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**How are socioeconomic aspects related to retirement
expectations?**

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Previous research has shown that retirement expectations may influence retirement-related behaviour, while socioeconomic aspects may influence retirement expectations. Existing literature has investigated several covariates of retirement expectations, yet socioeconomic aspects have received scarce attention. This thesis aims to quantitatively investigate how socioeconomic aspects relate to retirement expectations in a Swedish sample. Results indicate that positive retirement expectations correlate with earlier anticipated retirement age irrespective of educational level. Moreover, results from binary logistic regressions indicate that high socioeconomic measures influence retirement expectations concerning sufficiency of personal economy positively, and retirement expectations concerning overall satisfaction and occupational identity negatively. Results are discussed in relation to previous research, the Swedish retirement context and the theoretical perspectives role theory and the cumulative (dis)advantage hypothesis.

In this study, I sought to quantitatively investigate how socioeconomic aspects relate to older Swedish workers' expectations concerning retirement. To date, previous research has yet to investigate this relationship in a Swedish population. I wrote the present study within the context of the research group Adult Development and Aging (ADA-Gero Group) and their longitudinal cohort study HHealth, Aging and Retirement Transitions in Sweden (HEARTS), from which data was extracted.

According to research on aging from a life-course perspective, retirement constitutes an important life-event (Hofäcker, Hess, & König, 2016). This perspective suggests that life-events and experiences of life transitions are dependent on the contexts in which they occur (Wang & Shultz, 2010). From this viewpoint, it is conceivable that individual conditions influence how retirees experience the retirement transition. Furthermore, as retirement requires adjustment to a new phase of life (Hofäcker et al., 2016), individual resources, for example financial assets, may become significant (Wang, Henkens, & van Solinge, 2011). Theoretical, as well as empirical work, implies that resourceful individuals are advantaged in adjusting to retired life because they are better at accommodating their own various needs (Pinquart & Schindler, 2007; Wang & Shultz, 2010). Beyond individual resources, there has been a recent interest in how psychological factors, such as attitudes towards retirement, influence how prospective retirees approach retirement (Shultz & Wang, 2011). The central thesis of this study is that the relationship between these individual and psychological mechanisms require further and in-depth research. This study therefore set out to explore the relationship between socioeconomic aspects and psychological factors in approaching retired life.

The Swedish pension system and retirement expectations

Socioeconomic aspects in relation to retirement expectations have to be considered in the light of institutional context. While the experience of retirement is highly individual, it is particularly noteworthy in the context of this thesis that retirement

exists within a societal context with specific characteristics. In this thesis, I used data from a Swedish population, which required investigation of certain properties of the Swedish pension system. For further reading, I recommend the Swedish Pensions Agency's website (Pensionsmyndigheten, 2018b), or König and Sjögren Lindquist (2016).

In recent decades, the Swedish pension system has undergone policy reforms which, in some respects, have especially impacted individuals with lower socioeconomic measures (König & Sjögren Lindquist, 2016). Post reforms, the state pension (*allmän pension*) has decreased, which has made the relevance of the occupational pension (*tjänstepension*) greater. As the occupational pension varies with occupational level, occupational pensions may offer early retirement opportunities for high earners, while they are assumed to be insufficient for low earners (König & Sjögren Lindquist, 2016). Consequently, low earners may need to stay in the labour market longer to receive a reasonable pension (Halleröd, 2015), possibly until the age of 65 in order to be eligible for minimum old age pension (*garantipension*) (König & Sjögren Lindquist, 2016; Pensionsmyndigheten, 2018a). Furthermore, possibilities for a disability pension or early retirement among lower-educated workers have been restricted in recent decades, which may render it necessary for them to remain in the labour market longer (König & Sjögren Lindquist, 2016). Meanwhile, socioeconomic aspects have been linked to retirement timing, where blue-collar-workers leave the labour market earlier due to health issues (Halleröd, 2015), which constitutes a powerful push factor in exiting the labour market (De Preter, Van Looy, & Mortelmans, 2013; Radl, 2013).

Thus, due to properties of the reformed Swedish pension system, socioeconomic aspects may influence conditions for and experiences of retirement in Sweden. It is probable that this, in turn, may also influence the formation of retirement expectations, since research has shown that available resources, such as socioeconomic conditions, affect the formation of expectations prior to retirement (Siguaw, Sheng, & Simpson, 2017; Wang & Shultz, 2010). Following this logic, the retirement expectations of older workers in Sweden are likely influenced by socioeconomic aspects.

Theoretical perspectives on socioeconomic differences in retirement

Beyond institutional context, several theories describe how socioeconomic aspects relate to different outcome measures in retirement, such as for example well-being. In summary, these different perspectives are contradictory. While role theory indicates that the well-being of individuals with higher socioeconomic status is negatively influenced by the retirement transition, the cumulative advantage/disadvantage hypothesis indicates that the well-being of individuals with higher socioeconomic status is positively influenced by the retirement transition (König, Lindwall, Henning, & Johansson, 2018). Theoretical perspectives are outlined and described below in relation to the present study.

Role theory. Role theory provides a useful account of how individuals approach retirement (George, 1993), and postulates that retirement constitutes an important role transition where one's former work role is lost, a loss which may be accompanied by different affective reactions (Wang et al., 2011). For example, role theorists have contended that role loss may impair well-being in retirement (George & Maddox, 1977), since work-related roles may be important for identity and self-image, especially if involvement in other roles is low (Feldman, 1994). Similarly, well-being in retirement may be impaired if the work role provided a sense of safety when other roles amounted to stress and pressure, as suggested by Kim and Moen (2002). By contrast, the loss of a work-related role may be pleasurable if that role caused significant stress or constituted a

burden in the eyes of the individual (Kim & Moen, 2002; Wang et al., 2011). Also, retirement may provide an opportunity for engaging in other roles, for instance the role of being a family member (Wang et al., 2011).

Empirical studies, albeit few, have supported the notion that retirement is particularly challenging for workers who identify strongly with their work role (George & Maddox, 1977; Silver, Pang, & Williams, 2015), since these individuals fear losing a sense of meaningfulness inherent in their jobs and opportunities for contributing with knowledge and skills. In line with this, it is plausible that the initial relief following the loss of a burdensome work role may be short-lived, as suggested by Atchley (1976), who characterised it as a potential “honeymoon-phase”.

As previously mentioned, role theory generally implies that the retirement transition might be more problematic for those with higher socioeconomic measures (König et al., 2018), as individuals with higher education often have more mentally stimulating jobs (Hofäcker et al., 2016), which in turn may lead to greater occupational identification. In other words, from a role theory point of view, individuals with higher socioeconomic status may have more to lose through the retirement process than individuals with lower socioeconomic levels.

The cumulative advantage/disadvantage hypothesis. Socioeconomic differences in various health aspects have been found to be persistent across the life-span (Halleröd, 2015; Kok, Aartsen, Deeg, & Huisman, 2016; Schöllgen, Huxhold, & Tesch-Römer, 2010; Wetzel, Huxhold, & Tesch-Römer, 2016). It remains unclear, however, if these differences increase or decrease with age (Schöllgen et al., 2010; Schuring, Robroek, Lingsma, & Burdorf, 2015; Wetzel et al., 2016). There are three opposing theoretical models or trajectories described in the literature for explaining these social inequalities in different aspects of health and well-being over the lifespan which have received empirical support (Leopold & Engelhardt, 2012; Schöllgen et al., 2010). The three trajectories are the cumulative advantage/disadvantage hypothesis, the age-as-leveller hypothesis and the status maintenance hypothesis, sometimes referred to as continuity theory (Leopold & Engelhardt, 2012; Schöllgen et al., 2010). The cumulative advantage/disadvantage hypothesis posits that socioeconomic differences in health accumulate over the life-span as an effect of a socially stratified division of resources, and differences in conditions of life between social groups (Schöllgen et al., 2010). In other words, it is suggested that having high socioeconomic measures allows further attainment of relative gains over the life-span (DiPrete & Eirich, 2006). Contrary, the age-as-leveller hypothesis suggests that the correlation between socioeconomic status and health decreases in strength over the life-span, whereas the status maintenance hypothesis or continuity theory is characterised by a belief that socioeconomic status generates consistent differences in health and well-being throughout the life-span (Schöllgen et al., 2010).

Although scarce, empirical findings from testing of these theoretical models in Sweden support the notion of cumulative (dis)advantage. For instance, Leopold (2016) found that self-rated health in Sweden differed as an effect of socioeconomic aspects, and these differences accumulated over time. Furthermore, König and colleagues (2018), using the HEARTS sample (which also constitutes the material for the present study), compared workers and retirees on ratings of life satisfaction and found that retirement had a cumulative effect on differences in life satisfaction across educational groups over time (König et al., 2018).

Following role theory and the cumulative (dis)advantage hypothesis, it is conceivable that socioeconomic aspects influence the experience of the retirement transition, and consequently retirement expectations, in complex ways. As previously

stated, the present study attempted to gain clarity about this relationship. In line with this purpose, I reviewed the existing body of research on the topic.

Expected retirement age and retirement expectations

When searching for literature related to retirement expectations, I discovered that many available studies have examined retirement expectations in relation to retirement timing, often with the purpose of investigating potential influences on the decision of delaying retirement (Andersson & Jonsson, 1999; Berglund, Seldén, & Halleröd, 2017; De Preter et al., 2013; Halleröd, 2015; Zappalà, Depolo, Fraccaroli, Guglielmi, & Sarchielli, 2008). Data from several studies suggests that retirement expectations predict retirement timing (Taylor, Goldberg, Shore, & Lipka, 2008; Davies & Cartwright, 2011; Pienta & Hayward, 2002; Zappalà et al., 2008), where workers who view retirement as mainly positive tend to retire earlier (Taylor et al., 2008) and be less willing to work past normal working age than individuals with more negative expectations (Davies & Cartwright, 2011; Zappalà et al., 2008). However, the predictive power of retirement expectations on anticipated retirement timing may be dependent on socioeconomic aspects. For instance, Pienta and Hayward (2002) found that individuals with lower education expected to retire earlier than those with higher education. Similarly, as previously stated, workers in Sweden with lower socioeconomic measures often withdraw from the workforce earlier due to health issues (Halleröd, 2015; König & Sjögren Lindquist, 2016). Furthermore, individuals with lower socioeconomic measures are in some respects more challenged in the Swedish pension system, which may influence their expectations on retirement timing (König & Sjögren Lindquist, 2016). Hence, it is plausible that socioeconomic measures may influence the relationship between retirement expectations and anticipated retirement age.

To my knowledge, previous research has not investigated how retirement expectations relate to anticipated retirement age in a Swedish context, or whether this relationship depends on socioeconomic aspects. In order to investigate this, I posed the following research question:

1. How are expectations on the experience of retirement related to anticipated retirement age?

Based on previous research and characteristics of the Swedish pension system, I hypothesised:

H1a. Positive retirement expectations relate to earlier anticipated retirement age.

H1b. The relationship between expectations of the experience of retirement and anticipated retirement age depends on educational level.

Previous research on covariates of retirement expectations

Based on my review of available literature on the topic, a systematic understanding of which factors impact retirement expectations is still lacking. Available studies about the relationship between different covariates and retirement expectations vary greatly in respect to investigated populations, used methodology and definition of outcome measures. Many studies have used small and specific samples and analysed data qualitatively, which renders the generalisability of these results problematic. Furthermore, previous studies have defined retirement expectations in different ways and investigated expectations regarding a limited number of outcomes. Taking this into

account, several studies have shown that a number of variables may influence prospective retirees' expectations regarding the retirement transition, such as marital status and gender (Ong, 2009; Pienta & Hayward, 2002; Szinovacz, 1989; Wong & Hardy, 2009), ethnicity (Pienta & Hayward, 2002), activity level (Chase, Eklund, & Pearson, 2003; Jonsson, Josephsson, & Kielhofner, 2001; Taylor et al., 2008), age (Curl & Ingram, 2013; Ekerdt, Kosloski, & Deviney, 2000; Ong, 2009), prevalence of children or grandchildren (Jonsson et al., 2001; Ong, 2009; Pienta & Hayward, 2002) and informal and formal retirement planning (Curl & Ingram, 2013; Kosloski, Ekerdt, & DeViney, 2001; Rosenkoetter & Garris, 2001; Siguaw et al., 2017; Taylor & Shore, 1995; Taylor-Carter, Cook, & Weinberg, 1997). Whilst previous research has investigated how the aforementioned variables influence retirement expectations, there have been few empirical investigations into how socioeconomic aspects influence retirement expectations. However, some studies have implicated, albeit not exclusively, socioeconomic measures as covariates of retirement expectations. As these are of greater interest to the present study, they are addressed in greater detail below.

Education as a covariate of retirement expectations. As previously stated, Pienta and Hayward (2002) found that education correlated with expected retirement age, where lower educational levels were associated with earlier retirement age. Furthermore, a higher educational level has been associated with greater probability of expecting to be primarily self-funded in retirement (Ong, 2009). Thus, education may affect expectations regarding retirement timing and being primarily self-funded in retirement, although it has yet to be investigated in relation to other retirement expectations.

Occupational covariates of retirement expectations. Previous research has found that occupational aspects influence retirement expectations. Using qualitative methodology, Jonsson et al. (2001) found that individuals with a positive view of their work felt apprehensive about maintaining social contacts during retirement and also feared losing competence or opportunities for contributing with knowledge and skills. Similar findings were presented by Silver and colleagues (2015), who qualitatively investigated retirement expectations among a sample of physicians. They found that retirement may be experienced as a threat to this specific group who place a great deal of importance in the workplace in terms of identity, self-worth, and interpersonal interaction (Silver et al., 2015). This can be understood in relation to the fact that individuals with higher education often have more mentally stimulating jobs (Hofäcker et al., 2016). Moreover, it has been suggested that occupational stress levels have an impact on retirement expectations (Jonsson, 2011), albeit modified by personal preferences for activity (Silver et al., 2015).

Available resources as covariates of retirement expectations. Siguaw et al. (2017) discovered that available resources (motivational, physical and financial) affect the development of expectations preceding retirement, for example high self-efficacy, good health, and income. This is in accordance with a previous study by Taylor and Shore (1995), who found correlations between psychological resources such as a high sense of control, high levels of self-efficacy, coping-abilities and retirement expectations. Relatedly, Wang and Shultz (2010) suggested in a review article that resourceful individuals generally believe they know what to expect in retirement. Additionally, healthy wealth holdings, an absence of functional disabilities and high qualification levels have been linked to expectations on self-provision in retirement (Ong, 2009). Reversely, the same study found that pre-retirement welfare reliance correlated strongly with expectations of post-retirement welfare reliance (Ong, 2009). The former is interesting in relation to the Swedish pension system, where blue-collar-workers or individuals with

disabilities often rely on the state pension as their occupational pension may not suffice (Halleröd, 2015; König & Sjögren Lindquist, 2016).

In light of the above-mentioned findings, studying how socioeconomic aspects relate to different retirement expectations could contribute to an understanding of retirement-related decisions and behaviour. Previous research has implicated numerous variables as covariates of retirement expectations, yet much uncertainty remains about the relationship between socioeconomic aspects and retirement expectations. The present study provided an important opportunity to advance the understanding of how socioeconomic measures relate to several separate retirement expectations in a Swedish sample. Using quantitative methodology with a large sample, it offered advantages compared to previous research in terms of generalisability. In order to examine how socioeconomic aspects influence retirement expectations in the present sample, I posed the following research question:

2. Which mechanisms explain socioeconomic differences in relation to retirement expectations?

Based on indications from previous empirical research as well as the cumulative advantage hypothesis, individuals with higher socioeconomic levels fare better throughout the life-span, in several aspects of health and well-being. It has also been suggested that they are advantaged in adjusting to retirement. Therefore, I hypothesised:

H2a. Higher socioeconomic measures will be related to more positive retirement expectations concerning overall satisfaction.

Similarly, based on previous research and following the cumulative advantage hypothesis, it is conceivable that expectations regarding socioeconomic aspects are connected to pre-existing socioeconomic measures. Thus:

H2b. Higher socioeconomic measures will be related to positive retirement expectations regarding financial sufficiency.

Based on the spread and width of previous research, I wanted to investigate how socioeconomic aspects relate to several separate retirement expectations. Even though higher socioeconomic measures are likely to relate to positive retirement expectations regarding overall satisfaction and financial sufficiency, it is debatable whether individuals with higher socioeconomic measures find all aspects of retirement compelling. As indicated above, more mentally stimulating jobs, which are linked to higher socioeconomic levels (Hofäcker et al., 2016), may lead to stronger occupational identification. Furthermore, role theory, as well as empirical findings, suggest that individuals with higher socioeconomic levels may fear losing this part of their identity in retirement. Thus, individuals with higher socioeconomic measures may actually have negative retirement expectations regarding these measures. Given results from previous research and following role theory, I proposed:

H2c. Higher socioeconomic measures will be related to negative expectations regarding occupational identity (H2c).

Methods

Data collection and instrument

The present study was written within the context of the research group Adult Development and Aging (ADA-Gero Group). Since 2015, this group of researchers have annually sent out a longitudinal cohort study named HEalth, Aging and Retirement Transitions in Sweden – HEARTS (Lindwall et.al, 2017). The HEARTS study has received ethical approval from the regional ethical approval board of the University of Gothenburg (Dnr: 970-14) (Lindwall et.al, 2017). The HEARTS questionnaire had, at the time of the present study, been sent to the same sample on four different occasions, with the purpose of investigating variations over time on a multitude of measurements relating to psychological health (Lindwall et.al, 2017). Invitations for participation were dispatched to 14,990 individuals. The invitation letter contained overall information about the study as well as instructions for participation via a web-based survey. Reminders were sent out twice with three weeks intervals, along with a paper version of the questionnaire. The HEARTS questionnaire is divided into six different modules, namely 1) background information e.g. marital status, family situation, and relationships; 2) work-related questions e. g. present or pre-retirement job; 3) health, leisure activities and health-behaviour, 4) psychological health and well-being; 5) social relations and network; 6) personality, self-esteem, and future-perspective (Lindwall et al., 2017).

The total HEARTS sample was drawn from a representative sample of the Swedish population, consisting of 14,990 individuals between 60-66 years of age, transitioning into retirement (Lindwall et.al, 2017). The respondents were chosen from the database “Statens personadressregister (SPAR)”, which includes each person registered as a Swedish citizen. The sample was only stratified by age. The sample at baseline consisted of 5,913 individuals and was considered to be representative in terms of age and gender but the sample represents a higher educational level than the general population (Lindwall et.al, 2017).

Sample characteristics

The original sample used in this study was extracted from the HEARTS database on the 27th of September 2018 and consisted of participants who completed the first wave of the survey, namely 5,913 individuals with a response rate of 39.4 %. In line with the previously stated purpose of the current study, analyses were performed on those individuals who had not yet retired (i.e. still working or currently unemployed), namely 3,793 respondents (64.1 % of the total sample).

In order to obtain an equal sample size for all analyses, cases with missing values on relevant variables were excluded from analyses. After this procedure, the total number of respondents was $N=2,830$. Demographics are presented in table 1, below.

Before this exclusion, missing value analyses were conducted. The results revealed that the variable included in analyses with the largest percentage of missing values (13.9 %) was “do you currently have staff supervisor responsibility in your occupational position?”. This result can partially be explained by the fact that unemployed respondents are prompted to skip this specific question in the HEARTS questionnaire. The variable with the second largest percentage of missing values (12.1 %) was “at which age do you think you have completely ceased working?”. Similarly, this result may partially be explained by the fact that individuals with sickness or activity compensation are prompted to skip this specific question in the HEARTS questionnaire.

Table 1

Descriptive characteristics of the total sample. Data is presented as percent and absolute values, alternatively as mean and standard deviation within parentheses.

Variables	Total sample (N=2830)		
	%	<i>n</i>	<i>M (SD)</i>
Highest reached educational level			
Did not finish primary education or shorter primary than 9 years	1.5	42	
Finished primary education	10.7	304	
Vocational education and training/post-secondary education (e.g. training school or 2-year secondary education)	22.0	623	
Secondary education (upper-secondary school, 3- or 4-year)	11.8	334	
Post-secondary education (e.g. higher vocational education or folk high school/independent adult education college)	8.7	246	
Higher education/no diploma	8.8	249	
Higher education or university diploma	36.5	1032	
Gender			
Women	52.8	1494	
Men	47.2	1336	
Civil status			
Married/Partner	74.3	2102	
Unmarried (never been married)	7.7	217	
Divorced/Separated	14.8	420	
Widow/Widower	3.2	91	
Prevalence of children			
No	8.6	242	
Yes, 1 child	12.5	354	
Yes, 2 or more children	78.9	2234	
Retirement status			
Still working or unemployed	100.0	2830	
Staff supervisory responsibility			
Yes, for more than 30 people	3.5	98	
Yes, for 10-30 people	4.3	123	
Yes, for 1-10 people	11.2	317	
No	81.0	2292	
Retirement planning			
Yes, I have started planning to a large extent	18.6	525	
Yes, I have started planning to some extent	55.4	1567	
No, not at all	26.1	738	
Financial stability			

Table 1 continues.

Table 1 continuation.		
Could manage a financial challenge independently	90.9	2573
Could manage a financial challenge in a week with help from others (family, relatives, friends...)	5.1	143
Could not manage a financial challenge in a week	4.0	114
Health		
Very poor health	0.5	13
Poor health	1.5	43
Fairly poor health	5.7	162
Fairly good health	30.2	856
Good health	39.5	1117
Very good health	22.6	639
Anticipated retirement age		
61 years of age	1.9	53
62 years of age	2.9	83
63 years of age	7.6	214
64 years of age	7.8	220
65 years of age	33.9	958
66 years of age	10.6	299
67 years of age	18.4	522
68 years of age	5.0	142
69 years of age	0.8	24
70 years of age	7.1	200
71 years of age or later	4.1	115
<i>Retirement expectations</i>		
I will be content and satisfied (1-5)		3.96 (0.93)
I will have a sufficient personal economy in order to feel content and happy (1-5)		3.18 (1.23)
I will miss my occupational identity (1-5)		2.65 (1.32)
Total positivity in retirement expectations (12-60)		44.84 (7.51)

Measures

Retirement status. Definition of the concept of retirement status has proven methodologically challenging since retirement encompasses a variety of meanings and can be measured in different ways (Denton & Spencer, 2009). The possibility for bridge employment or transitional steps before full retirement, i.e. complete labour force withdrawal, has expanded for retirees, resulting in more circular retirement patterns (Shultz & Wang, 2011; Wang & Shultz, 2010; Zhan & Wang, 2015). In the survey HEARTS, retirement status is measured by a more subjective perception of retirement where the respondent is asked “Are you retired (i.e., have you started receiving old age pension)?”. Four response alternatives exist, namely: a) “no”; b) “yes, but still work and do not consider myself a retiree”; c) “yes, still work but consider myself a retiree” and d) “yes, full time retiree”. Response “a” represents individuals still working or who are

unemployed while response “b”, “c” and “d” reflect a more subjective measurement of transitional retirement where individual perception of retirement status is most important. This captures a more psychologically accurate representation of retirement, as is purposive in HEARTS which aims to investigate psychological health in retirement (Lindwall et al., 2017). The present study used a sample from the first wave of data with respondents who had yet to retire, meaning those who had answered response “a” to the question of retirement status, specifically 3,793 individuals as stated above. This selection was made due to the fact that this study sought to investigate expectations in anticipation of retirement and accordingly before entering retirement. As previously mentioned, the total sample size decreased to $N=2,830$ after removing missing values.

Socioeconomic measures. Conventionally, research with socioeconomic status as an independent variable has encompassed some type of information on occupation, income and educational level (Kok et al., 2016; Luo & Waite, 2005; Pinquart & Schindler, 2007), thereby involving multiple dimensions (Kolenikov & Angeles, 2009). Within social sciences, certain pieces of information, for example numeric measures of income, are often not available or dependable for various reasons (Kolenikov & Angeles, 2009), such as for example an unwillingness among respondents to report income (Tabachnick, 2006). When this is the case, proxies can be identified in order to obtain a viable measurement for analyses (Kolenikov & Angeles, 2009). Kolenikov and Angeles (2009) suggest that such a proxy for income could be retrieved by investigating respondents’ possession of durable goods, for example by asking “do you own a TV set?”. Furthermore, they propose that variables with fewer response categories generate fewer reporting errors compared to variables such as for example income (Kolenikov & Angeles, 2009). Due to restrictions in confidentiality, information about occupation respectively income could not be retrieved from the original HEARTS database. Therefore, proxies of occupation and income were identified and used for analyses. Nonetheless, information on respondents’ educational level was retrieved, which in Sweden has been found to correlate with salary (Statistiska Centralbyrån, 2017) and also occupation (Björklind, Gustafson, & Larsson, 2006; Gartell, 2005). Furthermore, education is a useful proxy for employability and job identification (Hofäcker et al., 2016; Radl, 2013).

The selected proxy of income was a self-reported measure of financial stability. Based on Kolenikov and Angeles (2009), it is plausible that a measure of financial stability can act as a proxy for income, since financial stability often in part is an effect of income. The item in HEARTS that was chosen as a proxy of income was: “if you suddenly were to end up in an unforeseen situation, where you in one week’s time would have to come up with 15,000 kronor, would you be able to do this?”. The response alternatives are 1) yes, with own/household funds, 2) yes, but with help from others (family, relatives, friends...) and 3) no.

Following the above-mentioned logic concerning proxies, the variable occupational level contains many inherent mechanisms such as for example occupational tasks. In the present study, the proxy for occupational level was the following measure in HEARTS: “do you currently have staff supervisor responsibility in your occupational position?” with the response alternatives 1) “yes, I have staff supervisor responsibility for more than 30 people”, 2) “yes, I have staff supervisor responsibility for 10-30 people”, 3) “yes, I have staff supervisor responsibility for 1-10 people”, 4) “no, I don’t currently have any staff supervisor responsibility”. Arguably, staff supervisor responsibility is an occupational task that often is related to occupational level and therefore works as a socioeconomic measurement.

In HEARTS, educational level is measured through a question with predetermined categories. The question in the survey reads out “which is your highest level of

education?”, with 7 response alternatives from low to high: “did not finish primary education or shorter primary than 9 years”, “finished primary education”, “vocational education and training/post-secondary education (e.g. training school or 2-year secondary education)”, “secondary education (upper-secondary school, 3- or 4-year)”, “post-secondary education (e.g. higher vocational education or folk high school/independent adult education college)”, “higher education/no diploma” and “higher education/or university diploma”.

Retirement expectations and anticipated retirement age. Expectations in anticipation of retirement are measured in HEARTS in the form of a scale, which was included in statistical analyses. The scale has an overarching question relating to retirement expectations, namely “what do you expect of life as a retiree?” and includes 12 items. Three of these items were selected as outcome measures, specifically “I will be content and satisfied”, “I will have a sufficient personal economy in order to feel content and happy” and “I will miss my occupational identity”. The items included in the scale concerning retirement expectations in HEARTS are based on “The Retirement Experience Questionnaire” (REQ) developed by Robinson, Demetre and Corney (2010), measuring positive and negative experiences during retirement. REQ consists of the two subscales Enjoyable Experiences and Negative Experiences, which are strongly negatively correlated ($r = .709$). Robinson et al. (2010) created REQ based on a thematic list produced by Kloep & Hendry (2006), describing positive and negative experiences of retirement. The scale regarding retirement expectations in HEARTS uses a 5-point Likert-type scale as response alternatives, ranging from 1 (“not at all true”) to 5 (“completely true”).

Through reversal of negatively worded items, a measurement of positivity in retirement expectations was derived from an overall score on the scale regarding retirement expectations in HEARTS. Anticipated retirement age was measured using the following question in HEARTS: “at which age do you think you have completely ceased working?” with 11 response alternatives ranging from “61 years of age” to “71 years of age or older”.

Statistical analyses

Pearson’s correlation (r) was used in order to investigate the relationship between retirement expectations and anticipated retirement age. Retirement expectations were measured using an overall score on the above-mentioned 12-item scale for each observation. Negatively worded items were reversed in order to obtain an overall score of positivity in retirement expectations. Anticipated retirement age was measured with the above-mentioned item in HEARTS regarding expected retirement age. In order to examine whether there were differences in correlations as an effect of education, the sample was divided into three educational groups based on frequencies, displayed in table 2 below. Correlations were run for these three separate educational levels via the split file procedure in SPSS. Derived correlations were compared using Fisher’s r to z transformation, a statistical method that enables testing for significant differences between two correlation coefficients through transformation into z scores (Colman, 2009). A customary α of .05 was used along with Cohen’s guidelines (1988) for estimating effect sizes for correlations.

The main analyses were several direct binary logistic regressions, exploring potential mechanisms which influence socioeconomic differences in three different retirement expectations. I decided to run direct binary logistic regressions rather than analysis of variance since a robustness-check showed that ANOVA violated the

assumption of homogeneity in population variances (Pallant, 2016). In this respect, logistic regression is a more flexible form of analysis with no assumption regarding equal variances in each examined group (Tabachnick, 2006). For the direct binary logistic regressions, collinearity diagnostics for all included independent variables were run for each binary expectation outcome measure, demonstrating tolerance and VIF values well within satisfactory ranges (Pallant, 2016; Tabachnick, 2006).

For the purpose of the direct binary logistic regressions, three dependent variables measuring different retirement expectations were chosen and re-coded into binary variables. This re-coding procedure was based on descriptive statistics and frequencies. Thus, each different retirement expectation had a possible outcome of 0 = not true and 1 = true. The three items concerning retirement expectations were 1) “I will be content and satisfied” ($M_0= 2.74$, $M_1= 4.46$), 2) “I will have a sufficient personal economy in order to be content and happy” ($M_0= 2.31$, $M_1= 4.39$) and 3) “I will miss my occupational identity” ($M_0= 1.40$, $M_1= 3.72$). Decisions concerning which independent variables to include in the analyses were based on previous research as well as available data. Following this reasoning, eight categorical independent variables were chosen and re-coded into fewer groups based on frequencies, in order to aid interpretation of the odds ratios. These re-coded variables are displayed in table 2. The reference category for interpretation of the odds ratio was 0 in each variable.

Table 2

Re-coding procedure of independent variables for direct binary logistic regressions.

Variable	0	1	2
Educational level	Low level of education = uncompleted or completed primary education and vocational education and training	Mid-level of education = secondary education, post-secondary education and higher education with no diploma	High level of education = higher education/or university diploma
Financial stability	Not at all = could not manage a financial challenge in a week	With help from others = could manage a financial challenge in a week with help from others (family, relatives, friends...)	Independently = could manage a financial challenge independently
Staff supervisory* responsibility	No = I don't have staff supervisory responsibility	Yes = I do have staff supervisory responsibility	n/a
Prevalence of children	No children	1 child	Two or more children
Civil status*	Single	Married	n/a
Retirement planning	Not having planned at all	Having planned somewhat	Having planned to a large extent
Gender*	Male	Female	n/a
Health	Poor health	Fairly good health	Very good health

* = The variable only had two levels as marked by “n/a = not applicable” under the column “2”.

Results

The purpose of the present study was to investigate how socioeconomic aspects relate to older Swedish worker's retirement expectations.

Retirement expectations and anticipated retirement age

Since most literature on retirement expectations refer to expected retirement age, the first research question I posed aimed to examine how expectations on the experience of retirement relate to anticipated retirement age. I hypothesized that positive retirement expectations relate to earlier anticipated retirement age and that this relationship depends on educational level. The relationship between expectations on the experience of retirement and anticipated retirement age was investigated using Pearson's correlation.

For the Pearson correlation, preliminary analyses were performed to examine possible violations of the assumptions of normality, linearity and homoscedasticity using histograms and descriptive statistics. Results from descriptive statistics showed that skewness and kurtosis for both variables were well within acceptable values, $\leq +2$ (Bulmer, 1979), especially considering that the impact of skewness and kurtosis is limited in analyses with large samples (Pallant, 2016; Tabachnick, 2006). Additionally, assessment of generated histograms sufficiently supported the fulfilment of assumptions concerning normal distribution, linearity and homoscedasticity.

There was a significant negative correlation between the two variables, $r = -0.302$, $n = 2830$, $p < 0.01$ (two-tailed). In other words, more positive retirement expectations related significantly to earlier anticipated retirement age in the present sample. Using Cohen's d , the effect size was deemed moderate at $d = 0.302$ (Cohen, 1988).

Furthermore, correlations between retirement expectations and anticipated retirement age were run for separate educational levels. Based on descriptive statistics and frequencies within each level, the sample was divided into three educational groups in accordance with table 2, above. The first group represented individuals with uncompleted as well as completed primary education and vocational education and training. The correlation for the first group was $r = -0.322$, $n = 969$, $p < 0.01$. The second group comprised individuals with secondary education, post-secondary education and higher education with no diploma. The correlation for the second group was $r = -0.319$, $n = 829$, $p < 0.01$. The third and final educational group consisted of individuals with higher education/or university diploma. The correlation for the third group was $r = -0.282$, $n = 1032$, $p < 0.01$. Correlations for the separate educational groups were compared in order to establish whether significant differences existed using Fisher's r to z transformation. There were no significant differences between correlation coefficients, $p > 0.05$ (two-tailed) in all comparisons, suggesting that more positive retirement expectations correlate with earlier expected retirement age irrespective of educational level.

Covariates of socioeconomic differences in retirement expectations

Through my second research question, I sought to examine which mechanisms explain socioeconomic differences in relation to retirement expectations. I expected that high socioeconomic measures would be related to a) more positive retirement expectations regarding overall satisfaction; b) more positive retirement expectations

regarding having a sufficient personal economy in order to be content and happy; and c) more negative retirement expectations regarding missing one's occupational identity.

Three direct binary logistic regressions were run in order to assess the influence of a number of independent variables on the likelihood of reporting "true" on three different retirement expectations, namely 1) "I will be content and satisfied", 2) I will have a sufficient personal economy in order to feel content and happy and 3) "I will miss my occupational identity". The model consisted of eight independent variables, namely educational level, financial stability, staff supervisory responsibility, prevalence of children, civil status, retirement planning, gender and health, presented above in table 2. The results obtained from these three separate direct binary logistic regressions are shown in tables 3, 4 and 5, see below.

Table 3

Direct binary logistic regression predicting likelihood of replying "true" to the expectation of being content and satisfied in retirement.

Variable	Odds Ratio	p	95 % C.I. for Odds Ratio	
			Lower	Upper
<i>Ref. low level of education</i>				
Mid-level education	.971	.739	.738	1.205
High level of education	.682	.000**	.557	.836
<i>Ref. not at all</i>				
Yes, but with help from others	1.126	.657	.667	1.901
Yes, by own means	1.348	.149	.899	2.022
<i>Ref. no</i>				
Yes, I do have staff supervisory responsibility	.947	.621	.762	1.176
<i>Ref. no children</i>				
1 child	1.281	.177	.894	1.836
2 or more children	1.351	.047*	1.004	1.817
<i>Ref. single</i>				
Married	1.386	.001**	1.138	1.689
<i>Ref. not having planned at all</i>				
Having planned somewhat	1.846	.000**	1.529	2.229
Having planned to a large extent	2.920	.000**	2.229	3.826
<i>Ref. male</i>				
Female	1.153	.106	.970	1.371
<i>Ref. poor health</i>				
Fairly good health	.972	.864	.702	1.346
Very good health	1.495	.012*	1.093	2.044

Table 3 continues.

Table 3 continuation.

Constant	.590	.064
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Note: Significant values are marked by * for the $p < 0.05$ level and ** for the $p < 0.001$ level. The dependent variable is coded so that 0 = not true and 1 = true. The predicted probability was of membership for “true”. The reference groups for the independent variables are coded as 0. The reference categories are abbreviated to “ref.” in the table.

The first analysis had the outcome measure “I will be content and satisfied” with the response alternatives “true” or “not true”. The predicted probability was of membership for “true”.

The overall model containing all predictors was highly statistically significant, $\chi(13, N = 2830) = 143.30, p < 0.001$, indicating that the model could distinguish between respondents who reported, and did not report, replying “true” on the expectation of being content and satisfied in retirement. The full model explained between 4.9 % (Cox and Snell R square) and 7.1 % (Nagelkerke R squared) of the variance in the expectation on being content and satisfied in retirement, and correctly classified 71 % of cases.

As demonstrated in Table 3, five of the independent variables made a unique, statistically significant contribution to the model (educational level, prevalence of children, civil status, retirement planning and health). It is apparent from this table that the strongest predictor of reporting “true” on the retirement expectation of being content and satisfied was retirement planning, with the highest recorded odds ratio for the second level of the variable (having planned to a large extent) of 2.229. This indicated that individuals who had planned for retirement to a large extent were 2.229 times more likely to expect to be content and satisfied in retirement than those who reported not having planned at all, controlling for all other factors in the model. Furthermore, the table also illustrates that having a very good health was the next best predictor for reporting “true” on the expectation of being content and satisfied in retirement with an odds ratio of 1.495. This indicated that individuals who reported having a very good health, compared to those who reported having a poor health, were 1.495 times more likely to respond “true” to the expectation of being content and satisfied in retirement. Surprisingly, and contrary to H2a, the only significant socioeconomic predictor in this model was having a high level of education with an odds ratio of less than 1 at .682, indicating that if the respondent reported having a high level of education compared to a lower education, they were .682 times less likely to report expecting to be content and satisfied in retirement, controlling for all other factors in the model.

The next analysis had the outcome measure “I will have a sufficient personal economy in order to be content and happy” with the possible group memberships of “true” or “not true”. The predicted probability was of membership for “true”.

Table 4

Direct binary logistic regression predicting likelihood of replying “true” to the expectation of having a sufficient personal economy in order to be content and happy in retirement.

Variable	Odds Ratio	<i>p</i>	95 % C.I. for Odds Ratio	
			Lower	Upper
<i>Ref. low level of education</i>				

Table 4 continues.

Table 4 continuation.				
Mid-level education	1.191	.091	.973	1.458
High level of education	1.388	.001**	1.145	1.684
<i>Ref. not at all</i>				
Yes, but with help from others	.991	.982	.456	2.156
Yes, by own means	4.127	.000**	2.269	7.505
<i>Ref. no</i>				
Yes, I do have staff supervisory responsibility	1.510	.000**	1.233	1.850
<i>Ref. no children</i>				
1 child	.791	.202	.552	1.134
2 or more children	.760	.074	.562	1.027
<i>Ref. single</i>				
Married	1.574	.000**	1.289	1.922
<i>Ref. not having planned at all</i>				
Having planned somewhat	1.309	.006*	1.079	1.588
Having planned to a large extent	2.478	.000**	1.941	3.162
<i>Ref. male</i>				
Female	.592	.000**	.502	.697
<i>Ref. poor health</i>				
Fairly good health	1.055	.756	.751	1.483
Very good health	2.115	.000**	1.543	2.916
Constant	.079	.000**		

Note: Significant values are marked by * for the $p < 0.05$ level and ** for the $p < 0.001$ level. The dependent variable is coded so that 0 = not true and 1 = true. The predicted probability was of membership for “true”. The reference groups for the independent variables are coded as 0. The reference categories are abbreviated to “ref.” in the table.

The overall model containing all predictors was highly statistically significant, $\chi(13, N = 2830) = 355.39, p < 0.001$, indicating that the model could distinguish between respondents who reported, and did not report, replying “true” on the expectation of having a sufficient personal economy in order to be content and happy in retirement. The full model explained between 11.8 % (Cox and Snell R square) and 15.9 % (Nagelkerke R squared) of the variance in the expectation of having a sufficient personal economy in order to be content and happy in retirement, and correctly classified 64.7 % of cases. As demonstrated in Table 4, seven of the independent variables made a unique statistically significant contribution to the model (educational level, financial stability, staff supervisory responsibility, civil status, retirement planning, gender and health). It is apparent from this table that the strongest predictor of reporting “true” on the retirement expectation of having a sufficient personal economy in order to be content and happy in retirement was the measure of financial stability, with a highest odds ratio for the second level of the variable at 4.127. This indicated that individuals who reported being able to independently manage a financial challenge in a week, compared to those who could not manage it at all, were 4.127 times more likely to report expecting to have a sufficient

personal economy in order to be content and happy in retirement, all other factors being equal. Furthermore, all socioeconomic measures contributed significantly to the variance in the expectation of having a sufficient personal economy in order to be content and happy in retirement. For example, individuals who reported having staff supervisory responsibility were 1.510 times more likely to report “true” on the expectation of having a sufficient personal economy. Similarly, individuals with a high level of education were 1.388 times more likely to report expecting to have a sufficient personal economy.

Additionally, the table illustrates that having planned for retirement to a large extent was the next best predictor for reporting “true” on the retirement expectation of having a sufficient personal economy in order to be content and happy with an odds ratio of 2.478. This indicated that individuals who reported having planned for retirement to a large extent, compared to those who reported not having planned at all, were 2.478 times more likely to report expecting to have a sufficient personal economy in order to be content and happy in retirement, all other factors being equal.

The next analysis had the outcome measure “I will miss my occupational identity” again with the possible group memberships of “true” or “not true”. The predicted probability was of membership for “true”.

Table 5

Direct binary logistic regression predicting likelihood of replying “true” to the expectation of missing one’s occupational identity in retirement.

Variable	Odds Ratio	<i>p</i>	95 % C.I. for Odds Ratio	
			Lower	Upper
<i>Ref. low level of education</i>				
Mid-level education	1.118	.245	.926	1.641
High level of education	1.387	.000**	1.157	1.664
<i>Ref. not at all</i>				
Yes, but with help from others	.893	.658	.541	1.473
Yes, by own means	.898	.586	.608	1.325
<i>Ref. no</i>				
Yes, I do have staff supervisory responsibility	1.329	.005*	1.091	1.619
<i>Ref. no children</i>				
1 child	.805	.207	.574	1.127
2 or more children	.862	.303	.650	1.143
<i>Ref. single</i>				
Married	1.023	.803	.853	1.228
<i>Ref. not having planned at all</i>				
Having planned somewhat	.820	.030*	.685	.981
Having planned to a large extent	.513	.000**	.407	.646

Table 5 continues.

Table 5 continuation.

<i>Ref. male</i>				
Female	1.091	.270	.935	1.274
<i>Ref. poor health</i>				
Fairly good health	1.153	.356	.852	1.558
Very good health	1.232	.154	.925	1.641
Constant	1.227	.449		

Note: Significant values are marked by * for the $p < 0.05$ level and ** for the $p < 0.001$ level. The dependent variable is coded so that 0 = not true and 1 = true. The predicted probability was of membership for “true”. The reference groups for the independent variables are coded as 0. The reference categories are abbreviated to “ref.” in the table.

The overall model containing all predictors was highly statistically significant, $\chi^2(13, N = 2830) = 64.35, p < 0.001$, indicating that the model could distinguish between respondents who reported, and did not report, replying “true” on the expectation of missing their occupational identity in retirement. The full model explained between 2.2 % (Cox and Snell R square) and 3 % (Nagelkerke R squared) of the variance in the expectation on missing one’s occupational identity in retirement, and correctly classified 57.6 % of cases. As shown in Table 5, only three of the independent variables made a unique statistically significant contribution to the model (educational level, supervisory staff responsibility and retirement planning). The strongest predictor of reporting “true” on the retirement expectation of missing one’s occupational identity was retirement planning, with a highest recorded odds ratio for the second level of the variable (having planned to a large extent) of .513. As this odds ratio is below 1, this indicated that individuals who reported having planned for retirement to a large extent were .513 times less likely to report missing their occupational identity than those who reported not having planned at all, controlling for all other factors in the model.

The other two significant predictors in the model were socioeconomic measures, namely educational level and whether respondents had staff supervisory responsibility. Educational level, as demonstrated in table 2, had the highest odds ratio for the second level of the variable (high level of education) of 1.387. This indicated that individuals with a high level of education were 1.387 times more likely to report expecting to miss their occupational identity in retirement, compared to those with a low level of education, controlling for all other factors in the model. Similarly, those who reported having staff supervisory responsibility were 1.329 times more likely to report missing their occupational identity in retirement than those who reported not having staff supervisory responsibility, holding all other variables in the model constant.

Discussion

Relevance

In the present study, I aimed to quantitatively investigate how socioeconomic aspects relate to older Swedish workers’ expectations concerning retirement. This was investigated through two research questions.

As previously mentioned, most research concerning retirement expectations has focused on retirement timing. For the present study, I was interested in how retirement expectations are related to anticipated retirement age, as well as if this relationship depends upon educational level. Therefore, the first research question aimed to examine

how expectations on the experience of retirement relate to anticipated retirement age. I proposed that positive retirement expectations relate to earlier anticipated retirement age. I also hypothesised that this relationship would depend on educational level.

Results in the present study confirmed findings from previous research (Davies & Cartwright, 2011; Taylor et al., 2008; Zappalà et al., 2008), by showing that retirement expectations in fact correlate with expected retirement age, where more positive retirement expectations relate to an earlier expected retirement age. This provides some support for H1a. The results are relevant in relation to previous findings and contributes in a significant way to existing literature by corroborating that retirement expectations do constitute a psychological variable that may influence retirement decisions (Wang & Shultz, 2010) in a Swedish population and a Swedish retirement context. However, the effect size of the correlation was deemed moderate, which may restrict the practical importance of the results. The discrepancy in importance of results could perhaps be attributed to differences in investigated populations. After all, pension systems differ across countries, which likely influences retirement expectations.

Another somewhat surprising finding from the present study was that the relationship between positivity in retirement expectations and earlier anticipated retirement age did not differ significantly between educational groups. This result contradicted H1b, which made it necessary to maintain the null hypothesis. A possible explanation for this result could be found in role theory, which suggests that the loss of work role inherent in retirement may cause different affective reactions in prospective retirees (Wang et al., 2011). Within this framework, it could be argued that positive retirement expectations may lead to earlier anticipated retirement age irrespective of educational group, since a longing for retirement may trump socioeconomically dependent reasons for staying in the labour market. In other words, individuals with lower or higher socioeconomic measures may be motivated to retire earlier as retirement offers them an opportunity to spend their time differently and invest more time in other roles, especially if the work role is experienced as burdensome or time-consuming for different reasons.

The finding that retirement expectations in fact correlate with expected retirement age raises the question of which individual factors influence retirement expectations. Previous research indicated that socioeconomic aspects may partially provide an answer to this question, which brings me to my second research question. Through my second research question, I sought to determine which mechanisms explain socioeconomic differences in relation to retirement expectations in the present sample. I proposed that high socioeconomic measures would be related to more positive retirement expectations regarding a) overall satisfaction; b) having a sufficient personal economy; and c) more negative retirement expectations regarding missing one's occupational identity.

Overall satisfaction. Five independent variables in the model made a statistically significant contribution to the outcome variable regarding expected overall satisfaction in retirement, amongst them one socioeconomic measure which was educational level. Educational level, as previously noted, correlates with occupational level and salary in Sweden (Björklind et al., 2006; Gartell, 2005; Statistiska Centralbyrån, 2017) respectively is a useful proxy for employability and job identification (Hofäcker et al., 2016; Radl, 2013). In the present study, contrary to H2a, a high level of education was associated with a decreased probability of expecting to be content and satisfied in retirement. This necessitated retaining the null hypothesis as the present study yielded contradictory results. These results are very interesting in relation to the fact that another recent study using the HEARTS sample, as previously mentioned, showed that individuals with high socioeconomic levels report higher levels of well-being in

retirement compared to individuals with lower socioeconomic levels (König et al., 2018). Thus, there is a discrepancy between expectations of well-being and satisfaction and actual outcome in terms of well-being and satisfaction. A possible explanation for this discrepancy may have a foundation in role theory, where individuals with high socioeconomic levels, through the loss of their occupational role, may fear becoming obsolete, idle or useless in retirement (Wang et al., 2011). However, it has been suggested in previous literature that individuals with higher socioeconomic levels are advantaged in adjusting to retirement (Pinquart & Schindler, 2007; Wang & Shultz, 2010), which may compensate for their fear preceding retirement. Furthermore, one form of adaptation to retirement which may mitigate negative expectations of satisfaction is bridge employment, which has become more available for retirees (Shultz & Wang, 2011; Wang & Shultz, 2010; Zhan & Wang, 2015). Thus, it would seem that results regarding the relationship between socioeconomic aspects and retirement expectations concerning overall satisfaction demonstrate support for role theory, while actual outcome measures of well-being support the cumulative advantage hypothesis.

In contrast to these results, another interesting finding was that the strongest predictors in the model for expecting to be content and satisfied in retirement were having planned for retirement to a large extent followed by having a very good health. These two predictors explained more of the variance in outcome than the variable education. One issue emerging from these findings is whether socioeconomic aspects should be considered to be important predictors for retirement expectations about being content and satisfied. I return to this issue under recommendations for future research.

Having a sufficient personal economy. In the second direct logistic binary regression, all predictors but one made a significant contribution to the model. This model also explained the largest percentage of variance in outcome measure, in comparison with the other direct binary logistic regressions, at 11.8-15.9 %. The strongest predictor for the outcome measure of expecting to have a sufficient personal economy was the proxy for income, but the two other socioeconomic predictors (staff supervisory responsibility and educational level) constituted significant predictors as well. These results indicated that individuals with higher socioeconomic levels were more likely to expect having a sufficient personal economy in order to be content and happy in retirement, which provides support for H2b. This seems reasonable when put in relation to the Swedish pension system which to some degree benefits individuals with higher socioeconomic measures, whom often receive larger occupational pensions. These results can also be understood in relation to the cumulative (dis)advantage hypothesis since individuals who are financially stable, well-educated and have staff supervisory responsibility are more likely to report expecting to have a sufficient personal economy in retirement. Furthermore, the results are consistent with previous research, since pre-existing socioeconomic measures have been linked to retirement expectations concerning self-provision (Ong, 2009).

The present study also found that having planned for retirement to a large extent was the second strongest predictor for expecting to have a sufficient personal economy in retirement. Comparison of this finding with those of other studies confirms that retirement planning influences retirement expectations (Curl & Ingram, 2013; Kosloski et al., 2001; Rosenkoetter & Garris, 2001; Siguaw et al., 2017; Taylor & Shore, 1995; Taylor-Carter et al., 1997). As previously mentioned, it is notable that retirement planning appears to be important for retirement expectations, and this constituted an important finding in the present study.

Occupational identity. In the third direct logistic binary regression, three independent variables made a unique and statistically significant contribution to the

model, amongst them educational level and staff supervisory responsibility which constituted socioeconomic measures. Individuals who reported having staff supervisory responsibility, as well as individuals who reported having a high level of education, were more likely to report expecting to miss their occupational identity than individuals without staff supervisory responsibility and individuals with low education. This provided some support for H2c and constituted an interesting finding. However, it is noteworthy that the entire model only explained 2.2-3 % of the variance in the outcome variable, which makes the practical importance of this finding limited.

Nonetheless, higher socioeconomic measures were found in the present study to be related to an increased probability of missing one's occupational identity. This could be attributed to the fact that individuals with high socioeconomic status often have more mentally stimulating jobs (Hofäcker et al., 2016), which perhaps render their jobs more important to them. The former may cause greater occupational identification, which in turn possibly makes retirement, and consequently the loss of a work role, somewhat frightening. This reasoning seems plausible in relation to role theory, which implies that individuals with higher socioeconomic levels would experience the retirement transition as more challenging due to role loss. Furthermore, the result that higher socioeconomic measures are related to a greater probability of expecting to miss one's occupational identity is interesting in relation to the discrepancy between expectations of well-being and actual well-being in retirement. As previously mentioned, it seems possible that bridge employment or greater investment in other roles, such as the role of family member, may mitigate the effect of negative expectations concerning missing one's occupational identity.

Similar to the above-mentioned results concerning expectations of overall satisfaction and sufficiency in personal economy, there was another interesting finding regarding the expectation of missing one's occupational identity. The strongest significant predictor of expecting to miss one's occupational identity was retirement planning, where individuals who had planned for retirement to a large extent were less likely to expect missing their occupational identity. Altogether, it appears that retirement planning could be a major factor, possibly a more important one than socioeconomic aspects, in influencing different retirement expectations. As previously mentioned, this finding is in line with previous research, which has found that retirement planning influences formation of retirement expectation prior to retirement (Curl & Ingram, 2013; Kosloski et al., 2001; Rosenkoetter & Garris, 2001; Siguaw et al., 2017; Taylor & Shore, 1995; Taylor-Carter et al., 1997).

In summary, the combination of findings from the present study provided some support for the conceptual premise that socioeconomic aspects relate to retirement expectations. Furthermore, findings raised intriguing questions regarding the nature and extent of this relationship. These issues are discussed under recommendations for future research.

Limitations

The present study investigated socioeconomic aspects in relation to retirement expectations. An expectation is a psychological attitude, and as such, it generates psychometric challenges. One of these challenges which has been described in previous research, is that retirement expectations have shown substantial within- and between-person heterogeneity, which indicates variability in both the actual expectations and the formation of them (Wong & Hardy, 2009). This variability is likely to be an effect of contextual contingencies. Furthermore, Taylor and colleagues (2008) found that

expectations regarding retirement have greater predictive value on life satisfaction early in the retirement process and weaken in significance as an effect of time. It is conceivable that expectations play more of a pivotal determinant early on in retirement since disconfirmed expectations are probably most salient shortly after exiting the workforce (Taylor et al., 2008). This supports the notion of retirement as a trajectory rather than a fixed occurrence (Shultz & Wang, 2011; Taylor et al., 2008; Wang & Shultz, 2010). In line with previous reasoning, expectations should be seen as an ongoing process dependent on specific individual contextual factors (Jonsson et al., 2001; Wang & Shultz, 2010; Wong & Hardy, 2009). Following the previous logic, longitudinal study of retirement expectations would appear advantageous. Due to restraints in time, a cross-sectional research design was chosen in the present study, which constitutes one of the main limitations.

Another limitation in the present study was the use of proxies as socioeconomic indicators. On the one hand, they do constitute indicators of socioeconomic level. On the other hand, they are prone to measurement errors since proxies always are imperfect measures of the variables themselves. Ideally, in order to counteract measurement errors, several proxies for each variable would be aggregated (Kolenikov & Angeles, 2009). This was not performed in the present study due to available data and constraints in time.

As with much research, another limitation is selection bias. This bias inevitably leads to failing to detect a large part of the variance within a specific sample. For instance, as previously mentioned, the response rate for the first wave of the HEARTS study was 39.4 % (5,913 responded out of 14,990). The individuals who responded to the survey chose to do so for unknown reasons, yet others did not, which constitutes a selection effect. Furthermore, the present study selected individuals who had not yet retired, which also constitutes a selection effect. Similarly, missing values were excluded from analyses which surely led to a limitation in detected variance. Missing values likely have a reason for being so, which this study failed to recognize. Due to these limitations, findings from the present study, although from a large sample, must be interpreted with caution, since they may not be representative of the population.

Recommendations for future research

There are still many unanswered questions concerning how socioeconomic aspects impact retirement expectations. Further research should be undertaken to investigate how more accurate socioeconomic measurements influence a larger number of different retirement expectations, preferably with more than one item as an outcome measure. Also, I would recommend future studies to incorporate additional covariates of retirement expectations in order to inspect possible interaction effects amongst them and gain further clarity concerning the influence of retirement planning.

Furthermore, I would suggest employing a longitudinal research design. This suggestion stems from the fact that previous research has indicated that longitudinal study of retirement expectations may better capture the dynamics of retirement expectations which change as an effect of time and life circumstances during the retirement process. To develop a full picture of how socioeconomic aspects relate to retirement expectations, additional studies will be needed, which use a longitudinal research design.

Moreover, I am convinced that future studies would benefit from exploring whether retirement expectations influence adjustment post retirement. Studying how retirement expectations interact with different outcome measures post retirement could further illuminate and clarify findings from the present study. Finally, I would also find

it interesting to investigate whether socioeconomic aspects influence retirement expectations in other populations within different pension systems.

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