**Expected retirement timing for older workers in eldercare – The importance of health, psychosocial factors and family-work conflict.**

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**Abstract**

To address the challenges with labor market shortage in eldercare, increased retirement ages and extended working life among older workers is a governmental intention. The aim of this cross-sectional study is to identify health, psychosocial, and family-work conflict factors associated with expected retirement timing among Swedish eldercare workers aged 45+. We use a sample of elder care workers aged 45-74 (n=706) from a representative Swedish study stratified by occupation. Multivariate regression analyses suggested that expectations to either retire early (<65) or late (>65) for elder care workers was associated with xxx. The main implication is XX. The results give us insights on potentials for facilitating an extended working life among older elder care workers.

**Keywords:** retirement timing, older workers, psychosocial factors, family-work conflict, eldercare, cross-sectional study

**Introduction**

Workforce shortage in eldercare is evident in all OECD countries (OECD, 2021), including Sweden (SKR, 2019). According to projections, a 40 percent increase of number of workers in eldercare are estimated to be needed by 2035 to meet the demands in the Swedish eldercare due to an increasing population of older people (OECD, 2020b; SKR, 2019). But structural shortcomings, in the current eldercare such as workers' poor working conditions, high job demands and low job resources, are challenging (Meagher & Szebehely, 2017; OECD, 2020b; Simonazzi, 2009). The Swedish eldercare is horizontally segregated (approximately 90 percent women (SCB, 2020). Horizontally segregated occupations associated with fewer job resources and greater job demands. Women are more likely to have repetitive work and more often involved in contact occupation, than men(The Swedish work environment authority, 2016). Eldercare workers often have low-hour or part-time contracts with flexible routers, and high levels of skill shortages (Edge et al., 2017). These factors all contribute to job strain and poor health, potentially pushing workers to early retirement (e.g. Fisher et al., 2016).

The other coincide of the workforce shortage in eldercare, is the future growth of the number of older people in care need. According to Meinow et al., (2020), downsizing in the comparatively generous, state-funded, and universal Swedish eldercare has impacted an increase in home-based elder care, as well as an increase in informal caring responsibilities. Informal caregiving, i.e., caring responsibilities for mostly relatives but also friends and neighbors, is a common domain in family-work conflicts (Stanfors & Jacobs, 2023). Family-work conflicts is defined as: “A form of interrole conflict in which the role pressures from the work and family domains are mutually incompatible in some respect” (Amstad et al., 2011, p. 151). Both family-work conflicts as well as several work characteristics in the eldercare, may have negative consequences for, especially older workers’, labor market participation (Ekman et al, 2021). However, the interplay between work characteristics and family related factors involved in the retirement timing process among older workers in an eldercare context are understudied (Hart et al., 2020). Therefore, this study aimed to explore the contribution of health (self-rated health, work ability and partners health), work characteristics (job demands, control and social support), and family to work conflict and enhancement on retirement timing (expected retirement age) among older eldercare workers in Sweden.

*Work characteristics*

According to previous literature, working conditions are one of the most influential factors affecting retirement timing (e.g., Shacklock et al., 2009). Working conditions are especially evident in the Swedish eldercare as they have gradually declined over time (Szebehely et al., 2017), which may form an obstacles to extending working life among older eldercare staff. However, what, and how specific work characteristic in the eldercare setting is associated with retirement timing is understudied, and some of the relatively few quantitative study findings are inconsistent with factors of significance for the general workforce.

A systematic review of factors involved in the retirement timing process in the general workforce concluded that several job resources, such as high job satisfaction and high job control, were associated with late retirement intentions (Browne et al., 2019). However, the authors found no consistent evidence for the association between high job demands and early retirement intentions. This result contrasts a systematic review of factors involved in the retirement timing process in the eldercare workforce, which concluded high physical job demands, but not emotional, were associated with early retirement intentions (Nordlinder et al., 2024). In the included studies, physical job demands were measured as high workload (Mäcken et al., 2019) and high work pace (Sejbaek et al., 2013), and emotional job demands were measured as hard mental work (Mäcken et al., 2019), high emotional work and role conflicts (Sejbaek et al., 2013). Thus, job demands and resources are involved in individuals' retirement timing. However, previous reviews indicate different job resources and demands are involved in the general workforce than in the eldercare.

*Family-work interface*

Other factors often highlighted as linked to the retirement timing are family factors and potential family-work conflicts. For example, individuals involved in informal caregiving responsibilities are more likely to be pushed out of work than individuals with no caregiving responsibilities (Lilly et al., 2007). In Gyllensten’s (2019) study of workers in elder care, the working conditions were experienced as poor if the job demands were high. As a consequence there was a shortage of staff and little time to recovery, i.e. conditions potentially resulting in work-family conflicts (Gyllensten et al., 2019). Accordingly to Sacco et al., (2022), women in Sweden aged 45-65 are overrepresented among informal care providers, which often results in reduced working hours (Szebehely et al., 2014). However, according to Matthews and Fisher (2012), the literature on the retirement process and the link to family factors are understudied and the knowledge on how the family-work interface interplay with retirement timing process is scarce. From a societal perspective, as well as a social work perspective, it is of vital to gain knowledge on which factors might generate older workers intentions to retire early or late, which is essential for the future of welfare and eldercare.

*Health and job satisfaction*

*The Swedish context*

To politically address the workforce shortage all OECD countries (OECD, 2020a) as well as Sweden have changed social security and pension schemes, to increase incentives for a delayed labor market exit (OECD, 2019). The retirement age in Sweden is flexible, i.e., at the time of the study individuals were able retire fully or partly between 62 and 68 years and receive public pension benefits. After the age of 68, individuals could only continue to work with employers’ agreement (The Swedish Pensions Agency, 2022). The policy interventions to encourage individuals to work longer are universal, however these interventions may have different effects in different workforce sectors. An evaluation of the effect of the change in pension schemes with raised retirement age in Sweden indicated individuals with low education and low income, typically workers in the eldercare, tend to retire at age 61, compared to individuals with high education and high income who tend to retire at age 67 (ISF, 2023). Indicating that the official objectives of extending working life are at odds with the actual retirement age.

This emphasize why the Swedish eldercare is an interesting context to study the link between family to work conflict, psychosocial work characteristics, and retirement intentions. Drivers for this research are the potentially different variables affecting intentions to continue working than those variables affecting older eldercare workers intentions to retire early, differences not revealed in previous literature.

*Theoretical framework*

The present study will use the Job Demands-Resources theory (Bakker & Demerouti, 2016) in the context of the Swedish eldercare. The JD-R theory posits job demands, such as high workload, increase the risk of strain and poor health, while job resources, such as social support, mitigate the negative effects of job demands. This is known as the “buffering” effect. the JD-R theory is driven by two parallel processes: the health impairment and work engagement process. Job strain and poor health, such as low general health, are associated with early retirement intentions, and high work engagement, such as low job satisfaction, are associated with late retirement intentions (ref). In this study we will use the JD-R theory to explore what type of resources (psychosocial job resources and family-work enhancement) and what type of demands (job-, and emotional demands, and family-work conflict) is associated with expected retirement timing (early or late).

**Method**

This cross-sectional study used a representative sample from the Swedish Longitudinal Occupational Survey of Health (SLOSH) 2018, which is a longitudinal cohort survey of the Swedish working population. More details about the SLOSH survey, e.g. the cohort profile, are to be found in Magnusson Hansson (2018). The Swedish Ethical Review Authority originally approved the SLOSH-study (ref. no. 2012/272-2/5) and the present study (ref. 2023-02693-01).

*Participants*

The studied working population is individuals working for at least 30 percent of full-time, excluding individuals temporary or permanent out of work, or fully retired 2018. The inclusion criteria for this study were eldercare staff (nursing aid, personal care workers, nurses, and managers) aged 45-74. The final study sample consists of 706 elder care workers. The study sample is representative of the Swedish elder care staff population in terms of gender and age ratio. This study includes individuals working in residential elder care and home-based elder care services, both private and municipal care providers.

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| **Table 1. Descriptive data of the study sample**  |
| Study sample *n*= 706 n (%) |
| Gender  |  |
|  | Women | 654 (93) |
|  | Men | 52 (7) |
| Age  |  |
|  | ≥45 | 84 (12) |
|  | 50-54 | 139 (20) |
|  | 55-59 | 215 (30) |
|  | 60-64 | 216 (31) |
|  | 65+ | 52 (7) |
| Background  |  |
| Born in Sweden | 647 (92) |
| Not born in Sweden  | 59 (8) |
| Education  |  |
| Elementary school | 16 (2) |
| Secondary school | 449 (64) |
| Tertiary education | 25 (3) |
| University education | 216 (31) |
| Household income in SEK  |  |
| 139 577-376 812 | 154 (22) |
| 377 763-549 094  | 115 (16) |
| 550 696-727 659 | 163 (23) |
| 728 902-944 085 | 141 (20) |
| 946 456-300 7174 | 133 (19) |
| Occupation  |  |
| Personal care workers/nurse aid | 505 (72) |
| Nurses | 71 (10) |
| Managers | 130 (18) |
| Duration employment (in years)  |  |
| <18 years | 52% |
| >19 years | 48% |
| Married/cohabitant  |  |
| Yes | 543 (77) |
| No | 160 (23) |
| Spouse working  |  |
| Yes | 426 (60) |
| No | 119 (17) |
| Children living at home  |  |
| Yes | 181 (26) |
| No | 509 (72) |
| Caring responsibilities  |  |
| 1-2 hours | 675 (97) |
| 3 or more hours | 19 (3) |

**Measures**

*Dependent variable*

We used one single item to measure older eldercare workers expected retirement age ("At what age do you think you'll retire (as things look today)?"), a widely used measurement of retirement intentions (Hyde et al., 2004) ( . The expected retirement age was given in years. We used Fisher, Chaffee and Sonnega's (2016) trichotomization on early, on-time, and late retirement timing, which has also been used in other studies (e.g., Sousa-Ribeiro et al., 2021). We coded the expected retirement age into early: 1=age 61 or earlier; on-time: 2=age 62-65; late: 3=age 66 or later).

***Independent variables***

Independent variables of interest were operationalized using valid and reliable research scales 1) the Control, Support, Demand Questionnaire (CSDQ); the 2) the Work/non-work (family) interface (Fisher et al., 2009); 3) the work ability Index (Ebener & Hasselhorn, 2019).

Inspired by the JD-R theory , (Bakker & Demerouti, 2016) the variables were grouped into Demands and Resources. For example, the demand variables were work-family/family-work conflict, job demands, and emotional job demands, and the resource variables were work-family/family-work enhancement, job control, and social support at work. Health variables were self-rated health, work ability, and life events in terms of illness or accident of one’s partner. To assess work motivation, we used the variable job satisfaction. The variables were grouped into individual-, work-, and organizational-level factors for the analysis.

*Demands*

Psychosocial work demands were measures by two subscales with 5 items for job demands (e.g. “do you have to work very fast”) and, 3 items for emotional demands (e.g. “Is your work emotionally demanding?”). Conflict between work and family life was measured by two subscales, with 4 items for work to family conflict (e.g. “My personal life suffer because of my work”), and 3 items for family to work conflict (e.g. “My work suffers because of everything going on in my personal life”).

*Resources*

Psychosocial work resources were measured by two subscales with 6 items for social support at work (e.g. “There is a calm and pleasant atmosphere where I work”) and 5 items for control at work (e.g. “Do you have possibility of learning new things through work?”). Enhancement between work and family life were measured by two subscales with 3 items for work to family enhancement (e.g. “Because of my job, I am in a better mood at home”) and 3 items for family to work enhancement (e.g. “My personal life gives me energy to do my job”).

*Health*

General self-rated health is a widely used measure of perceived current health status, which has been shown to be an indicator for the retirement timing (REF). Self-rated health was measured with the single question: “How would you rate your general state of health?”. Respondents answered on a 5-point scale from “very good” to “very poor”. Work ability was measured with two questions: “How would you rate your work capacity concerning physical/mental demands”. Life events was measured by two questions: “During the last two years, have you experienced any of the following: illness/accident of husband/wife/partners”.

*Job satisfaction*

Job satisfaction was assessed by one single item “Roughly, how satisfied are you with your work?”.

*Sociodemographic (covariates)*

Socio-demographics included sex (men/women), age (45-49; 50-54; 55-59; 60-64; 65+), occupation (SSYK 2012 Managers; Nurses; Assistant nurses and care workers), Swedish born(yes/no), level of education, household income (in quintiles), relationship status (marital/non-marital/cohabitation), children living at home (Yes/No), years/month for current employer and, informal caregiving responsibilities (yes/no). Informal caregiving responsibilities encompasses all aspects of caregiving, e.g. personal (e.g. medication and appointments) and emotional care (e.g. worries about relatives safety), and was assessed by hours spending and, if the caregiving was conceived as a burden. All of these variables have been found to be important for the retirement timing in previous studies (REF).

**Statistical analysis**

Univariate descriptive analyses were performed for all of the independent variables. Continuous variables were reported as Mean (M) and Standard Deviation (SD). Categorical variables were reported as N (%). The normality distribution of continuous variables was assessed. Acceptable range of skewness were assessed for X variables. To test the bivariate association of the subscales with expected retirement age we performed Pearson correlations.

For the statistical models, income was recoded in quintiles stratified for the sample. X variables were collapsed into a dichotomous variable: marital status were recoded into 1=married/cohabitant or 2=single; country of birth were recoded into (1=Born in Sweden; 2=born outside Sweden).

To ensure that model assumptions were met we examined the residuals.

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**Figure 1.** A conceptual model of the proposed association between different demands, resources, and the potentially moderating role of health and job satisfaction, on the outcome expected retirement timing (early or late).

**Results**

*Participant characteristics*

*Family-work interface*

*Health*

*Job satisfaction*

**Discussion**

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