

Linnaeus University Dissertations
No 274/2017

INGRID DJUKANOVIC

DEPRESSION IN OLDER PEOPLE

– *Prevalence and preventive intervention*



LINNAEUS UNIVERSITY PRESS

Depression in older people

– *Prevalence and preventive intervention*

Linnaeus University Dissertations

No 274/2017

DEPRESSION IN OLDER PEOPLE

– *Prevalence and preventive intervention*

INGRID DJUKANOVIC

LINNAEUS UNIVERSITY PRESS

Depression in older people – Prevalence and preventive intervention

Doctoral dissertation, Department of Health and Caring Sciences, Linnaeus University, Kalmar, 2017

Cover picture: Anna Bjurström

ISBN: 978-91-88357-56-4

Published by: Linnaeus University Press, 351 95 Växjö

Printed by: DanagårdLiTHO AB, 2017

Abstract

Djukanovic, Ingrid (2017). *Depression in older people – Prevalence and preventive intervention*, Linnaeus University Dissertation No 274/2017, ISBN: 978-91-88357-56-4. Written in English.

Background

Depression in older people often goes undetected but has severe consequences on physical health, functioning and quality of life. As the aging population is growing, mental ill-health already is and will continue to be an important public health problem. There is a need for adequate strategies to meet this challenge.

Aims

- (1) To investigate the prevalence of and the association between depressive symptoms and loneliness in relation to age and sex in a random Swedish sample in the age group 65-80 years, and to investigate to what extent those scoring ≥ 8 in the depression dimension of the Hospital Anxiety and Depression Scale (HAD) had visited health care professionals and/ or used antidepressant medication.
- (2) To evaluate the effect of group discussions, in which structured reminiscence and a Problem Based Method (PBM) were used, on depressive symptoms, Quality of Life (QoL) and Self-Rated Health (SRH) among older people.
- (3) To describe the individual's experiences of the year before and the time after retirement.
- (4) To evaluate the factorial structure of the HAD in a general older population 65-80 years and to examine the possible presence of differential item functioning (DIF) related to sex.

Results

More men than women reported depressive symptoms, few were offered psychological treatment and a quarter used antidepressant medication. Depressive symptoms were associated with loneliness and this association decreased with increasing age.

Participation in group discussions resulted in a decrease in depressive symptoms and an increase in QoL and SRH. Both expectations and fears were experienced the year before and the time after retirement.

The psychometric evaluation of the HAD showed a two-factorial structure and invariance regarding sex.

Conclusions

The result highlights the importance of detecting depressive symptoms and loneliness in older people and offer adequate treatment. Transition into retirement should receive more attention both from a health care and organizational perspective. Group discussions with structured reminiscence and PBM as a nursing intervention, seem to be a promising method to prevent depressive symptoms in older people, but further research is needed. The HAD can be recommended to assess anxiety and depression among a general population 65-80 years old.

Keywords

Depression, HAD, older people, prevention, retirement

To my family

List of publications

This thesis is based on the following studies, which will be referred to by their Roman numerals I-IV:

I. Djukanovic, I., Sorjonen, K., & Peterson, U. (2014) Association between depressive symptoms and age, sex, loneliness and treatment among older people in Sweden. *Aging & Mental Health*. 19(6), 560-568.

II. Djukanovic, I., Carlsson, J., & Peterson, U. (2016). Group discussions with structured reminiscence and a problem based method as an intervention to prevent depressive symptoms in older people. *Journal of Clinical Nursing*, 25 (7-8), 992-1000.

III. Djukanovic, I., & Peterson, U. (2016). Experiences of the transition into retirement: An interview study. *Nordic Journal of Nursing Research*. 36(4), 224-232.

IV. Is the Hospital Anxiety and Depression Scale (HAD) a valid measure in a general population 65-80 years old? A psychometric evaluation study with focus on factor structure and differential item functioning related to sex. (in manuscript).

Article I. Published with permission from Journals Routledge, Taylor & Francis Group.

Article II. Published with permission from John Wiley and Sons.

Article III. Published with permission from Sage Publishing.

Abbreviations

DSM-V	Diagnostic and Statistical Manual of Mental Disorders (5 th ed.)
HAD	Hospital Anxiety and Depression Scale
HAD-A	Hospital Anxiety and Depression Scale-Anxiety
HAD-D	Hospital Anxiety and Depression Scale-Depression
IOM	Institute of Medicine
NBHWS	National Board of Health and Welfare Sweden
NIC	Nursing Intervention Classification
QOL	Quality of Life
PBL	Problem Based Learning
PBM	Problem Based Method
SCB	Statistics Sweden
SRH	Self Rated Health
SSRI	Selective Serotonin Reuptake Inhibitor
WHO	World Health Organization

Contents

Introduction	7
Background	9
Depression.....	11
Depression in older people - symptoms and treatment	12
Prevention of depression in older people.....	13
Epidemiology of depression in older people	13
Sex differences in depression in older people.....	14
Loneliness in older people	15
Self-rated health (SRH) in older people.....	15
Quality of life (QoL) in older people	16
Retirement.....	17
Reminiscence and life review	17
Problem based method (PBM).....	19
Theoretical frameworks	20
Erikson's development ageing theory.....	20
Modeling and Role-Modeling.....	22
Transition theory.....	22
Rationale.....	24
Aims	26
Specific aims	26
Method	27
Design and data collection	27
Sample/Participants.....	28
The intervention	32
Qualitative interviews	34
Measures	34
Data analyses	36
Ethical considerations	38
Results	40
Study I.....	40
Study II.....	41
Study III	42
Study IV	43
Discussion	45
Depressive symptoms in older people, age and sex-differences.....	45
Treatment/Under-treatment of depression in older people	47
Loneliness.....	48
Group discussion with structured reminiscence and a PBM.....	50
Experiences of being a retiree.....	52
Methodological considerations	55
Conclusion.....	59
Clinical implications and further research	60

Populärvetenskaplig sammanfattning.....	61
Tillkännagivanden.....	64
References.....	66

Introduction

In my work as a nurse in orthopaedic care, I have met people of all ages, but most of them have been older people (> 65 years of age) because the orthopaedic disease panorama usually affects this age group. As the care focused on the individual, I came to understand that some had an easier road to recovery than others. At that time I did not really consider their mental status unless they had a history of psychiatric illness/medication. During my years in academia, my knowledge and understanding of health as a concept have deepened and made me realise that it so clearly is an individual experience. My research is focused on older people (> 65 years) and the ageing process, with an emphasis on how ageing might affect mental health.

In 2010, I had the privilege of being involved as a research nurse in a project, concerning primarily mental health and quality of life in people aged 65–80 years old (in part of the project, the age group was extended to 55–80 years old). Further aims of the project were to test a preventive intervention regarding depressive symptoms and to investigate individual's experiences of retirement. The results of the first study in this thesis gave rise to the research questions, which were then focused on in the fourth study. This project has given me the opportunity to immerse myself and increase my knowledge on how people experience both the transition into retirement but also how life itself changes when getting older. There is a common perception in society that ageing is a period in life when it is fully normal to feel sad and tired of life, which might lead to an ignorance of the situation for older people with depressive symptoms. It is obvious that nurses who often encounter older people have a key role in identifying those at risk for depression. Nursing interventions should be focused on support and facilitate the path to healthy ageing.

Background

The world population is ageing rapidly, which is a result of better nutrition, improved healthcare and ability to cure diseases that previously were fatal. If these extra years are experienced in good health, there is possibility to live a life with few limitations. If these years instead are dominated by reduced physical and mental abilities, the negative impact on older people and society may become significant (WHO, 2015).

Europe has the highest proportion of population aged 65 years or more in the world. This proportion is currently about 16% but will almost double to 28% in 2050 (Börsch-Supan, 2005). The corresponding figures for Sweden reflect that in 2011 nearly 1.8 million Swedes were 65 years or older and of those, almost half a million were ≥ 80 years old. In 2035, it is estimated that 2.5 million will be over 65 years and 0.8 million ≥ 80 . This means that the proportion of older people in Sweden will increase from 18% to 23% (Statistics Sweden, 2012). Older people contribute to society in many ways, including within the family, in local community and in a broader social context. However, the extent to which this contribution is possible depends a great deal on the individual's health. The risk of declining physical and mental abilities increases with age, which can result in negative implications for both the individual and society. Thus, a comprehensive public-health response is needed (WHO, 2015).

The National Board of Health and Welfare (NBHWS, 2013) stated that 20% of all older people (> 65 year) are suffering from mental ill-health. Currently, psychiatric healthcare for older people is insufficient, and there is a lack of comprehensive strategies to solve this problem. For example, people over 65 years old with psychiatric diseases are taken care of in psychiatric clinics to a lesser extent than younger people. These patients are instead cared for at somatic clinics, where there is lack of sufficient knowledge, which has shown to lead to increased mortality for this group. The prescribing of psychotropic drugs is, to a great extent, done in primary healthcare clinics; moreover, these

drugs are associated with several risks and side effects e.g. drowsiness, dizziness and muscle relaxation leading to increased risk of falls (NBHWS, 2013). Regarding psychotherapeutic care for older people in Sweden, the resources are under dimensioned, and the individual has very limited access to this care (NBHWS, 2009). In the near future, 25% of all people in Sweden will be over 65 years old. Thus, mental ill health will be one of the most important public health diseases, increasing the need for adequate preventive strategies to meet this challenge (NBHWS, 2013). Ageing involves physical, psychological as well as social changes (Malmberg & Ågren, 2013). Social gerontology is described as having three perspectives: individual, social and societal. The individual perspective includes changes in perceived age identity and individual progress through life. The social perspective means the social context, which defines ageing and how the position and experiences of older people are formed by class, gender and ethnicity. Last, the societal perspective comprises demographic, structural, cultural and economic changes in society when the proportion of older people in society increases (Victor, 2005). An important event in a person's life when approaching the latter part of middle age is retirement. This transition may, on the one hand, entail a sense of wellbeing if one leaves a stressful and demanding job. On the other hand, it might lead to diminished well-being since retiree loses his or her professional networks and social contacts at work (Kim & Moen, 2002). It has also been shown that retirement might have negative long-term effect on self-assessed, general, mental and physical health (Heller Sahlgren, 2012).

Depression

Depression is a syndrome consisting of several symptoms that tend to occur together but with different origins. Depressive mood or sadness is one of the six basic emotions which is part of the human biological nature but also one of two main symptoms that constitute criteria for clinical depression in the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-V; American Psychiatric Association, 2013). Lack of ability to feel pleasure, to experience positive reinforcement or being interested in the surrounding environment form the other main symptoms (Åsberg & Mårtensson, 2009). In addition to the two main symptoms, anxiety (e.g. internal anxiety, panic attacks) and decreased emotional involvement (inability to feel positive feelings, emptiness, apathy) are parts of depressive syndrome. Boredom and suicidal thoughts are also symptoms of depression, followed by increased suicidal risk. Other symptoms of depression can be: diminished ability to concentrate or make decisions, passivity and inefficiency. Depression can also lead to disturbed sleep, such as insomnia, interrupted or shallow sleep or premature awakening. Physical symptoms such as tightness of chest, shortness of breath and fatigue often occur in depressive disorders and might be the reason why individuals seek healthcare (Åsberg & Mårtensson, 2009). According to DSM-V (American Psychiatric Association, 2013), there are two dimensions regarding depression, namely, polarity and severity. The state of depression referred to in this thesis is the unipolar affective state with different levels of difficulty: clinical depression, dysthymia and minor depression. The diagnosis minor depression, which seems to be the most common type of depression in older adults, requires the same duration as clinical depression (two weeks or more) in addition to three to four of the criteria symptoms according to the DSM system (Åsberg & Mårtensson, 2009). The diagnosis is made on the basis of observations and information received in dialogue with the patient, but screening instrument/structured interviews can also be useful as complement. Screening instruments such as Montgomery-Åsberg Depression Rating Scale (MADRS; Montgomery & Asberg, 1979), Hamilton Depression Rating Scale (HAM-D; Bech et al., 1981) or Hospital Anxiety and Depression Scale (HAD, Zigmond & Snaith, 1983) might be suitable to use. The treatment alternatives are pharmacological and /or psychotherapeutical, depending a great deal on the severity of the depression but suicidal risk, bipolarity, melancholia or psychotic signs should also be considered. Of further importance is that each patient should be assessed and treated individually based on a thorough review of his/her medical history (Åsberg & Mårtensson, 2009).

In this thesis the focus was on depressive symptoms where the Hospital Anxiety and Depression Scale (HAD) was used, and scores ≥ 8 in the HAD are used to suggest the presence of a depressive disorder.

Depression in older people - symptoms and treatment

Depression in older people can have serious consequences due to the high rate of comorbidity with physical illness, impaired functioning and increased suicidal risk. Over 50% of depressed older adults have their first episode after the age of 60 (Fiske, Wetherell, & Gatz, 2009). Factors that significantly increase the risk of developing depressive symptoms in later life are female gender, poor self-rated health status, stroke in the past, risky alcohol consumption, poor social network and functional impairment (Luppa, Luck, König, Angermeyer, & Riedel-Heller, 2012). Depressive symptoms in older adults are often referred to as “organic”, “secondary” or “masked” (Gottfries, Noltorp, & Noergaard, 1997) due to the fact that older people are less likely to present affective symptoms and are more likely to show changes in cognition, somatic symptoms and loss of interest, compared to younger adults (Fiske et al., 2009). Older people do not manifest depressed mood or sadness to the same extent as younger age groups but might instead show somatic symptoms e.g. loss of appetite (Hybels, Landerman, & Blazer, 2012). A common form of depression in older people is minor depression, with fewer and not as pronounced symptoms. As it can be hard to identify depressive disorders in older people, screening instruments can be of help but should be supplemented with diagnostics according to the DSM-criteria. However, there is a clinical relevance to be aware of depressive symptoms which do not reach diagnostic criteria, as they have considerable impact on both mortality and health state (Jongenelis et al., 2004). Depressive symptoms have been found to be an independent risk factor for decline in SRH among elderly (Han, 2002). Also, social network (Steunenbergh, Beekman, Deeg, & Kerkhof, 2006), social support (Jongenelis et al., 2004), loneliness (Cacioppo, Hughes, Waite, Hawkley, & Thisted, 2006) and self-rated Quality of Life (QoL; Naumann & Byrne, 2004) are associated with depressive symptoms among older people. At present, the predominant treatment for depression in older people is pharmacological with different types of antidepressant medications. However, a review based on eight multi-centre short-term trials did not show better effect for SSRI (selective serotonin reuptake inhibitor) medication, compared to placebo in people above the age of 65 years. Nonetheless, for those helped by SSRI drugs, maintenance treatment might lead to prevention of relapse of depressive symptoms (Swedish Council on Technology Assessment in Health Care, 2015). Treatment with antidepressants can lead to severe side effects, especially in older people, such as somnolence and dizziness (Blazer, 2003) and increased risk for falls (Modén, Merlo, Ohlsson, & Rosvall, 2010). There is also risk for unfavourable drug-drug interactions due to the fact that older

people are often treated with several different types of drugs (Swedish Council on Technology Assessment in Health Care, 2015). Clinical evidence supports the use of psychological treatment in reducing depression in older people, for example, cognitive behavioural therapy, psychodynamic therapy and reminiscence therapy (Bartels et al., 2004; Frazer, Christensen, & Griffiths, 2005; Scogin, Welsh, Hanson, Stump, & Coates, 2005). There is also some evidence that physical activities might have positive effect on depression in older people and should therefore be considered as part of the treatment strategy (Lindwall, Rennemark, Halling, Berglund, & Hassmén, 2007; Sjösten & Kivelä, 2006). However, earlier research have shown that depression in older people often goes undetected by physicians (Gregg, Fiske, & Gatz, 2013; Lotfi, Flyckt, Krakau, Mårtensson, & Nilsson, 2010), and there is an underutilisation of treatment, both drug treatment (Henriksson, Asplund, Boëthius, Hällström, & Isacson, 2006) as well as psychotherapy (Gregg et al., 2013).

Prevention of depression in older people

As depression in older people has severe consequences on physical health, functioning and overall quality of life (Fiske et al., 2009), prevention could offer possibilities to avoid this decline in overall health status (Cuijpers, Beekman, & Reynolds, 2012). Prevention is different from intervention and treatment as it is aimed at general population groups who vary in risk level for e.g. depression. The Institute of Medicine (IOM), USA (Springer & Phillips, 2007) has introduced a framework to describe different forms of prevention where selective prevention and/or indicated preventive interventions could be appropriate for older people at risk for depression. Selective prevention is targeted at those who have significantly higher risk of a disorder than average, and the indicated prevention is directed against those who have a minimal but detectable signs or symptoms of a disorder (Springer & Phillips, 2007).

Regarding depression in older people, it has been shown that psychological treatment can be used as prevention (National Board of Health and Welfare, 2009). Furthermore, preventive interventions have shown to be efficient and significantly decrease depressive symptoms (Jane-Llopis, Hosman, Jenkins, & Anderson, 2003), but there is still lack of research in this area (Forsman, Schierenbeck, & Wahlbeck, 2011).

Epidemiology of depression in older people

Previous research has shown a large variety regarding prevalence of depressive symptoms among older adults. In the so called EURODEP study, including nine European centres, the prevalence of depression symptoms among adults > 65 years of age varied between 8.8% in Iceland and 23.6% in

Munich with a mean of 12.3% (Copeland et al., 1999). Major geographical differences regarding prevalence of depression symptoms were also shown in a study that included people ≥ 50 years from 10 European countries, where the prevalence varied from 18% in Denmark to 37% in Spain (Sweden 19%) (Castro-Costa et al., 2007). A German study showed a prevalence of 28.7% for depression symptoms in a population of community-dwelling older people in the age group 60–85 years old (Glaesmer, Riedel-Heller, Braehler, Spangenberg, & Lupp, 2011).

Sex differences in depression in older people

Through extensive research, it has emerged that more women than men ≥ 65 years of age suffer from depression (Copeland et al., 1999; Sonnenberg, Beekman, Deeg, & van Tilburg, 2000; Zunzunegui, Alvarado, Béland, & Vissandjee, 2009). There are also studies that show no sex differences in prevalence of depression in older people. For example, Stordal et al. (2001) found no statistically significant differences between women and men in the age group 60–79 years old. In a study with a population aged between 55 to 85 years, Sonnenberg et al. (2000) showed almost twice as high prevalence of depression for women than men. They also found that sex differences in association with risk factors were small, but females were considerably more exposed to risk factors than men. Risk factors for men were: not being or no longer being married, low income and low emotional social support received. For women, the risk factors constituted of: not being or no longer being married, having completed lower level of education, lower income, one or more chronic physical illnesses and one or more functional limitations (Sonnenberg et al., 2000). Previous studies have shown sex differences in how depression is expressed, where women are more likely to internalise (e.g. become quiet, cry) and men are more likely to externalise (e.g. show anger, increased alcohol intake) (Parker & Brotchie, 2010; Sonnenberg et al., 2000). According to Martin, Neighbors, and Griffith (2013), men experienced alternative symptoms of depression compared to women and reported significantly higher rates of anger attacks/aggression, substance abuse and risk taking behaviour. Women reported significantly more traditional symptoms like stress, irritability, sleep problems and loss of interest in things usually enjoyed than men. That study showed no sex differences when symptoms, considered to be male-type symptoms of depression, were combined with traditional symptoms of depression (Martin et al., 2013).

Loneliness in older people

Loneliness can be described as the discrepancy between a person's desired and actual relationship. A related but distinct concept is social isolation, which reflects an objective measure of social interactions and relationships (Perlman & Peplau, 1981). A study with data from 14 European countries showed that there is a variation regarding prevalence of loneliness among people older than 50 years-old, from 6.3% in Denmark to 25.4% in Italy (Fokkema, De Jong Gierveld, & Dykstra, 2012). Feelings of loneliness in older people have been shown to have significant impact on physical health such as elevated blood pressure, sleep issues and immune stress response (Luanaigh & Lawlor, 2008). There is also higher risk for cognitive decline and dementia when feeling lonely (Wilson et al., 2007). Loneliness has also shown to be associated with increased mortality, where for people over 50 years, those with highest levels of loneliness had 1.96 times higher risk of dying within a 6-year period than those with lowest levels of loneliness (Luo, Hawkey, Waite, & Cacioppo, 2012). Earlier research among older people has shown a relationship between depressive symptoms and loneliness for both women and men (Cacioppo et al., 2006; Zebhauser et al., 2014). However, in the study by Cacioppo et al. (2006), there was a stronger association between loneliness and depressive symptoms among men than women. Even the study by Zebhauser et al. (2014) showed that men who experienced loneliness tended to be more depressed than women. Perceived loneliness has been found to increase in older age (Jylhä, 2004; Luanaigh & Lawlor, 2008), and more older women seem to experience loneliness compared with men (Pinquart & Sörensen, 2001; Victor & Yang, 2012). Further, loneliness, experienced by people 50 years and older, has shown to have a strong negative effect on wellbeing and that support from spouse/partner and friends alleviates loneliness and thus results in increased wellbeing (Chen & Feeley, 2014).

Self-rated health (SRH) in older people

Self-rated health (SRH) is a health measure which has long been established as stable predictor of morbidity, health utilisation and mortality (Jylhä, 2009). It has been widely used in different contexts such as when comparing health status between population groups, as an outcome variable in clinical trials (Jylhä, 2009) and also as an instrument for disease risk screening (May, Lawlor, Brindle, Patel, & Ebrahim, 2006). The measure of SRH is usually based on asking individuals to evaluate their health status on a Likert scale, from excellent, very good, good and fair to poor and/or to compare their health status with that of age peers (Jylhä, 2009). Earlier research has shown an association between depressive symptoms in older people and poor SRH (Chang-Quan et al., 2010; Jang, Chiriboga, Kim, & Cho, 2009). Furthermore,

low perceived social support and small social network have shown to be associated with poor SRH for the age group > 60 years (Caetano, Silva, & Vettore, 2013). Other factors associated with poor SRH for older people are chronic conditions, somatic symptoms, mobility difficulties and low levels of activity (Verropoulou, 2012). The same study also showed that being of female sex and higher educational attainment were highly protective factors for a decline in SRH (Verropoulou, 2012). In contrast, other research has shown contradictory results with significantly poorer SRH for women than for men (Zunzunegui et al., 2009). When looking into how retirement affects SRH when living in a relationship, both men and women rated declining SRH in a short term. Still, the longer the men had been retired the worse they rated their health, while the women improved their SRH the longer time they had been in retirement (Curl & Townsend, 2014).

Quality of life (QoL) in older people

Quality of life has been defined as ‘an individual’s perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns’ (WHOQOL Group, 1997, p.1). How quality of life is defined by people aged from 65 to over 80 years have been described in a study by Gabriel and Bowling (2005). The results showed that social relationship, home and neighbourhood and psychological wellbeing were the most important constituents. Furthermore, health, social roles and activities, financial circumstances and independence were important factors for achieving quality of life (Gabriel & Bowling, 2005). Another study showed that the most important facets of QoL for older people were having energy, being happy, having well-functioning senses and being free from pain (Molzahn, Skevington, Kalfoss, & Makaroff, 2010). A positive outlook on life and strategies to handle changes that ageing brings to daily life as well as for the future were stressed as important factors for quality of life in adults 80+ (Borglin, Edberg, & Rahm Hallberg, 2005). However, living alone (Bilotta et al., 2011), experienced loneliness (Hellström, Persson, & Hallberg, 2004) and depression (Bilotta et al., 2011; Naumann & Byrne, 2004) have shown to negatively affect QoL in older people.

Retirement

Retirement is regarded as one of the most important transitions in later life and affects several life domains (van Solinge & Henkens, 2008). It has been shown to have consequences for daily activities, social relations, income and may also influence health and wellbeing (Kim & Moen, 2001; Wong & Earl, 2009). Retirement has shown to have a preserving effect on overall general health (Coe & Zamarro, 2011). However, a negative long-term effect on both general physical and mental health associated with retirement was shown in a study conducted in 11 European countries (Heller Sahlgren, 2012). On the one hand, retirement may entail a sense of wellbeing if one leaves a stressful and demanding job. But on the other hand, it might lead to diminished wellbeing since retiree loses his or her professional networks and social contacts at work (Kim & Moen, 2002). The official retirement age in Sweden is 65; however, it is possible to retire at any stage between the ages of 61 to 67. Average retirement age in Sweden has been constant since 2006 and for women is 64.6 and for men 64.5 years (Swedish Pensions Agency, 2014), which compared to international statistics is late (Davey, Malmberg, & Sundström, 2014). Factors that have impact on the decision to retire early (push-factors) are, for example, stressful work situation, quality of work, low social support at work and high physical strain. Factors important for the decision to remain in the working force (pull-factors) are, for example, economic situation in society, economic situation for the individual and various options for retirement as the pension system offers (Anxo, Månsson, & Ivarsson, 2014). In Sweden, different pensions and insurances are possibilities when there are reasons for not being able to work until the legal retirement age is reached. Sickness compensation is a form of insurance for those between the ages of 30–64 who probably will never be able to work full time due to illness, injury or disability (Försäkringskassan, 2016). Guarantee pension is paid when the individual has low pension or no earnings-related pension (Swedish Pension Agency, 2016). Further, when lack of work is the reason to prematurely leave, the workforce insurance is paid by the employer until the age of 65, provided that specific conditions are met (Afa försäkring, 2016).

Reminiscence and life review

Butler (1963) began to scientifically identify reminiscence and life review and posited that these are natural processes in older people and an ‘inner experience or mental process of reviewing one’s life’ (Butler, 1963, p.65). To recover memories in order to make the unconscious conscious is usually

regarded as one of the essential ingredients of a healing process and should thus be encouraged (Butler, 1963). Life review is defined as a reassessment of previous experiences and aims to put one's life into perspective by, for example, resolving conflicts, grieving losses and making changes in order to feel a sense of completion about life. Butler (1974) describes the major development task for the concept of life review as 'to clarify, deepen and find use of what one has already obtained in a lifetime of learning and adapting' (Butler, 1974, p.531).

Life review is not identical to, but includes reminiscence (Butler, 1963; Haight & Burnside, 1993). Reminiscence is defined as the act or process of recalling the past. It has been proved to facilitate the ageing process in various ways both by strengthening the individual's identity and by helping individuals to find meaning and coherence in life. Reminiscence may also entail a feeling of preserved control and increased ability for reconciliation and acceptance of the life that has been lived (Bohlmeijer, 2007). It is a reflecting process, which can have several different functions (e.g. boredom reduction, identity forming, problem-solving) and may occur in many different forms. Based on previous research, there is, for example, integrative reminiscence that aims to find meaning and coherence in life and instrumental reminiscence which includes identification of previous strategies to reach goals and solve problems (Cappeliez, O'Rourke, & Chaudhury, 2005). According to Butler (1963), reminiscence may disclose negative experiences of one's present and past life and could cause depression. However, a systematic retrospective review of one's life may reveal experiences that could enable the elaboration of alternative perspectives (Bohlmeijer, 2007). As an intervention, reminiscence can be performed in group settings or individually, both structured and unstructured (Stinson, 2009). According to Kunz (2002), the need for structured reminiscence increases as people age, due to significant people becoming unavailable for different reasons (e.g. death, disability) resulting in fewer contacts available for natural reminiscence. Both life review and reminiscence can be used as prevention strategies regarding depression symptoms (Bohlmeijer, 2007) but also as treatment for depression (Serrano, Latorre, Gatz, & Montanes, 2004; Watt & Cappeliez, 2000). Previous research have shown that reminiscence and life review significantly reduce depression symptoms in older people, both when performed in group (Chueh & Chang, 2014; Pot et al., 2010; Sharif, Mansouri, Jahanbin, & Zare, 2010) and individually (Preschl et al., 2012; Wu, 2011). Other effects from reminiscence shown in previous studies are improvement of mastery (Afonso, Bueno, Loureiro, & Pereira, 2011; Bohlmeijer, Kramer, Smit, Onrust, & van Marwijk, 2009), increase in self-esteem (Chao et al., 2006; Meléndez Moral, Fortuna Terrero, Sales Galán, & Mayordomo Rodríguez, 2015) and life satisfaction (Meléndez-Moral, Charco-Ruiz, Mayordomo-Rodríguez, & Sales-Galán, 2013; Sharif et al., 2010). An increase in autonomy and personal growth was shown by Afonso et al. (2011) as well as positive impact on integrity (Afonso

et al., 2011; Meléndez Moral et al., 2015) According to Bohlmeijer (2007), a major advantage of reminiscence is that it is associated with a daily meaningful life activity for older people. Yet, it should also be stressed that it is not effective for everyone (Bohlmeijer, 2007).

According to Nursing Interventions Classification system, reminiscence is classified as a nursing intervention (NIC ;Butcher, Bulechek, Dochterman, & Wagner, 2013).

Problem based method (PBM)

Combined with reminiscence, a problem based method (PBM;Ekberg & Svedin, 1998) was used in one of the studies in this thesis to gain a participative approach. The approach was developed from a pedagogical method, problem based learning (PBL; Maudsley, 1999), which aimed to encourage individuals to develop abilities, knowledge and positive attitudes about themselves. Underlying theoretical perspectives for this view on learning are pragmatism, cognitive psychology and social constructivism, but also research concerning meaningful learning and adult education (Silén, 2000). Having learned something means in this context that personal thoughts and behaviours have changed in one way or another. It might also imply that one is more aware of new perspectives, giving the possibility to interpret/read and handle different situations in new ways (Silén, 2000). It is a structured, process-oriented method that takes place in a group setting, requiring active participation with exchange of experiences among the group members. The focus is on the process of change, with a common overall goal determined by the group (Medin, Bendtsen, & Ekberg, 2003). The PBM is thought to provide strategies for development of psychological and social resources that include improved self-perception and stronger self-confidence, increased ability to handle strain, and a sense of control (Ekberg & Svedin, 1998). Furthermore, PBM has been used in health promotion and rehabilitation, resulting in improved self-confidence and social support (Medin et al., 2003). Arneson and Ekberg (2005) suggested that the method might have the potential to enable empowerment. It has also been used in stress and burnout prevention (Peterson, Bergström, Samuelsson, Åsberg, & Nygren, 2008) and in promoting self-care for people with rheumatic diseases (Arvidsson, Bergman, Arvidsson, Fridlund, & Tingström, 2013). Enhancing a person's belief that he or she has the ability to act in ways leading to desired goals has been discussed concerning prevention of depression in older people (Blazer, 2002;2003).The participants are considered to be experts on their own situation and are encouraged to formulate their goals and find their own strategies to reach these goals.

Theoretical frameworks

The most prominent theory regarding life review and reminiscence is grounded in Erikson's development ageing theory, which is described here briefly, with focus on the last stage.

The Transition theory and the Modelling and Role modelling theory are described and used in this thesis to explain and confirm how older people can be helped and supported when they experience and suffer from depression symptoms and face important transitions in life.

Erikson's development ageing theory

This theory argues that the life cycle cannot be understood without inclusion of the psychology of the aged. Erikson (1963) describes personality as a lifelong development process, with eight separate stages from birth to older adulthood at 65+. Each stage is described as interplay between biological changes within the individual, together with expectations from the cultural and social environment. Every stage has its own potential for crisis and conflicts due to the change of perspectives (Erikson, 1963). The ninth stage was developed by Joan Erikson to describe the demands, re-evaluations and daily challenges that old age over 80 might entail. She also stated that in the last stage those previous resolved crises are once again confronted (Erikson & Erikson, 1998) (Table 1).

Table 1. Erikson's stages of psychological development

Group	Age	Virtue	Crisis
Infants	0-18 months	Hope	Trust vs Mistrust
Toddlers	18 months-3 years	Will	Autonomy vs Shame & Doubt
Preschool	3 to 6 years	Purpose	Initiative vs Guilt
Childhood	6 to 12 years	Competence	Industry vs Inferiority
Adolescence	12 to 18 years	Fidelity	Identity vs Confusion
Young adults	19 to 40 years	Love	Intimacy vs Isolation
Middle adulthood	40 to 65 years	Care	Generativity vs Self-absorption
Seniors	65 to 80 years	Wisdom	Integrity vs Despair
Ninth stage	80+	All virtues from earlier stages	All crisis but with a reversed order e.g. Mistrust vs Trust

According to Erikson (1963), the ageing process involves review and consolidation in each step to reach the personal integrity of the eight stage. To reach the stage of ego integrity implies the person's acceptance of the meaning and purpose of the life lived. The recall and assertion of happiness and sorrows of being are prerequisites to avoiding despair, which in Erikson's theory is the antithesis of ego integrity. To avoid despair or depression, one must determine that the life lived was worthwhile and had a purpose. An important part to reach this goal is to integrate experiences from those earlier on in life with those from the present (Erikson, 1963). The ninth phase of Erikson's development ageing theory has been added, based on the theory of gerotranscendence by Tornstam (2003). This theory suggests that the need for good contemplative loneliness increases with age and that older people are also more often selective in their choice of social and other activities (Tornstam, 2003). There have been some objections to Erikson's framework, foremost regarding whether individuals rather than achieving ego-integrity, work to maintain a sense of self they have possessed throughout their lives. Their goal is to continue their life as before and not to achieve some mythical "final state" (Parker, 1995). The theory of gerotranscendence has been questioned inter alia considering if it is to be correlated to spirituality/religiosity rather than with age (Bruyneel, Marcoen, & Soenens, 2005) and also if it is truly age-related (Jewell, 2014).

Modeling and Role-Modeling

The nursing theory called Modelling and Role-Modelling (Erickson, Tomlin, & Swain, 2009) is developed and synthesised from the work of well-known theorists, including Erik Erikson, Abraham Maslow, Hans Seyle, George Engel and Jean Piaget. The work of these five theorists are used in Modeling and Role Modeling Theory to show how people are alike (Erikson, Maslow, Piaget) and how people are different (Seyle, Engel). How we are alike is described as all of us being biophysical, psychosocial beings with basic needs, with a drive to develop our potential. Reaching to our potential is a process through predictable stages in life both regarding cognitive as well as psychosocial domains (Erickson et al., 2009). How people are different include both genetic and inherited characteristics and the way we adapt and mobilise resources when exposed to various stressors. The ability to reach the various development stages of life is dependent on the extent to which the basic needs are satisfied at each step. If there is a great deficit in one of the basic needs, it will be harder for an individual to mobilise resources to struggle with new or ongoing stressors (Erickson et al., 2009).

The Modeling and Role-Modeling Theory states that a person owns a “personal model of his or her world”, which is formed based on, for example, the individual’s own perspectives of the environment, experiences, past learning and state of life. The act of modeling is when the nurse develops an image and understanding of the individual’s world within the individual’s framework (Erickson et al., 2009) The role-modeling occurs when the nurse plans and implements interventions that are unique, based on the individual’s personal perceptions and beliefs. The theory stresses that each individual has capacity for growth and development through the whole lifespan. The care given should be modeled based on the client’s world with understanding and appreciation of its value and significance for the client from his or her perspective. Erickson believes that the role for the nurse is as facilitator, not an effector. The relationship between nurse and client/patient is an interactive, interpersonal process, aiming to identify, mobilise and develop the clients’ own strengths (Erickson et al., 2009).

Transition theory

The term transition has been used over the years in different disciplines, for example, history, anthropology, science and health (Kralik, Visentin, & Van Loon, 2006). Van Gennep (1960) presented a three-phase approach to transition: rites of separation, rites of transition and rites of incorporation, which have come to influence the current health literature concerning transition. Meleis (2010) described transition as a passage from one life phase,

condition and status to another where nurses have a central role to support people to have healthy transitions. Transitions are not uniform experiences by different people although the circumstances, such as retirement are similar. However, there is a general structure described in three phases: entry, passages and exit. It may be short or long distance between the beginning and the end, but the process is associated with movement, development and flow (Meleis, 2010). Bridges (2004) describes that transition is not just another word for change but that it also involves adapting to change as an inner re-orientation and self-redefinition. Transitions can be empowering and result in personal growth but could also result in stress related symptoms, decreased wellbeing and vulnerability. During transitions, there may be losses of networks, social support and a sense of uncertainty. There may also be problems as a result of not being able to separate from past identities and ways of functioning as well as not being able to make decisions (Golan, 1981). Examples of transition that may make people vulnerable are: illness experiences, such as diagnosis and surgery; development and lifespan transitions such as childbirth, adolescence and ageing; and social and cultural transitions such as migration and retirement. It is obvious that people may undergo more than one transition at the same time, and it is important for the person to be aware of the changes and engage in them (Meleis, Sawyer, Im, Messias, & Schumacher, 2000). A healthy transition is often linked with the development of relationship and connection with others in social contexts (Kralik et al., 2006). Transition planning as a way for the nurse to support individuals with mental illness to actively take part in their own care and to reach a good quality of life was suggested by Skärsäter and Willman (2006). For a person in transition, reminiscence may facilitate integration of the transition in the life course and may offer a bridge between the past and present (Schumacher, Jones, & Meleis, 1999).

Rationale

Depression in older people is currently and might continue to be a public health problem, as it concerns a growing age group and there is a high rate of comorbidity with physical illness and impaired functioning. It has also been shown to have considerable impact on both SRH and QoL. Factors considered as having importance for being at risk for depression in older people are, for example, loneliness, poor social support, not having access to a social network and retirement. Retirement has, however, shown both positive and negative effects on health (including mental health) and wellbeing. Therefore, it is important to adopt an individual perspective and examine the unique experiences for each individual regarding transition into retirement.

As previous research has shown somewhat diverging results regarding prevalence of depressive symptoms for men and women respectively, this needs to be further investigated.

Depressive symptoms in older people can be hard to identify, as they are more likely to be shown as changes in cognition, somatic symptoms and loss of interest compared with younger adults. Also, some studies have shown sex differences in how symptoms are expressed, where women are more likely to internalise e.g. become quiet and cry and men are more likely to externalise e.g. show anger, increased alcohol intake. Research has also shown that depression in older people often goes undetected by physicians and that there is an underutilisation of treatment. Thus, there is a need for short, usable and valid instruments for identifying those at risk for depression in the current age group.

The predominant treatment for depression in older people is pharmacological, while psychological treatment is infrequently prescribed. The antidepressant medications frequently used might imply undesirable side effects such as dizziness, somnolence and increased risk of falls. However, clinical evidence supports the use of psychological interventions in reducing depression in older adults, e.g. cognitive behavioural therapy, psychodynamic therapy and reminiscence. A major benefit of psychological treatment is that it can be used

as prevention, but there is lack of research in this area. Thus, it would be a valuable contribution to develop and test a non-pharmacological intervention directed at the population at risk for depression and designed to be preventive, effective and accessible.

In all, there seems to be shortcomings in the attention and care of older people with depressive symptoms. It is essential to identify those older people at risk for depression and to have the ability to offer different treatment or preventive alternatives. Nurses have a key role in identifying those at risk for depression as they often encounter older people, and they could also be the most appropriate caregiver to work preventively using nursing interventions.

Aims

The overall aim of this thesis was to immerse into the knowledge about depressive symptoms and loneliness in older people and also about how the transition to become a retiree is experienced. Finally, an intervention aimed at preventing depressive symptoms in older people was evaluated.

Specific aims

The aim of *Study I* was twofold: (1) to investigate the prevalence of and the association between depressive symptoms and loneliness in relation to age and sex in a random Swedish sample in the age group 65-80 years. (2) investigate to what extent those scoring ≥ 8 in the depression dimension of the Hospital Anxiety and Depression Scale had visited a health care professional and/or used antidepressant medication.

The aim of *Study II* was to evaluate the effect of group discussions, in which structured reminiscence and a PBM were used, on depressive symptoms, quality of life and self-rated health among older people.

The aim of *Study III* was to describe the individual's experiences of the year before and the time after retirement.

The aim of *Study IV* was also twofold (1) to evaluate the factor structure of the Hospital Anxiety and Depression scale (HAD) in a general population 65-80 years old (2) to exam the possible presence of Differential Item Functioning (DIF) related to sex.

Method

Design and data collection

A project with the overarching aim to find methods for reducing depression among retirees was started in 2010 in collaboration with Karolinska Institutet, Folksam (insurance company), KPA (pensions company) and Grundsunda Framtidsgrupp (a local association for retirees in the northeast of Sweden). The regional ethical review board in Stockholm gave its approval for all aspects of the project. Informational meetings were held in the two communities in the northeast of Sweden. Contact was made, and contracts were signed with the primary healthcare centres in each community to provide contact and possible treatment for those who scored high on the HAD. During September 2010, a questionnaire was sent to a random sample of individuals ($n=9968$) selected from the total Swedish population aged 65–80 years old ($N=1\,276\,307$). Participants were randomly selected from a register, which includes all persons who are registered as residents in Sweden, and the inclusion criterion was being in the age group 65–80 years old. It was also sent to all retirees aged 55–80 years old in two communities ($N=679$) and ($N=1044$) in the northeast of Sweden, which were not included in the national sample. A flowchart for the sampling procedure is presented in figure 1. The voluntary nature of participation was stressed, and the respondents were guaranteed confidentiality. The questionnaire comprised 53 items reflecting demographic data, health (SRH and questions about medical conditions), educational level, reasons for retirement, depression and anxiety (HAD), quality of life (WHOQOL-OLD), loneliness, lifestyle (alcohol and smoking habits) and medical treatment. Statistics Sweden (SCB) conducted the randomisation (the authors were not involved in this process), distributed questionnaires, sent reminders to non-respondents and also scanned the data which was submitted in data files to the project leader. For questions, the respondents had the opportunity to contact the project management by telephone and about 200 people got in touch.

Study I was cross-sectional using data from the questionnaire survey.

Study II was quasi-experimental based on data from the questionnaire survey. Those in community I who provided contact information and scored ≥ 7 -10 on the HAD-D were contacted and invited to participate in an intervention aimed at preventing depressive symptoms i.e. group discussions with structured reminiscence and PBM.

The participants were followed up using questionnaires at two times: post intervention (T1) and a year after intervention (T2). Also, open-ended questions were used to evaluate the group participation (T1).

Study III was an interview study. The sample consisted of those in communities I and II who provided contact information and had been retired during the last year.

Study IV was a psychometric test of the HAD using data from the national questionnaire survey (Study I).

Sample/Participants

There were three separate samples in the project as described in Figure 1 and Table 2. For those aged between 55–64 years old in communities I and II, special criteria had to be met to be included in the population: being prematurely retired or receiving sickness compensation.

For the national sample in the age group 65–80, there were no such criteria.

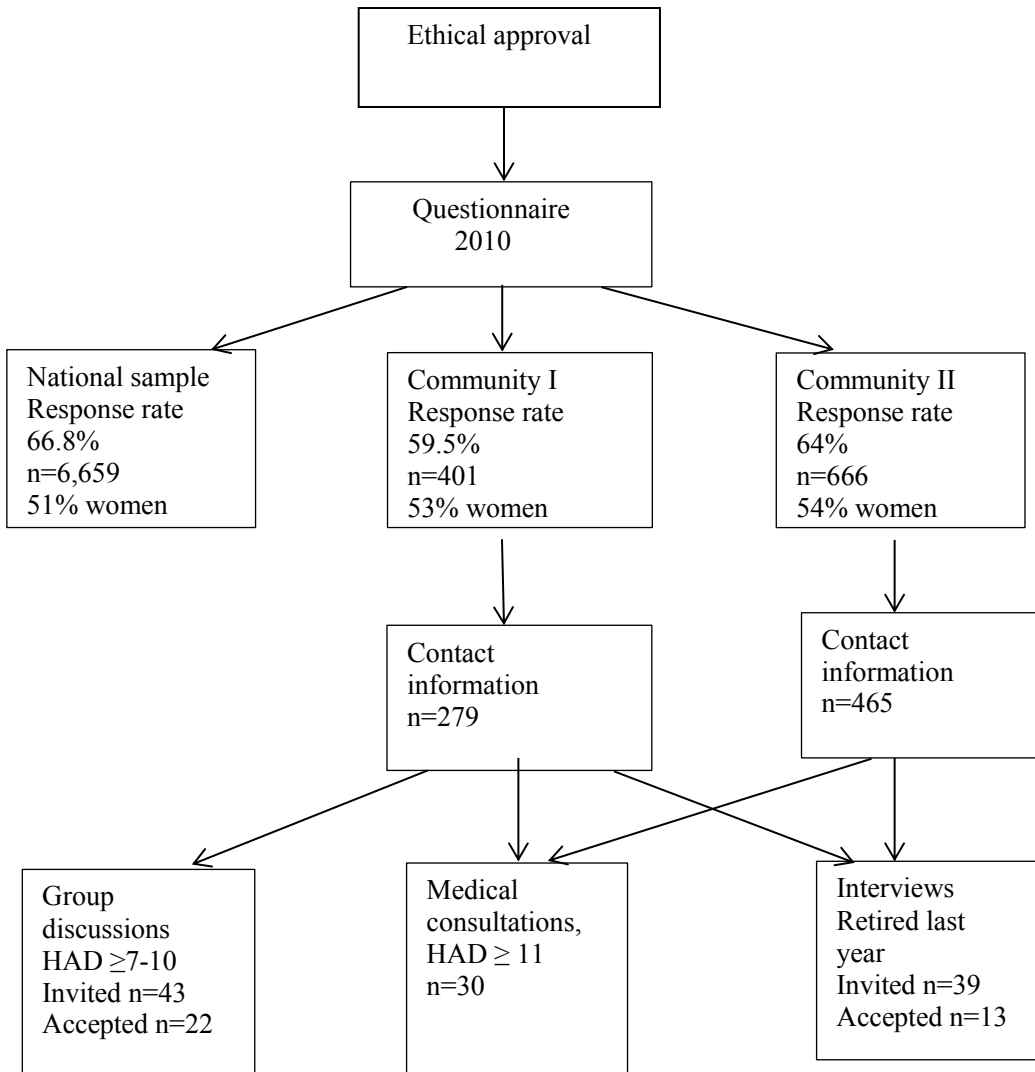


Figure 1. Flowchart of the sampling procedure

Table 2. Samples and number of respondents

Sample	Sampling Design		Sample size	Age	Respondents
National	Stratified sample	random	10 000	65–80	6659 (66.8%)
Community I	Total sample		679	55–80	401 (59.5%)
Community II	Total sample		1044	55–80	666 (64.0%)

A dropout analysis for the national sample showed that men responded to a somewhat greater extent than women, those who were married responded to a greater extent than those who were unmarried and that people with Swedish citizenship responded to a greater extent than people who were immigrants. The dropout analysis for the samples in Community I and Community II showed that women responded to a greater extent than men and those who were married to a greater extent than those who were unmarried.

Studies I and IV

A total of 6659 completed the national questionnaire survey and represent the sample for Studies I and IV. The mean age for the sample was 71.2 years (SD 4.5). For Study IV, a total of 37 incomplete questionnaires regarding the HAD were excluded, leaving a final sample of 6622.

Study II

In Community I, a total of 401 answered the questionnaire and 279 of them voluntarily provided their contact information. Those who also scored ≥ 7 -10 on the HAD-D were contacted and invited to participate in group discussions. There were 43 invited and 22 accepted to participate. Four participants dropped out and 18 were included in the study. All participants (n=18) answered at follow-up after group participation (T1), and 15 at follow-up after 12 months (T2). The mean age for Community I was 70.5 (SD 5.0).

Study III

Those in Communities I and II who answered the questionnaire survey (n=401 and n=666, respectively), voluntarily provided their contact information (n=279 and n=465, respectively) and had retired during the last year were invited to participate (n=39). A total of 15 accepted to participate. Two of them could not be interviewed due to time constraints of the investigators, so 13 interviews were conducted. The mean age for Community II was 70.5 (SD 5.2).

The demographic data for all respondents are presented in Table 3.

Table 3. Demographic data for all respondents divided into the national sample, Communities I and II.

	National (n=6659)	Community I (n=401)	Community II (n=666)
Age (year, M (SD))	71.2 (4.5)	70.5 (5.0)	70.5 (5.2)
Women (%)	51.0	53.0	53.5
Married/living together (%)	70.4	71.0	72.0
Living arrangement (%)			
<i>Apartment</i>	39.8	12.6	21.6
<i>Own villa /house</i>	52.9	72.0	66.8
<i>Farm</i>	5.8	12.1	10.0
<i>Nursing home/hospital</i>	0.1	0.3	0.2
<i>Old age residence</i>	0.3	0.5	0.3
<i>Lodger</i>	0.4	1.3	0.5
<i>Other</i>	0.6	1.3	0.5
Having wage labour (%)	8.8	3.7	5.2
Reasons for retirement (%)			
<i>Old age pension</i>	53.8	33.9	48.0
<i>Sickness benefit</i>	11.9	18.3	20.7
<i>Part-time pension</i>	26.6	42.7	25.2
<i>Other</i>	7.7	5.1	6.1
Education (%)			
<i>Incomplete primary school</i>	6.2	7.2	8.6
<i>Primary school</i>	49.1	63.2	54.6
<i>Baccalaureate</i>	9.5	5.4	5.7
<i>Residential college for adults</i>	16.1	15.4	21.1
<i>University/college graduates</i>	17.9	8.5	10.0
<i>Graduate</i>	1.2	0.3	0.0

An overview of the studies included in this thesis is presented in Table 4.

Table 4. Overview of the studies to be included in this thesis.

Study	Design	Sample	Data collection	Data analysis
I	Cross-sectional	n= 6659	Questionnaires	Descriptive statistics, Chi-square test, Student's t-test, logistic regression analysis
II	Quasi-experimental	n=18	Questionnaires, written evaluations	Paired t-test, Wilcoxon's sign rank test, Manifest content analyses
III	Interview	n=13	Semi-structured interviews	Latent content analyses
IV	Psychometric test	n=6622	Questionnaires	Confirmatory factor analysis, ordinal logistic regression, Student's t-test, Chi square test, ordinal alpha, Polychoric correlations

The intervention

The intervention introduced and tested in Study II was a combination of structured group reminiscence and problem-based method designed as group discussions. This new method was developed by the senior author (UP), inspired by a protocol for structured group reminiscence (Stinson, 2009) and positive experiences of using PBM in stress and burn-out research (Peterson et al., 2008).

A manual including both methods was formulated for the current study by the senior author (UP). The purpose of the group discussions was to encourage memories, exchange experiences, and through dialog and interaction prevent depressive symptoms. Another goal was to enable the participants to not only look back but also to focus on the present and the future. Participants met weekly for 10 weeks. Each session lasted for two hours and was held in a community centre. The discussions were focused around themes such as

school, first job, holidays, and subjects like photos and newspapers from the past were used (Table 5). A registered nurse acted as a group leader for all sessions, introduced to the method by the senior author. The role of the group leader was to support the methodological steps and the group process (Medin et al., 2003) and to act as a facilitator not an effector (Erickson et al., 2009).

Before the intervention started, the participants together with the group leader formulated verbal mutual agreement concerning, for example, confidentiality. All sessions started with a short-guided relaxation and there was also a coffee-break in the middle of each session. At the first session, the participants interviewed each other in pairs and thereafter presented their interviewee to the group. During the following four sessions, the participants related and discussed memories from childhood, school, young- and adulthood. From sessions six–ten, a PBM was used starting with brainstorming around the question: What constitutes a good life for you as retiree?

The participants were encouraged to share whatever came to their minds regarding the current issue. All contributions were written down on a whiteboard so it could be accessible to all group members. This result was written down and sorted into areas by the group leader. The different areas constituted a menu from where themes were selected to be discussed in coming sessions. The selection was done by the participants. Further, in sessions six–nine, participants chose individual goals to be achieved by the next meeting. From what was discussed, the participants chose, for example, to call a friend, start to read a book or go fishing. At session ten, the participation in the group discussions was evaluated.

Table 5. Manual for group settings

Session	Themes/activities
1	Presentation of aim, structure and goal. Participants interview each other in pairs and thereafter presentation of each interviewee. A verbal mutual agreement formulates concerning confidentiality. Old newspaper clippings are presented by the group leader to initiate a discussion, with focus on positive memories.
2	Participants bring old photos of special importance and share their memories connected to the photos and the importance they have for them.
3	Memories associated with school are focused, for example, on teachers, and schoolmates. How was your life then? What were your dreams for the future?
4	Memories with focus on youth. What clothes did you wear? Where did you live? How was your life?

- 5 Memories associated with adulthood from youth to retirement, for example, colleagues from first job, family and children. Events having great importance?
- 6 Brainstorming according to PBM with the overarching question: What constitutes a good life for you as retiree? Participants chose a theme to discuss and share their experiences. Each participant chose an individual goal for making a change.
- 7–9 Evaluation of individual goals. How did it go? What constituted resistance/facilitation? A new theme to discuss is chosen by the participants from the results of the brainstorming process.
- 10 Evaluation of group participation. How was it to participate in the group? What has it meant for you?

Qualitative interviews

In Study III, individual qualitative interviews were used as data collection (Brinkmann & Kvale, 2015). The aim was to immerse into the respondents experiences from the year before and the time after retirement. The interviews were conducted in separate rooms at the community healthcare centre and lasted between 30–45 minutes. We strived to have a respectful and relaxed atmosphere during the interviews. The respondents were encouraged to speak freely about their experiences. Two guiding questions were used: How did you experience the last year before retirement? How has your life been since retirement? Probing questions were asked such as: What do you mean when you say....? Would you elaborate on that? The first author conducted nine of the 13 interviews, while the second author conducted the remaining four. The interviews were tape recorded and transcribed verbatim by the first author before analysis.

Measures

Self-rated health (SRH) was measured by two questions from Short Form Health Survey (SF36; Sullivan, Karlsson, & Ware, 1994): ‘In general how would you say your health is?’ and ‘Compared with how your health status was a year ago, how would you say your health is?’ For question I, response alternatives were: excellent, very good, good, fair and poor and for question II: much better now than a year ago, slightly better than a year ago, about the same, slightly worse than a year ago, much worse than a year ago. In Study II, the scores for question I were dichotomised into good health and poor health.

Quality of life (QoL) was measured by WHOQOL-OLD (Power, Quinn, & Schmidt, 2005), and four out of six facets presented with Cronbach's alpha were used: sensory abilities (.78), autonomy (.76), past, present and future activities (.79) and social participation (.80). Each facet has four items (five response alternatives each), and example of items from each facet are: 'How much freedom do you have to make your own decisions?', 'To what extent do you feel in control of your future?', 'How much do you feel that the people around you are respectful?', 'To what extent are you able to do things you'd like to do?' For each of the facets, the possible values can range from 4-20. Raw scores were transformed using a transformation formula, with the negatively worded items score recoded. Items were then added to a total transformed score between 0-100, and high scores represented a high quality of life.

The Hospital Anxiety and Depression Scale (HAD; Zigmond & Snaith, 1983) was used to measure *anxiety* and *depression*. It is a self-assessment scale, developed for assessing emotional distress in non-psychiatric patients, as well as for assessing clinically significant degrees of anxiety (HAD-A) and depression (HAD-D). The HAD has performed well in screening for separate dimensions of anxiety and depression in primary care patients (Bjelland, Dahl, Haug, & Neckelmann, 2002) and in a sample of hospitalised patients aged 65–101 years old (Helvik, Engedal, Skancke, & Selbæk, 2011). Furthermore, the factorial structure of the HAD has been evaluated and different solutions have been suggested. The hypothesised two-factor structure is most often confirmed e.g. in a community based sample of healthy older people (Gale et al., 2010) and in a community-dwelling population aged 60–80 years old (Roberts, Fletcher, & Merrick, 2014). Yet, both one factor (Johnston, Pollard, & Hennessey, 2000), three factor (Desmond & MacLachlan, 2005) and four factor solutions (Lloyd-Williams, Friedman, & Rudd, 2001) have been suggested.

The HAD consists of 14 items: seven for depression and seven for anxiety. Cut-off scores are, as suggested by Zigmond and Snaith (1983), 8-10 for doubtful cases and 11 or more for definite cases. Each item has four response alternatives, ranging from 0 to 3. Bjelland et al. (2002) found in their review that most of the studies showed an optimal balance between sensitivity (a true positive value for those who have depression) and specificity (a true negative value for those who don't have depression) when caseness was defined by a score of 8 or above on the HAD-D. This cut-off was applied in Studies I and IV, and scores ≥ 8 in the HAD-D were used to suggest the presence of a depressive disorder. Cronbach's alpha for HAD-D in Study I was .81 for both women and men. In Study II, ≥ 7 was used as cut-off scores for HAD-D in order to not miss anyone at risk. This cut-off score has earlier been used in primary healthcare (Bjelland et al., 2002). Cronbach's alpha for HAD-D in Study I was .81, in Study II it was .85, and in Study IV Cronbach's alpha for HAD Anxiety was 0.87 and for HAD Depression 0.81.

Loneliness was measured by one single item 'Do you ever feel lonely?' with four response alternatives: Yes often, Yes sometimes, No seldom and No never.

Respondents were also asked to report if they had visited a physician, district nurse, welfare officer, psychologist or physiotherapist during the last three months. The response alternatives were no, yes once and yes several times. Respondents were also asked if they had considered themselves to be in need of medical care during the last three months but refrained from seeking care (Yes/No), and if so, the reason for not seeking care. Drug intake during the last three months (Yes/No) was also recorded. Following drugs were of interest: drug for peptic ulcer, anti-hypertensive drug, sleeping pills, anti-depressants, anxiolytics and analgesics with or without prescription.

Data analyses

Confirmatory factor analysis (CFA) was used in Study IV to evaluate the factor structure of the HAD. The following goodness of fit statistics was used: root mean square of approximation (RMSEA), comparative fit index (CFI) and Tucker-Lewis index (TLI). According to Brown (2015), recommended goodness of fit indices for excellent model fit are: $RMSEA \leq 0.06$, CFI and $TLI \geq 0.95$.

Cronbach's alpha coefficients were used in Studies I, II and IV to assess the internal consistency coefficients for the scales included. In Study IV, *ordinal alpha* was also used.

D'Agostino test was used in Study IV to test if item and scale scores deviated significantly from a normal distribution.

Descriptive statistics were used to describe the study sample (I, II and IV) and were reported as frequencies, means, median, standard deviations and ranges.

Little's chi-squared test for MCAR was used in Study IV to evaluate if data were complete missing at random (MCAR).

Logistic regression analyses were conducted in Study I to investigate the association between depressive disorder and loneliness and the moderating influence of age and sex. Loneliness were treated as predictive variable and depressive disorder ($HAD \geq 8/HAD < 8$) as dependent variable.

Ordinal logistic regression analysis was used in Study IV for examining the presence of differential item functioning (DIF) for sex. This method enables one to test for both uniform (effects of group differences) and non-uniform

(effects of differences in group ability) (Zumbo, 1999). This analysis was performed in three steps, where in the first step (Block I) the item responses were treated as outcome variables predicted by the conditional variable (i.e. total score for HAD Depression and HAD Anxiety, respectively). Further, in the second step (Block II), the grouping variable (i.e. sex) was added as covariate to detect uniform DIF. In the third step (Block III), the interaction term (i.e. sex \times total score for HAD Depression and sex \times total score for HAD Anxiety) was added as covariate to test for non-uniform DIF.

Paired t-test was used in Study II to test the difference regarding HAD-D and WHOQOL-OLD before (T0), after intervention (T1) and one year after the intervention (T2).

Pearson's Chi-square analysis was used in Studies I and IV to test differences between sexes in demographics, prevalence of depressive symptoms (Study I, IV) and loneliness (Study I). Also differences between respondents with and without depressive symptoms in intake of drugs, visits to healthcare professionals, and reasons for not seeking care was tested with *Pearson's Chi-square analysis* (Study I).

Polychoric correlations were used in Study IV to evaluate homogeneity.

Student's t-test was used in Studies I and IV for differences in age.

Wilcoxon's sign rank test was used in Study II to test for differences in SRH before (T0), after intervention (T1) and one year after intervention (T2).

Qualitative content analysis was used in Studies II and III for analysing answers to open questions and interviews.

To analyse the interviews in Study III, qualitative content analysis was used. According to Krippendorff (2012), this method is appropriate for gaining inferences from all kinds of verbal and communication data. Further, the analysis was performed inspired by (Graneheim & Lundman, 2004), with focus on the latent content.

The tape-recorded interviews were transcribed verbatim and then read in their entirety to get a sense of the whole. Then each interview was read through several times to get an understanding of the content in relation to the aim. Further, according to the aim, the content was divided into two domains "before retirement" and "after retirement". Meaning units corresponding to the aim were identified and condensed, with the core meaning preserved. Then, the condensed meaning units were coded, sorted and abstracted into subthemes, four subthemes under the domain "before retirement" and five subthemes under the domain "after retirement". The subthemes were then

abstracted into two themes. The subthemes and the themes were discussed between researchers until consensus was reached. The analysis process was characterised by openness and dialogue between researchers to ensure trustworthiness.

Content analysis focusing on the manifest content was used in Study II for analysing the result of the evaluation of group participation at T1. The written evaluations were read through several times to get immersed in the data. Thereafter the text was condensed into codes which were then abstracted into categories. Finally, consensus was reached between researchers, that the categories covered the data.

All statistical analyses were done in SPSS Statistics 20.0 (IBM Corp, Armonk, NY, USA), Mplus 7.4 (Muthén & Muthén, Los Angeles, CA, USA) and R 3.0 software (the R Foundation for Statistical Computing, Vienna Austria).

Ethical considerations

The project was approved in all its parts by the regional ethical review board of Stockholm, Sweden (Dnr. 2010/823-31/4).

Study I

Written information about the study was sent together with the questionnaire, and contact information to the project leader if any questions would arise. Anonymity was guaranteed.

Study II

Participants in this study had voluntarily given their contact information in connection with the questionnaire survey. For those who were invited to participate in the group discussions, a written informed consent was sent with a reply form and a pre-stamped envelope. Those who scored ≥ 11 in the HAD-D were contacted by telephone and offered to visit a physician at the local healthcare centre. If the group discussions caused discomfort or led to an experience of deterioration of depressive symptoms, we were prepared to contact the local healthcare centre. Voluntary participation and freedom to withdraw from the study at any time was stressed, and confidentiality guaranteed. Thus, participants were informed that only the researcher had access to the data and that no individual could be identified when the results were presented.

Study III

Participants in this study had voluntarily given their contact information in connection with the questionnaire survey. For those who considered participating in the study, a written informed consent was sent together with a reply form and a pre-stamped envelope. Voluntary participation and freedom

to withdraw from the study at any time was stressed, and confidentiality guaranteed. Thus, participants were informed that only the researchers had access to the data, the tape recordings would be erased after they had been transcribed verbatim, and that no individual was going to be identified when the results were presented.

For the samples in communities I and II, each questionnaire was coded with a unique number. The code list and questionnaires were kept in a locked safe at Karolinska Institutet where only the researchers had access. The respondents were informed that their data were registered at the Department of Clinical Sciences at Karolinska Institutet and that it was possible for them to obtain personal data from the register.

Results

Study I

The prevalence of depression was found to be 9.8% (n=653), using the cut-off score ≥ 8 in the HAD-D, of which 52.1% was men. For the total sample, the proportion of men scoring ≥ 8 in the HAD-D was 10.1% compared with 9.1% of the women. For men, the largest prevalence of depressive symptoms was found in the age group 75–80 years old, χ^2 (d.f. = 2) = 11.15, $p = .004$. No corresponding statistically significant difference was found for women. In the total sample, 27.5% reported feelings of loneliness, and a larger proportion of women (36.1%) than men (18.4%) reported that they often or sometimes experienced loneliness.

An association was found between the odds of having a depressive disorder and experience of loneliness. The odds of having a depressive disorder were predicted to increase threefold for every increase in loneliness by one step, on a scale from 0–3. Yet, this effect of loneliness was qualified by both a significant ($p < .001$) loneliness \times sex and a significant ($p < .001$) loneliness \times age interaction effect. An increase in loneliness by one step was associated with an increase in the odds of having a depressive disorder with a multiplicative factor of 4.42 for women ($p < 0.001$); for men, this effect of loneliness was only 2.92 ($p < 0.001$). However, the positive association between loneliness and the odds to have a depressive disorder decreased with increasing age; alternatively, the positive association between age and the odds of having a depressive disorder decreased with increasing loneliness.

Of those who scored ≥ 8 in the HAD-D (n=653), only a low proportion had visited a psychologist (2.9%) or a welfare officer (4.2%), and one in four reported that they used anti-depressant medication. Of those who reported depressive symptoms 61 % had consulted a general practitioner during the last three months, Of the total sample, 11.6% (n=774), of whom 189 scored 8 or above in the HAD-D, considered that they had needed medical care during the

last three months but had refrained from seeking, and the most common reason for that was negative experience from previous visits.

Study II

At the evaluation after the last session (T1), the intervention group showed a statistically significant improvement regarding symptoms of depression (HAD-D) from T0 (M = 8.32, SD = 1.4) to T1 (M = 7.29, SD = 2.2), $t(15) = 2.32$, $p = .0035$. HAD-D was lower at T2 than at T0, but the difference was not statistically significant.

Only the facet of autonomy in WHOQOL-OLD showed improvement from T0 (M = 55.07, SD = 16.6) to T1 (M = 62.10, SD = 10.01), $t(15) = 2.58$, $p = .0021$. There was no statistically significant improvement for the remaining three facets as well as for any of the facets at T2. A significant improvement regarding SRH was seen directly after the intervention (T1), $z = -2.53$, $p = .011$. Seven participants rated their health as good after the group discussions compared to two prior to the intervention.

The attendance rate was 84% over all sessions.

The participants evaluated the group participation positively, and four categories were identified:

Involvement and new insights. The opportunity to share experiences and listening to others were described as being involved. The discussion and sharing of stories could imply both the recollection of embarrassing experiences but also a re-evaluation of these experiences, which resulted in self-reflection and new insights about oneself.

Having something to look forward to. To participate in the groups was something to look forward to in an otherwise lonely day. The group meetings also provided pleasant hours of discussions and laughter, and the ten sessions were experienced as passing quickly.

A sense of social enrichment. Positive outcomes from the group participation were to meet new people from different age groups and forming new friendships. The group participation led to increased knowledge of life in society and provided a place for those who experienced difficulties in contacting others due to old age or illness. A sense of trust unlike in other social gatherings was also described.

Self-confidence. Increased self-confidence, less shyness and more openness to new contacts were described as positive outcomes of the group discussions. Furthermore, a feeling of knowing how to prioritise and devoting time to oneself resulted in courage to try new experiences.

Study III

The analysis of how the participant's experienced the year before and the time after retirement resulted in two themes: *become aware of*, and *become adapted to*. Further, each theme contained four and five subthemes, respectively.

Become aware of

Planning for retirement. Voluntarily reducing one's working time was considered to lead to a more natural withdrawal from the job and consequently reduced stress. Having control over one's work situation and making plans for the future were seen as valuable. Working as consultants and/or having their own firm continued even after retirement for some of the respondents.

Longing for retirement. A feeling of a future long leave but also a sense of satisfaction after a full working life was described. Both the opportunity for physical rest as well as being able to avoid work related stress were described as reasons for longing for retirement. Reasons to long for retirement included more leisure time to spend at home, on hobbies, on work in the garden, on time with grandchildren, being in control of one's time.

Fearing for losses. Fear of personal economical strain in association with retirement was described. Also, feelings of not being needed, fears of losing networks connected to work and fears of being alone were stressed. A fear of feeling empty was expressed as well as the loss of identity, which was considered to be strongly associated with one's job.

Feeling of grief. A feeling of sadness was expressed with the insight that one is no longer needed at work. Also, when someone else took over the job or when retirement was a result of cut backs, it resulted in feelings of redundancy and being dispensable. Respondents also described a desire to continue working but that was not possible due to the rules for retirement age.

Become adapted to

Feeling of freedom. Participants expressed a sense of freedom after retirement, that is, having the opportunity to continue to work, but deciding themselves to what extent. Working as a consultant was one alternative, an economic strategy but also because the work was interesting. Further, the sense of being in control over one's life was stressed and exemplified as: being able to do what one wants, planning one's own time and not having to watch the clock.

Having time. The sense of having time to do things that earlier were impossible due to active working time was prominent among informants. Physical activities, spending time outdoors, unlimited time with the family and time for friends were stressed as valuable. Commitment in society and in church as well as time for oneself and not always being available were also seen as important.

Being needed and confirmed. The informants described the importance of having somewhere to go and something to wake up for every morning. Some of the informants worked as consultants and advisors to their former employers, which made them feel needed and important. Also, being a resource for family and others, for example, to help older people were expressed as positive, in meaning to be useful.

Remaining fear. Even after retirement, there remained a fear of weakened economy. The deteriorating financial situation led to considerable uncertainty and affected family life in a negative way. Fear of loneliness was stressed due to less social contacts and also concerns about a decreased strength /falling ill in relation to ageing.

Feeling of disconnectedness. There was variation in the extent to which the informants kept in touch with former workplaces and colleagues. Those that did not have any contact with colleagues missed the group community especially. Fear of disturbing former colleagues or visiting at inappropriate times were reasons for not visiting.

Study IV

Item scores for both HAD Depression and HAD Anxiety deviated significantly from a normal distribution. Missing data were at a low level and ranged between 0.6% and 1.4% for items in HAD Anxiety and 0.2% and 0.9% for items in HAD Depression. The mean inter-item correlations were 0.61 (SD=0.07, range=0.51-0.75) for the HAD Anxiety and 0.51 (SD=0.10, range=0.35-0.68) for HAD Depression.

Regarding the factor structure, the two-factor model (I) without modifications showed a reasonable fit between model and data (RMSEA =0.068, CFI =0.965, TLI =0.958). To improve fit in model II, items 7 and 8 were allowed to cross-load on both factors (i.e. HAD Anxiety and HAD Depression). This model demonstrated a good fit according to all goodness-of-fit indices (RMSEA=0.050, CFI=0.982, TLI=0.978). To further improve fit between model and data and for statistical reasons, the response categories 2 and 3 were collapsed into one category. This model demonstrated excellent fit according to all fit indices (RMSEA=0.047, CFI=0.984, TLI=0.980), and there was no need for further revisions according to the modification index.

The internal consistency reliability was assessed with both ordinal alpha (HAD Anxiety 0.92 and HAD Depression 0.88) and traditional Cronbach's alpha (HAD Anxiety 0.87 and HAD Depression 0.81).

The logistic regression showed that the item responses were predicted by the conditional variable (i.e. HAD scale scores), the group variable (i.e. sex) and the interaction term (i.e. HAD scale scores x sex). However, the explained variance according to the McFadden pseudo R^2 did not increase more than up

to 1% for the items in HAD Anxiety and 2% for HAD Depression. Based on this, no indication of meaningful DIF for sex was identified.

Discussion

The general aim of the thesis was to immerse into knowledge about depressive symptoms in older people and its relation to age, gender, loneliness, healthcare, retirement, and to evaluate an intervention aimed at preventing depressive symptoms. The thesis shows that a considerable proportion of older people in the age group 65–80 years old suffer from depressive symptoms associated with loneliness, sex and age. Unexpectedly, depressive symptoms were not more prevalent among women compared to men as shown in previous research. One explanation for this sex difference could have been due to an invariance regarding sex in the HAD, but the performed psychometric analysis showed no such bias. Retirement as a transition was described as an experience of both expectations and fears. The intervention developed and tested showed promising results with decrease in depressive symptoms, increase in the autonomy facet of QoL and increase in SRH.

Depressive symptoms in older people, age and sex-differences

The prevalence of depressive symptoms in Study I corresponds to the study by Copeland et al. (1999), where the prevalence rate was 12.3% as a mean for nine European countries (Sweden not included) for the age group above 65 years. Yet, compared with other studies with samples from Europe, our results show a lower prevalence. For example, Castro-Costa et al. (2007) showed a rate of 19.2% in depressive symptoms for Swedes above 50 years, and Dewey and Prince (2005) presented rates for Sweden in the age group 50–80 years old, with 21.6% for women and 12.3% for men. Possible explanations for the difference in prevalence might be that the samples varied somewhat in age and that different measures were used with both the latter studies, using the Euro-D scale for depression. A statistically significant difference in prevalence of depressive symptoms between age groups in our study (Study I) was found only for men, with the largest prevalence in the oldest age group, 75–80 years old. A similar result was shown, for example, in the studies by Glaesmer et al.

(2011) and Sonnenberg et al. (2000) where the highest prevalence of depressive symptoms was found among men in the age group of 75–79-years-old, whereas for women in our study (Study I), a continuous increase in depressive symptoms was seen with rising age.

Studies have shown an age difference in how depressive symptoms are expressed. Older people are less likely to report feeling “sad” or “depressed mood” compared to younger people. Signs like, for example, hopelessness, anxiety, slowed movement, irritability, unexplained somatic complaints, should be emphasised when diagnosing depression in older people (Beyer, 2007). Although depressive symptoms in older people can be vague, WHO (2014) reports that older people > 70 years have the highest rate of suicide and that men are successful completing the suicide in a higher rate than women. Important risk factors for dying by suicide are untreated depression and anxiety, which stress the importance of detecting, treating and at best preventing emotional distress in older people and also being aware of how men and women might differ in expressing depressive symptoms (WHO, 2014).

Our study (Study I) unexpectedly showed that depressive symptoms were not more prevalent in women than in men, which is contradictory compared with most other studies (Copeland et al., 1999; Dewey & Prince, 2005; Ylli et al., 2016; Zunzunegui et al., 2009). The result is, however, in line with two Norwegian studies among older people (> 60 years), which also used the HAD (Helvik et al., 2011; Stordal et al., 2001).

Thus, one of the possible explanations for the result might be the use of HAD in which common somatic symptoms of illnesses are excluded, whereas the former studies used symptoms scale to assess depressive disorder. It has been suggested that the prevalence of depressive disorder in men is overestimated in men and/or underestimated in women when using the HAD (Nortvedt, Riise, & Sanne, 2006). That study found, in a general population in the age group of 40–47, that two of the items in the HAD-D about personal appearance (Item 12) and the ability to enjoy books, TV and radio (Item 14) explained 70% of the depression scores for men, and the conclusion of this was that men might have high scores on these items without being depressed. Another explanation of the sex difference when using the HAD was suggested by Langvik, Hjemdal, and Nordahl (2016) and was related to the anhedonic content where symptoms reported could reflect tendencies towards extroversion.

Using traditional symptoms of depressive disorders have been suggested to lead to an under diagnosis in men (Martin et al., 2013). A study by Khan and Raeside (2014) showed that men may experience alternative symptoms of depression compared to women. Men reported significantly more insomnia and agitation, whereas women more frequently reported fatigue, hypersomnia and psycho-motor retardation (Khan & Raeside, 2014). In another study, when men and women (21–66 years old) were asked about their experiences from

depression, men more often talked about physical distress e.g. chest pain than emotions, whereas women verbalised emotional distress while physical symptoms were secondary and vague (Danielsson & Johansson, 2005). It has also been concluded that men have difficulties to seek help for depressive symptoms (Rutz, von Knorring, Pihlgren, Rihmer, & Wålinder, 1995) and that men present other problems than depression due to proscriptive gender norms (Addis, 2008).

The HAD has shown good to very good concurrent validity when compared to diagnostic instruments of depression (Bjelland et al., 2002; Terluin, Brouwers, van Marwijk, Verhaak, & van der Horst, 2009). The results of Study IV in this thesis, which was carried out following the results in Study I, strengthen the validity of the HAD. The confirmatory factor analysis showed a two-factor structure with HAD-Anxiety and HAD-Depression as unidimensional measures. No DIF was found for sex thus, the HAD can be seen as an invariant measure in this matter.

Treatment/Under-treatment of depression in older people

The results in Study I showed that only 2.9% of those who scored eight and above on the HAD-D had visited a psychologist and 4.2% a welfare officer despite the fact that psychological treatment has shown to be effective in treatment of depression in older people (Cuijpers, van Straten, & Smit, 2006; Pinquart, Duberstein, & Lyness, 2007). A possible explanation to this result could be unwillingness among older people to seek healthcare when feeling depressed. A study by Sarkisian, Lee-Henderson, and Mangione (2003) showed that older people, who ascribed depression to age rather than to illness, had higher odds for not seeking healthcare. Thus, there might be attitudes about ageing in the target group that contribute to the under-treatment. Our study (Study I) also showed that nearly 28% of those who scored ≥ 8 on the HAD felt that they had negative experiences from earlier visits for healthcare and therefore refrained from seeking help again. This is an important result to be addressed for general healthcare. Another reason for the low rate of visits for psychological treatment in our study could be that the respondents had been referred to psychological treatment but rejected it, or that there was a long waiting list. The prescription of drugs was also rare, where one in four of those scoring ≥ 8 on the HAD-D had used antidepressant medication during the last three months (Study I). This is in line with the results from a Swedish study in a general population in the age group 18–85 years-old (Henriksson et al., 2006). There are well known side effects of antidepressant medications in older people, which could be a possible explanation for the low prescription rate. Furthermore, the poly-pharmacy, which is

common among older people and the subsequent risk of negative interaction effects, might imply a cause for caution regarding the prescription of anti-depressant medication. The prescription rates for analgesics as well as sleeping pills were significantly higher ($p < 0.001$ for those scoring ≥ 8 than those scoring < 8 on the HAD-D. This might be explained by the fact that older people show other symptoms of depression than expected, according to DSM-V.

Our study also showed that about 60% of respondents with HAD-D scorings ≥ 8 had consulted a general practitioner (GP) during the last three months (Study I). From this result, it could be suggested that primary healthcare might be one arena to detect depressive symptoms in older people. Still, in the study by Gregg et al. (2013), only 14 out of 344 older adults with clinically significant depressive symptoms were detected by the primary care physicians. Also, in a Swedish study regarding primary healthcare, a considerable proportion of undetected depression was found (Lotfi et al., 2010). Furthermore, Drageset, Eide, and Ranhoff (2013) showed a corresponding tendency when twice as many nursing home residents had symptoms of depression, anxiety and both, than the respective diagnoses in their medical records.

One explanation for this result might be that symptoms of depression in older people are often different from those shown by younger adults and therefore not always congruent with the DSM-V (Swedish Council on Technology Assessment in Health Care, 2012). Furthermore, older people are more likely to endorse physical symptoms than sadness or dysphoria (Hybels et al., 2012), which can make it problematic to detect depression (Gregg et al., 2013). WHO (2015, p.10) describes another possible reason for this inequity, namely, 'Some of the most important barriers to developing good public-health policy on ageing are pervasive misconceptions, attitudes and assumptions about older people' and further states that the negative attitudes against older people are also present within the health and social-care settings. Murray et al. (2006) suggests that care for older people with depression, within primary healthcare can only be improved if screening is combined with organised systems of depression care. To be able to identify depressive symptoms in older people, it is essential to have brief, feasible and valid instruments. Moreover, when depressive symptoms are identified, it is important to be able to offer appropriate interventions for treatment/ prevention

Loneliness

More than 25% of the randomised national sample in the ages 65–80 years old reported that they sometimes or often feel lonely, with the largest proportion in the age group 75–80 years old. For those scoring ≥ 8 on the HAD, the corresponding proportion was 63.7% (Study I). A previous study in which a

Swedish sample aged ≥ 50 years was included showed a prevalence of loneliness of 10.1% (Fokkema et al., 2012). Further, a study from United States with a study population ≥ 65 years showed a prevalence of 19.3% regarding experiences of loneliness (Theeke, 2009). In both these studies, loneliness was assessed with a single item with two response alternatives (Yes/No), covering the last week. This might explain the disparities compared to our result. Comparing different studies is difficult as there are some presumptions to be considered i.e. different age groups and different measures but also different cultural environment. Cultural environment seems to affect how loneliness is experienced and expressed; therefore, such comparisons should be done with caution (Jylhä, 2004). In two cross-cultural large European studies, it was found that the prevalence of feelings of loneliness in a non-institutionalised population of ≥ 50 years was more common in the Mediterranean countries than in Northern Europe (Fokkema et al., 2012; Sundström, Fransson, Malmberg, & Davey, 2009).

A larger proportion of women than men reported that they often or sometimes experience loneliness (Study I). This result is in line with previous research e.g. (Dykstra, 2009; Victor & Yang, 2012). In the study by Victor and Yang (2012), an increase in loneliness was seen for women after the age of 55 years, but for men the increase was at the age ≥ 75 years. Yet, a study by Zebhauser et al. (2014) found no sex differences in a population in the range of 64–94 years old except for the oldest group (≥ 85 years), where loneliness was more pronounced among women. No sex differences were shown for those who were unmarried, in a meta-analysis measuring loneliness as a constituent of wellbeing (Pinquart & Sörensen, 2001). In our study, a larger proportion of men compared with women in all age groups were married/cohabitating (Study I). This alone cannot explain the sex difference since the result showed that the odds of experiencing loneliness for women were larger in all marital status (i.e. married/cohabitating and living alone).

An association between loneliness and depression was found, which is consistent with previous research (Bekhet & Zauszniewski, 2012; Luo et al., 2012; Victor & Yang, 2012). Interestingly, the positive association between loneliness and the odds of having a depressive disorder decrease with increasing age. In a study by Holt-Lunstad, Smith, Baker, Harris, and Stephenson (2015), there was an increased risk shown for middle age adults compared with older people ≥ 65 years regarding the risk of mortality when experiencing loneliness, social isolation and when living alone. One possible explanation suggested was that an individual's experience of the transition from full-employment to retirement could entail changes in social networks with a decrease in socialisation both in occupational as well as public forum. This can also be understood as meaning that a slow adaption occurs, and according to Tornstam (2003), the proportion of "solitude seekers" increases from 12% in the ages of 65–74 to 23% in the age 95+. Erikson (1963) explains the dominating element in the eighth stadium of his development ageing

theory, as integrity, in the meaning of coherence and wholeness. If this integrity is reached when getting older, it can lead to a self-imposed solitude. Study I had a cross-sectional design; therefore, the results allow for more than one interpretation of the direction of causality. A reciprocal relationship between loneliness and depression has been described (Luo et al., 2012). However, a longitudinal study over five years showed that loneliness predicted depressive symptoms but not vice versa (Cacioppo, Hawkley, & Thisted, 2010).

The positive association between loneliness and the odds of having a depressive disorder was larger for women than men (Study I). The results were contrary to this in the studies by Cacioppo et al. (2006) and Zebhauser et al. (2014), but these studies used different measures to assess depression and loneliness and included different age groups.

Interventions to alleviate social isolation and loneliness in older people have been suggested i.e. group activities with educational and social activity that target specific groups (Cattan, White, Bond, & Larmouth, 2005). Furthermore, engagement in social activities, good physical health, being married, tertiary education and household size have shown to be protective factors for loneliness, but then it was the quality of social engagement not the quantity that showed protective effect for those in mid and late life (Victor & Yang, 2012). Also, support from spouse/partner and friends have been shown to significantly reduce loneliness for people ≥ 50 years (Chen & Feeley, 2014). When getting older, widowhood is one reason for experiencing loneliness. This loneliness is explained as both a loss of spouse but also a loss of routines (Davies, Crowe, & Whitehead, 2016). According to the transition theory, it is important to restructure routines to gain predictability, manageability and pleasure. From a nursing perspective, this could mean to assess the individual's resources and options for the future. An example of nursing intervention suitable to support the transition into the life course is reminiscence, as the transition must be seen within the context of the whole lifespan. Even if the transition involves endings and disruptions, it is essential for a healthy transition to maintain whatever continuity is possible in for example identity and relationships. This continuity facilitates coping with the changes that the transition might entail and allows for the individual to integrate the experience of changes in to his/hers life as a whole. (Schumacher, 1999).

Group discussion with structured reminiscence and a PBM

The new intervention that was evaluated consisted of group discussions in which both reminiscence and a PBM were used in (Study II). The aim was to prevent depressive symptoms in older people, and the main results after

(Study II). The aim was to prevent depressive symptoms in older people, and the main results after participation was a statistically significant decrease in depressive symptoms and statistically significant increase in the autonomy facet of QoL as well as for SRH. This is consistent with previous research regarding the effects of reminiscence e.g. (Bohlmeijer et al., 2009). Yet, in a review by Forsman et al. (2011), reminiscence as preventive intervention did not reduce depressive symptoms, whereas social activities did. The present intervention (Study II) was performed as group discussions but within a structured format, following a manual based on two scientifically evaluated methods. Moreover, the participants were not only encouraged to look back on life, but also to reflect over their present situation and to look forward. Also, setting small goals attainable in the near future as part of the method might have contributed to the positive evaluation.

The themes discussed during the last five sessions when PBM was used were based on the participant's experiences of life as retiree and what they thought was important to highlight in the discussions. For the individual, it is imperative to be accepted as unique and important, met with respect and consideration of the model of his/her world. This is a prerequisite, making it possible for the nurse to facilitate the individual to mobilise his/her own resources (Erickson et al., 2009). This approach might have contributed to the improvement of autonomy, as the use of PBM has shown to result in increased self-reflection and empowerment (Arvidsson et al., 2013; Ringsberg, Lepp, & Finnström, 2002). Empowerment has been described by WHO (1998) as a process through which the individual gains more control over decisions and actions regarding health but also in a social and cultural context. The improvement of autonomy could also be explained by the simultaneous decrease in depressive symptoms, as lack of autonomy in older people has shown to be associated with development of depression (Boyle, 2005).

Autonomy was also one of the themes that was discussed in the brainstorming process during the group discussions and emphasised as an important factor for living a good life as retiree. According to Schumacher et al. (1999) a healthy transition might result in a sense of autonomy and self-determination while an unhealthy transition may be manifested in loss of control and incapacity to take and implement decisions.

More participants perceived their health as good after group participation than before (Study II). This result could reflect different aspects with both the simultaneous decrease in depressive symptoms and the increased feeling of autonomy. Changes in depressive symptoms have shown to clearly coincide with changes in SRH (Han, 2002). Study II showed that having good health was emphasised when discussing what was important for a good life as retiree. This is in line with the study by Gabriel and Bowling (2005) when people above 65 years were asked about what constitutes QoL.

This is the first time to our knowledge that reminiscence was used in combination with PBM. This method implies except looking back and focus on the present life also that the participants had to formulate small individual goals for the future. In the theory of Modeling and Role Modeling, it can be very difficult for people who are too impoverished (having diminished resources available for mobilisation) to make plans very far in the future. It is then appropriate with small goals and interventions that are within the individuals' model, not someone else's (Erickson et al., 2009).

Participation in the group discussions was seen as something to look forward to and was considered socially enriching. Fiske et al. (2009) underlines the importance of the role of meaningful engagement as a protective factor against depression but also social support with the aim to encourage a person to engage in meaningful activities.

Stronger self-confidence was also stressed as a result of group participation, which confirms earlier results when using PBM (Ringsberg et al., 2002). Combining reminiscence and PBM is justified by the fact that each method alone has shown to result in improvement of factors important for mental health, such as improved self-esteem (Chao et al., 2006) and social support (Medin et al., 2003). To articulate experiences from the past life through reminiscence supports the process of growth and development of identity and also supports the process of new beginnings (Schumacher et al., 1999). No negative experiences were seen in this study (Study II), but it is important for the group leader to observe if memories discussed are causing discomfort for someone in the group. If needed, the group leader has to refer to other healthcare professionals, for example, psychologist or physician. A practical aspect of implementing this method could be that it might be troublesome for older people to attend due to difficulties with mobility, not being able to get to the venue for the group meetings. For them, there is a need to also offer alternative individual preventive solutions. Group discussions with structured reminiscence combined with a PBM seems to be useful and comparatively inexpensive tool, which can be implemented in clinical practice.

Experiences of being a retiree

The transition into retirement was described in Study III as being aware of and adapting to, representing the transition and process that retirement might entail. The individual's perspective and variations regarding the experience of the year before and the time after retirement is represented by the subthemes. Positive expectations before retirement were met after leaving the workforce. Still, some fears about how life as retiree was going to be remained unsolved after retirement. Retirement expectations have shown to have a strong influence on how retirement life is experienced (Taylor, Goldberg, Shore, &

Lipka, 2008). As we did not have the aim to do individual analyses, this cannot be confirmed here but still is important to consider.

Retirement is described by Meleis (1975) as a development transition, which is characterised by numerous role transitions. Two significant development transitions that may be associated with health problems are from childhood to adolescence and from adulthood to old age, where the latter is followed by problems relating to identity, retirement and chronic illness.

Awareness is described as a defining characteristic of a transition and the individual in transition must have some awareness that a change is occurring (Chick & Meleis, 1986). Adaptation is described as mobilising internal and external coping resources (Erickson et al., 2009) but also as an adjustment to the new situation or circumstances that the transition has entailed (Kralik et al., 2006).

The time before retirement was for some, a time of planning by, for example, voluntarily reducing one's working time as a way to achieve a natural withdrawal from work. Leaving the workforce on a part-time basis has shown to mitigate the adverse health effects that might follow retirement, whereas complete retirement among other negative health effects resulted in an increase in depressive symptoms (Dave, Rashad & Spasojevic, 2008). On the other hand, Westerlund et al. (2010) found that retirement reduced depressive symptoms and mental and physical fatigue. These contradictory results are common through retirement research and underline the importance of adopting an individual perspective.

Fear for losses was described before retirement, both with respect to changes in personal finances but also to not being needed, being alone and losing one's identity. In summary, these factors are all risk factors for developing depressive symptoms in later-life (Fiske et al., 2009). The fear of losing one's identity can be understood from how Matour and Prout (2007) describe employment 'it is more than a job; it is a world of relationships, routines and expectations that confer a sense of identity and belonging in society' (Matour & Prout, 2007, p.51). To relinquish one's professional identity has previously been described as constituting a loss of social contacts and employment challenges (Price, 2000) but also a loss of status (Barnes & Parry, 2004). Yet, key components of identity are possible to maintain in the transition from work to retirement through, for example, social connectedness, continued learning and continual involvement in aspects of one's former work role (Borrero & Kruger, 2015). To achieve a healthy transition in this respect requires possibilities for growth and personal development regarding e.g. self-awareness, new dimension of identity and relationships (Schumacher et al., 1999). According to the nursing theory, Modeling and Role-modeling (Erickson et al., 2009), each human being has capacity for growth and development during the entire lifespan. Facilitating and gently encouraging this growth and development at the individual's own pace is an important part of professional nursing.

The fear of being lonely and losing social contacts might be a justified fear according to results presented in this thesis (Study I), where 27.5 % of a Swedish sample of respondents aged 65–80 years old reported feelings of loneliness. WHO (2015) suggests group interventions (e.g. providing social support or community-based exercise programmes) but also in-person and technology-assisted interventions (e.g. Internet and telephone) as effective interventions to combat feelings of loneliness.

The experience of grief that was described before retirement shows how vulnerable the individual might be during the retirement process. For some individuals, the retirement process is experienced as a crisis where the loss of role and status might result in, for example, grief, depression and feelings of meaninglessness (Robinson & Stell, 2014). In transition theory, grief, mourning and powerlessness are explained as signs of role loss and that role transition requires the individual to change his/her definition of him/herself in a social context (Meleis, 1975). In a study including individuals in the age group 60–69 years old, the period after retirement was described as a time in which identity, lifestyle, goals and relationships were altered. Struggles with ego-identity and goals could be handled by either an active engaging lifestyle or a volitional acceptance of a more disengaged way of living (Robinson & Stell, 2014). Both ways are suggested to be adaptive and optimal in older adults, depending on circumstances, such as the individual's health and social context (Koren, 2011).

Worrying about the change in personal finances is a concern that remains during the transition and the time frame this study encompasses. This is a common concern for retirees and in Europe is associated with, for example, being older, being female, having ill health and being less educated. However, there are national differences in the amount of financial worries in connection with retirement, where the Scandinavian countries had rather low levels of being worried, whereas the people in Eastern Europe countries reported to be more worried (Hershey, Henkens, & van Dalen, 2010). Furthermore, Nilsson, Hydbom, and Rylander (2011) showed significant associations between personal economic incentives and what people aged 55–64 years old thought would influence why they want to work and why they think they can work, until 65 years of age or beyond. As the study sample in the interview study (Study III) represents both white and blue collar workers, it can be suggested that the personal financial situation that retirement entails is a reason for worry, irrespective of profession.

Feeling of not being needed was expressed as a fear of losses before retirement but was expressed after as something positive, both in relation to former workplace and family. Not having demands and expectations can be experienced as stressful and is described as an imbalance between inner motivation and external demands (Jonsson, 2011). This might explain why people continue to work after retirement. This so-called bridge-employment has been shown to help retirees maintain psychological wellbeing (Wang,

2007) and also to prevent illness conditions and functional limitations compared to those who chose full retirement (Dave, Rashad, & Spasojevic, 2006).

Having time for oneself, not always being available, the ability to do what one wants, making one's own decision, having control over one's time were all examples of a sense of freedom experienced after retirement. It can also be understood as mastery, which has been defined as having control over one's life and is also one of the best predictors of retirement adjustment and an important resource for wellbeing (Donaldson, Earl, & Muratore, 2010). Mastery has also been shown to be an outcome of a healthy transition (Schumacher & Meleis, 1994). Further, retained empowerment and integrity are particularly important for older people to achieve a successful transition (Schumacher et al., 1999).

We did not identify any direct influences on the participant's health, but the results showed some risk factors that should be considered and paid attention to e.g. a feeling of disconnectedness, grief and loss of identity. A feeling of disconnectedness which was stressed in relation to experiences after retirement is considered to be the most pervasive characteristic of a transition with impact on an individual's health (Chick & Meleis, 1986).

This stresses the importance of being aware, from a health perspective, of older people who are in the transition phase from the workforce into retirement. Finding strategies that allow for a smooth transition into retirement is important and can, for example, include an individual retirement planning on both a financial as well as a psychosocial level.

Methodological considerations

The design for Study I was cross-sectional, based on a large randomised sample which makes the results representative and fairly generalizable. However, when data are collected at the same point in time, there are limitations concerning the direction of causality, and allows for more than one interpretation of the results (Polit & Beck, 2016). The large sample size is also a strength for Study IV, though one consequence of a large statistical power is that it can detect significant results of minor importance. Furthermore, appropriate statistical methods for ordinal data was used in the psychometric test of the HAD (Study IV), which strengthens the statistical validity. The analysis of DIF, which is an aspect of construct validity, was performed to test for sex differences as a result of Study I. According to Tennant, McKenna, and Hagell (2004), DIF analyses should be done for all subgroups in question to be compared with an instrument to ensure that the scale works in the same way for each group, respectively. Using DIF to evaluate measurement invariance of an instrument should focus on differences between cultural

groups, but also with respect to sex and age (Tennant et al., 2004). However, in this study (Study IV), the sample consisted of individuals within a limited age range; as for the cultural differences, the questionnaire did not include any questions about the respondent's country of origin.

The dropout rate of the national sample for Studies I and IV was 33% which is in line with what could be expected for population-based studies (Swedish Association of Local Authorities and Regions, 2015). Yet, in psychometric studies, large dropouts are seldom a problem as long as it does not affect the variation of data. This was not a problem in Study IV as all response categories were used. An increased dropout rate was seen with increasing age (Study I), with 31.3% in 65–69 years old, 32.2% in 70–74 years old and 37.1% for 75–80 years old, which could reflect that the response rate may fall with increasing age, disability and poor medical health. This could imply that the material represents a healthier proportion of the population and also that the prevalence of depressive symptoms in older people might be an underestimation (Study I).

Only 22 of 43 of older people at risk for depression chose to participate in group discussions, and four discontinued due to illness or without giving any reason (Study II). The low participation might be explained by the possible stigma of being identified as having depression symptoms in a small community.

With the results based on 18 participants, it cannot be generalised without caution. The intervention needs to be further tested in a larger sample and be designed as a randomised controlled study.

The inclusion criterion for the national randomised sample was 65–80 years old. This age group was chosen with regard to the fact that different health issues increase with age and, above all, the prevalence of dementia (National Board of Health and Welfare, 2014). Furthermore, depression is a risk factor for developing dementia (da Silva, Gonçalves-Pereira, Xavier, & Mukaetova-Ladinska, 2013). The reason for including participants from 55 years from the two communities in northeast of Sweden was a result of an increase in the number of early retirees due to closure of major employer in the communities. A study by Calvo, Sarkisian, and Tamborini (2013) showed that if the transition to retirement occurred before institutional timetable, it resulted in bad health outcomes. Also, an involuntary job-loss in later-life was shown to entail negative effects on both physical function as well as mental health (Gallo, Bradley, Siegel, & Kasl, 2000).

The use of self-report questionnaires have been discussed in relation to, for example, the risk of negative affectivity (Watson & Clark, 1984) or social desirability (Chan, 2009). However, Ganna and Ingelsson (2015) found in a large population-based study that self-reported data regarding questions about,

for example, health status was found to be a better predictor of mortality than objective measures e.g. diagnosis, medical opinion or blood analysis. Moreover, even though screening tools are not diagnostic they are useful in assessing and monitoring, for example, depressive symptoms (Roman & Callen, 2008).

The cut-off used for the HAD in Studies I and IV was ≥ 8 –10 suggesting presence of depressive disorder, which according to Zigmond and Snaith (1983) also include doubtful cases i.e. HAD-D scores 8–10. Yet, optimal balance between specificity and sensitivity has been shown when using 8 as cut-off criterion (Bjelland et al., 2002). A cut-off ≥ 7 –10 for HAD-D was chosen for Study II to not miss anyone at risk. Also ≥ 6 for HAD-D as cut-off has been used among older people in a general practice (Lam, Pan, Chan, Chan, & Munro, 1995).

Loneliness was measured with one single item (Study I), which has advantages as it is easy to use but has also its weakness in that it presumes an understanding of the concept loneliness (Luanaigh & Lawlor, 2008). On the other hand, using a single-item question measures loneliness as it is understood by the respondent, not predetermined by the researcher and mirrors then a genuine subjective experience (Jylhä, 2004). Also, it has been shown that a single loneliness item was highly correlated to the total score from a multi-item loneliness scale (De Jong Gierveld & Van Tilburg, 1999).

In Study II, both quantitative and qualitative data were used for the analysis. According to Polit and Beck (2016), one advantage of mixing quantitative and qualitative approach is, for example, that it is complementary, meaning ‘they represent words and numbers, the two fundamental languages of human communication’ (Polit & Beck, 2016, p. 578). Another strength of this design is an enhanced validity as multiple types of data support the hypothesis.

To strengthen the trustworthiness as suggested by Lincoln and Guba (1985), *credibility*, *confirmability*, *dependability* and *transferability* were considered for Studies II and III. *Credibility* was strengthened in Study II by data triangulation, as both predefined questions as well as open answers were used. Investigator triangulation was used to review and confirm relevance of the findings from the content analysis. Together, with the presentation of the quotes representing the transcribed text, it strengthens the *confirmability*. To maintain *dependability*, the analysis process is clearly described both in text (Studies II and III) as well as in the table in Study III. In Study III, different professions, ages and sex were represented which contributed to a richer variation of the phenomena under study. Also, descriptive data of the participants as well as description of the context could contribute to *transferability*.

Conclusion

Although, a majority of respondents in a large randomised Swedish sample between 65–80 years old have good mental health, about 10% suffer from depressive symptoms. Unexpectedly, the prevalence of depressive symptoms was higher in men than women. One explanation for this result could be the use of the HAD, but the psychometric study (Study IV) showed a two-factor structure with no DIF regarding sex. Thus, from this aspect, the HAD might be seen as a valid instrument for this age group.

Few of the respondents who showed depressive symptoms had visited a psychologist or a welfare officer. This highlights the importance of identifying signs and symptoms of depression in older people and offering prevention/treatment to enhance healthy ageing.

Loneliness was experienced by nearly 28% of the respondents, and an association was seen with depressive symptoms. This association was stronger for women and decreased with increasing age.

Group discussions with both reminiscence and PBM could be a useful method in preventing depressive symptoms in older people. The approach allows the individual to not only look back but also to focus on the present and the future. The intervention resulted in a decrease in depressive symptoms and in an increase in QOL, giving the participants the opportunity to feel involved and socially enriched and strengthening their self-confidence. Considering the negative side effects of antidepressant medications, our intervention could be a valuable non-pharmacological alternative. As a nursing intervention, the group discussions could also be a more accessible alternative and with a possible effect of reduced loneliness.

In this thesis, the transition to retirement showed a variety of individual experiences, from fulfilled expectations to remaining concerns. From a nursing perspective, it is vital to understand and be observant that experience of grief, loss of identity and feeling of disconnectedness in relation to retirement could lead to ill health. Also, on an organisation level, it is important to adopt an individual perspective. To offer, for example, bridge-

employment as a strategy to facilitate the transition to become retiree might probably benefit both the individual and the organisation.

Clinical implications and further research

Symptoms and signs of depression in older people should be given greater attention in healthcare, considering its impact on QOL and SRH. Furthermore, there is improvement to be made regarding the way older people with depressive symptoms are treated when they seek healthcare, as the most common reason for this group not to seek healthcare when needed is negative experiences from earlier visits.

Group discussions with structured group reminiscence and PBM might be an alternative for nurses to support older people at risk for depression. As there was no remaining effect of the intervention after one year, it should probably be extended with more sessions. To enable a more continuous implementation of the intervention, former group participants could be educated in the method and act as group leaders. It seems to be a promising method but needs to be tested with a randomised-controlled study on a larger population.

To gain extended knowledge on how the transition in retirement is experienced over a longer period, repeated follow-up interviews would be of interest. Then, it would be of utmost interest to focus on the factors that were shown to result in persistent concerns e.g. worries about the financial situation, social isolation and fears about decreased health in relation to ageing.

To further examine the HAD regarding sex differences, it might be possible to evaluate concurrent validity, in a clinical context together with a complementary diagnostic interview.

Populärvetenskaplig sammanfattning

Världens befolkning blir allt äldre som ett resultat av att vi äter bättre mat, har tillgång till en förbättrad hälso-och sjukvård samt en ökad förmåga att bota sjukdomar som tidigare var dödliga. Om dessa extra år kan tillbringas i god hälsa så innebär det ett liv med få begränsningar men om dessa år istället domineras av fysisk eller psykisk sjukdom så kommer det att påverka främst individen men även samhället negativt. Det är därför angeläget att till alla äldre kunna erbjuda åtgärder som främjar hälsa och förebygger ohälsa.

Psykisk ohälsa, framför allt depression är för individer mellan 65-80 år en av de mest vanliga orsakerna till försämrad livskvalitet. Depression ökar risken för att drabbas av demens men ökar också risken för t.ex. stroke, diabetes och hjärtinfarkt. Det kan vara svårt att upptäcka tecken på depression hos äldre då symtomen inte visar sig på samma sätt som hos yngre. Äldre kan uppvisa mer kognitiva förändringar t.ex. förändringar i tankeverksamhet, uppmärksamhet och minne men även uppvisa mer fysiska symtom som t.ex. minskad aptit och sömnsvårigheter, än yngre.

Den behandling som oftast används är antidepressiv medicinering vilken medför stor risk för biverkningar som t.ex. dåsighet och yrsel som i sin tur kan leda till ökad risk för fall med påföljande skador. Psykologisk behandling förskrivs sällan trots att det har visat sig ha effekt även för äldre.

Pensioneringen innebär för de flesta en stor förändring i tillvaron. För somliga kan det innebära en övergång till ett lugnt och behagligt liv medan för andra kan förlust av arbetsuppgifter, nätverk, arbetskamrater och försämrad ekonomi leda till minskad självkänsla och i värsta fall livsleda.

Det övergripande syftet med avhandlingen var att fördjupa kunskapen om depressiva symtom hos äldre och även upplevelsen av övergången till att bli pensionär. Slutligen utvärderades en intervention för att förebygga depressiva symtom hos äldre.

Avhandlingen består av fyra artiklar. Delstudiernas syften var följande:

- (I) Att undersöka förekomst och samband mellan depressiva symtom och ensamhet i relation till ålder och kön i ett randomiserat svenskt urval i åldersgruppen 65-80 år samt att undersöka i vilken

utsträckning de som enligt självskattning uppvisade depressiva symtom hade besökt hälso-och sjukvården och/eller använde antidepressiv mediciner.

- (II) Att utvärdera effekten av gruppdiskussioner där strukturerad reminiscens och PBM (Problem Baserad Metod) användes bland äldre, avseende depressiva symtom, livskvalitet och självskattad hälsa.
- (III) Att beskriva individuella upplevelser av året innan och tiden efter pensioneringen.
- (IV) Att utvärdera frågeformuläret HAD (Hospital Anxiety and Depression Scale) avseende om det är lämpligt att använda i åldersgruppen 65-80 år och om det har en förmåga att ge en korrekt bild av eventuella könsskillnader i förekomst av depressiva symtom

En enkät skickades ut till ett slumpmässigt urval av alla individer i Sverige i åldern 65-80 år (I). Enkäten bestod av frågor om bl.a. hälsa, upplevd ensamhet, levnadsvanor, sjukdomar, livskvalitet, depressionssymtom, vårdkontakter och behandlingar. Resultatet visade att svenskar i gruppen 65-80 år generellt har god hälsa men att ca 10 % har depressiva symtom och ca 28% känner sig ensamma. Det visade sig också finnas ett samband mellan depressiva symtom och att känna sig ensam. Detta samband minskade med stigande ålder. Av de som hade depressiva symtom hade cirka hälften träffat en läkare senaste tre månaderna, dock hade bara cirka en fjärdedel behandlats med antidepressiva läkemedel. Dessutom så visade sig att anledningen till att denna grupp inte valde att söka vård fast de egentligen var i behov av det berodde på att de blivit dåligt bemötta vid tidigare besök i hälso-och sjukvården. Väldigt få av de som uppvisade depressiva symtom hade haft kontakt med psykolog eller kurator, vilket tyder på att denna åldersgrupp sällan erbjuds psykologisk behandling. Ett oväntat resultat var att en större andel män uppvisade depressiva symtom jämfört med kvinnor.

För att undersöka om den oväntade könsfördelningen avseende depressiva symtom berodde på den skala (HAD) som användes för att mäta depression och ångest, genomfördes en statistisk utvärdering (IV). Resultatet visade att skalan ger tillförlitliga resultat för aktuell åldersgrupp oavsett kön.

I studie II testades och utvärderades en intervention med avsikt att förebygga depressiva symtom hos dem som är i riskzon för att utveckla depression. Metoden bygger på gruppsamtal där strukturerad reminiscens och en problembaserad metod används. Interventionen genomfördes i ett samhälle i Västernorrland och de som erbjöds att delta var i riskzon för depression enligt poäng på depressionsskalan (HAD-Depression). Det var 18 personer som deltog fördelade på 3 grupper. Grupperna träffades 10 gånger, 2 timmar varje gång. Träffarna följde en manual där session 1-5 hade ett speciellt tema med fokus på positiva minnen förknippade med t.ex. skoltiden, ungdomstiden och

vuxenlivet (reminiscens). Från session 6-9 användes problembaserad metod där deltagarna först tillsammans fick ”brainstorma” om vad ett bra liv som pensionär innebär och vilka hinder och möjligheter som finns för att uppnå detta. Utifrån vad som framkom valdes individuella förändringsmål som skulle utvärderas vid kommande träff. Under session 10 valdes någon pröva på aktivitet/ underhållning samt en gemensam utvärdering av deltagandet. Interventionen utvärderades därefter genom enkät avseende depressiva symtom, självskattad hälsa och livskvalitet direkt efter sista träffen och efter 1 år. Även en skriftlig individuell utvärdering avseende hur det var att delta i gruppsamtalen genomfördes efter interventionen. Enkätresultatet visade en minskning av depressiva symtom, en ökad självskattad hälsa och ökad livskvalitet. Deltagandet i gruppträffarna utvärderades positivt vilket deltagarna beskrev som t.ex. att ha fått nya insikter om sig själv, känna sig engagerad och ha fått ökat självförtroende.

I Studie III tillfrågades de i två samhällen i Västernorrland som hade gått i pension senaste 12 månaderna. Det var 13 som blev intervjuade individuellt och inledande frågor var: Hur upplevde du sista året innan du gick i pension och? Hur har ditt liv blivit som pensionär? Resultatet visade att det året före både fanns förväntningar på pensionärlivet men även oro för hur det skulle komma att bli. Några planerade inför pensioneringen för att förbereda sig men det fanns också en längtan efter ledighet. Oro för hälsan, att förlora inkomst, arbetskamrater och ett socialt sammanhang visade sig men också en sorg över att inte längre vara behövd på arbetet. Efter att ha tillbringat en tid som pensionär så hade en del av förväntningarna infriats såsom att ha tid för familj och till hobby men också att ha hittat sammanhang där man fyllde en uppgift och kände sig behövd och bekräftad. Däremot så kvarstod oro för ekonomin och hälsa men även en känsla av isolering och att vara ”bortkopplad” främst från tidigare arbetskamrater framkom.

Depression hos äldre är idag ett folkhälsoproblem där det finns brister i uppmärksamhet avseende de som är i riskzonen för att drabbas samt brister när det gäller förskrivning av psykologisk behandling som alternativ till läkemedelsbehandling. Över en fjärdedel av alla mellan 65-80 år känner sig ensamma och det finns ett samband mellan ensamhet och depression. Att förebygga depression genom en förhållandevis enkel och kostnadseffektiv metod har i denna avhandling visat sig vara ett möjligt alternativ och skulle samtidigt kunna vara en åtgärd för att minska känslan av ensamhet. Övergången från aktivt arbetsliv till att bli pensionär kan innebära förändringar som på olika sätt påverkar en individs liv och det krävs uppmärksamhet kring detta både inom arbetsorganisationen men även inom hälso-och sjukvården för att kunna stödja ett hälsosamt åldrande.

Tillkännagivanden

Jag är väldigt tacksam för att ha fått möjligheten att gå denna forskarutbildning. Det har varit en rolig och lärorik tid med många intressanta kurser, givande diskussioner, möten med nya människor, och en del resor i samband med konferenspresentationer. Kort sagt så har det varit en mycket berikande tid.

Jag skulle vilja rikta ett tack till alla som på olika sätt har stöttat och funnits vid min sida under dessa år. De kollegor i den doktorandgrupp som jag har fått förmånen att få vara en del av, kommer alltid att ha en speciell plats i mitt hjärta

Ett stort tack vill jag rikta till de som har tagit sig tid att svara på den nationella enkäten men speciellt de som deltagit i två av de andra delstudierna genom att avsätta tid för att svara på enkät frågor, delta i samtalsgrupper och bli intervjuade om hur det är att bli pensionär.

Dessutom är det några som jag vill tacka alldeles speciellt:

Jörg Carlsson, Professor- huvudhandledare och medförfattare, för att du med din gedigna kunskap och forskningserfarenhet varit ett stort stöd under den här tiden. Du har även gjort det möjligt för mig att under sista året få ägna mer tid åt forskningsarbete, vilket jag är mycket tacksam för.

Ulla Peterson, PhD – bihandledare och medförfattare men på många sätt så mycket mer. Tack vare dig så fick jag chansen att delta i HÄLP projektet och starta resan för att så småningom bli doktorand. Du har på alla sätt stöttat, inspirerat och entusiasmerat mig. Du har alltid svarat på mina frågor, haft kloka synpunkter och även utmanat mig när det har känts som arbetet har stannat upp. Tack för alla resor och sällskap i samband med dem. Du är en förebild, en kär vän och en förutsättning för att den här avhandlingen har kommit till.

Kristofer Årestedt, Professor – medförfattare, för ditt engagemang, entusiasm och aldrig sinande energi att klargöra statistisk på ett pedagogiskt och tydligt

sätt. Tack för din inspiration till och ditt engagemang för den fjärde studien. Jag är mycket tacksam för det!

Marie Åsberg, Professor emeritus och *Åke Nygren*, Professor emeritus, Karolinska Institutet, för att ni vågade anställa mig som forskningssköterska i HÅLP projektet. För att jag fick ta del av er klokskap, kunskap, erfarenheter och vetenskapliga resonemang vid trevliga och inspirerande möten på Stressrehab, Danderyds sjukhus.

KPA och *Folksam*, för ekonomiskt stöd till projektet.

Kimmo Sorjonen, statistiker och medförfattare, för insiktsfulla resonemang och hjälp med statistiska analyser i Studie I.

Maud Gustafsson, sjuksköterska och gruppleddare för gruppdiskussionerna i Västernorrland, för din energi och vilja att på ett föredömligt sätt genomföra interventionen som planerat. Tack även för din gästfrihet när jag var i Västernorrland och genomförde intervjuerna för Studie III.

Kristiina Heikkilä, PhD och prefekt, för den tid och energi som du har lagt ned på att granska och kommentera mitt material vilket har lett till nya tankar och idéer som har utvecklat min avhandling.

Lena Lendahls, PhD och god vän, för kloka råd och outhärligt stöd under åren samt hjälp med min poster inför de obligatoriska internationella konferenspresentationerna.

Anders Åkerman, tidigare verksamhetschef vid ortopedkliniken i Kalmar, för att du visade förtroende för min förmåga att genomföra egen forskning. Ditt råd var avgörande. Jag är så tacksam för det!

Sol-Britt Andersson, bibliotekarie, för all hjälp och support med EndNote.

Mina föräldrar, *Jon* och *Inga-Stina*, för att ni alltid har trott på mig och stöttat mig på alla sätt, och min bror, *Tomas med familj*, för ert intresse och stöd under de här åren.

Mina döttrar, *Helena* och *Johanna*, mitt allt, för all entusiasm, inspiration, framtidstro och kärlek. Utan ert stöd och er uppmuntran så hade detta arbete överhuvudtaget inte varit möjligt. Tack även till *Samuel* och *Daniel*, för den glädje och framtidstro ni har bidragit med till vår familj/ for the gladness and belief in the future that you have contributed to our family.

References

- Addis, M. E. (2008). Gender and depression in men. *Clinical Psychology: Science and Practice*, 15(3), 153-168.
- Afa försäkring. (2016). Work-related insurance. Retrieved from https://www.afaforssakring.se/globalassets/sprak/f6285_forsakringar-i-arbetslivet-engelska.pdf
- Afonso, R. M., Bueno, B., Loureiro, M. J., & Pereira, H. (2011). Reminiscence, psychological well-being, and ego integrity in Portuguese elderly people. *Educational Gerontology*, 37(12), 1063-1080.
- American Psychiatric Association. (2013). *American Psychiatric Association Diagnostic and Statistical Manual of Mental Disorders(DSM-V)*. New York: American Psychiatric Association (APA)
- Anxo, D., Månsson, J., & Ivarsson, E. (2014). *Sambandet mellan arbetsmiljö och beslutet att lämna arbetskraften*. (2014:8). Retrieved from Swedish work environment authority: www.av.se/publikationer/rapporter
- Arneson, H., & Ekberg, K. (2005). Evaluation of empowerment processes in a workplace health promotion intervention based on learning in Sweden. *Health promotion international*, 20(4), 351-359.
- Arvidsson, S., Bergman, S., Arvidsson, B., Fridlund, B., & Tingström, P. (2013). Effects of a self-care promoting problem-based learning programme in people with rheumatic diseases: a randomized controlled study. *Journal of Advanced Nursing*, 69(7), 1500-1514. doi:10.1111/jan.12008
- Barnes, H., & Parry, J. (2004). Renegotiating identity and relationships: Men and women's adjustments to retirement. *Ageing and Society*, 24(02), 213-233.
- Bartels, S. J., Dums, A. R., Oxman, T. E., Schneider, L. S., Areán, P. A., Alexopoulos, G. S., & Jeste, D. V. (2004). Evidence-based practices in geriatric mental health care. *FOCUS: The Journal of Lifelong Learning in Psychiatry*, 2(2), 268-281.
- Bech, P., Allergup, P., Gram, L., Reisby, N., Rosenberg, R., Jacobsen, O., & Nagy, A. (1981). The Hamilton depression scale. *Acta Psychiatrica Scandinavica*, 63(3), 290-299.
- Bekhet, A. K., & Zauszniewski, J. A. (2012). Mental health of elders in retirement communities: is loneliness a key factor? *Archives of psychiatric nursing*, 26(3), 214-224.

- Beyer, J. L. (2007). Managing depression in geriatric populations. *Annals of Clinical Psychiatry*, 19(4), 221-238.
- Bilotta, C., Bowling, A., Nicolini, P., Casè, A., Pina, G., Rossi, S., & Vergani, C. (2011). Older Peoples Quality of Life (OPQOL) scores and adverse health outcomes at a one-year follow-up. A prospective cohort study on older outpatients living in the community in Italy. *Health and quality of life outcomes*, 9, 72. doi:10.1186/1477-7525-9-72.
- Bjelland, I., Dahl, A. A., Haug, T. T., & Neckelmann, D. (2002). The validity of the Hospital Anxiety and Depression Scale-An updated literature review. *Journal of Psychosomatic Research*, 52(2), 69-78.
- Blazer, D. (2002). Self-efficacy and depression in late life: a primary prevention proposal. *Aging & mental health*, 6(4), 315-324.
- Blazer, D. (2003). Depression in late life: review and commentary. *J Gerontol A Biol Sci Med Sci*, 58(3), 249-265.
- Bohlmeijer, E. (2007). *Reminiscence and depression in later life*. Vrije Universiteit., Amsterdam.
- Bohlmeijer, E., Kramer, J., Smit, F., Onrust, S., & van Marwijk, H. (2009). The effects of integrative reminiscence on depressive symptomatology and mastery of older adults. *Community Ment Health J*, 45(6), 476-484. doi:10.1007/s10597-009-9246-z
- Borglin, G., Edberg, A.-K., & Rahm Hallberg, I. (2005). The experience of quality of life among older people. *Journal of Aging Studies*, 19(2), 201-220.
- Borrero, L., & Kruger, T. M. (2015). The Nature and Meaning of Identity in Retired Professional Women. *Journal of women & aging*, 27(4), 309-329.
- Boyle, G. (2005). The role of autonomy in explaining mental ill-health and depression among older people in long-term care settings. *Ageing and Society*, 25(05), 731-748.
- Bridges, W. (2004). *Transitions: Making Sense of Life's Changes*. Cambridge, MA.: Da Capo Press.
- Brinkmann, S., & Kvale, S. (2015). *InterViews : learning the craft of qualitative research interviewing* (3 ed.). Los Angeles: Sage Publications, .
- Brown, T. A. (2015). *Confirmatory factor analysis for applied research*. New York: Guilford Publications.
- Bruyneel, S., Marcoen, A., & Soenens, B. (2005). Gerotranscendence: Components and spiritual roots in the second half of life. Retrieved from <https://lirias.kuleuven.be/bitstream/123456789/122696/1/0564.pdf>
- Butcher, H. K., Bulechek, G. M., Dochterman, J. M. M., & Wagner, C. (2013). *Nursing interventions classification (NIC)*. S:t Louis, Missouri: Elsevier Health Sciences.
- Butler, R. N. (1963). The life review: An interpretation of reminiscence in the aged. *Psychiatry*, 26(1), 65-76.
- Butler, R. N. (1974). Successful aging and the role of the life review. *Journal of the American Geriatrics Society*, 22(12), 529-535.
- Börsch-Supan, A. (2005). Introduction. In A. Börsch-Supan, H. Brügiavini, J. Makenbach, J. Siegrist, & J. Weber (Eds.), *Health, ageing and retirement*

- in Europe (pp. 7-27). Mannheim: Mannheim Research Institute for the Economics of Aging.
- Cacioppo, J. T., Hawkley, L. C., & Thisted, R. A. (2010). Perceived social isolation makes me sad: 5-year cross-lagged analyses of loneliness and depressive symptomatology in the Chicago Health, Aging, and Social Relations Study. *Psychology and aging, 25*(2), 453.
- Cacioppo, J. T., Hughes, M. E., Waite, L. J., Hawkley, L. C., & Thisted, R. A. (2006). Loneliness as a specific risk factor for depressive symptoms: cross-sectional and longitudinal analyses. *Psychology and aging, 21*(1), 140-151.
- Caetano, S. C., Silva, C. M., & Vettore, M. V. (2013). Gender differences in the association of perceived social support and social network with self-rated health status among older adults: a population-based study in Brazil. *BMC Geriatrics, 13*(1), 1-14. doi:10.1186/1471-2318-13-122
- Calvo, E., Sarkisian, N., & Tamborini, C. R. (2013). Causal effects of retirement timing on subjective physical and emotional health. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences, 68*(1), 73-84.
- Cappeliez, P., O'Rourke, N., & Chaudhury, H. (2005). Functions of reminiscence and mental health in later life. *Aging & mental health, 9*(4), 295-301.
- Castro-Costa, E., Dewey, M., Stewart, R., Banerjee, S., Huppert, F., Mendonca-Lima, C., . . . Ritchie, K. (2007). Prevalence of depressive symptoms and syndromes in later life in ten European countries The SHARE study. *The British Journal of Psychiatry, 191*(5), 393-401.
- Cattan, M., White, M., Bond, J., & Learmouth, A. (2005). Preventing social isolation and loneliness among older people: a systematic review of health promotion interventions. *Ageing & Society, 25*(1), 41-67.
- Chan, D. (2009). So why ask me? Are self-report data really that bad *Statistical and methodological myths and urban legends: Doctrine, verity and fable in the organizational and social sciences* (pp. 309-336). New York: Routledge.
- Chang-Quan, H., Xue-Mei, Z., Bi-Rong, D., Zhen-Chan, L., Ji-Rong, Y., & Qing-Xiu, L. (2010). Health status and risk for depression among the elderly: a meta-analysis of published literature. *Age and Ageing, 39*(1), 23-30.
- Chao, S.-Y., Liu, H.-Y., Wu, C.-Y., Jin, S.-F., Chu, T.-L., Huang, T.-S., & Clark, M. J. (2006). The effects of group reminiscence therapy on depression, self esteem, and life satisfaction of elderly nursing home residents. *Journal of Nursing Research, 14*(1), 36-45.
- Chen, Y., & Feeley, T. H. (2014). Social support, social strain, loneliness, and well-being among older adults An analysis of the Health and Retirement Study. *Journal of Social and Personal Relationships, 31*(2), 141-161.
- Chick, N., & Meleis, A. I. (1986). Transitions: A nursing concern. In P. Chinn (Ed.), *Nusing research methodology* (pp. 9). Boulder, CO: Aspen Publication.

- Chueh, K. H., & Chang, T. Y. (2014). Effectiveness of group reminiscence therapy for depressive symptoms in male veterans: 6-month follow-up. *International journal of geriatric psychiatry*, 29(4), 377-383.
- Coe, N. B., & Zamarro, G. (2011). Retirement effects on health in Europe. *Journal of health economics*, 30(1), 77-86.
- Copeland, J., Beekman, A., Dewey, M. E., Hooijer, C., Jordan, A., Lawlor, B., . . . Meller, I. (1999). Depression in Europe. Geographical distribution among older people. *The British Journal of Psychiatry*, 174(4), 312-321.
- Cuijpers, P., Beekman, A. T., & Reynolds, C. F. (2012). Preventing depression: a global priority. *JAMA*, 307(10), 1033-1034.
- Cuijpers, P., van Straten, A., & Smit, F. (2006). Psychological treatment of late-life depression: a meta-analysis of randomized controlled trials. *International journal of geriatric psychiatry*, 21(12), 1139-1149.
- Curl, A. L., & Townsend, A. L. (2014). A multilevel dyadic study of the impact of retirement on self-rated health: Does retirement predict worse health in married couples? *Research on aging*, 36(3), 297-321.
- da Silva, J., Gonçalves-Pereira, M., Xavier, M., & Mukaetova-Ladinska, E. B. (2013). Affective disorders and risk of developing dementia: Systematic review. *The British Journal of Psychiatry*, 202(3), 177-186. doi:10.1192/bjp.bp.111.101931
- Danielsson, U., & Johansson, E. E. (2005). Beyond weeping and crying: a gender analysis of expressions of depression. *Scandinavian Journal of Primary Health Care*, 23(3), 171-177.
- Dave, D., Rashad, I., & Spasojevic, J. (2006). *The effects of retirement on physical and mental health outcomes* (Working Paper 12123). Retrieved from <http://www.nber.org/papers/w12123>
- Davey, A., Malmberg, B., & Sundström, G. (2014). Aging in Sweden: Local variation, local control. *The Gerontologist*, 54(4), 525-532.
- Davies, N., Crowe, M., & Whitehead, L. (2016). Establishing routines to cope with the loneliness associated with widowhood: a narrative analysis. *Journal of psychiatric and mental health nursing*, 23(8), 532-539. doi:10.1111/jpm.12339
- De Jong Gierveld, J., & Van Tilburg, T. (1999). Manual of the Loneliness Scale 1999. *Department of Social Research Methodology, Vrije Universiteit Amsterdam, Amsterdam (updated version 18.01. 02)*.
- Desmond, D. M., & MacLachlan, M. (2005). The factor structure of the Hospital Anxiety and Depression Scale in older individuals with acquired amputations: a comparison of four models using confirmatory factor analysis. *International journal of geriatric psychiatry*, 20(4), 344-349.
- Dewey, M. E., & Prince, M. J. (2005). Mental health *Health, ageing and retirement in Europe—First results from the Survey of Health, Ageing and Retirement in Europe*. (pp. 108-117). Mannheim: Mannheim Research Institute for the Economics of Aging.
- Donaldson, T., Earl, J. K., & Muratore, A. M. (2010). Extending the integrated model of retirement adjustment: Incorporating mastery and retirement planning. *Journal of Vocational Behavior*, 77(2), 279-289.

- Drageset, J., Eide, G. E., & Ranhoff, A. H. (2013). Anxiety and depression among nursing home residents without cognitive impairment. *Scandinavian Journal of Caring Sciences*, 27(4), 872-881 doi:10.1111/j.1471-6712.2012.01095.x
- Dykstra, P. A. (2009). Older adult loneliness: myths and realities. *European Journal of Ageing*, 6(2), 91-100.
- Ekberg, K., & Svedin, L. (1998). Patienten själv arbetar aktivt mot uppställda mål. *Läkartidningen*, 95(21), 2473-2478.
- Erickson, H. C., Tomlin, E. M., & Swain, M. A. P. (2009). *Modeling and role modeling: A theory and paradigm for nursing* (9th ed.). Cedar Park: EST Company.
- Erikson, E. (1963). *Childhood and society*. New York: W.W. Norton.
- Erikson, E., & Erikson, J. (1998). *The life cycle completed (extended version)*: WW Norton & Company.
- Fiske, A., Wetherell, J. L., & Gatz, M. (2009). Depression in older adults. *Annual review of clinical psychology*, 5, 363-389.
- Fokkema, T., De Jong Gierveld, J., & Dykstra, P. A. (2012). Cross-national differences in older adult loneliness. *The Journal of psychology*, 146(1-2), 201-228.
- Forsman, A. K., Schierenbeck, I., & Wahlbeck, K. (2011). Psychosocial interventions for the prevention of depression in older adults: Systematic review and meta-analysis. *Journal of aging and health*, 23(3), 387-416.
- Frazer, C. J., Christensen, H., & Griffiths, K. M. (2005). Effectiveness of treatments for depression in older people. *Med J Aust*, 182(12), 627-632.
- Försäkringskassan. (2016). Sickness compensation and activity compensation. Retrieved from <https://www.forsakringskassan.se>
- Gabriel, Z., & Bowling, A. (2005). Quality of life from the perspectives of older people. *Ageing & Society*, 24, 675-691.
- Gale, C. R., Allershand, M., Sayer, A. A., Cooper, C., Dennison, E. M., Starr, J. M., . . . Deary, I. J. (2010). The structure of the Hospital Anxiety and Depression Scale in four cohorts of community-based, healthy older people: the HALCyon program. *International Psychogeriatrics*, 22(04), 559-571.
- Gallo, W. T., Bradley, E. H., Siegel, M., & Kasl, S. V. (2000). Health effects of involuntary job loss among older workers findings from the health and retirement survey. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 55(3), S131-S140.
- Ganna, A., & Ingelsson, E. (2015). Articles: 5 year mortality predictors in 498 103 UK Biobank participants: a prospective population-based study. *The Lancet*, 386, 533-540. doi:10.1016/S0140-6736(15)60175-1
- Glaesmer, H., Riedel-Heller, S., Braehler, E., Spangenberg, L., & Lupp, M. (2011). Age-and gender-specific prevalence and risk factors for depressive symptoms in the elderly: a population-based study. *International Psychogeriatrics*, 23(08), 1294-1300.
- Golan, N. (1981). *Passing through transitions*. New York: Free Press.

- Gottfries, G., Noltorp, S., & Noergaard, N. (1997). Experience with a Swedish version of the Geriatric Depression Scale in primary care centres. *International journal of geriatric psychiatry*, 12(10), 1029-1034.
- Graneheim, U. H., & Lundman, B. (2004). Qualitative content analysis in nursing research: concepts, procedures and measures to achieve trustworthiness. *Nurse education today*, 24(2), 105-112.
- Gregg, J. J., Fiske, A., & Gatz, M. (2013). Physicians' detection of late-life depression: The roles of dysphoria and cognitive impairment. *Aging & mental health*, 17(8), 1030-1036.
- Haight, B. K., & Burnside, I. (1993). Reminiscence and life review: Explaining the differences. *Archives of psychiatric nursing*, 7(2), 91-98.
- Han, B. (2002). Depressive Symptoms and Self-Rated Health in Community-Dwelling Older Adults: A Longitudinal Study. *Journal of the American Geriatrics Society*, 50(9), 1549-1556.
- Heller Sahlgren, G. (2012). Work 'til you drop: short-and longer-term health effects of retirement in Europe. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2153191
- Hellström, Y., Persson, G., & Hallberg, I. R. (2004). Quality of life and symptoms among older people living at home. *Journal of Advanced Nursing*, 48(6), 584-593. doi:10.1111/j.1365-2648.2004.03247.x
- Helvik, A. S., Engedal, K., Skancke, R. H., & Selbæk, G. (2011). A psychometric evaluation of the Hospital Anxiety and Depression Scale for the medically hospitalized elderly. *Nordic journal of psychiatry*, 65(5), 338-344.
- Henriksson, S., Asplund, R., Boëthius, G., Hällström, T., & Isacson, G. (2006). Infrequent use of antidepressants in depressed individuals (an interview and prescription database study in a defined Swedish population 2001–2002). *European psychiatry*, 21(6), 355-360.
- Hershey, D. A., Henkens, K., & van Dalen, H. P. (2010). What drives retirement income worries in Europe? A multilevel analysis. *European Journal of Ageing*, 7(4), 301-311.
- Holt-Lunstad, J., Smith, T. B., Baker, M., Harris, T., & Stephenson, D. (2015). Loneliness and social isolation as risk factors for mortality a meta-analytic review. *Perspectives on Psychological Science*, 10(2), 227-237.
- Hybels, C. F., Landerman, L. R., & Blazer, D. G. (2012). Age differences in symptom expression in patients with major depression. *International journal of geriatric psychiatry*, 27(6), 601-611.
- Jane-Llopis, E., Hosman, C., Jenkins, R., & Anderson, P. (2003). Predictors of efficacy in depression prevention programmes Meta-analysis. *The British Journal of Psychiatry*, 183(5), 384-397.
- Jang, Y., Chiriboga, D. A., Kim, G., & Cho, S. (2009). Changes in Perceived Health and Depressive Symptoms: A Longitudinal Analysis with Older Korean Americans. *Journal of Immigrant and Minority Health*, 11(1), 7-12.
- Jewell, A. J. (2014). Tornstam's notion of gerotranscendence: Re-examining and questioning the theory. *Journal of Aging Studies*, 30, 112-120.

- Johnston, M., Pollard, B., & Hennessey, P. (2000). Construct validation of the hospital anxiety and depression scale with clinical populations. *Journal of Psychosomatic Research*, 48(6), 579-584.
- Jongenelis, K., Pot, A. M., Eisses, A. M. H., Beekman, A. T. F., Kluiters, H., & Ribbe, M. W. (2004). Prevalence and risk indicators of depression in elderly nursing home patients: the AGED study. *Journal of affective disorders*, 83(2-3), 135-142.
doi:<http://dx.doi.org/10.1016/j.jad.2004.06.001>
- Jonsson, H. (2011). The first steps into the third age: the retirement process from a Swedish perspective. *Occupational therapy international*, 18(1), 32-38.
- Jylhä, M. (2004). Old age and loneliness: cross-sectional and longitudinal analyses in the Tampere Longitudinal Study on Aging. *Canadian Journal on Aging*, 23(2), 157-168.
- Jylhä, M. (2009). What is self-rated health and why does it predict mortality? Towards a unified conceptual model. *Social science & medicine*, 69, 307-316.
- Khan, H. T. A., & Raeside, R. (2014). Between country variations in self-rated-health and associations with the quality of life of older people: Evidence from the Global Ageing Survey. *Applied Research in Quality of Life*, 9(4), 923-949. doi:10.1007/s11482-013-9278-y
- Kim, J. E., & Moen, P. (2001). Is retirement good or bad for subjective well-being? *Current Directions in Psychological Science*, 10(3), 83-86.
- Kim, J. E., & Moen, P. (2002). Retirement transitions, gender, and psychological well-being a life-course, ecological model. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 57(3), P212-P222.
- Koren, C. (2011). Continuity and discontinuity: The case of second couplehood in old age. *The Gerontologist*, 51(5), 687-698.
- Kralik, D., Visentin, K., & Van Loon, A. (2006). Transition: a literature review. *Journal of advanced nursing*, 55(3), 320-329.
- Krippendorff, K. (2012). *Content analysis: An introduction to its methodology*. Thousand Oaks, California: Sage.
- Kunz, J. A. (2002). Integrating reminiscence and life review techniques with brief cognitive behavioral therapy. In J. D. Webster & B. K. Haight (Eds.), *Critical advances in reminiscence work* (pp. 275-288). New York: Springer publishing company.
- Lam, C. L., Pan, P.-C., Chan, A. W., Chan, S.-Y., & Munro, C. (1995). Can the Hospital Anxiety and Depression (HAD) Scale be used on Chinese elderly in general practice? *Family Practice*, 12(2), 149-154.
- Langvik, E., Hjemdal, O., & Nordahl, H. M. (2016). Personality traits, gender differences and symptoms of anhedonia: What does the Hospital Anxiety and Depression Scale (HADS) measure in nonclinical settings? *Scandinavian journal of psychology*, 57(2), 144-151.
doi:10.1111/sjop.12272
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Newbury Park, California: Sage.

- Lindwall, M., Rennemark, M., Halling, A., Berglund, J., & Hassmén, P. (2007). Depression and exercise in elderly men and women: findings from the Swedish national study on aging and care. *Journal of aging and physical activity*, 15(1), 41-45.
- Lloyd-Williams, M., Friedman, T., & Rudd, N. (2001). Original article: An Analysis of the Validity of the Hospital Anxiety and Depression Scale as a Screening Tool in Patients with Advanced Metastatic Cancer. *Journal of Pain and Symptom Management*, 22(6), 990-996. doi:10.1016/S0885-3924(01)00358-X
- Lotfi, L., Flyckt, L., Krakau, I., Mårtensson, B., & Nilsson, G. H. (2010). Undetected depression in primary healthcare: Occurrence, severity and co-morbidity in a two-stage procedure of opportunistic screening. *Nordic journal of psychiatry*, 64(6), 421-427.
- Lunaigh, C. Ó., & Lawlor, B. A. (2008). Loneliness and the health of older people. *International journal of geriatric psychiatry*, 23(12), 1213-1221.
- Luo, Y., Hawkey, L. C., Waite, L. J., & Cacioppo, J. T. (2012). Loneliness, health, and mortality in old age: A national longitudinal study. *Social science & medicine*, 74(6), 907-914.
- Luppa, M., Luck, T., König, H.-H., Angermeyer, M. C., & Riedel-Heller, S. G. (2012). Natural course of depressive symptoms in late life. An 8-year population-based prospective study. *Journal of affective disorders*, 142(1), 166-171.
- Malmberg, B., & Ågren, M. (2013). Socialt åldrande. In M. Bravell Ernsth (Ed.), *Äldre och åldrande* (pp. 161-186). Malmö: Gleerups Utbildning AB.
- Martin, L. A., Neighbors, H. W., & Griffith, D. M. (2013). The experience of symptoms of depression in men vs women: analysis of the National Comorbidity Survey Replication. *JAMA psychiatry*, 70(10), 1100-1106.
- Matour, S., & Prout, M. F. (2007). Psychological Implications of Retirement in the 21st Century. *Journal of Financial Service Professionals*, 61(1), 57-63.
- Maudsley, G. (1999). Do we all mean the same thing by" problem-based learning"? A review of the concepts and a formulation of the ground rules. *Academic Medicine*, 74(2), 178-185.
- May, M., Lawlor, D. A., Brindle, P., Patel, R., & Ebrahim, S. (2006). Cardiovascular disease risk assessment in older women: can we improve on Framingham? British Women's Heart and Health prospective cohort study. *Heart*, 92(10), 1396-1401.
- Medin, J., Bendtsen, P., & Ekberg, K. (2003). Health promotion and rehabilitation: a case study. *Disability & Rehabilitation*, 25(16), 908-915.
- Meleis, A. I. (1975). Role insufficiency and role supplementation: a conceptual framework. *Nursing research*, 24(4), 264-271.
- Meleis, A. I. (2010). *Transitions theory*. New York: Springer Publishing Company.
- Meleis, A. I., Sawyer, L. M., Im, E., Messias, D. K. H., & Schumacher, K. (2000). Experiencing transitions: an emerging middle-range theory. *Advances in Nursing Science*, 23(1), 12-28.

- Meléndez-Moral, J. C., Charco-Ruiz, L., Mayordomo-Rodríguez, T., & Sales-Galán, A. (2013). Effects of a reminiscence program among institutionalized elderly adults. *Psicothema*, 25(3), 319-323.
- Meléndez Moral, J. C., Fortuna Terrero, F. B., Sales Galán, A., & Mayordomo Rodríguez, T. (2015). Effect of integrative reminiscence therapy on depression, well-being, integrity, self-esteem, and life satisfaction in older adults. *The Journal of Positive Psychology*, 10(3), 240-247.
- Modén, B., Merlo, J., Ohlsson, H., & Rosvall, M. (2010). Psychotropic drugs and falling accidents among the elderly: a nested case control study in the whole population of Scania, Sweden. *Journal of Epidemiology and Community Health*, 64(5), 440-446. doi:10.1136/jech.2009.098947
- Molzahn, A., Skevington, S. M., Kalfoss, M., & Makaroff, K. S. (2010). The importance of facets of quality of life to older adults: an international investigation. *Quality of Life Research*, 19(2), 293-298.
- Montgomery, S. A., & Asberg, M. (1979). A new depression scale designed to be sensitive to change. *The British Journal of Psychiatry*, 134(4), 382-389.
- Murray, J., Banerjee, S., Byng, R., Tylee, A., Bhugra, D., & Macdonald, A. (2006). Primary care professionals' perceptions of depression in older people: a qualitative study. *Social science & medicine*, 63(5), 1363-1373.
- National Board of Health and Welfare. (2009). *Psychological treatment of mental disorders among the elderly. A knowledge compilation*. Retrieved from www.socialstyrelsen.se
- National Board of Health and Welfare. (2013). *Mental illness among the elderly and treatment in health care* (2013-6-22). Retrieved from <http://www.socialstyrelsen.se/publikationer2013/2013-6-22>
- National Board of Health and Welfare. (2014). *Nationell utvärdering-vård och omsorg vid demenssjukdom 2014: indikatorer och underlag för bedömningar*. Retrieved from: <http://www.socialstyrelsen.se/Lists/Artikelkatalog/Attachments/19322/2014-2-1.pdf>
- National Board of Health and Welfare Sweden. (2013). *Increased support for elderly with psychiatric ill health*. Retrieved from www.socialstyrelsen.se
- Naumann, V., & Byrne, G. (2004). WHOQOL-BREF as a measure of quality of life in older patients with depression. *International Psychogeriatrics*, 16(2), 159-173.
- Nilsson, K., Hydbom, A. R., & Rylander, L. (2011). Factors influencing the decision to extend working life or retire. *Scandinavian Journal of Work, Environment & Health*, 37(6), 473-480.
- Nortvedt, M. W., Riise, T., & Sanne, B. (2006). Are men more depressed than women in Norway? Validity of the Hospital Anxiety and Depression Scale. *Journal of Psychosomatic Research*, 60(2), 195-198.
- Parker, G., & Brochie, H. (2010). Gender differences in depression. *International Review of Psychiatry*, 22(5), 429-436.
- Parker, R. (1995). Reminiscence: A continuity theory framework. *The Gerontologist*, 35(4), 515-525.

- Perlman, D., & Peplau, L. A. (1981). Toward a social psychology of loneliness. In S. Duck & R. Gilmor (Eds.), *Personal relationships in disorder* (pp. 31-56). London: Academic Press.
- Peterson, U., Bergström, G., Samuelsson, M., Åsberg, M., & Nygren, A. (2008). Reflecting peer-support groups in the prevention of stress and burnout: randomized controlled trial. *J Adv Nurs*, 63(5), 506-516. doi:10.1111/j.1365-2648.2008.04743.x
- Pinquart, M., Duberstein, P., & Lyness, J. (2007). Effects of psychotherapy and other behavioral interventions on clinically depressed older adults: a meta-analysis. *Aging & mental health*, 11(6), 645-657.
- Pinquart, M., & Sörensen, S. (2001). Gender differences in self-concept and psychological well-being in old age a meta-analysis. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 56(4), 195-P213.
- Polit, D. F., & Beck, C. T. (2016). *Nursing research: Generating and assessing evidence for nursing practice* (10th ed.). Philadelphia: Lippincott Williams & Wilkins.
- Pot, A. M., Bohlmeijer, E. T., Onrust, S., Melenhorst, A. S., Veerbeek, M., & De Vries, W. (2010). The impact of life review on depression in older adults: a randomized controlled trial. *International Psychogeriatrics*, 22(4), 572-581. doi:10.1017/S104161020999175X
- Power, M., Quinn, K., & Schmidt, S. (2005). Development of the WHOQOL-old module. *Quality of Life Research*, 14(10), 2197-2214.
- Preschl, B., Maercker, A., Wagner, B., Forstmeier, S., Baños, R. M., Alcañiz, M., . . . Botella, C. (2012). Life-review therapy with computer supplements for depression in the elderly: A randomized controlled trial. *Aging & mental health*, 16(8), 964-974.
- Price, C. A. (2000). Women and retirement: Relinquishing Professional Identity. *Journal of Aging Studies*, 14(1), 81-101.
- Ringsberg, K., Lepp, M., & Finnström, B. (2002). Experiences by patients with asthma-like symptoms of a problem-based learning health education programme. *Family Practice*, 19(3), 290-293.
- Roberts, M. H., Fletcher, R. B., & Merrick, P. L. (2014). The validity and clinical utility of the Hospital Anxiety and Depression Scale (HADS) with older adult New Zealanders. *International Psychogeriatrics*, 26(02), 325-333.
- Robinson, O. C., & Stell, A. J. (2014). Later-life crisis: Towards a holistic model. *Journal of Adult Development*, 22(1), 38-49.
- Roman, M. W., & Callen, B. L. (2008). Screening instruments for older adult depressive disorders: updating the evidence-based toolbox. *Issues in Mental Health Nursing*, 29(9), 924-941.
- Rutz, W., von Knorring, L., Pihlgren, H., Rihmer, Z., & Wålinder, J. (1995). Prevention of male suicides: lessons from Gotland study. *Lancet*, 345(8948), 524-524.
- Sarkisian, C. A., Lee-Henderson, M. H., & Mangione, C. M. (2003). Do depressed older adults who attribute depression to "old age" believe it is important to seek care? *Journal of General Internal Medicine*, 18(12), 1001-1005.

- Schumacher, K. L., Jones, P. S., & Meleis, A. I. (1999). Helping elderly persons in transition: a framework for research and practice. In E. A. Swanson & T. Tripp-Reimer (Eds.), *Life transitions in the older adult: Issues for nurses and other health professionals* (pp. 1-26). New York: Springer.
- Schumacher, K. L., & Meleis, A. I. (1994). Transitions: a central concept in nursing. *Image: The Journal of Nursing Scholarship*, 26(2), 119-127.
- Scogin, F., Welsh, D., Hanson, A., Stump, J., & Coates, A. (2005). Evidence-Based Psychotherapies for Depression in Older Adults. *Clinical Psychology: Science and Practice*, 12(3), 222-237.
- Serrano, J. P., Latorre, J. M., Gatz, M., & Montanes, J. (2004). Life review therapy using autobiographical retrieval practice for older adults with depressive symptomatology. *Psychology and aging*, 19(2), 272.
- Sharif, F., Mansouri, A., Jahanbin, I., & Zare, N. (2010). Effect of group reminiscence therapy on depression in older adults attending a day centre in Shiraz, southern Islamic Republic of Iran. *Eastern Mediterranean Health Journal*, 16(7), 765-770.
- Silén, C. (2000). Problembaserat lärande - pedagogisk idé och metod. Linköping university, Linköping, Sweden.
- Sjösten, N., & Kivelä, S. L. (2006). The effects of physical exercise on depressive symptoms among the aged: a systematic review. *International journal of geriatric psychiatry*, 21(5), 410-418.
- Skärsäter, I., & Willman, A. (2006). The recovery process in major depression: an analysis employing Meleis' transition framework for deeper understanding as a foundation for nursing interventions. *Advances in Nursing Science*, 29(3), 245-259.
- Sonnenberg, C. M., Beekman, A. T., Deeg, D. J., & van Tilburg, W. (2000). Sex differences in late-life depression. *Acta Psychiatrica Scandinavica*, 101(4), 286-292.
- Springer, J. F., & Phillips, J. (2007). The institute of Medicine framework and its implication for the advancement of prevention policy, programs and practice. Retrieved from: ca-sdfsc.org/docs/resources/SDFSC_IOM_Policy.pdf
- Statistics Sweden. (2012). *The future population of Sweden 2012-2060*. Retrieved from <http://www.scb.se/sv/Hitta-statistik/Publiceringskalender/Visa-detaljrad-information/?publobjid=18618+>
- Steunenberg, B., Beekman, A. T., Deeg, D. J., & Kerkhof, A. J. (2006). Personality and the onset of depression in late life. *Journal of affective disorders*, 92(2), 243-251.
- Stinson, C. (2009). Structured group reminiscence: An intervention for older adults. *The Journal of Continuing Education in Nursing*, 40(11), 521-528. doi:10.3928/00220124-20091023-10
- Stordal, E., Bjartveit Kruger, M., Dahl, N. H., Kruger, O., Mykletun, A., & Dahl, A. A. (2001). Depression in relation to age and gender in the general population: the Nord-Trøndelag Health Study (HUNT). *Acta Psychiatrica Scand*, 104(3), 210-216.

- Sullivan, M., Karlsson, J., & Ware, J. (1994). SF-36 Hälsoenkät: svensk manual och tolkningsguide.
- Sundström, G., Fransson, E., Malmberg, B., & Davey, A. (2009). Loneliness among older Europeans. *European Journal of Ageing*, 6(4), 267-275.
- Swedish Association of Local Authorities and Regions. (2015). National Patient Survey. Retrieved from <https://patientenkat.se/sv/resultat/>
- Swedish Council on Technology Assessment in Health Care. (2012). *Diagnostik och uppföljning av förstämningssyndrom* (212). Retrieved from <http://www.sbu.se/sv/publikationer/SBU-utvarderar/diagnostik-och-uppfoljning-av-forstamningssyndrom/>
- Swedish Council on Technology Assessment in Health Care. (2015). *Treatment of late-life depression. A systematic review*. (233). Retrieved from [http://www.sbu.se/upload/Publikationer/Content0/1/Depression aldre 20 15.pdf](http://www.sbu.se/upload/Publikationer/Content0/1/Depression%20aldre%2015.pdf)
- Swedish Pension Agency. (2016). Guarantee pension. Retrieved from <https://www.pensionsmyndigheten.se/forsta-din-pension/sa-fungerar-pensionen/garantipension-om-du-har-lag-pension>
- Swedish Pensions Agency. (2014). Medelpensioneringsålder och utträdesålder 2013. Retrieved from: <http://secure.pensionsmyndigheten.se/MedelpensionsalderOchUttradesalder.html>
- Taylor, M. A., Goldberg, C., Shore, L. M., & Lipka, P. (2008). The effects of retirement expectations and social support on post-retirement adjustment: A longitudinal analysis. *Journal of Managerial Psychology*, 23(4), 458-470. doi:10.1108/02683940810869051
- Tennant, A., McKenna, S. P., & Hagell, P. (2004). Application of Rasch Analysis in the Development and Application of Quality of Life Instruments. *Value in Health*, 7(S 1), S22-S26. doi:10.1111/j.1524-4733.2004.7s106.x
- Terluin, B., Brouwers, E., van Marwijk, H., Verhaak, P., & van der Horst, H. (2009). Detecting depressive and anxiety disorders in distressed patients in primary care; comparative diagnostic accuracy of the Four-Dimensional Symptom Questionnaire (4DSQ) and the Hospital Anxiety and Depression Scale (HADS). *BMC Family Practice*, 10, 58-69.
- Theeke, L. A. (2009). Predictors of loneliness in U.S. adults over age sixty-five. *Archives of psychiatric nursing*, 23(5), 387-396. doi:10.1016/j.apnu.2008.11.002
- Tornstam, L. (2003). Gerotranscendence from young old age to old old age. Retrieved from <http://proxy.lnu.se/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=edsswe&AN=edsswe.oai.DiVA.org.uu.68648&lang=sv&sit e=eds-live&scope=site>
- Van Gennep, A. (1960). *The rites of passage*. Chicago: University of Chicago Press.
- van Solinge, H., & Henkens, K. (2008). Adjustment to and satisfaction with retirement: Two of a kind? *Psychology and aging*, 23(2), 422-434. doi:10.1037/0882-7974.23.2.422

- Wang, M. (2007). Profiling retirees in the retirement transition and adjustment process: examining the longitudinal change patterns of retirees' psychological well-being. *Journal of Applied Psychology*, 92(2), 455.
- Watson, D., & Clark, L. A. (1984). Negative affectivity: the disposition to experience aversive emotional states. *Psychological bulletin*, 96(3), 465-490.
- Watt, L. M., & Cappeliez, P. (2000). Integrative and instrumental reminiscence therapies for depression in older adults: Intervention strategies and treatment effectiveness. *Aging & mental health*, 4(2), 166-177. doi:10.1080/13607860050008691
- Verropoulou, G. (2012). Determinants of change in self-rated health among older adults in Europe: a longitudinal perspective based on SHARE data. *European Journal of Ageing*, 9(4), 305-318.
- Westerlund, H., Vahtera, J., Ferrie, J. E., Singh-Manoux, A., Pentti, J., Melchior, M., . . . Kivimäki, M. (2010). Effect of retirement on major chronic conditions and fatigue: French GAZEL occupational cohort study. *British Medical Journal*, 341, c6149.
- WHO. (1998). *Health Promotion Glossary*. Retrieved from <http://www.who.int/healthpromotion/about/HPR%20Glossary%201998.pdf?ua=1>
- WHO. (2014). *Preventing suicide: A global imperative*. Retrieved from http://www.who.int/mental_health/suicideprevention/world_report_2014/en/
- WHO. (2015). *World report on ageing and health*. Retrieved from <http://www.who.int/ageing/publications/world-report-2015/en/>
- WHOQOL Group. (1997). *Measuring quality of life: the development of the World Health Organization Quality of Life instrument (WHOQOL)*. Geneva: WHO.
- Victor, C. R. (2005). *The social context of ageing : [a textbook of gerontology]*. New York: Routledge.
- Victor, C. R., & Yang, K. (2012). The prevalence of loneliness among adults: a case study of the United Kingdom. *The Journal of Psychology*, 146(1-2), 85-104.
- Wilson, R. S., Krueger, K. R., Arnold, S. E., Schneider, J. A., Kelly, J. F., Barnes, L. L., . . . Bennett, D. A. (2007). Loneliness and risk of Alzheimer disease. *Archives of general psychiatry*, 64(2), 234-240.
- Wong, J. Y., & Earl, J. K. (2009). Towards an integrated model of individual, psychosocial, and organizational predictors of retirement adjustment. *Journal of Vocational Behavior*, 75(1), 1-13.
- Wu, L. F. (2011). Group integrative reminiscence therapy on self-esteem, life satisfaction and depressive symptoms in institutionalised older veterans. *Journal of clinical nursing*, 20(15-16), 2195-2203.
- Ylli, A., Miszkurka, M., Phillips, S. P., Guralnik, J., Deshpande, N., & Zunzunegui, M. V. (2016). Clinically relevant depression in old age: An international study with populations from Canada, Latin America and Eastern Europe. *Psychiatry research*, 241, 236-241.

- Zebhauser, A., Hofmann-Xu, L., Baumert, J., Häfner, S., Lacruz, M., Emeny, R., . . . Peters, A. (2014). How much does it hurt to be lonely? Mental and physical differences between older men and women in the KORA-Age Study. *International journal of geriatric psychiatry*, 29(3), 245-252.
- Zigmond, A. S., & Snaith, R. P. (1983). The Hospital Anxiety and Depression scale. *Acta Psychiatrica Scandinavica*, 67(6), 361-370.
- Zumbo, B. D. (1999). *A handbook on the theory and methods of differential item functioning (DIF)*. Ottawa: Directorate of Human Resources Research and Evaluation, Department of national Defense.
- Zunzunegui, M.-V., Alvarado, B.-E., Béland, F., & Vissandjee, B. (2009). Explaining health differences between men and women in later life: A cross-city comparison in Latin America and the Caribbean. *Social science & medicine*, 68(2), 235-242.
- Åsberg, M., & Mårtensson, B. (2009). Förstämningssyndrom. In J. Herlofson, L. Ekselius, L.-G. Lundh, A. Lundin, B. Mårtensson, & M. Åsberg (Eds.), *Psykiatri* (pp. 305-333). Lund: Studentlitteratur.