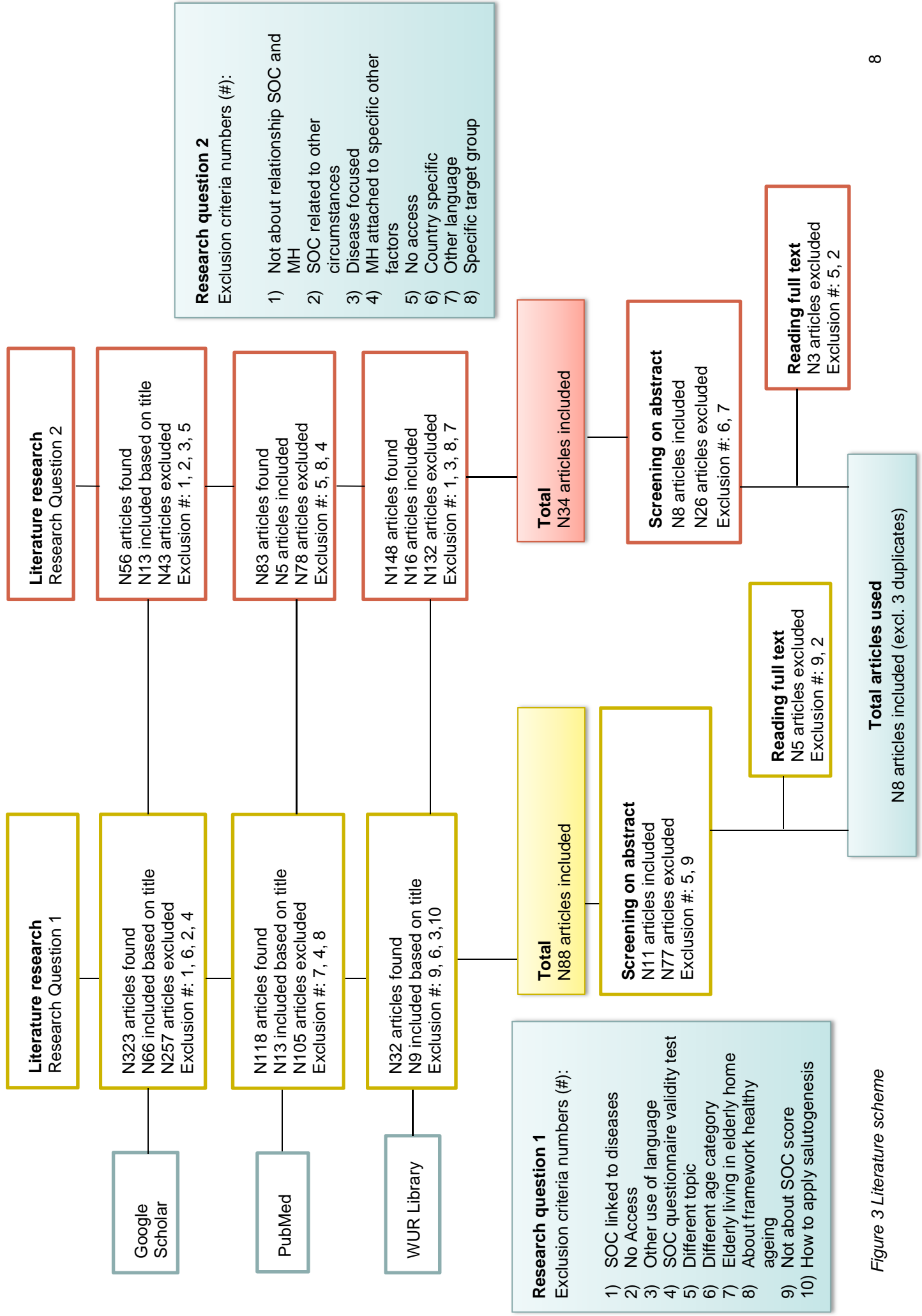


Figure 3 Literature scheme

2.1 RESULTS LITERATURE RESEARCH

A total of 760 articles were found. And after selecting 122 articles by title, abstract and fully reading the articles, 8 articles were eligible to answer the two research questions. For research question one, 6 articles were found, and for research question two, 5 articles were found. Three out of the eleven articles were used to answer both research questions. There are three cross-sectional survey studies, two longitudinal studies, two systemic reviews and one qualitative study. For an overview of the used literature, see the *Literature Table in Appendix 1*.

2.1.1 RESEARCH QUESTION 1: WHAT IS KNOWN IN THE LITERATURE ABOUT THE DEVELOPMENT OF THE SENSE OF COHERENCE IN OLDER PERSONS?

Cross-sectional survey

In the study of Nilsson, Leppert, Simonsson & Starrin (2010), which included 43.589 respondents aged 18-85 years, a relationship is found between Sense of Coherence and age. Their study also shows that the Sense of Coherence is stronger in older persons. In line with this, the study of Lindmark, Stenström, Wärnberg & Hugoson (2010), held among 526 individuals aged 20-80 years, found that Sense of Coherence increases with age. The results showed that younger adults have a statistically significant lower Sense of Coherence compared to individuals aged 30 years or older. A restriction in this study is however made, namely that the response rate among the 80+ group is quite low.

Cohort and prospective and longitudinal study

In the study of Mattison, Horstmann & Bogren (2014), conducted among 2.723 participants living in Sweden with an age range between 40-96 years, a positive correlation is found between age and Sense of Coherence total score. This study used the SOC-29 item questionnaire. The mean SOC score slightly decreases and in the oldest group increases. For example, the mean SOC score of age group 60-69 was: 143.6; of age group 70-79, the mean SOC score was: 142.4 and of the age group 80+, the mean SOC score was: 149.2. However, there is one restriction. Although this article is published in 2014, it uses data obtained between 1947 and 1997, meaning that this study does not present the modern population of Sweden. This affects the external validity of this study. The study of Lövheim, Graneheim, Jonsén, Strandberg & Lundman (2012) contained after 5 years' follow-up 56 participants aged 85+ years, found that the average Sense of Coherence score increased over five years. One restriction is made: the small sample size in the five years of follow-up.

Systemic review

The systemic review of Tan, Vehviläinen-Julkunen & Chan (2014) is drawn from one qualitative study and seven cross-sectional studies conducted among participants aged 65+ year old. This study found that older persons have a reasonable stronger Sense of Coherence compared to the younger age groups. The researcher did not find a longitudinal study to suggest when older persons achieve a stronger Sense of Coherence. The study also found that older persons who live in their own home environment had stronger Sense of Coherence than older persons who lived in community care facilities. This relationship is not tested statistically.

Qualitative study

In the study of Nygren, Aléx, Jonsén, Gustafson, Norberg & Lundman (2005) an amount of 125 participants of 95 years or older, 90 years or 85 years were included. The participants in this study had have higher or at least the same level of Sense of Coherence.

2.1.2 CONCLUSION LITERATURE STUDY RESEARCH QUESTION 1

This first part of the literature search tries to answer research question 1: *What is known in the literature about the development of the Sense of Coherence in older persons?* From all articles found for research question 1, it can be concluded that older participants have stronger, slightly stronger or at least the same level mean Sense of Coherence scores compared to younger participants. Younger participants were aged 18, 20, 40, 65 or 85 years old. All studies are held in Sweden and one in Finland. Next to this, two articles from a cross-sectional study and a longitudinal study, showed that Sense of Coherence and age are positively correlated.

2.1.3 RESEARCH QUESTION 2: WHAT IS KNOWN IN THE LITERATURE ABOUT THE RELATION BETWEEN THE SOC AND PERCEIVED MENTAL HEALTH?

Cross-sectional survey

The study of Nilsson et al. (2010), which was held in Sweden among 43.598 respondents aged 18-85 years, showed that stronger Sense of Coherence is related to higher psychological well-being. In another study (Söderhamn, Sundsli, Cliffordson & Dale, 2015), conducted among 709 participants aged 65+ and living in the southern of Norway, it was found that Sense of Coherence has a particularly strong relationship with mental health. Next to this, the researcher found five predictors of strong Sense of Coherence, which are: *good mental health, higher self-care ability, not feeling lonely, being active and not having a chronic disease or handicap*. The opposite of these five predictors is true for a lower Sense of Coherence. A restriction for this finding is the low response rate (34.4%).

Cohort and prospective longitudinal study

No cohort or longitudinal study is found for research question two.

Systemic review

Eriksson & Lindström (2006) have reviewed 458 scientific publications and 13 doctoral theses and found that Sense of Coherence is strongly related to perceived health, especially to the mental dimension of health. Sense of Coherence and mental health are independent concepts but they correlate positively with each other. And the stronger the Sense of Coherence, the better the perceived health in general, leastways for those with a high Sense of Coherence at start. This relation is manifested in studies regardless of sex, age, nationality, ethnicity and study design. Sense of Coherence has a moderating effect on mental health and is a mediator between stress and mental health. Restrictions are that the interpretation of causality is complicated. The review is more probabilistic than deterministic.

In the systemic review of Tan et al. (2014), which is drawn from one qualitative study and seven cross-sectional studies conducted among participants aged 65+ year old, found that a strong Sense of Coherence among older persons correlated with better physical, social and mental health. The researcher also found that Sense of Coherence moderates stress and is associated with health, predominantly with mental health. In this review though, a causal relationship between Sense of Coherence and psychosocial well-being could not be established. Restriction of this review is that it excluded non-English publications. Next to this, seven studies were cross-sectional, which is a snapshot of that moment, so no causal relationship could be established.

Qualitative study

The study of Nygren et al. (2005) found a positive correlation between Sense of Coherence and perceived mental health, and no significant correlation between Sense of Coherence and physical health. This study has a broader scope and also found that three more concepts are correlated to perceived mental health, namely: *Resilience*, *Purpose in life*, and *Self-transcendence*. And likewise, no significant correlations were found between Resilience, Purpose in life and Self-transcendence to physical health. Next to this, no correlation was found between physical and mental health.

2.1.4 CONCLUSION LITERATURE STUDY RESEARCH QUESTION 2

The second part of the literature research tries to find an answer to research question 2: *What is known in the literature about the relation between the Sense of Coherence and perceived mental health?* From all studies found in the literature research, it can be concluded that Sense of Coherence is positively related to perceived mental health.

3. EMPIRICAL RESEARCH

This chapter describes the execution and results of the empirical research. The focus of this study is on the development of Sense of Coherence and 'mental health' in the population older persons. The aim of this study is to give insight in the development of healthy ageing among Dutch older persons, and to contribute to developing salutogenic theories and healthy ageing. For this study, four research questions are formulated, namely: (1) *What is known in the literature about the development of the Sense of Coherence in older persons?* (2) *What is known in the literature about the relation between the Sense of Coherence and perceived mental health?* (3) *How does the Sense of Coherence develop in Dutch older persons aged 65+? And how much does the SOC dimension 'Meaningfulness', 'Comprehensibility' and 'Manageability' contributes to the SOC score?* (4) *Are Sense of Coherence and perceived mental health related to each other?* The empirical research is aimed at answering research question 3 and 4.

The data used for this research is collected through the Academic Collaborative Centre *AGORA Healthy Ageing Study* and was kindly provided for this study. AGORA is active since 2005 as Academic Workplace Public Health for the region Gelderland. Since 2006 it formed alliances with the community health service *Gelre-IJssel* and *Wageningen University*. AGORA aims "to contribute to the development of effective evidence-based problem-oriented interventions by synthesising knowledge and bridging the gaps between practice, science and policy" (AGORA, 2016).

The 'healthy ageing study' of AGORA is a longitudinal Dutch study held in the region of *Gelre-IJssel* among the non-institutionalized population older persons aged, 65 or above, living in Epe, Ermelo and Zuthpen. The aim of the 'healthy ageing study' is to increase the physical and mental health of the population older persons. The study consist of three parts, first the researchers investigated the health status of the older persons. After that, a health intervention was given and later, this intervention is evaluated, for the reason to develop a knowledge management system to support inter-sectoral collaboration for healthy ageing (Naaldenberg, 2011). The study was held from 2006 until 2014. A standardized ± 60 items questionnaire, called 'Research on older persons 2008' (Ouderenonderzoek 2008), was developed and used to assess the following concepts among these older persons: general information, perceived health, life events, Sense of Coherence, perceived health, perceived well-being, quality of life, mental health, loneliness, habits, social engagement and the use of healthcare facilities. *See appendix 2 for the questionnaire 'Research on older persons 2008' (Ouderenonderzoek 2008)*. Over the years, the questionnaire changed, but this does not apply for the questions used for this study.

3.1 DATA ANALYSIS OF EMPIRICAL DATA

3.1.1 THE SAMPLE

The given databases consists of 2 files with 3 waves, file 1 containing two surveys of the years 2008 and 2010 and file 2 containing the third survey of the year 2013. Both files are merged together. The 2008-2010 database consists of 858 participants, and the 2013 database contains 931 participants. With merging both data files, the participants from both waves were merged by the key variable ID number, meaning that the same participants from the first file were connected with the second file. Next to this, some participants were only participating in wave 2008 and/or 2010, others only in wave 2013.

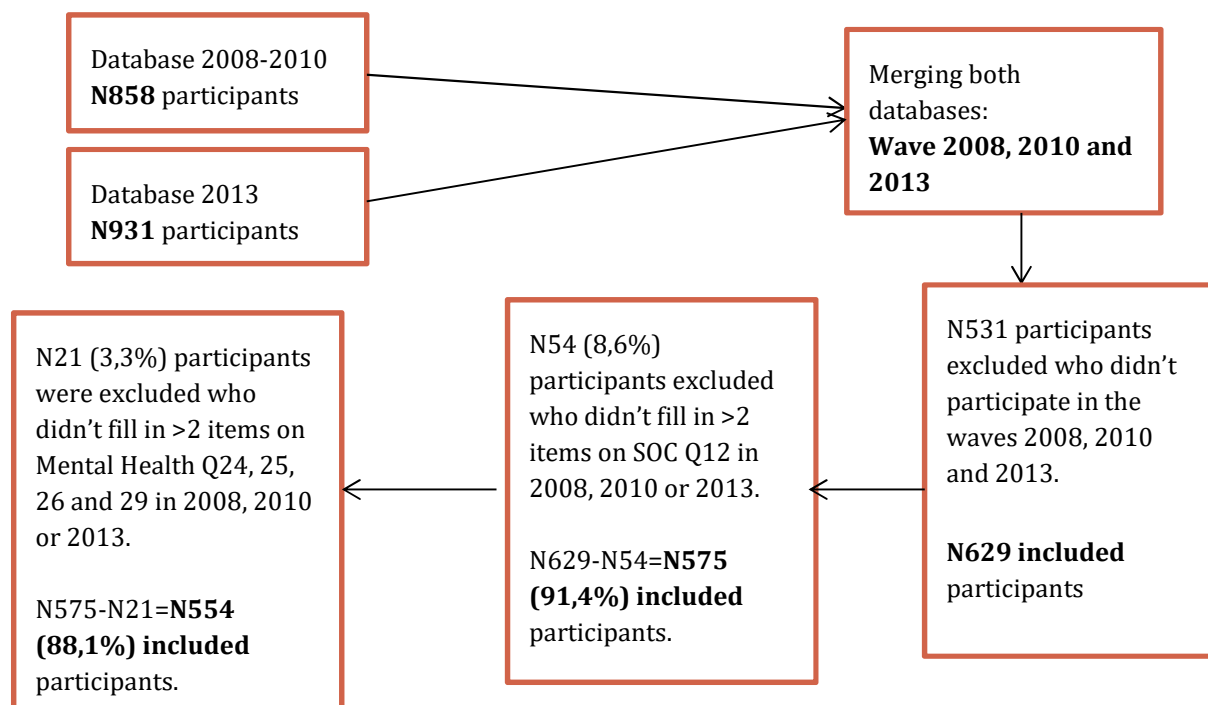


Figure 3 Number of participants included and excluded

From these participants, a total of 629 participated in all three waves. From this group the appropriate participants for this study are selected. The respondents, who did not fill in more than two items per question, were excluded from the database. The participants who did not fill in two or less than two items per set of questions, were given a mean score on the items left open - a method called 'imputation'. For a short overview of the amount of selection and deleting of participants, see figure 3 above.

The 554 selected participants for this study consists of 261 (47.1%) men and 293 (52.9%) women (see *table 2*). The distribution of age among the participants in the first wave is shown in the histogram below. Participants, who were at baseline 71 and 67 years of age, are highly represented. Participants in the ages 83 till 92, are the lowest represented. The average age of the participants in 2008 is 73 years old. See *figure 4*.

Table 2 Gender distribution of the sample in counts and percentages

| | Frequency | Percent |
|--------------|-----------|---------|
| Man | 261 | 47,1 |
| Woman | 293 | 52,9 |
| Total | 554 | 100 |

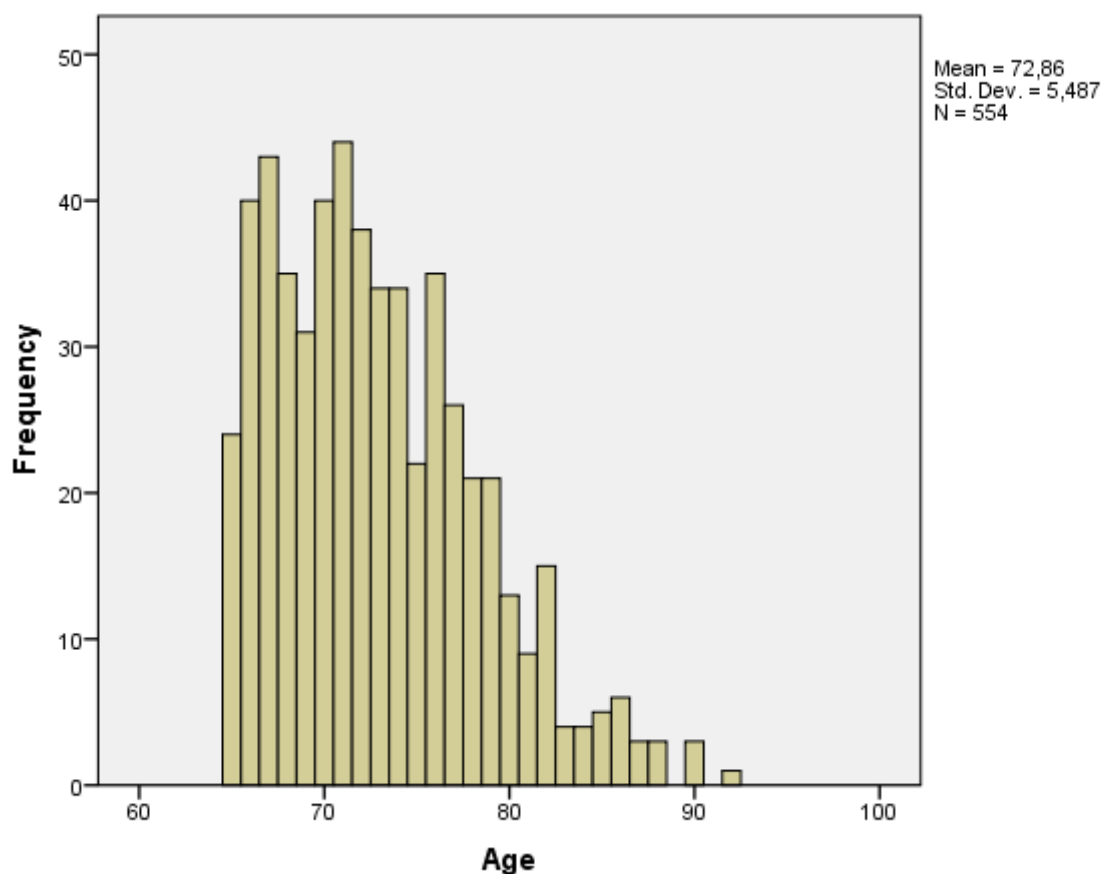


Figure 4 Histogram age distribution at baseline of the participants

3.1.2 THE METHOD OF EMPIRICAL RESEARCH

For conducting the data analysis, the software program '*Statistical Package for the Social Sciences*' (IBM SPSS statistics 23) and '*Microsoft Excel 2010*' is used.

Measuring the Sense of Coherence

Question 12 from the standardized questionnaire 'Research on older persons 2008' (Ouderenonderzoek 2008) (see appendix 2) is used. It encompasses the SOC-13 questionnaire, which consists of 13 questions with a Likert-type scale of 1 to 7, ranging from "very often" to "rarely or never". The total score for this question can range from 13 to 91 points.

Measuring 'mental health'

Questions 24, 25, 26 and 29 of the standardized questionnaire are used. Question 24 consists of 5 questions with a Likert-type scale of 1 to 6, ranging from "always" to "never". The questions focus on experienced feelings of depression, nervousness, gloominess, calmness and happiness. The total score of this question can range from 5 to 30 points. With the help of question 25, the participants can rate their loneliness, with a score from 1 point (never lonely) to 10 points (always lonely). Question 26 contains 11 questions with a Likert-type scale of 1 to 3 ranging from "no", "more or less" to "yes". This question refers to the degree of perceived social support when an event occurs. Lastly, question 29 asks the participants if they feel lonely sometimes. The possible answers are 1 "yes" or 2 "no".

Recoding and Reliability

In order to ensure the score to have the same meaning as the other questions, the following questions were re-coded: question 12 (Sense of Coherence): a, b, c, g and j; question 24 (experienced feelings of depression): d and e; and, finally, question 26 (perceived social support): a, d, g, h and k. The reliability analysis is conducted for the same questions 12, 24 and 26 (see also Appendix 3). The subscales Sense of Coherence and mental health per wave (2008, 2010 and 2013) all have high reliabilities. For question 12 (Sense of Coherence), the Cronbach's $\alpha = .81$ (2008), $.79$ (2010) and $.80$ (2013). For question 24 (experienced feelings) the Cronbach's $\alpha = .81$ (2008), $.84$ (2010) and $.83$ (2013). And for question 26 (perceived social support), finally, the Cronbach's $\alpha = .83$ (2008), $.86$ (2010) and $.87$ (2013).

Variables

New variables are created for the sum scores of the Sense of Coherence question 12 and mental health question 24 experienced feelings of depression. Also sum scores for the dimensions of the Sense of Coherence: Meaningfulness, Comprehensibility and Manageability, are created.

The ages of the participants are clustered into 7 age categories, each category containing 5 years. These adaptations follow from the *'Local and National Health Monitor'* (Lokale en Nationale Monitor Gezondheid) agreement to collect data in a uniform way, which makes local and national comparison possible (RIVM, 2005). Also a new variable is made, which, in accordance with Eriksson (2007), presents the SOC level divided in weak, medium and strong SOC.

Answering research question 3

To answer research question 3 (*'How does the Sense of Coherence develop in Dutch older persons aged 65+? And how much does the SOC dimension 'Meaningfulness', 'Comprehensibility' and 'Manageability' contribute to the SOC score?'*), an overview is made of the amount and percentages of weak, medium or strong SOC, divided by 6 age categories in the tables 3, 4 and 5. Each table represents a wave. Next to this, a *'Repeated Measures - Within Subjects Comparison'* is conducted with the sum scores variable of the Sense of Coherence. This makes it possible to show the differences between the waves, taking into account the individuality of the participants. To investigate how much of the dimensions of the Sense of Coherence contributes to the SOC score per wave, table 9 is made consisting of the mean and percentage per dimension per wave.

Answering research question 4

For answering research question 4 (*'Are Sense of Coherence and perceived mental health related to each other?'*) a *Pearson Correlation* is conducted between question 24 (Experienced feelings of depression) and question 12 (Sense of Coherence). Between question 25 about 'perceived loneliness' and the question of Sense of Coherence, the Spearman correlation is used. The questions concerning Sense of Coherence and 'perceived loneliness' both consist of continuous variables, but the question of 'perceived loneliness' is not normally distributed, hence the choice to use the Spearman correlation. Both correlations will give the strength and direction of the SOC score compared to the mental health questions 'experienced feelings of depression' and 'perceived loneliness'. Question 26 about 'perceived social support' consists of three groups: participants who perceives 'no social support', 'more or less' and 'sufficient social support'. The group 'no social support' was very small (N6), this group is therefore merged with the group of 'more or less perceived social support'. Subsequently, the following two groups were made: *'none to less social support'* and *'sufficient social support'*. For these two groups, an *Independent Samples t-test* is conducted to see the relation between the mean SOC score and mental health score of the question about 'perceived social support'. Also for question 29 'feeling lonely' an *'Independent Samples t-test'* is conducted to see the relation between the mean SOC score and the mental health score of the question about 'feeling lonely'.

3.2 RESULTS OF THE EMPIRICAL RESEARCH

In this chapter the results of the statistical analyses are presented. The first part focuses on the results concerning research question 3 about how the Sense of Coherence develops over time and how much the three dimensions of SOC contribute to the SOC score. The second part focuses on research question 4 and investigates the relationship between Sense of Coherence and mental health.

3.2.1 HOW DOES THE SENSE OF COHERENCE DEVELOP OVER TIME?

The tables below show which age category scored a low, medium or high SOC in this study. The used age categories are taken from RIVM (2005); the SOC levels are made by Eriksson (2007).

Table 3 Participants divided in age categories and level of SOC in wave 2008

| | | Level of Sense of Coherence 2008 | | | Total (%) |
|----------------------------|--------------|----------------------------------|---------------------------|---------------------------|-------------------|
| | | Weak SOC (0-40) (%) | Medium SOC (41-70) (%) | Strong SOC (71-91) (%) | |
| Age categories 2008 | 65-69 | 0 | 98 (56,6) | 75 (43,4) | 173 (31,2) |
| | 70-74 | 1 (0,5) | 105 (55,3) | 84 (44,2) | 190 (34,3) |
| | 75-79 | 1 (0,8) | 56 (44,8) | 68 (54,4) | 125 (22,6) |
| | 80-84 | 1 (2,2) | 26 (57,8) | 18 (40) | 45 (8,1) |
| | 85-89 | 0 | 10 (58,8) | 7 (41,2) | 17 (3,1) |
| | 90-94 | 0 | 0 | 4 (100) | 4 (0,7) |
| Total (%) | | 3 (0,5) | 295 (53,2) | 256 (46,2) | N554 |

The medium SOC score is overall the most frequently scored in every wave among the participants. In all waves, there are a small amount of participants scoring a weak SOC, and the oldest age group is fairly small. Nevertheless, between the age categories, some participants score a stronger SOC. For example, in the first wave of 2008 (see *table 3*) the participants in the age category 75-79 scored 9.6% more on strong SOC compared to the medium SOC. In the age group 90-94 the four participants in this age category scored all a strong SOC.

Table 4 Participants divided in age categories and level of SOC in wave 2010

| | | Level of Sense of Coherence 2010 | | | Total (%) |
|----------------------------|-------|----------------------------------|------------------------|------------------------|-------------------|
| | | Weak SOC (0-40) (%) | Medium SOC (41-70) (%) | Strong SOC (71-91) (%) | |
| Age categories 2010 | 65-69 | 0 | 58 (54,2) | 49 (45,8) | 107 (19,3) |
| | 70-74 | 0 | 102 (54,8) | 84 (45,2) | 186 (33,6) |
| | 75-79 | 0 | 70 (45,8) | 83 (54,2) | 153 (27,6) |
| | 80-84 | 1 (1,3) | 38 (48,1) | 40 (50,6) | 79 (14,3) |
| | 85-89 | 1 (4,5) | 9 (40,9) | 12 (54,5) | 22 (3,9) |
| | 90-94 | 0 | 3 (42,9) | 4 (57,1) | 7 (1,3) |
| Total (%) | | 2 (0,4) | 280 (50,5) | 272 (49,1) | N554 |

In the second wave of 2010 (see *table 4*) a total of four age categories scored a stronger SOC score compared to the medium SOC. For the age category 75-79, the difference was 8.4% of the participants. The difference of age category 80-84 is 2.5% and for the age category 85-89 the difference is about 13.6%. In the oldest participants of that year, aged 90-94, even 14.2% scored a stronger SOC compared to the medium SOC. In the last wave every age category, scored a medium SOC, see *table 5*.

Table 5 Participants divided in age categories and level of SOC in wave 2013

| | | Level of Sense of Coherence 2013 | | | Total (%) |
|----------------------------|-------|----------------------------------|------------------------|------------------------|-------------------|
| | | Weak SOC (0-40) (%) | Medium SOC (41-70) (%) | Strong SOC (71-91) (%) | |
| Age categories 2013 | 70-74 | 1 (0,6) | 103 (59,5) | 69 (39,9) | 173 (31,2) |
| | 75-79 | 1 (0,5) | 100 (52,9) | 88 (46,6) | 189 (34,1) |
| | 80-84 | 1 (0,8) | 68 (53,9) | 57 (45,2) | 126 (22,7) |
| | 85-89 | 0 | 23 (51,1) | 22 (48,9) | 45 (8,1) |
| | 90-94 | 0 | 11 (64,7) | 6 (35,3) | 17 (3,1) |
| | 95-99 | 0 | 4 (100) | 0 | 4 (0,7) |
| Total (%) | | 3 (0,5) | 309 (55,8) | 242 (43,7) | N554 |

The next analysis conducted, is a one-way repeated measures ANOVA, to compare the Sense of Coherence score in wave 1 with wave 2 and wave 3. The mean and standard deviation of the Sense of Coherence score from every wave is shown in *Table 6*. Given the mean score of the N554 participants on Sense of Coherence, the SOC remains quite stable. The mean SOC score decreases fairly slightly (0.09) in the second wave and decreases about one point in the third wave. The standard deviations are more or less equal.

Table 6 The mean and standard deviation of the Sense of Coherence per wave

| | Mean | Standard Deviation |
|------------------------|-------|--------------------|
| SOC score of wave 2008 | 69,25 | 10,102 |
| SOC score of wave 2010 | 69,16 | 9,677 |
| SOC score of wave 2013 | 68,18 | 10,097 |

In conducting the repeated measures ANOVA, at first, age is entered as a covariate since the change in SOC can, next to the factor time, be due to having a different age and getting older. Age can be seen as a possible mediator. However, it is found that the 'interaction term' of SOC and age was not significant, meaning that age is not a mediator. So in conducting the repeated measures, age as a covariate is left out.

The result of the repeated measure showed that the Mauchly's test of Sphericity is found not significant; $\chi^2(2) = .873, p = .646$ (See *table 7*). This means that the variances between all possible pairs of within-subject are assumed to be equal. *Table 7* shows that there is an overall significant difference found between the SOC score over the different waves; $F(2, 1106) = 4.789, p = .008$. A significant effect was found for time, Wilks' Lambda = .98, $F(2, 552) = 4.634, p = .010$, see *table 7*. This entails that over the waves the SOC score does differ significantly. To check what the effect size of the difference would be, ANOVA uses the eta square formula. This shows how strong the relationship is between time and SOC score. The multivariate partial eta squared = .017, meaning a small effect size (Cohen 1988, pp. 284-287).

Table 7 Repeated measures output of SOC of the waves 2008, 2010 and 2013

| Within Subject Effect | Mauchly's W | Approx. Chi square | Df | P-value | | |
|-----------------------|-------------------------|--------------------|---------------|----------|---------|---------------------|
| Waves | ,998 | ,873 | 2 | ,646 | | |
| | | | | | | |
| | Type III Sum of Squares | Df | Mean square | F | P-value | |
| Waves | 386,993 | 2 | 193,496 | 4,789 | ,008 | |
| Error Waves | 44686,341 | 1106 | 40,404 | | | |
| | | | | | | |
| | Value | F | Hypothesis df | Error df | P-value | Partial Eta Squared |
| Wilks' Lambda | ,983 | 4,634 | 2 | 552 | ,010 | ,017 |

Where the significant differences are detected in this study is shown in *table 8* where the mean differences between the waves is shown. Between wave 2008 - 2013 and wave 2010 - 2013, a significant decrease in SOC-score is found.

Table 8 Mean difference between the different waves with the *P*-value and 95% confidence interval

| Waves (A) | Waves (B) | Mean Difference (A-B) | <i>P</i> -value | 95% CI for the difference Lower and Upper Bound | |
|--------------|--------------|--------------------------|-----------------|--|-------|
| 2008 | 2010 | ,088 | 1,000 | -,816 | ,992 |
| 2008 | 2013 | 1,065* | ,019 | ,130 | 1,999 |
| 2010 | 2008 | -,088 | 1,000 | -,992 | ,816 |
| 2010 | 2013 | ,977* | ,031 | ,064 | 1,889 |
| 2013 | 2008 | -1,065* | ,019 | -1,999 | -,130 |
| 2013 | 2010 | -,977* | ,031 | -1,889 | -,064 |

* significant *P*-value of the mean difference

3.2.2 HOW MUCH DO THE DIMENSIONS OF SENSE OF COHERENCE CONTRIBUTE TO THE SOC SCORE?

In table 9 the individual mean score of the dimensions 'Meaningfulness', 'Comprehensibility' and 'Manageability' per wave is given. The dimension 'Meaningfulness' and 'Manageability' consists of 4 questions, and the dimension 'Comprehensibility' of 5 questions. To overcome the overestimation of the dimension 'Comprehensibility', the total score per dimension is corrected by dividing the total score by the amount of questions per dimension. The mean score per wave and per dimension are quite the same. And the standard deviations are very small, which shows that these means are a good predictor of the mean per dimension that can be found in the population.

Table 9 The mean contribution per dimension on the SOC score

| | Meaningfulness Mean [SD] (%) | Comprehensibility Mean [SD] (%) | Manageability Mean [SD] (%) |
|-----------------|---------------------------------|------------------------------------|--------------------------------|
| SOC 2008 | 5,3 [,002] (33,1) | 5,4 [,002] (33,8) | 5,3 [,002] (33,1) |
| SOC 2010 | 5,2 [,001] (32,5) | 5,4 [,002] (33,8) | 5,4 [,002] (33,8) |
| SOC 2013 | 5,1 [,002] (32,5) | 5,3 [,002] (33,8) | 5,3 [,002] (33,8) |

3.2.3 CONCLUSION RESEARCH QUESTION 3

Regarding the third research question, it can be concluded that the Sense of Coherence decreases statistically over time. To be more specific between wave 1 and 3, and between wave 2 and 3. The decrease between wave 1 and 2 is not significant. To clarify that, *table 10* shows the total amount and percentage of the overall SOC score. The level of weak SOC stays quite stable over the waves. Medium SOC decreases in 2010 and increases in 2013. Strong SOC increases in 2010 but in 2013 declines. This means that there are also participants in 2010 increasing in the SOC score, and whose SOC score declines again in 2013. Overall, the medium SOC is the highest scored level of SOC. From the three dimensions of Sense of Coherence, it is found in this study, that all dimensions are equally important contributors to the SOC-score.

Table 10 Total percentage of the level of SOC from the waves 2008, 2010 and 2013

| | Weak SOC (0-40) | Medium SOC (41-70) | Strong SOC (71-91) |
|--------------|------------------------|---------------------------|---------------------------|
| 2008 | 3 (0,5%) | 295 (53,2%) | 256 (46,2%) |
| 2010 | 2 (0,4%) | 280 (50,5%) | 272 (49,1%) |
| 2013 | 3 (0,5%) | 309 (55,8%) | 242 (43,7%) |
| Total | 8 | 884 | 770 |

3.2.4 ARE SENSE OF COHERENCE AND MENTAL HEALTH CORRELATED?

To answer research question 4, a Pearson's Correlation between the sumscore of the SOC score and mental health question about experienced feelings of depressions is conducted. A significant relationship is found between Sense of Coherence and mental health in all waves. See *table 11* for the results. In 2008 $r = .584, p = .000$. In 2010 $r = .526, p = .000$ and in 2013 $r = .605, p = .000$. This means that the participants with a higher SOC score, scored high on the 'experiences of depression' question. A higher score on 'experiences of depression' stands for participants who did not have experienced feelings of depression, nervousness or gloominess, but did feel calm and happiness. The relationships can be defined positive and strong (Cohen, 1988, pp. 79-81).

Table 11 Correlation of Sense of Coherence and 'experienced feelings of depression' and 'perceived loneliness' in 2008, 2010 and 2013

| Mental Health Questions | Sense of Coherence score | | |
|------------------------------------|--------------------------|------|------|
| Experienced feelings of depression | 2008 | 2010 | 2013 |
| 2008 | ,584 ^{^**} | | |
| 2010 | ,526 ^{^**} | | |
| 2013 | ,605 ^{^**} | | |
| Perceived Loneliness | | | |
| 2008 | -,481 ^{~**} | | |
| 2010 | -,397 ^{~**} | | |
| 2013 | -,388 ^{~**} | | |

[^] Pearson's correlation
[~] Spearman's correlation
^{**} Correlation is significant at the 0,01 level (2-tailed).

The Spearman correlation for SOC score and mental health question about 'perceived loneliness', found a significant relationship between Sense of Coherence score and 'feeling lonely' in all waves. The relationships can be defined negatively and medium strong (Cohen, 1988, pp. 79-81). In 2008 $r = -.481$ with $p = .000$, in 2010 $r = -.397$, $p = .000$. And in 2013 $r = -.388$, $p = .000$. This means that if participants score high on Sense of Coherence, the score on 'perceived loneliness' will be low. See also *table 11* for the results.

An independent samples t-test is conducted for the relation between Sense of Coherence and the question about 'perceived social support'. The SOC score of the group who experienced 'none to more or less social support' is compared to the SOC score from participants who did experienced 'sufficient social support'. A Bootstrap (1000) is conducted because the amount of participants who perceived 'sufficient social support' is higher than the participants who answered 'None to more or less perceived social support', and this distribution might be found by chance in this sample. The bootstrap will take care of this by taking 1000 different samples and counts the amount of times the H0 (no difference) will be rejected. And from here, the empirical p-value is conducted.

Table 12 shows that in 2008, N31 (5.6%) of the participants experienced less social support against N523 (94.4%) of the participants. Participants in the first group scored a mean SOC of; $M = 58.03$, $SD = 10.27$ in contrary to the second group that scored: $M = 69.91$, $SD = 9.70$. The mean differences of both groups is shown in *table 13*; $MD = -11.878$, 95% CI: -15.413 to -8.343 which is found to be significant; $t(552) = -6.60$, $p = .000$ (*two tailed*).

The magnitude of the mean difference can be calculated by hand, using the next formula (Pallant,

2007): $\frac{t^2}{t^2 + (N1 + N2 - 2)}$.

The effect size is eta squared; 0.09 which is moderate to large (Cohen, 1988, pp. 284-287).

Table 12 'Perceived social support' groups and the mean SOC scores in wave 2008, 2010 and 2013

| Waves | Perceived social support | N | Mean SOC score | SD | SE | 95% CI Lower Bound | 95% CI Upper Bound |
|-------|--------------------------|-----|----------------|-------|------|--------------------|--------------------|
| 2008 | No to more or less | 31 | 58,03 | 10,27 | 1,79 | 54,21 | 61,35 |
| 2008 | Sufficient | 523 | 69,91 | 9,70 | 0,44 | 69,01 | 70,77 |
| 2010 | No to more or less | 35 | 60,43 | 9,84 | 1,67 | 57,21 | 63,76 |
| 2010 | Sufficient | 519 | 69,75 | 9,39 | 0,40 | 68,95 | 70,54 |
| 2013 | No to more or less | 50 | 60,50 | 10,15 | 1,45 | 57,60 | 63,27 |
| 2013 | Sufficient | 504 | 68,94 | 9,78 | 0,43 | 68,12 | 69,83 |

Table 13 Test for equality of means between SOC and 'perceived social support' in wave 2008, 2010 and 2013

| | Mental health question | T | df | P-value (2-tailed) | Mean difference | St error | 95% CI lower | 95% CI Upper |
|---------------------------|---------------------------------|--------|-----|--------------------|-----------------|----------|--------------|--------------|
| Sense of Coherence | Perceived Social Support | | | | | | | |
| 2008 | 2008 | -6,601 | 552 | ,000 | -11,878 | 1,799 | -15,413 | -8,343 |
| 2010 | 2010 | -5,666 | 552 | ,000 | -9,317 | 1,644 | -12,547 | -6,087 |
| 2013 | 2013 | -5,803 | 552 | ,000 | -8,442 | 1,455 | -11,300 | -5,585 |
| Sense of Coherence | Feeling Lonely | | | | | | | |
| 2008 | 2008 | -6,380 | 552 | ,000 | -6,461 | 1,013 | -8,450 | -4,472 |
| 2010 | 2010 | -5,049 | 552 | ,000 | -4,397 | 0,871 | -6,108 | -2,687 |
| 2013 | 2013 | -6,722 | 552 | ,000 | -6,245 | 0,929 | -8,069 | -4,420 |

In wave 2010, see *table 12*, the amount of N35 (6.3%) of the participants experienced less social support than participants who did feel socially supported: N519 (93.7%). The group who feels less socially supported scored a mean SOC of; $M = 60.43, SD = 9.84$ compared to the other group; $M = 69.75, SD = 9.39$.

The mean difference, see *table 13*, is; $MD = -9.317$, 95% CI : -12.547 to -6.087 which is found to be significant; $t(552) = -5.67$, $p = .000$ (two tailed). The magnitude of this difference is calculated (Pallant, 2007); eta squared 0.06 which means a moderate effect (Cohen 1988, pp. 284 – 287).

Lastly, in wave 2013 the distribution of these two groups is as follows, N50 (9%) participants in the ‘None to more or less’ experienced against N504 (90.9%) participants in the ‘Sufficient experienced social supported’, see *table 12*. The mean difference in the SOC score is; $MD = -8.442$, 95% CI : -11.300 to -5.585 and is again found to be significant; $t(552) = -5.80$,

$p = .000$ (two tailed) see *table 13*. The effect size of this mean difference is again calculated (Pallant, 2007); eta squared 0.06 meaning a moderate effect (Cohen 1988, pp. 284 – 287).

In comparing SOC score and mental health question about ‘feeling lonely’ to each other, an independent-samples t-test was conducted per wave. In *table 14*, from the N554 participants, N118 (21.3%) of the participants felt lonely. Bootstrap (1000) is conducted because the amount of participants who said ‘No’ are a lot more than the ‘Yes’ answered participants, resulting in a not normally distributed variable in all waves.

Table 14 ‘Feeling lonely’ group and the mean SOC scores in wave 2008, 2010 and 2013

| Waves | Feeling Lonely | N | Mean | SD | SE | 95% CI Lower Bound | 95% CI Upper Bound |
|-------|----------------|-----|-------|-------|------|-----------------------|-----------------------|
| 2008 | Yes | 118 | 64,16 | 10,01 | 0,92 | 62,36 | 65,90 |
| 2008 | No | 436 | 70,62 | 9,69 | 0,47 | 69,74 | 71,56 |
| 2010 | Yes | 171 | 66,12 | 9,60 | 0,74 | 64,66 | 67,63 |
| 2010 | No | 383 | 70,51 | 9,41 | 0,48 | 69,55 | 71,44 |
| 2013 | Yes | 150 | 63,63 | 10,52 | 0,82 | 61,90 | 65,21 |
| 2013 | No | 404 | 69,87 | 9,40 | 0,46 | 68,96 | 70,79 |

There are significant differences found in SOC score among participants who feel lonely in the first wave of 2008. See *table 14*, the mean SOC score is; $M = 64.16$, $SD = 10.01$ for participants who feel lonely and for participants who didn’t feel lonely; $M = 70.62$, $SD = 9.69$. See in *table 13*, the t-test is; $t(552) = -6.4$, $p = .000$. The effect size of the differences in the mean SOC scores is; $MD = -6.461$, 95% CI : -8.450 to -4.472), is *eta squared* = 0.08 and determined to be moderate to large (Cohen 1988, pp. 284 – 287). This means that the participant who scored high

on the Sense of Coherence question, scored significantly higher on the question 'feeling lonely', which stands for not feeling lonely.

In wave 2010 again a significant difference is found in the SOC-score between participants feeling lonely or not. Participants who felt lonely had a mean SOC-score of; $M = 66.12$ with a $SD = 9.59$ and scored on average lower on the SOC-score compared to the mean score of the participants who didn't felt lonely; $M = 70.51$ with a $SD = 9.41$. The difference between the two means, see *table 13*, is; $MD = -4.39$, 95% CI; $[-6.108 \text{ to } -2.687]$, was significant $t(552) = -5.05, p = .000$. The magnitude of this difference represent a $\eta^2 = 0.05$ which entails a small to moderate effect (Cohen 1988, pp. 284 – 287).

In the last wave of 2013 there is also a significant difference found in the SOC-score between participants feeling lonely, yes or no. Participants who felt lonely had a mean SOC-score of; $M = 63.63$ with a $SD = 10.52$ and scored on average lower on the SOC-score compared to the mean score of the participants who didn't felt lonely; $M = 69.87$ with a $SD = 9.40$ (See *table 12*). The difference between the two mean SOC scores; -6.25 , 95% CI; $[-8.069 \text{ to } -4.420]$, was significant $t(552) = -6.722, p = .000$. The magnitude of this difference represent a $\eta^2 = 0.09$ which entails a moderate to large effect (Cohen 1988, pp. 284 – 287).

3.2.5 CONCLUSION RESEARCH QUESTION 4

In respect of research question four, it can be concluded that Sense of Coherence and perceived mental health are positively related to each other.

4. DISCUSSION

This study consists of two parts. The first part investigates how the Sense of Coherence develops over time among Dutch older persons. The expectation of this study is, as Antonovsky (1987) states, that the Sense of Coherence will remain stable until retirement and then will decrease. However, the literature research of this study showed that the mean Sense of Coherence score among older persons was stronger, slightly stronger or at least stayed the same as the mean Sense of Coherence score of the younger aged. Next to this, the literature study found that the SOC score somewhere between the age of 40-96 slightly decreases and in the older persons increases. This result was presented by a cohort study held in Sweden from 1947 - 1997. On top of that, Sense of Coherence and age were found to be correlated, meaning that the SOC score increases with age. But, from the empirical research of this study, it is shown that overtime the Sense of Coherence decreases significantly, specifically between the first and third wave, and between the second and third wave. The reason why the SOC score did not significantly decreases between the first and second wave is shown in *table 10*: it is because the SOC also increases among participants between wave 1 and 2. Despite that, the empirical research showed results that are in line with Antonovksy's (1987) statement: the Sense of Coherence will remain stable until retirement and after this will decrease. Nevertheless, the literature study shows exactly the opposite. There are several considerations that can account for this strong deviating result from the cohort study held in Sweden. It could be due to the larger sample size and longer study period. Whereas this study is held over a period of 5 years, the tenfold is true for the cohort study in Sweden. It could also be because of the different study area. Sweden and the Netherlands have a different social and health support system, likewise the time frame within which the Sweden cohort study is conducted is already out dated, and therefore doesn't present the modern population of Sweden, which affects the external validity of that study. Lastly, the ages in this study start from 65 years old, although in the cohort held in Sweden, the minimum age at baseline was 40 years old.

How much the three dimensions contributed to the SOC score did not come forward during the literature research. It is expected that, as Antonovsky (1987) stated, the dimension of 'Meaningfulness' is the most important one. By calculating the mean score of each dimension during the empirical research, it is shown in this study that 'Comprehensibility', 'Manageability' and 'Meaningfulness' are all three equally important dimensions of the SOC score. These percentages cannot be generalized, but in this study they do give some insight in the development of these dimensions over time. The dimensions of Sense of Coherence seems to describe elements of 'Manageability', 'Meaningfulness' and 'Comprehensibility' in the interaction between individuals and the environment (Eriksson, 2007). It appears that, when getting older,

to comprehend or understand, to manage a given situation as an individual and finding a meaning in to work on this all, is very important to maintain a high SOC score or to stay healthy. In other words, that the 'Meaningfulness' dimension of the SOC is the important one (Antonovsky, 1987), is *not* shown in this study.

The second part of this study investigates whether Sense of Coherence and mental health are related to each other. There is a knowledge gap here. Both concepts are very important for maintaining health and it seems, and therefore is expected, that they are linked to each other. This expectation has been confirmed by the literature research. From the empirical research, four analyses are conducted concerning the four mental health questions. The Pearson's correlation showed a significant, strong and positive correlation in all waves. This means that the higher the SOC-score, the less the participants experienced feelings of depression, nervousness, gloominess but did feel calmness and happiness. So a high SOC score and a positive mental health are going hand in hand.

The results from the Spearman correlation showed a significant, medium strong and negative correlation in all waves. This entails that if participants score high on the Sense of Coherence, the score will be low on loneliness, meaning that participants perceive themselves as not being lonely. This makes sense, since feeling lonely effects a persons mental health negatively (WHO, 2012), resulting in a low SOC score and a high loneliness score.

However, the causality of this relation is not investigated in this study. It remains unclear whether the high SOC score results in a better mental health, or the other way around.

Between SOC and perceived social support, a significantly mean difference in all waves is found, meaning that the participants scoring a higher SOC, perceived better or more social support. In the relation between SOC score and feeling lonely also significant mean differences were found in all waves. Participants who scored a higher SOC felt significantly less lonely. The effect size of this difference was moderate to large in 2008 and 2013. And in 2010 small to moderate. A post-hoc power analysis is conducted since it is not done previous to this study. This resulted in a 100% post-hoc power, meaning that the statistical analyses are true as shown, no flaws are found in the sample size of this study.

In all four empirical analyses a relation is found between Sense of Coherence and mental health. So, in this respect, the expectations, the literature research and the empirical research of this study, all points to the same result.

4.1 LIMITATIONS

A limitation of this study can be found in the use of a sample, collected for AGORA's 'Healthy Ageing Study'. The sample is drawn from the eastern region 'Gelre-IJssel' of the Netherlands. As a result, this sample does not represent the older persons living in the other areas of the Netherlands. For example, older persons living in the northern part of the Netherlands may differ much in how they maintain their health and likewise in other parts of the Netherlands other diseases may occur. The generalizability of this study therefore is restricted to mostly the eastern region of the Netherlands.

In addition, the imputation on the participants who had 2 or less than 2 missed answers on a subset of questions, represent both a strength and a limitation of this study. In conducting the 'sample mean approach' (Hertel, 1976; Kalton, 1983a, 1986: p. 19), the data can reduce in variability on the variable involved by the imputation. This, in turn, can reduce correlations between the variables involved to other variables.

Another limitation is that the ages, at baseline, were different and the distribution of the ages is right-skewed (see *figure 4*). For example, the overall decrease of Sense of Coherence could be due to the fact that more participants are in a lower age category, compared to the higher aged. And with this in mind, maturation can also be the factor for the decrease in SOC. If the participants are getting older, the participants are better skilled in comprehending, managing and finding meaning in their life. This may account for the fact that the much older participants in this study are not very highly represented. This leads to another limitation which is the drop-out of participants from this longitudinal study. People are getting older over time, and this may result in higher drop-out rates in the older aged participants.

Finally, instrumentation can also be a limitation, which entails that the questionnaire, containing ± 60 questions, given in three waves, are answered in a systematic way. The participants are already familiar with the question, which could end up in answering the questions in the same way, over the waves. Lastly, the questions are very personal, and may provoke social desired answering.

4.2 STRENGTHS

The main strength of this study is that it is based on a longitudinal study held in the Netherlands and uses the combination of a literature and empirical research to find the answers to the research questions. Next to this, the large sample size is a strength, N554 which is 88.1% of the participants who participated over all three waves. The inclusion of participants for this study is based on the answering of the total of 5 questions about Sense of Coherence and mental health, or at least have 2 or less items missing on these questions. The Cronbach's Alpha's of the

questions used were found to be very reliable (Cronbach's α between .79 and .87). Finally, the post-hoc power analysis showed to be 100%, which gives a strength to the statistical analysis conducted in this study.

4.3 RECOMMENDATIONS

For future research this study recommends the use of participants with the same age (e.g. 65 years) at baseline. In that way, age will not act as a possible mediator between the variables 'SOC score' and 'time'. It is also recommended to follow people for a longer period, so changes in SOC can grow over time.

For future research of Dutch older persons, it is recommended to select an appropriate sample which represents the Netherlands (or another desired country) in a better way. This will enable future studies to make generalizations.

5. CONCLUSION

The aim of this study is to give insight into the development of healthy ageing among Dutch older persons, and to contribute to developing salutogenic theories and healthy ageing. It can be concluded that Sense of Coherence decreases significantly over time among older persons, which stands for a decrease in their ability to age in a healthy way. Sense of Coherence and mental health are shown to be two related concepts, which entail that if the Sense of Coherence decreases, the mental health is also decreasing. In this study, the three dimensions of the Sense of Coherence showed to be, and remain, equally important to contribute to the SOC score.

The assumption of Antonovsky (1987) that the Sense of Coherence decreases after the age of 65, is supported by this study. The assumption that the Sense of Coherence dimension 'Meaningfulness' is the important dimension of the three, is not supported within this study.

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APPENDIX 1: LITERATURE TABLE RESEARCH QUESTIONS 1 AND 2

| Article for Research Question 1 | Author, year, country, ref, AIM | Study design, sample, response rate | Measuring what? | Main outcomes | Study quality |
|--|--|---|--|---|--|
| TITLE | | | | | |
| 1. Sense of Coherence and psychological well-being: improvement with age. | <p>Nilsson K.W., Leppert J., Simonsson B. & Starrin B. (2010) Sweden</p> <p>AIM: 1) To investigate SOC in relation to age and sex 2) To investigate psychological well-being in relation to age and sex 3) To investigate the relationship between GRR and psychosocial well-being.</p> | <p>Cross-sectional postal survey questionnaire,</p> <p>Random sample 68.000, 43.598 response rate (64%)</p> | <p>-SOC-13</p> <p>-Psychological well-being (GHQ-12)</p> | <p>-increase in SOC is related to a decrease in psychosocial well-being. Stronger SOC correspond with higher well-being.</p> <p>-relationship between SOC and age, with stronger SOC in the older age groups.</p> | <p>- restrict conclusions can be drawn. Especially, cause and effect must be considered tentative.</p> <p>- threshold scores were used to obtain high specificity and high sensitivity. We should not, therefore, overestimate the reduced psychological well-being in the study population.</p> |

| Article for Research Question 1 | Author, year, country, ref, AIM | Study design, sample, response rate | Measuring what? | Main outcomes | Study quality |
|--|---|--|---|---|--|
| TITLE | | | | | |
| 2. Relationship of SOC with sociodemographic variables, mental disorders and mortality. | <p>Cecilia Mattisson, Vibeke Horstmann & Mats Bogren (2014) Sweden.</p> <p>AIM: 1) To describe the relationship of Antonovsky's 29-item Sense of Coherence scale (SOC) and is three subscales to mental health and mortality in an unselected middle-aged and elderly community cohort, controlling for gender, age marital status, and SES. 2) To analyse three-factor structure of SOC.</p> | <p>Cohort study (Lundby Study) 1947, with follow-up in: 1957, 1972 and 1997. Of the 1797 surviving participants in 1997, 1559 interviewed and 1164 answered SOC questionnaire. Response rate 65,4%</p> <p>Age range 40-96 years.</p> | <p>-Diagnostically classified by DSM-IV and the Lundby diagnostic system</p> <p>-SOC-29 questionnaire</p> | <p>-a positive correlation between age and SOC score.</p> <p>-age group 60-69 mean SOC 143,6</p> <p>-age group 70-79 mean SOC 142,4</p> <p>-age group over-80 mean SOC 149,2.</p> | <p>- Population based</p> <p>- Not represent a modern Swedish population</p> |

| Article for Research Question 1 | Author, year, country, ref, AIM | Study design, sample, response rate | Measuring what? | Main outcomes | Study quality |
|---|---|--|--|--|--|
| TITLE | | | | | |
| 3. The distribution of “Sense of Coherence” among Swedish adults: A quantitative cross-sectional population study. | Ulrika Lindmark, Ulf Stenström, Elisabeth Wärnberg Gerdin & Anders Hugoson (2010) Sweden. AIM: Describe the distribution of SOC scores and their components in an adult Swedish population aged 20-80 years. | Cross-sectional population study, stratified random sample of 910 individuals aged 60, 70 and 80. 526 participants, response rate 89%. Age group 80, 53% non-responded. | - SOC-13 version “the life orientation questionnaire scale” - oral health examination | - SOC increases with age and younger adults have a statistically significantly lower SOC score compared with individuals older than 30 years of age. | - 80+ age group, 53% non-respondent!!! Considered with caution. |

| Article for Research Question 1 | Author, year, country, ref, AIM | Study design, sample, response rate | Measuring what? | Main outcomes | Study quality |
|---|---|--|--|--|---|
| TITLE | | | | | |
| 4. Changes in Sense of Coherence in old age – a 5-year follow-up of the Umeå 85+ study | Hugo Lövheim, Ulla H. Graneheim, Elisabeth Jonsén, Gunilla Strandberg & Berit Lundman (2012) Sweden. AIM: Describe the changes in Sense of Coherence (SOC) over time and relate these changes to negative life events among very old people. | Prospective and longitudinal study, From 203 participants, 190 participants completed the SOC scale, and 56 (29,5%) could be included in 5-years follow-up (completing the SOC assessment). | -SOC-13 - Index of negative life events, questions about; medical condition, losses of close relatives, ADL-functioning (loss of independence), cognitive and communicational abilities, and subjective negative events (loneliness and crisis in life) | - The average SOC score increased over 5 years. - A correlation was found between negative life events and decrease in SOC. | - small sample size over 5 years’ follow-up |

| Article for Research Question 1 | Author, year, country, ref, AIM | Study design, sample, response rate | Measuring what? | Main outcomes | Study quality |
|---|--|--|---|---|---|
| TITLE | | | | | |
| 5. Integrative review: salutogenesis and health in older people over 65 years old. | <p>Khoon-Kiat Tan, Katri Vehviläinen-Julkunen & Sally Wai-Chi Chan (2014) Finland</p> <p>AIM: To synthesise the evidence in published studies that used a salutogenic framework to explore the relationship between generalized resistance resources, a Sense of Coherence, health and the quality of life in people aged 65 years and over.</p> | <p>Review of 8 studies (1 qualitative study and 7 cross-sectional quantitative studies (Western countries).</p> <p>Participants aged from 65 and older. Living in communities, in two studies the participants are living in health institution.</p> | <p>-SOC-13 and SOC-29.</p> <p>-QOL</p> <p>-HRQOL</p> <p>-Subjective health or perceived health</p> <p>-Mini-D-test (cognitive health)</p> | <p>-A strong Sense of Coherence among older people was correlated with better physical, social and mental health.</p> <p>-The older people have reasonably stronger SOC compared to the other SOC scores of other age groups. But there was no longitudinal study to suggest when older people achieve a stronger SOC.</p> <p>-Community dwellers in their home environments had stronger SOC than older people in communal care facilities for the aged, but this relationship is not tested statistically in this review.</p> <p>-SOC moderates stress and is associated with health, particularly with mental health. A causal relationship between SOC and psychosocial well-being could not be established in this review.</p> | <p>-excluded non-English publications</p> <p>-7 studies cross-sectional, no causal relationships could be found from correlational analysis.</p> <p>- the directional or bi-directional effect of SOC, GRRs, health and QOL could not be established.</p> |

| Article for Research Question 1 | Author, year, country, ref, AIM | Study design, sample, response rate | Measuring what? | Main outcomes | Study quality |
|--|--|---|--|---|---|
| TITLE | | | | | |
| 6. Resilience, Sense of Coherence, purpose in life and self-transcendence in relation to perceived physical and mental health among the oldest old. | <p>B. Nygren, L. Aléx, E. Jonsén, Y. Gustafson, A. Norberg & B. Lundman (2005) Sweden.</p> <p>AIM: Describe resilience, Sense of Coherence, purpose in life, and self-transcendence in relation to perceived physical and mental health in a sample in the oldest old.</p> | <p>Part of a larger study, Interviewing participants on 2 occasions; The Umea 85+ study. Invite all people aged 95 or older, and a random sample of individuals aged 85 years old. Living in a mid-sized town in northern of Sweden.</p> <p>Participants 125.</p> <p>Response rate unknown.</p> | <p>-The Resilience Scale (RS) Cronbach's Alpha 0.83</p> <p>-SOC-13 version, Cronbach's alpha 0.77</p> <p>- The Purpose in Life Test (PIL), Cronbach's alpha 0.85</p> <p>-The Self-transcendence scale (STS), Cronbach's alpha 0.70</p> <p>-The SF-36 Health Survey, Cronbach's alpha 0.79-0.93. (physical and mental health)</p> | <p>- a positive correlation of resilience, SOC, purpose in life, and self-transcendence to perceived mental health (for women, not for men, but the mean scores for the scales are comparable between sexes. Due to more females in the study?)</p> <p>- the lack of significant correlations of these scales to physical health.</p> <p>-No correlation found between physical and mental health.</p> <p>-The oldest old in this study had higher (or at least the same level of) SOC, resilience, purpose in life and self-transcendence as younger persons.</p> <p>-connections between resilience, SOC, purpose in life and self-transcendence, and these concepts liaison to inner strength.</p> | <p>- No broad explanation about study type.</p> |

| Article for Research Question 2 | Author, year, country, ref, AIM | Study design, sample, response rate | Measuring what? | Main outcomes | Study quality |
|--|--|-------------------------------------|---|--|---|
| TITLE | | | | | |
| 1. Antonovsky's Sense of Coherence scale and the relation with health: a systematic review. | <p>Monica Eriksson, Bengt Lindström (2006) Finland.</p> <p>AIM: To synthesize empirical findings on the salutogenic concept SOC and examine its capacity to explain health and its dimensions.</p> | Systematic review | 458 scientific publications and 13 doctoral theses used to summarize 25 years of salutogenic research to present evidence of the relation between SOC and health. | <p>-SOC is strongly related to perceived health, especially mental health.</p> <p>-The stronger the SOC the better the perceived health in general, at least for those with an initial high SOC. This relation is manifested in study populations regardless of age, sex, ethnicity, nationality and study design.</p> <p>-SOC seems to have a main, moderating or mediating role in the explanation of health.</p> <p>-SOC seems to be able to predict health.</p> <p>-SOC and mental health are two independent but correlated constructs.</p> <p>- SOC is a mediator between stress and mental health.</p> <p>-SOC has a direct and moderating effect on mental health.</p> <p>-SOC seems strongly associated to perceived good health, especially mental dimension, at least among the people with a high SOC.</p> | <p>- the interpretation of causality is somewhat complicated</p> <p>-the synthesis applies a probabilistic approach. Not a deterministic. It is based on studies where multivariate analysis was applied. The outcome might include an uncertainty.</p> |

| Article for Research Question 2 | Author, year, country, ref, AIM | Study design, sample, response rate | Measuring what? | Main outcomes | Study quality |
|--|---|---|--|---|--|
| TITLE | | | | | |
| 2. Sense of Coherence and psychological well-being: improvement with age. | <p>Nilsson K.W., Leppert J., Simonsson B. & Starrin B. (2010) Sweden.</p> <p>AIM: 1) To investigate SOC in relation to age and sex 2) To investigate psychological well-being in relation to age and sex 3) To investigate the relationship between GRR and psychosocial well-being.</p> | <p>Postal survey questionnaire,</p> <p>Random sample 68.000, 43.598 response rate (64%)</p> | <p>-SOC (SOC-13)</p> <p>-Psychological well-being (GHQ-12)</p> | <p>-increase in SOC is related to a decrease in psychosocial well-being. Stronger SOC correspond with higher well-being.</p> <p>-relationship between SOC and age, with stronger SOC in the older age groups.</p> | <p>- restrict conclusions can be drawn. Especially, cause and effect must be considered tentative.</p> <p>- threshold scores were used to obtain high specificity and high sensitivity. We should not, therefore, overestimate the reduced psychological well-being in the study population.</p> |

| Article for Research Question 2 | Author, year, country, ref, AIM | Study design, sample, response rate | Measuring what? | Main outcomes | Study quality |
|--|--|---|--|---|---------------|
| TITLE | | | | | |
| 3. Resilience, Sense of Coherence, purpose in life and self-transcendence in relation to perceived physical and mental health among the oldest old. | <p>B. Nygren, L. Al  x, E. Jons  n, Y. Gustafson, A. Norberg & B. Lundman (2005) Sweden.</p> <p>AIM: Describe resilience, Sense of Coherence, purpose in life, and self-transcendence in relation to perceived physical and mental health in a sample in the oldest old.</p> | <p>Part of a larger study, Interviewing participants on 2 occasions; The Umea 85+ study. Invite all people aged 95 or older, and a random sample of individuals aged 85 years old. Living in a mid-sized town in northern of Sweden.</p> <p>Participants 125.</p> <p>Response rate unknown.</p> | <p>-The Resilience Scale (RS) Cronbach's Alpha 0.83</p> <p>-SOC-13 version, Cronbach's alpha 0.77</p> <p>- The Purpose in Life Test (PIL), Cronbach's alpha 0.85</p> <p>-The Self-transcendence scale (STS), Cronbach's alpha 0.70</p> <p>-The SF-36 Health Survey, Cronbach's alpha 0.79-0.93. (physical and mental health)</p> | <p>- a positive correlation of resilience, SOC, purpose in life, and self-transcendence to perceived mental health (for women, not for men, but the mean scores for the scales are comparable between sexes. Due to more females in the study?)</p> <p>- the lack of significant correlations of these scales to physical health.</p> <p>-No correlation found between physical and mental health.</p> <p>-The oldest old in this study had higher (or at least the same level of) SOC, resilience, purpose in life and self-transcendence as younger persons.</p> <p>-connections between resilience, SOC, purpose in life and self-transcendence, and these concepts liaison to inner strength.</p> | |

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| 4. Integrative review: salutogenesis and health in older people over 65 years old. | <p>Khoon-Kiat Tan, Katri Vehviläinen-Julkunen & Sally Wai-Chi Chan (2014) Finland</p> <p>AIM: To synthesise the evidence in published studies that used a salutogenic framework to explore the relationship between generalized resistance resources, a Sense of Coherence, health and the quality of life in people aged 65 years and over.</p> | <p>Review of 8 studies (1 qualitative study and 7 cross-sectional quantitative studies (Western countries).</p> <p>Participants aged from 65 and older. Living in communities, in two studies the participants are living in health institution.</p> | <p>-SOC-13 and SOC-29.</p> <p>-QOL</p> <p>-HRQOL</p> <p>-Subjective health or perceived health</p> <p>-Mini-D-test (cognitive health)</p> | <p>-A strong Sense of Coherence among older people was correlated with better physical, social and mental health.</p> <p>-The older people have reasonably stronger SOC compared to the other SOC scores of other age groups. But there was no longitudinal study to suggest when older people achieve a stronger SOC.</p> <p>-Community dwellers in their home environments had stronger SOC than older people in communal care facilities for the aged, but this relationship is not tested statistically in this review.</p> <p>-SOC moderates stress and is associated with health, particularly with mental health. A causal relationship between SOC and psychosocial well-being could not be established in this review.</p> | <p>-excluded non-English publications</p> <p>-7 studies cross-sectional, no causal relationships could be found from correlational analysis.</p> <p>- the directional or bi-directional effect of SOC, GRRs, health and QOL could not be established.</p> |

| Article for Research Question 2 | Author, year, country, ref, AIM | Study design, sample, response rate | Measuring what? | Main outcomes | Study quality |
|---|---|--|---|---|--|
| TITLE | | | | | |
| 5. Psychometric properties of Antonovsky's 29-item Sense of Coherence scale in research on older-home-dwelling Norwegians. | <p>Ulrika Söderhamn, Kari Sundsli, Christina Cliffordson & Bjørg Dale (2015) Sweden.</p> <p>AIM: Test the homogeneity and construct validity of the Sense of Coherence 29-item scale (SOC-29) among older home-dwelling Norwegians.</p> | <p>Cross-sectional study, part of large project about selfcare and health among home-dwelling people (65+ years old) in southern Norway.</p> <p>Postal questionnaire, 2069 random sampled in 5 countries in southern of Norway. Response rate 34,3%.</p> | <p>-SOC-29 Cronbach's alpha 0.91</p> <p>-Self-care Ability Scale for the Elderly (SASE)</p> <p>-Goldberg's General Health Questionnaire (GHQ-30) measuring mental problems.</p> | <p>-SOC has a particularly strong relationship with mental health and self-care ability.</p> <p>-five predictors of strong SOC emerged in the linear regression analysis good mental health, higher self-care ability, not feeling lonely, being active, and not having a chronic disease or handicap. (opposite way for low SOC)</p> | <p>- low response rate (34,3%)</p> <p>-possibility of obtaining significant correlations will increase with a large sample size.</p> |

APPENDIX 2: QUESTIONNAIRE 'RESEARCH ON OLDER PERSONS 2008 (OUDERENONDERZOEK 2008)'

Ouderenonderzoek 2008

(Brief)

Uitleg

Lees voordat u begint met invullen eerst de onderstaande instructies.

- Het is de bedoeling dat de vragen worden beantwoord door de persoon, aan wie de vragenlijst is toegestuurd.
- Het gaat om uw mening en uw eigen ervaringen. Als u echter op bepaalde vragen geen antwoord wilt geven, dan kunt u deze natuurlijk overslaan.
- Als u de vragen niet zelf kunt lezen of invullen, mag iemand anders u helpen. Geeft u dan wel zelf de antwoorden. Als er niemand in uw omgeving is die u kan helpen bij het invullen van de vragen dan kunt u contact opnemen met de GGD Gelre-IJssel: 088-443 3705. De medewerkers van de GGD regelen dan een vrijwilliger voor uw.
- Het invullen van de vragenlijst kost de nodige tijd; neem er dus rustig de tijd voor. Als u de lijst te lang vindt, kunt u deze gerust in meerdere keren invullen. U kunt dan bijvoorbeeld de volgende dag verder gaan. Wij stellen het zeer op prijs als u de vragenlijst helemaal invult.
- Wilt u de vragenlijst invullen met een zwarte of blauwe balpen (niet met potlood)!
- Zet een duidelijk kruis in het antwoordvakje
- Het kan zijn dat u bepaalde vragen niet hoeft in te vullen. Er staat dan aangegeven naar welke vraag u moet gaan (bijvoorbeeld → ga naar vraag 10). De tussenliggende vragen mag u overslaan.
- Meestal kunt u gewoon één antwoord kiezen uit een rijtje mogelijke antwoorden.

Voorbeeld

Bent u allergisch voor huisdieren?

- ☒ Ja
☐ Nee

- Als u een fout antwoord invult, laat dan het foutieve kruisje staan en maak het goede vakje helemaal zwart. Het goede antwoord is dus ja.

Voorbeeld

Bent u allergisch voor huisdieren?

- ☒ Ja
☐ Nee

- Soms mag u ook meerdere antwoorden aankruisen; dit staat dan bij de vraag vermeld.

Voorbeeld

Welk huisdier heeft u?

(Er zijn meerdere antwoorden mogelijk)

- ☐ Kat
☒ Hond
☒ Anders, namelijk

cavia

- Vul bij een getal één cijfer per vakje in. Het hele cijfer moet binnen het vakje komen. Geen streepjes zetten als u iets niet hoeft in te vullen.

Voorbeeld

Hoeveel huisdieren heeft u?

1 2

1 Wat is uw geslacht?

- ☐ Man
☐ Vrouw

2 Wat is uw geboortejaar?

3 Wat is uw geboorteland?

- ☐ Nederland
☐ Nederlands Indië
☐ Duitsland
☐ Suriname
☐ Nederlandse Antillen
☐ Aruba
☐ Turkije
☐ Marokko
☐ Anders, namelijk:

4 Wat is uw burgerlijke staat?

- ☐ Gehuwd
☐ Samenwonend
☐ Ongehuwd, nooit gehuwd geweest
☐ Gescheiden, gescheiden levend
☐ Weduwe, weduwnaar

5 Wie wonen er bij u in huis?

- ☐ Ik woon alleen
☐ Samen met een partner / echtgenoot of echtgenote
☐ Samen met partner en thuiswonend(e) kind(eren)
☐ Samen met één of meer thuiswonende kinderen
☐ Samen met andere familieleden (bijvoorbeeld broer of zus)
☐ Ik woon in bij een kind en zijn/haar gezin
☐ Anders

6 In wat voor woning woont u?

- ☐ Eengezinswoning (rijtjeshuis, twee onder een kap, vrijstaand, bungalow)
☐ Flat, etagewoning, appartement of maisonnette
☐ Boerderij/ woning met tuinderij
☐ Zelfstandige ouderenwoning, bejaardenwoning, seniorenwoning
☐ Woongemeenschap voor ouderen
☐ Aanleunwoning bij een verzorgingshuis
☐ Serviceflat
☐ Woning bij een zorgpunt, woon-zorgcomplex, clusterwoning
☐ Anders, namelijk:

Algemeen

7 Wat is uw postcode?

8 Wat is uw hoogst voltooide opleiding?

(een opleiding afgerond met diploma of voldoende getuigschrift)

(Er is maar 1 antwoord mogelijk)

- ☐ Geen opleiding
- ☐ Lagere school
- ☐ Lager beroepsonderwijs (bijv. ambachtsschool, huishoudschool, agrarische school)
- ☐ Middelbaar algemeen voortgezet onderwijs (bijv. VGLO, (M)ULO, handelsschool, MAVO)
- ☐ Middelbaar beroepsonderwijs (bijv. MTS, UTS, opleidingen voor kleuterleidster, gezinsverzorgster, verpleegster)
- ☐ Hoger algemeen voortgezet onderwijs (bijv. MMS, HBS, HAVO, Atheneum, Gymnasium)
- ☐ Hoger beroepsonderwijs (bijv. HTS, sociale academie, kweekschool, hogeschool)
- ☐ Wetenschappelijk onderwijs (universiteit)
- ☐ Anders, namelijk:

9 Bestaat uw (gezamenlijk) inkomen alleen uit AOW?

- ☐ Ja
- ☐ Nee

10 Heeft u het afgelopen jaar moeite gehad om van het inkomen van uw huishouden rond te komen?

- ☐ Nee, geen enkele moeite
- ☐ Nee, geen moeite, maar ik moet wel opletten op mijn uitgaven
- ☐ Ja, enige moeite
- ☐ Ja, grote moeite

Levensgebeurtenissen

11 Heeft u in de afgelopen 12 maanden een van de volgende gebeurtenissen meegemaakt?

(Let u er a.u.b. op dat u bij **elke regel** (a, b, c, enz.) één hokje aankruist.)

| | Ja | Nee | Niet van toepassing |
|---|--------------------------|--------------------------|--------------------------|
| a. Gestopt met werken | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Partner is gestopt met werken | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Ernstige ziekte van uzelf | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d. Ernstige ziekte van uw partner of gezinslid | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e. Opname van uw partner in verzorgingshuis/ verpleeghuis | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| f. Overlijden van partner | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| g. Overlijden van naaste anders dan partner | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| h. Jubileum of huwelijk van uzelf, naaste familie, vriend(in) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| i. U bent verhuisd | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| j. Verhuizing van een voor u belangrijk persoon | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| k. Echtscheiding/ verbreken van de relatie met uw partner | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| l. Geboorte van een kleinkind | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| m. Ernstige ruzie/ conflict | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| n. Belangrijke achteruitgang in de financiële situatie | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| o. Andere ingrijpende gebeurtenis, namelijk: | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <div></div> | | | |

12 De volgende vragen gaan over verscheidene aspecten van uw leven. Bij elke vraag zijn 7 antwoordkeuzes mogelijk, waarbij de getallen 1 en 7 de extreme antwoorden zijn.

Wilt u het getal aankruisen, welk uw antwoord het beste uitdrukt.

(Let u er a.u.b. op dat u bij **elke regel** (a, b, c, enz.) één kokje aankruist.)

a. Heeft u het gevoel dat het u tamelijk onverschillig laat wat er om u heen gebeurt?

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7

◀ uiterst zelden of nooit zeer vaak ▶

b. Bent u in het verleden eens verrast door het gedrag van mensen die u goed dacht te kennen?

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7

◀ dat is nooit gebeurd dat komt altijd weer voor ▶

c. Is het gebeurd dat mensen op wie u gerekend had u teleurgesteld hebben?

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7

◀ dat is nooit gebeurd dat komt altijd weer voor ▶

d. Tot nu toe heeft uw leven...

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7

◀ ...geen duidelijke doelen of een doeleinde ...zeer duidelijke doelen of een doeleinde ▶

e. Heeft u het gevoel oneerlijk behandeld te worden?

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7

◀ heel vaak zelden of nooit ▶

Levensgebeurtenissen

Vervolg vraag 12

f. Heeft u het gevoel in een ongewone situatie te zijn en niet te weten wat u moet doen?

| | | | | | | |
|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 | <input type="checkbox"/> 6 | <input type="checkbox"/> 7 |
| ◀ heel vaak | | | | | | zelden of nooit ▶ |

g. Dat wat u dagelijks doet is voor u een bron van...

| | | | | | | |
|------------------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 | <input type="checkbox"/> 6 | <input type="checkbox"/> 7 |
| ◀ ...diepe vreugde en tevredenheid | | | | | | ...pijn en verveling ▶ |

h. Hoe vaak zijn uw gevoelens en ideeën erg verward?

| | | | | | | |
|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 | <input type="checkbox"/> 6 | <input type="checkbox"/> 7 |
| ◀ heel vaak | | | | | | zelden of nooit ▶ |

i. Komt het voor dat u gevoelens heeft die u liever niet zou hebben?

| | | | | | | |
|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 | <input type="checkbox"/> 6 | <input type="checkbox"/> 7 |
| ◀ heel vaak | | | | | | zelden of nooit ▶ |

j. Veel mensen - ook die met een sterk karakter - voelen zich soms in bepaalde situaties een pechvogel. Hoe vaak heeft u zich in het verleden zo gevoeld?

| | | | | | | |
|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 | <input type="checkbox"/> 6 | <input type="checkbox"/> 7 |
| ◀ zelden of nooit | | | | | | zeer vaak ▶ |

k. Wanneer er iets gebeurt vindt u in het algemeen dat u het belang ervan...

| | | | | | | |
|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 | <input type="checkbox"/> 6 | <input type="checkbox"/> 7 |
| ◀ ...over- of onderschat | | | | | | ...juist inschat ▶ |

l. Hoe vaak heeft u het gevoel dat de dingen die u dagelijks doet weinig zin hebben?

| | | | | | | |
|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 | <input type="checkbox"/> 6 | <input type="checkbox"/> 7 |
| ◀ heel vaak | | | | | | zelden of nooit ▶ |

m. Hoe vaak heeft u gevoelens waarvan u niet zeker bent of u ze onder controle kunt houden?

| | | | | | | |
|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 | <input type="checkbox"/> 6 | <input type="checkbox"/> 7 |
| ◀ heel vaak | | | | | | zelden of nooit ▶ |

13 Hoe zou u over het algemeen uw gezondheid noemen?

- ☐ Uitstekend
- ☐ Zeer goed
- ☐ Goed
- ☐ Matig
- ☐ Slecht

14 Hoe tevreden bent u met uw gezondheid?

- ☐ Erg tevreden
- ☐ Tamelijk tevreden
- ☐ Tevreden noch ontevreden
- ☐ Ontevreden
- ☐ Erg ontevreden

15 Hoe zou u uw kwaliteit van leven inschatten?

- ☐ Erg goed
- ☐ Tamelijk goed
- ☐ Goed noch slecht
- ☐ Tamelijk slecht
- ☐ Erg slecht

16 Heeft u de volgende ziekten en aandoeningen of heeft u deze in de afgelopen 12 maanden gehad? (Let u er a.u.b. op dat u bij elke regel (a,b,c, enz.) één hokje aankruist.)

| | Nee | Ja, NIET door arts vastgesteld | Ja, door arts vastgesteld |
|---|--------------------------|--------------------------------------|------------------------------|
| a. Hoge bloeddruk | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Suikerziekte/ Diabetes | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Hart- en vaatziekten (zoals beroerte, hersenbloeding, herseninfarct, TIA, hartfalen, hartinfarct, vernauwing bloedvaten) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d. Gewrichtsaandoeningen (zoals slijtage, chronische ontsteking, reuma, rugaandoening, hernia) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e. Chronische longziekten (zoals astma, bronchitis, longemfyseem of CARA) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| f. Psychische klachten (zoals depressiviteit) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| g. Ernstige of hardnekkige darmstoornissen langer dan 3 maanden | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| h. Kanker | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| i. Huidaandoening (zoals psoriasis, chronische eczeem) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| j. Onvrijwillig urineverlies | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| k. Anders, namelijk: | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <div></div> | | | |

Gezondheid

- 17 In welke mate wordt u door een langdurige ziekte of aandoening (uit de vorige vraag) belemmerd bij het uitvoeren van uw dagelijkse bezigheden thuis, of in uw (vrijwilligers) werk, of in uw vrijetijdsbesteding?**

- ☐ Sterk belemmerd
☐ Licht belemmerd
☐ Niet belemmerd
☐ Niet van toepassing: ik heb in de afgelopen 12 maanden geen van de aandoeningen uit de vorige vraag gehad

- 18 Hoe goed kunt u zich verplaatsen?**

- ☐ Erg goed
☐ Tamelijk goed
☐ Goed noch slecht
☐ Tamelijk slecht
☐ Erg slecht

- 19 Hieronder staan enkele handelingen waar sommige mensen moeite mee hebben. Wilt u voor elk van deze handelingen aangeven of u deze zonder moeite, met enige moeite maar zonder hulp, alleen met hulp van anderen, of helemaal niet kunt doen?**

(Let u er a.u.b. op dat u bij **elke regel** (a,b,c, enz.) één hokje aankruist.)

| | Zonder moeite | Met moeite zonder hulp | Alleen met hulp van anderen | Nee |
|---|--------------------------|--------------------------|-----------------------------|--------------------------|
| a. Een voorwerp van 5 kg (bijvoorbeeld een volle boodschappentas) 10 meter dragen | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. 400 meter aan een stuk lopen, zonder stil te staan (zo nodig met stok) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Uzelf van de ene naar de andere kamer verplaatsen (op dezelfde verdieping) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d. Naar buiten gaan | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e. Licht huishoudelijk werk doen | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| f. Zwaar huishoudelijk werk doen | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| g. Eten en drinken | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| h. Zelfstandig warm eten klaarmaken (koken) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| i. In en uit bed stappen | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| j. Uzelf aan- en uitkleden | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| k. Uzelf volledig wassen | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| l. De trap op- en aflopen | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| m. Naar het toilet gaan | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

- 20** De volgende vragen gaan over uw gezichtsvermogen en gehoor. Wilt u voor de volgende situaties aangeven in hoeverre horen of zien u moeite kost? Het gaat er in de vragen om wat u normaal kunt doen. Het gaat NIET om tijdelijke problemen van voorbijgaande aard. (Let u er a.u.b. op dat u bij **elke regel** (a,b,c, enz.) één hokje aankruist.)

| | Ja, zonder moeite | Ja, met enige moeite | Ja, met grote moeite | Nee, dat kan ik niet |
|--|--------------------------|--------------------------|--------------------------|--------------------------|
| a. Kunt u een gesprek volgen in een groep van 3 of meer personen (zo nodig met hoorapparaat)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Kunt u met één andere persoon een gesprek voeren (zo nodig met hoorapparaat)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Zijn uw ogen goed genoeg om de kleine letters in de krant te kunnen lezen (zo nodig met bril of contactlenzen)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d. Kunt u op een afstand van 4 meter het gezicht van iemand herkennen (zo nodig met bril of contactlenzen)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Welbevinden

- 21 In de volgende vragen wordt gevraagd naar de mate waarin u in de afgelopen twee weken bepaalde dingen heeft ervaren of in staat was te doen.**

| | Helemaal niet | Bijna niet | Gemiddeld | Nogal | Helemaal |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| a. Hoe veilig voelt u zich in uw dagelijkse leven? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Hoe gezond is uw omgeving? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Heeft u genoeg energie voor het leven van alledag? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d. Heeft u genoeg geld om in uw behoeften te voorzien? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e. Hoe beschikbaar voor u is de informatie die u nodig hebt in uw dagelijkse leven? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| f. Heeft u mogelijkheden tot recreatie? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

- 22 In de volgende vragen wordt gevraagd in welke mate (hoeveel) u in de afgelopen twee weken bepaalde dingen hebt ervaren.**

| | Helemaal niet | Weinig | Middelmatig | Hevig | Een extreme hoeveelheid |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| a. In welke mate vindt u dat pijn u afhoudt van wat u moet doen? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Hoeveel behoefte hebt u aan medische behandeling om in uw dagelijkse leven te functioneren? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

- 23 In de volgende vragen wordt gevraagd naar hoe tevreden of ontevreden u in de afgelopen twee weken bent geweest met de verschillende aspecten van uw leven.**

| | Erg ontevreden | Tevreden | Tevreden noch ontevreden | Tamelijk tevreden | Erg tevreden |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| a. Hoe tevreden bent u met uw slaap? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Bent u tevreden met uw vermogen om alledaagse activiteiten te verrichten? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Bent u tevreden met uw leefomstandigheden? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d. Hoe tevreden bent u met uw toegang tot gezondheidsdiensten? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e. Hoe tevreden bent u met uw vervoer? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Welbevinden

- 27 Hieronder volgen een aantal stellingen. Kunt u voor iedere stelling aangeven in hoeverre u het hiermee eens bent?**

| | Helemaal eens | Eens | Eens noch oneens | Beetje oneens | Helemaal oneens | Weet niet |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| a. Eenzaamheid komt onder ouderen regelmatig voor. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Door met anderen over gevoelens van eenzaamheid te praten kan de eenzaamheid worden verminderd. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Ik heb er vertrouwen in dat ik zelf iets kan doen aan mijn gevoelens van eenzaamheid. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

- 28 Praat u wel eens met mensen in uw omgeving over dat er mensen eenzaam zijn?**

- ☐ Ja, regelmatig
☐ Ja, af en toe
☐ Zelden of nooit

- 29 Voelt u zich wel eens alleen?**

- ☐ Ja
☐ Nee (→ ga naar vraag 33)

- 30 In welke situaties voelt u zich weleens alleen?**

(Let u er a.u.b. op dat u bij **elke regel** (a,b,c, enz.) één hokje aankruist.)

| | Ja | Nee |
|---|--------------------------|--------------------------|
| a. Wanneer ik alleen eet | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Wanneer ik een moeilijke beslissing moet nemen | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Wanneer ik ziek ben | <input type="checkbox"/> | <input type="checkbox"/> |
| d. Wanneer in de zomermaanden iedereen op vakantie is | <input type="checkbox"/> | <input type="checkbox"/> |
| e. Op zondagen | <input type="checkbox"/> | <input type="checkbox"/> |
| f. Bij feesten of bijzondere gebeurtenissen (bijvoorbeeld verjaardagen, huwelijken etc.) | <input type="checkbox"/> | <input type="checkbox"/> |
| g. Bij verdrietige gebeurtenissen (bijvoorbeeld overlijden, ziekte, etc.) | <input type="checkbox"/> | <input type="checkbox"/> |
| h. Als er in en om huis een klusje moet gebeuren | <input type="checkbox"/> | <input type="checkbox"/> |
| i. Als ik er op uit wil trekken (bijvoorbeeld wandelen, fietsen, naar een museum, op vakantie etc.) | <input type="checkbox"/> | <input type="checkbox"/> |
| j. Anders, namelijk: | <input type="checkbox"/> | <input type="checkbox"/> |

Welbevinden

31 Wanneer u zich soms alleen voelt, wat doet u dan?

- ☐ Ik probeer andere mensen te ontmoeten of bel iemand op
- ☐ Ik zoek afleiding en ga dingen ondernemen
- ☐ Ik doe niets bijzonders
- ☐ Ik weet dan niet goed wat ik moet doen

32 Indien u zich soms alleen of eenzaam voelt, praat u hier dan over met anderen?

(meerdere antwoorden mogelijk)

- ☐ Nee
- ☐ Ja, met mijn partner
- ☐ Ja, met mijn (klein)kinderen
- ☐ Ja, met een goede vriend of vriendin
- ☐ Ja, met de huisarts
- ☐ Ja, met de burens
- ☐ Ja, met anderen namelijk:

33 De volgende vragen gaan over uw omgang met andere mensen. Wilt u steeds aangeven of u de omschreven situatie weleens ervaart. Wilt u bij iedere vraag het antwoord dat het meest op u van toepassing is aankruisen?

| Gebeurt het wel eens dat men..... | Zelden of nooit | Af en toe | Regelmatig | Erg vaak |
|--|--------------------------|--------------------------|--------------------------|--------------------------|
| a. ...u uitnodigt voor een feestje of etentje? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. ...gezellig bij u op bezoek komt? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. ...genegenheid voor u toont? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d. ... u troost? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e. ... u complimenten geeft? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| f. ... interesse in u toont? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| g. ... u hulp biedt in bijzondere gevallen zoals bij ziekte en verhuizing? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| h. ... u geruststelt? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| i. ... u goede raad geeft? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| j. ... u in vertrouwen neemt? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| k. ... u om hulp of advies vraagt? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| l. ... uw sterke punten naar voren haalt? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Leefgewoonten

34 Hoeveel kilogram weegt u? (zonder kleren)

kilogram

35 Hoe lang bent u? (zonder schoenen)

meter

36 Bent u in de afgelopen maand afgevallen in gewicht?

- ☐ Ja, meer dan 3 kilo afgevallen
- ☐ Ja, 1-3 kilo afgevallen
- ☐ Nee
- ☐ Ik weet niet

37 Is uw voedingsinname de afgelopen 3 maanden door gebrek aan eetlust, spijsverteringsproblemen of kauw- of slikproblemen verminderd?

- ☐ Ja, erg verminderd
- ☐ Ja, een beetje verminderd
- ☐ Nee

38 Hoeveel glazen/kopjes vocht (water, vruchtensap, koffie, thee, melk, wijn, bier etc.) drinkt u per dag?

- ☐ Minder dan 3 glazen/kopjes per dag
- ☐ 3 - 5 glazen/kopjes per dag
- ☐ Meer dan 5 glazen/kopjes per dag

Leefgewoonten

39 Hoeveel dagen in de week gebruikt u een ontbijt?

(N.B. drinkontbijt, pap, muesli en dergelijke telt ook als ontbijt)

Aantal dagen per week

☐ minder dan 1 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7

40 Hoeveel dagen in de week gebruikt u een warme maaltijd?

Aantal dagen per week

☐ minder dan 1 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7

41 Met wie gebruikt u doorgaans de warme maaltijd?

(Let u er a.u.b. op dat u bij **elke regel** (a,b,c, enz.) één hokje aankruist.)

| | Zelden of nooit | Af en toe | Meestal of altijd | Niet van toepassing |
|---|--------------------------|--------------------------|--------------------------|--------------------------|
| a. Alleen | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Met mijn partner/ huisgenoot | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Met een vriend(in) of vrienden | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d. Met familie (bijvoorbeeld kinderen, broer, zus etc.) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e. Met de burens, mensen uit de buurt, bewoners uit de flat | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| f. Met een eetgroep | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| g. Met anderen, namelijk: | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <div></div> | | | | |

42 Op hoeveel dagen per week drinkt u gemiddeld genomen alcoholhoudende drank?

Aantal dagen per week

☐ minder dan 1 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7

☐ ik drink nooit (→ ga naar vraag 44)

Leefgewoonten

43 Als u op een dag alcoholhoudende drank gebruikt, hoeveel glazen drinkt u dan gemiddeld?

(Met een glas wordt bedoeld een glas dat voor die drank gebruikelijk is. Reken voor een blikje of flesje bier 1,5 glas. Dus 2 flesjes bier is 3 glazen. Halve glazen naar boven afronden.)

Aantal glazen

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 of meer glazen

44 Rookt u of heeft u in het verleden gerookt?

- ☐ Ik heb nooit gerookt (→ ga naar vraag 46)
- ☐ Ik heb in het verleden gerookt, maar ben nu gestopt (→ ga naar vraag 45)
- ☐ Ik rook op dit moment (→ ga naar vraag 46)

45 Wanneer bent u gestopt met roken?

- ☐ Minder dan 15 jaar geleden
- ☐ 15 jaar geleden of meer dan 15 jaar geleden

46 Deze vraag gaat over lichaamsbeweging, zoals bijvoorbeeld wandelen of fietsen, tuinieren of sporten. Het gaat om alle lichaamsbeweging die tenminste even inspannend is als stevig doorlopen of fietsen.

- a. Hoeveel dagen per week verricht u in de **zomer**, alles bij elkaar opgeteld, tenminste 30 minuten per dag zulke lichaamsbeweging? Het gaat om het gemiddeld aantal dagen van een gewone week.

Aantal dagen per week

☐ minder dan 1 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7

- b. Hoeveel dagen per week verricht u in de **winter**, alles bij elkaar opgeteld, tenminste 30 minuten per dag zulke lichaamsbeweging? Het gaat om het gemiddeld aantal dagen van een gewone week.

Aantal dagen per week

☐ minder dan 1 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7

Leefgewoonten

47 Hieronder staat een aantal activiteiten. Wilt u aangeven hoe vaak u deze activiteiten doet?

(Let u er a.u.b. op dat u bij **elke regel** (a,b,c, enz.) één hokje aankruist.)

| | (Vrijwel) dagelijks Wekelijks | Een paar keer per maand | Eén keer per maand of minder | (Vrijwel) nooit | Niet van toepassing |
|---|-------------------------------------|-------------------------------|------------------------------------|--------------------------|---------------------------|
| a. Op bezoek gaan | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Bezoek ontvangen | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Wandelen | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d. Fietsen | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e. Meedoen met ouderensport (zoals ouderengym, ouderen zwemmen, (volks)dans) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| f. Overige sporten (zoals bijvoorbeeld: tennis, zwemmen, dansen) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| g. Gezelschapsactiviteiten (zoals jeu de boules, biljart, kegelen, koersbal) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| h. Verenigingsactiviteiten anders dan sport (zoals toneel, schutterij, carnaval) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| i. Activiteiten voor politieke of belangenvereniging | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| j. Culturele activiteiten (zoals bezoek museum, bioscoop, theater) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| k. Naar het buurthuis, ouderensoos, koffieochtend | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| l. Vrijwilligerswerk doen | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| m. Betaald werk doen | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| n. Hobby uitvoeren, cursus doen | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| o. Werk voor de kerk doen | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| p. Passen op de kleinkinderen | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| r. Verzorgen van zieke partner | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| s. Verzorgen van zieke, anders dan partner | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| t. Bij anderen klusjes doen | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| u. Bibliotheek bezoeken | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| v. Internetten/ e-mailen | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| w. Tv kijken, radio luisteren | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| x. Lezen (kranten, tijdschriften, boeken) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| y. Tuinieren | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| z1. Overige recreatieve activiteiten (zoals bezoek sportwedstrijd, naar natuur- of recreatiegebied, op vakantie gaan) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| z2. Anders, namelijk: | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <div style="border: 1px solid black; height: 20px; width: 100%;"></div> | | | | | |

Contact met andere mensen

- 48** Hieronder wordt een aantal stellingen gegeven over mensen in de buurt waar u in woont. Wilt u aangeven in hoeverre u het eens bent met deze stellingen.

| | Helemaal eens | Beetje eens | Eens noch oneens | Beetje oneens | Helemaal oneens |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| a. De mensen in mijn buurt helpen elkaar. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. De mensen in mijn buurt voelen zich verbonden met elkaar. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. De mensen in mijn buurt zijn te vertrouwen. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d. De mensen in mijn buurt kunnen in het algemeen slecht met elkaar opschieten. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e. Ik ga liever niet om met de mensen die in mijn buurt wonen. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

- 49** Op welke afstand woont uw kind of een ander familielid dat het dichtst bij woont?

- ☐ In hetzelfde huishouden
- ☐ Binnen een straal van 1,5 km
- ☐ 1,5 - 8 km
- ☐ 9 - 24 km
- ☐ 25 - 80 km
- ☐ Meer dan 80 km
- ☐ Niet van toepassing; ik heb geen familieleden (meer)

- 50** Indien u kinderen heeft, waar woont het kind dat het dichtst bij woont?

- ☐ In hetzelfde huishouden
- ☐ Binnen een straal van 1,5 km
- ☐ 1,5 - 8 km
- ☐ 9 - 24 km
- ☐ 25 - 80 km
- ☐ Meer dan 80 km
- ☐ Niet van toepassing; ik heb geen kinderen (meer)

- 51** Indien u broers of zusters heeft, waar woont de broer of zus die het dichtst bij woont?

- ☐ In hetzelfde huishouden
- ☐ Binnen een straal van 1,5 km
- ☐ 1,5 - 8 km
- ☐ 9 - 24 km
- ☐ 25 - 80 km
- ☐ Meer dan 80 km
- ☐ Niet van toepassing; ik heb geen broers of zusters (meer)

Contact met andere mensen

52 Hoe vaak ontmoet u uw kinderen of andere familieleden?

- ☐ Dagelijks
- ☐ 2 tot 3 keer per week
- ☐ Ten minste wekelijks
- ☐ Ten minste maandelijks
- ☐ Minder dan 1 keer per maand
- ☐ Nooit
- ☐ Niet van toepassing; ik heb geen familie (meer)

53 Indien u vrienden of kennissen in uw gemeenschap of buurt hebt, hoe vaak maakt u een praatje met hen of doet u iets gezamenlijk?

- ☐ Dagelijks
- ☐ 2 tot 3 keer per week
- ☐ Ten minste wekelijks
- ☐ Ten minste maandelijks
- ☐ Minder dan 1 keer per maand
- ☐ Nooit
- ☐ Niet van toepassing; ik heb geen vrienden of kennissen in deze buurt

54 Hoe vaak maakt u een praatje met de burens of doet u iets gezamenlijk met hen?

- ☐ Dagelijks
- ☐ 2 tot 3 keer per week
- ☐ Ten minste wekelijks
- ☐ Ten minste maandelijks
- ☐ Minder dan 1 keer per maand
- ☐ Nooit
- ☐ Niet van toepassing; ik heb geen burens

55 Bezoekt u kerkelijke bijeenkomsten?

- ☐ Ja, regelmatig
- ☐ Ja, af en toe
- ☐ Nee

56 Bezoekt u wel eens bijeenkomsten van een vereniging, een club, een lezing, of iets dergelijks?

- ☐ Ja, regelmatig
- ☐ Ja, af en toe
- ☐ Nee

57 Alles in aanmerking genomen, hoe tevreden of ontevreden bent u met uw sociale contacten? U kunt hierbij denken aan het aantal burens, vrienden en kennissen waarmee u regelmatig contact hebt, de dingen die u samen met hen doet, enz.

| | Ze te vreden | Tevreden | Tevreden noch ontevreden | Ontevreden | Ze er ontevreden | Niet van toepassing |
|--------------------------|--------------------------|--------------------------|--------------------------------|--------------------------|--------------------------|--------------------------|
| a. Burens | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Familie | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Vrienden | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d. Kennissen van de kerk | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e. Overige kennissen | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Contact met andere mensen

58

Kunt u voor elk van onderstaande diensten en voorzieningen aangeven of u er wel eens gebruik van maakt óf (als u dat niet doet) er op dit moment gebruik van zou willen maken?

(Let u er a.u.b. op dat u bij **elke regel** (a,b,c, enz.) één hokje aankruist.)

| | Ja, gebruik ik wel eens | Nee, maar zou ik wel willen | Nee, geen behoefte aan | Nooit van gehoord |
|---|-------------------------------|-----------------------------------|------------------------------|--------------------------|
| a. Maaltijdverstrekking / maaltijddienst (bijv. tafeltje-dek-je / thuisbezorging van diepvries-, koelvers- of magnetronmaaltijden) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Open Tafel/ buffetten (waar u naar toe kunt gaan om warm te eten) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Advies of voorlichting van een ouderenadviseur (bijv. het Thuis Informatie Project TIP, seniorenvoorlichting) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d. Hulp bij administratieve of financiële activiteiten (bijv. belastingaangifte, aanvragen van voorzieningen) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e. Sport- of bewegingsactiviteiten voor ouderen vanuit een activiteiten- of dienstencentrum of welzijnsstichting (bijv. ouderengym/-zwemmen, Meer Bewegen Voor Ouderen) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| f. Sport- of bewegingsactiviteiten van reguliere sportverenigingen | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| g. Recreatieve / culturele activiteiten voor ouderen in de gemeente (bijv. kaarten, volksdansen, zingen, soos, koffieochtend) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| h. Computercursus, internetcursus (bijv. computercafé, internetcafé) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| i. Hulp in en om huis van een vrijwilliger via een vrijwilligersorganisatie (bijv. klussendienst, boodschappendienst, klussenbus) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| j. Ondersteuning bij het geven van mantelzorg (bijv. oppascentrale, gesprek met hulpverleners en/of andere mantelzorgers) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| k. Hulp bij (het uitbreiden van) mijn sociale contacten (bijv. bezoekdienst, activiteitenbemiddeling) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| l. Vervoer naar voorzieningen (bijv. regiotaxi, TaxiBUS, Beverbus, vervoersdienst, boodschappentaxi, Valys) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| m. WMO loket/ Zorgloket/ Pluspunt | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| n. Voedselbank | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| o. Consultatie Bureau voor Ouderen/ Vitaliteitscentrum | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| p. Anders, namelijk: | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <div style="border: 1px solid black; height: 20px; width: 100%;"></div> | | | | |

Voorzieningen

59 Wilt u voor elk van de volgende voorzieningen aangeven of u weet waar u moet zijn als u deze voorziening wilt aanvragen of deel wilt nemen aan een cursus of activiteit?

(Let u er a.u.b. op dat u bij **elke regel** (a, b, c, enz.) een hokje aankruist.)

| | Ja | Nee | Ik ken de voorziening niet |
|--|--------------------------|--------------------------|----------------------------------|
| a. Thuiszorg | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Persoonsgebonden Budget (PGB) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Financiële ondersteuning vanuit minimabeleid, bijzondere bijstand (bijv. 'Iedereen doet mee') | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d. Invalidenparkeerkaart | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e. Woningaanpassing | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| f. Rolstoel | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| g. Rollator | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| h. Scootmobiel | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| i. Uitleen van hulpmiddelen | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| j. Personenalarmering | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| k. Hulp bij het huishouden | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| l. Vrijwilligersvacaturebank | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| m. Vervoersvoorziening (bijv. taxikostenvergoeding, autoaanpassingen, driewiel fiets) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| n. Maaltijdverstrekking / maaltijddienst (bijv. tafeltje-dek-je / thuisbezorging van diepvries-, koelvers- of magnetronmaaltijden) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| o. Ouderenadviseur of -voorlichter | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| p. Ouderengym/-zwemmen, Meer Bewegen Voor Ouderen | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| q. Soos of activiteiten voor ouderen (bijv. kaarten, volksdansen) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| r. Rouwverwerkingbegeleiding | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| s. Cursus 'Op zoek naar zin' | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| t. Cursus 'Levensverhalen' | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| u. Cursus 'Leven met een chronische ziekte' | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| v. Cursus valpreventie | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Voorzieningen

- 60** Tenslotte willen wij graag van u weten wat u belangrijk vindt om gezond oud te worden. Kunt u op elke regel aangeven hoe belangrijk u deze omschrijving vindt om u gezond te voelen of gezond te blijven voelen in de toekomst. Het kan gaan om een bepaalde leefstijl, sociale contacten, lichamelijke en geestelijke gezondheid etc.
(Let u er a.u.b. op dat u bij **elke regel** (a, b, c, enz.) een hokje aankruist.)

| | Ze er, b angrij k | B el angrij k | N e u t r a a l | O n b e l a n g r ij k | Ze er o n b e l a n g r ij k | W e e t n i e t |
|--|----------------------------|--------------------------|--------------------------------------|--|--|--------------------------------------|
| a. Op bezoek gaan | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Bezoek ontvangen | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Goed contact met de bure | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d. Verenigingsactiviteiten doen | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e. Werk voor de kerk doen | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| f. Religie, spiritualiteit, zingeving | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| g. Bewegen (wandelen, fietsen, sporten) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| h. Samen met anderen dingen doen | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| i. Nieuwe vriendschappen aangaan | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| j. Vriendschappen onderhouden | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| k. Kunnen relativeren | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| l. Vrijwilligerswerk doen | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| m. Betaald werk doen | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| n. Contact met (klein)kinderen | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| o. Contact met andere familieleden | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| p. Gezonde voeding | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| q. Af en toe een borreltje/ glaasje wijn | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| r. Afwezigheid van ziekte | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| s. Geestelijk gezond blijven (niet dement of vergeetachtig worden) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| t. Niet afhankelijk zijn van anderen | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| u. Genieten van muziek (muziek luisteren of zelf muziek maken) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| v. Hobby's uitvoeren (lezen, handwerken, tuinieren etc.) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| w. Naar buiten gaan, de natuur in | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| x. Af en toe een avondje of dagje uit (naar de film, een concert, museum, uit eten etc.) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| y. Weten waar je moet zijn voor bepaalde zorg of voorzieningen en vragen over welzijn en gezondheid. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| z. Anders, namelijk: | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <div></div> | | | | | | |

Een laatste vraag

61 Hoe heeft u deze vragenlijst ingevuld?

- ☐ Zelfstandig
- ☐ Met behulp van partner
- ☐ Met hulp van ander familielid, vriend(in) of buren
- ☐ Met hulp van een medewerker/ vrijwilliger van het zorgloket, een ouderenbond of Stichting Welzijn Ouderen
- ☐ Met hulp van iemand anders, namelijk:

Nu bent u aan het einde gekomen van de vragenlijst.

Wij willen u heel hartelijk bedanken voor het invullen van deze uitgebreide lijst met vragen. Mocht u nog aanvullende opmerkingen willen maken, dan kunt u deze hieronder aangeven.

U kunt de vragenlijst in de antwoordenvelop verzenden. U hoeft geen postzegel op de envelop te plakken. Indien u geen antwoordenvelop heeft ontvangen of deze kwijt bent, kunt u de vragenlijst in een blanco envelop stoppen en sturen naar:

GGD Gelre-IJssel
Antwoordnummer 10635
2650 VB Nootdorp

Mocht u naar aanleiding van het invullen van de vragenlijst behoefte hebben aan een gesprek met een ouderenadviseur over uw gezondheid of welzijn dan kunt u contact op nemen met de GGD Gelre-IJssel.
Telefoon: 088-443 3705

Nogmaals bedankt voor uw medewerking.

Ruimte voor opmerkingen



-Verantwoording-

Dit onderzoek wordt uitgevoerd door de Academische Werkplaats AGORA in samenwerking met de gemeenten Epe, Zutphen en Ermelo.
AGORA is een samenwerkingsverband tussen Wageningen Universiteit en de GGD Gelre-IJssel.

De geadresseerden zijn een random selectie van alle zelfstandig wonende ouderen van 65 jaar en ouder uit de gemeenten Epe, Zutphen en Ermelo. De selectie is zorgvuldig gemaakt op basis van gegevens uit de gemeentelijke basis administratie. Desondanks kunt u per abuis zijn aangeschreven. U bent bijvoorbeeld nog geen 65 jaar of u woont in een verzorgings- of verpleeghuis. Het is ook mogelijk dat de geadresseerde inmiddels is verhuisd of overleden. Wij willen ons hiervoor verontschuldigen. Wilt u **als u niet tot de doelgroep behoort** of als de geadresseerde **niet meer woonachtig is op dit adres** de vragenlijst **oningevoerd retourneren** in de bijgevoegde antwoortenvelop? In onderstaand kader kunt u de reden van het retourneren noteren. Wij zullen er zorg voor dragen dat u in de toekomst niet nogmaals wordt aangeschreven.

Ruimte voor opmerkingen

APPENDIX 3: CRONBACH'S ALPHA

Question 12 about Sense of Coherence 2008

Reliability Statistics

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
|------------------|--|------------|
| ,813 | ,825 | 13 |

Item-Total Statistics

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Squared Multiple Correlation | Cronbach's Alpha if Item Deleted |
|--|----------------------------|--------------------------------|----------------------------------|------------------------------|----------------------------------|
| transformed ME Do you have the feeling that you dont really care about what goes on around you? 2008 | 63,84 | 91,065 | ,329 | ,139 | ,811 |
| transformed CO Has it happened in the past that you were surprised by the behaviour of people whom you thought you knew | 64,57 | 88,390 | ,333 | ,488 | ,813 |
| transformed MA Has it happened that people whom you counted on disappointed you? 2008 | 64,46 | 86,607 | ,391 | ,517 | ,808 |
| ME Until now your life has had? 2008 | 64,44 | 90,381 | ,308 | ,195 | ,814 |
| MA Do you have the feeling that you are being treated unfairly? 2008 | 63,70 | 88,888 | ,414 | ,233 | ,804 |
| CO Do you have the feeling that you are in an unfamiliar situation and dont know what to do? 2008 | 63,46 | 86,965 | ,583 | ,450 | ,791 |
| transformed ME Doing the things you do every day is? 2008 | 63,87 | 91,648 | ,468 | ,297 | ,801 |
| CO Do you have very mixed-up feelings and ideas? 2008 | 63,29 | 87,821 | ,569 | ,481 | ,793 |
| CO Does it happen you have feelings inside you would rather not feel? 2008 | 63,87 | 85,569 | ,532 | ,411 | ,794 |
| transformed MA transformede Many people sometimes feel like sad sacks in certain situations. How often have you felt thi | 63,93 | 86,677 | ,495 | ,273 | ,797 |
| CO When something happened, have you generally found that? 2008 | 64,23 | 88,971 | ,485 | ,294 | ,799 |
| ME How often do you have the feeling that there is little meaning in the things you do in your daily life? 2008 | 63,68 | 88,294 | ,524 | ,349 | ,796 |
| MA How often do you have feelings that you are not sure you can keep under control? 2008 | 63,61 | 86,802 | ,580 | ,460 | ,791 |

Question 12 about Sense of Coherence 2010

Reliability Statistics

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
|------------------|--|------------|
| ,789 | ,799 | 13 |

Item-Total Statistics

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Squared Multiple Correlation | Cronbach's Alpha if Item Deleted |
|---|----------------------------|--------------------------------|----------------------------------|------------------------------|----------------------------------|
| transformed ME Do you have the feeling that you dont really care about what goes on around you? 2010 | 63,86 | 83,037 | ,318 | ,156 | ,784 |
| transformed CO Has it happened in the past that you were surprised by the behaviour of people whom you thought you knew | 64,54 | 79,189 | ,374 | ,534 | ,781 |
| transformed MA Has it happened that people whom you counted on disappointed you? 2010 | 64,30 | 78,798 | ,409 | ,544 | ,777 |
| ME Until now your life has had? 2010 | 64,43 | 87,880 | ,112 | ,099 | ,805 |
| MA Do you have the feeling that you are being treated unfairly? 2010 | 63,52 | 78,901 | ,481 | ,357 | ,769 |
| CO Do you have the feeling that you are in an unfamiliar situation and dont know what to do? 2010 | 63,42 | 78,277 | ,565 | ,472 | ,762 |
| transformed ME Doing the things you do every day is? 2010 | 64,01 | 84,481 | ,387 | ,227 | ,778 |
| CO Do you have very mixed-up feelings and ideas? 2010 | 63,16 | 78,831 | ,613 | ,522 | ,759 |
| CO Does it happen you have feelings inside you would rather not feel? 2010 | 63,77 | 77,758 | ,523 | ,428 | ,764 |
| transformed MA Many people sometimes feel like sad sacks in certain situations. How often have you felt this way in the | 63,86 | 79,997 | ,462 | ,265 | ,771 |
| CO When something happened, have you generally found that? 2010 | 64,06 | 84,126 | ,359 | ,235 | ,780 |
| ME How often do you have the feeling that there is little meaning in the things you do in your daily life? 2010 | 63,54 | 82,802 | ,452 | ,285 | ,773 |
| MA How often do you have feelings that you are not sure you can keep under control? 2010 | 63,42 | 81,398 | ,513 | ,391 | ,768 |

Question 12 about Sense of Coherence 2013

Reliability Statistics

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
|------------------|--|------------|
| ,802 | ,815 | 13 |

Item-Total Statistics

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Squared Multiple Correlation | Cronbach's Alpha if Item Deleted |
|--|----------------------------|--------------------------------|----------------------------------|------------------------------|----------------------------------|
| transformed ME Do you have the feeling that you dont really care about what goes on around you? 2013 | 62,86 | 89,634 | ,351 | ,148 | ,797 |
| transformed CO Has it happened in the past that you were surprised by the behaviour of people whom you thought you knew | 63,42 | 88,906 | ,324 | ,562 | ,801 |
| transformed MA Has it happened that people whom you counted on disappointed you? 2013 | 63,20 | 86,691 | ,406 | ,563 | ,792 |
| ME Until now your life has had? 2013 | 63,67 | 93,922 | ,168 | ,168 | ,815 |
| MA Do you have the feeling that you are being treated unfairly? 2013 | 62,60 | 88,887 | ,402 | ,183 | ,792 |
| CO Doyou have the feeling that you are in an unfamiliar situation and dont know what to do? 2013 | 62,59 | 84,903 | ,576 | ,439 | ,777 |
| transformed ME Doing the things you do every day is? 2013 | 62,93 | 89,374 | ,515 | ,354 | ,784 |
| CO Do you have very mixed-up feelings and ideas? 2013 | 62,33 | 86,786 | ,603 | ,482 | ,777 |
| CO Does it happen you have feelings inside you would rather not feel? 2013 | 62,86 | 85,042 | ,538 | ,412 | ,780 |
| transformed MA transformede Many people sometimes feel like sad sacks in certain situations. How often have you felt thi | 62,95 | 87,941 | ,419 | ,228 | ,790 |
| CO When something happened, have you generally found that? 2013 | 63,26 | 91,110 | ,412 | ,227 | ,791 |
| ME How often do you have the feeling that there is little meaning in the things you do in your daily life? 2013 | 62,80 | 88,227 | ,526 | ,387 | ,783 |
| MA How often do you have feelings that you are not sure you can keep under control? 2013 | 62,69 | 86,520 | ,581 | ,442 | ,778 |

Question 24 about experienced depressed feelings (Mental health) 2008

Reliability Statistics

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
|------------------|--|------------|
| ,813 | ,814 | 5 |

Item-Total Statistics

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Squared Multiple Correlation | Cronbach's Alpha if Item Deleted |
|--|----------------------------|--------------------------------|----------------------------------|------------------------------|----------------------------------|
| How much of the time were you a very nervous person 2008 | 20,04 | 6,366 | ,574 | ,362 | ,785 |
| How much of the time have you felt downhearted and blue 2008 | 19,70 | 5,860 | ,698 | ,543 | ,746 |
| How much of the time have you felt so down in the dumps that nothing could cheer you up 2008 | 19,26 | 6,683 | ,585 | ,410 | ,783 |
| transformed How much of the time have you felt calm and peaceful 2008 | 20,03 | 6,357 | ,555 | ,327 | ,791 |
| transformed How much of the time were you a happy person 2008 | 19,97 | 5,988 | ,606 | ,382 | ,776 |

Question 24 about experienced depressed feelings (mental health) 2010

Reliability Statistics

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
|------------------|--|------------|
| ,843 | ,849 | 5 |

Item-Total Statistics

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Squared Multiple Correlation | Cronbach's Alpha if Item Deleted |
|--|----------------------------|--------------------------------|----------------------------------|------------------------------|----------------------------------|
| How much of the time were you a very nervous person 2010 | 19,96 | 7,552 | ,610 | ,395 | ,821 |
| How much of the time have you felt downhearted and blue 2010 | 19,62 | 7,096 | ,736 | ,576 | ,788 |
| How much of the time have you felt so down in the dumps that nothing could cheer you up 2010 | 19,19 | 7,863 | ,671 | ,499 | ,810 |
| transformed How much of the time have you felt calm and peaceful 2010 | 20,02 | 6,864 | ,654 | ,432 | ,811 |
| transformed How much of the time were you a happy person 2010 | 19,97 | 7,021 | ,609 | ,388 | ,825 |

Question 24 about experienced depressed feelings (mental health) 2013

Reliability Statistics

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
|------------------|--|------------|
| ,831 | ,834 | 5 |

Item-Total Statistics

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Squared Multiple Correlation | Cronbach's Alpha if Item Deleted |
|--|----------------------------|--------------------------------|----------------------------------|------------------------------|----------------------------------|
| How much of the time were you a very nervous person 2013 | 19,63 | 7,741 | ,581 | ,400 | ,810 |
| How much of the time have you felt downhearted and blue 2013 | 19,34 | 7,223 | ,719 | ,597 | ,772 |
| How much of the time have you felt so down in the dumps that nothing could cheer you up 2013 | 18,93 | 7,877 | ,635 | ,505 | ,797 |
| transformed How much of the time have you felt calm and peaceful 2013 | 19,68 | 7,254 | ,666 | ,480 | ,786 |
| transformed How much of the time were you a happy person 2013 | 19,67 | 7,362 | ,563 | ,393 | ,819 |

Question 26 about perceived social support (mental health) 2008

Reliability Statistics

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
|------------------|--|------------|
| ,831 | ,834 | 11 |

Item-Total Statistics

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Squared Multiple Correlation | Cronbach's Alpha if Item Deleted |
|---|----------------------------|--------------------------------|----------------------------------|------------------------------|----------------------------------|
| transformed There is always someone I can talk to about my day-to-day problems 2008 | 26,80 | 12,109 | ,404 | ,220 | ,825 |
| I miss having a really close friend 2008 | 26,88 | 11,126 | ,536 | ,345 | ,815 |
| I experience a general sense of emptiness 2008 | 26,78 | 11,656 | ,524 | ,477 | ,816 |
| transformed There are plenty of people I can lean on when I have problems 2008 | 26,81 | 11,927 | ,433 | ,265 | ,823 |
| I miss the pleasure of the company of others 2008 | 26,82 | 11,346 | ,566 | ,497 | ,812 |
| I find my circle of friends and acquaintances too limited 2008 | 26,87 | 11,143 | ,548 | ,382 | ,813 |
| transformed There are many people I can trust completely 2008 | 27,13 | 11,033 | ,507 | ,415 | ,818 |
| transformed There are enough people I feel close to 2008 | 26,93 | 11,314 | ,492 | ,384 | ,819 |
| I miss having people around me 2008 | 26,78 | 11,429 | ,586 | ,473 | ,811 |
| I often feel rejected 2008 | 26,63 | 12,603 | ,437 | ,262 | ,825 |
| transformed I can call on my friends whenever I need them 2008 | 26,92 | 11,192 | ,548 | ,409 | ,813 |

Question 26 about perceived social support (mental health) 2010

Reliability Statistics

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
|------------------|--|------------|
| ,863 | ,867 | 11 |

Item-Total Statistics

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Squared Multiple Correlation | Cronbach's Alpha if Item Deleted |
|---|----------------------------|--------------------------------|----------------------------------|------------------------------|----------------------------------|
| transformed There is always someone I can talk to about my day-to-day problems 2010 | 26,79 | 13,161 | ,554 | ,344 | ,852 |
| I miss having a really close friend 2010 | 26,84 | 12,602 | ,556 | ,360 | ,852 |
| I experience a general sense of emptiness 2010 | 26,75 | 12,984 | ,588 | ,489 | ,850 |
| transformed There are plenty of people I can lean on when I have problems 2010 | 26,79 | 13,194 | ,507 | ,416 | ,855 |
| I miss the pleasure of the company of others 2010 | 26,81 | 12,736 | ,576 | ,516 | ,850 |
| I find my circle of friends and acquaintances too limited 2010 | 26,85 | 12,511 | ,608 | ,406 | ,848 |
| transformed There are many people I can trust completely 2010 | 27,04 | 12,503 | ,539 | ,490 | ,854 |
| transformed There are enough people I feel close to 2010 | 26,90 | 12,535 | ,616 | ,549 | ,847 |
| I miss having people around me 2010 | 26,79 | 12,859 | ,589 | ,503 | ,850 |
| I often feel rejected 2010 | 26,63 | 13,811 | ,535 | ,331 | ,856 |
| transformed I can call on my friends whenever I need them 2010 | 26,91 | 12,820 | ,526 | ,332 | ,854 |

Question 26 about perceived social support (mental health) 2013

Reliability Statistics

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
|------------------|--|------------|
| ,865 | ,867 | 11 |

Item-Total Statistics

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Squared Multiple Correlation | Cronbach's Alpha if Item Deleted |
|---|----------------------------|--------------------------------|----------------------------------|------------------------------|----------------------------------|
| transformed There is always someone I can talk to about my day-to-day problems 2013 | 26,34 | 15,064 | ,523 | ,301 | ,856 |
| I miss having a really close friend 2013 | 26,39 | 14,317 | ,590 | ,394 | ,851 |
| I experience a general sense of emptiness 2013 | 26,31 | 14,771 | ,570 | ,486 | ,853 |
| transformed There are plenty of people I can lean on when I have problems 2013 | 26,36 | 14,789 | ,551 | ,394 | ,854 |
| I miss the pleasure of the company of others 2013 | 26,39 | 14,252 | ,635 | ,574 | ,848 |
| I find my circle of friends and acquaintances too limited 2013 | 26,41 | 14,336 | ,573 | ,379 | ,852 |
| transformed There are many people I can trust completely 2013 | 26,61 | 14,358 | ,519 | ,448 | ,858 |
| transformed There are enough people I feel close to 2013 | 26,44 | 14,496 | ,572 | ,490 | ,852 |
| I miss having people around me 2013 | 26,36 | 14,562 | ,590 | ,505 | ,851 |
| I often feel rejected 2013 | 26,18 | 15,656 | ,517 | ,309 | ,858 |
| transformed I can call on my friends whenever I need them 2013 | 26,45 | 14,490 | ,562 | ,391 | ,853 |