Managers’ Attitudes to Different Action Proposals in the Direction to Extended Working Life: A Cross-Sectional Study

Kerstin Nilsson 1,2,⁎ and Emma Nilsson 1

1 Division of Occupational and Environmental Medicine, Lund University, 223 81 Lund, Sweden; emma.nilsson.1672@med.lu.se
2 Department of Public Health, Kristianstad University, 291 88 Kristianstad, Sweden
⁎ Correspondence: kerstin.nilsson@med.lu.se

Abstract: In many countries, the retirement age is postponed due to the global demographic change, and a larger amount of older people need to participate in working life. However, how and what measures and action proposals that could extend and increase employees’ voluntary and sustainable participation in working life have not entirely been investigated. The employer is responsible for enabling employees’ access to measures that facilitate participation in the workplace, for enabling employability and a sustainable extended working life. The aim of this cross-sectional study was to evaluate Swedish managers’ attitude to action proposals that could increase employees’ participation in an extended working life. Logistic regression analysis was used to investigate associations between different univariate estimates and in data modelling. The nine determinate areas of the swAge model, for a sustainable working life and employability, was used as analysis model, i.e., self-rated health and diagnoses; physical work environment; mental work environment; work schedule, work pace and time for recuperation; financial incentives; personal social environment; social work environment; stimulation, motivation and self-crediting through work tasks; and competence, skills and knowledge development. The results stated decreased physical work demands to be the final measure in the multivariate modelling associated to whether the managers believe their employees ‘can work’ until age 65 and older, however, changing work tasks in the workplace when needed, rotation between different work tasks to decrease physical as well as mental workload and strain, and decreased mental work demands proved to be statistically significant in the univariate estimates. The strongest measure activity in the organisations, associated to managers believing their employees ‘want to work’ until age 65 and older in the multivariate modelling, was decreased work pace, however, increased time for recuperation between work shifts also proved to be statistically significant in the univariate estimate. The management’s perspectives on measures and action proposals associated to whether employees ‘can’ and ‘want’ to work will hopefully contribute to an increased understanding in society and the organisational process of creating a sustainable extended working life.

Keywords: employability; ageing; work environment; swAge-model; demography; retirement; work–life balance; discrimination; competence; work ability; older worker; senior worker; extended working life; age management

1. Introduction

1.1. The Need of Organisational Measures in the Direction of an Extended Working Life

The area of occupational health and well-being, and promoting high standards in working conditions, is a key priority for the EU and the EU Directive regarding measures to improve occupational health and safety to protect workers and to promote workers’ rights [1]. Improving working conditions is crucial for workers and employers. However, only one fifth of European companies are estimated to already have discovered how to achieve optimal workplace well-being and business performance. Many different aspects regarding job quality need to be considered [1]. Good and sustainable employability and
work-quality jobs enable people to have longer and better working lives, contributing to sustainable work and a positive work–life balance. It is of a great importance to understand factors in the organisation that affect whether employees can and want to work, in the aim of creating a sustainable working life [1–3]. This is of particular importance in the current demographic trend when the proportion of older citizens is continuously increasing in most of the industrial world [4]. The increasing older population results in a larger amount of people in the pension system. The effect of this demographic change causes an increased old age dependency ratio, when fewer citizens in the workforce must provide for an increasing number of older citizens [5–7]. A consequence analysis from The Organization for Economic Cooperation and Development (OECD) compared the elderly boom to have economic and budgetary implications, such as the social effects resulting from natural disasters [4]. Retirement ages in many countries are being postponed as a way of adapting to the new demographic distribution; older people need to be encouraged to continue working and participating in the labour force for as long as possible. Due to this, the current demographic situation stresses the importance of knowledge regarding measure activities to motivate senior employees to experience that they can and want to work until an older age. Due to the demographic development, with an ageing workforce and a shortage of employees, there is a great need for organisations and companies to remain attractive in order to attract competent staff. However, individuals also need to remain employable until an older age. Hence, employability is important both to the possibility of gaining employment and to remain employed and not being pushed out of the workforce. Employees’ employability is a central part of the organisational structure and development, for workers and employers alike. In previous studies, working in the public sector has been especially associated with early withdrawal from working life [8,9], and knowledge of measure activities to change this trend in the public sector is necessary.

In an organisation, quality human resources are central to the development of employees as robust human capital and to organisational growth, contributing to a sustained attractiveness for individuals to seek employment and to the competitiveness of the company [10–16]. Human resource management strategies, measures, and practices have been stated to stimulate the development of intellectual capital in the organisation, and the employees’ maintained employability, through stimulating the employee’s abilities, motivation, and opportunities [10–16]. However, ongoing development of knowledge and stimulation is not all that is important to employees’ employability. Previous studies identify nine determinant areas connected to individuals’ employability, and state that there is a difference between whether people can work versus want to work [2,3,17–54]. These nine areas are divided into four action spheres, also described in the theoretical swAge model (sustainable working life for all ages) [1], and are as follows: Health impacts of the work environment: i.e., (1) self-rated health and diagnoses; (2) physical work environment; (3) mental work environment; (4) work schedule, work pace, and time for recuperation. Financial incentives: i.e., (5) personal finances. Social inclusion, relations, and participation: i.e., (6) personal social environment; (7) work social environment. Execution of work tasks: i.e., (8) work tasks, stimulation, motivation, and self-crediting; and (9) knowledge, skills, and competence. Therefore, it is of importance to investigate different measure activities in association to these determinant areas with the intention of developing a sustainable working life.

Managers have a key role in the development of a sustainable working life until an older age. The employer, through the manager, enables employees’ access to different measures that facilitate labour force participation and motivates and introduces measures in the work situation to enable employees’ employability and extension of working life [2,3,17,21]. Therefore, the manager’s attitudes are important to investigate in relation to enabling a sustainable extended working life in different sectors and workplaces. However, according to previous studies, some managers hold negative and stereotypical attitudes towards senior employees; these studies identify ageism and age discrimination [2,17,21,23,27]. For example, some managers perceive senior employees as stagnant and as an obstacle to
organisational development, through having difficulties in adjusting to change, through working more slowly and being less educated, as well as through holding negative attitudes towards new technology [17,21]. The experience of such negative attitudes, from managers towards senior employees, could push people out of working life early [18–22].

Though to our knowledge, there appears to be a scarcity of literature regarding managers’ attitudes and beliefs towards what organisational measures and actions increase their employees’ ability and willingness to extended working life, after our search for articles in the databases Scopus and PubMed. Therefore, additional knowledge is needed regarding managers’ attitudes and beliefs towards different measure activities with the aim of increasing their employees’ employability and work force participation, in order to make working life healthier and sustainable until an older age.

The aim of this study was to increase the knowledge of this area and to evaluate the managers’ attitudes and beliefs regarding whether different organisational measure activities could enable an extension of working life beyond 65 years of age in their workplace. The specific research questions were: (i) which organisational measures were associated to whether the managers believed their employees were able to work until and after the age of 65 years; (ii) what organisational measures were associated to whether the managers believed that their employees wanted to work until and after the age of 65 years?

1.2. Theoretical Background of the Analysis and Structure

Working life and all factors that affect individuals have been researched for a long time in a traditional, almost kaleidoscopic perspective, examining one perspective at a time. In order to understand the complexity of how different factors affect and interact regarding a healthy and sustainable working life, it is necessary to use different interdisciplinary and intersectional measurement methods to triangulate and validate the results. In the past, there has been a lack of explanatory models with a holistic approach that weighs in the overall complex picture of predictors and determinant areas for a sustainable working life. Instead, one or a few factors have been studied at a time. In order to capture the complexity, a more interdisciplinary perspective on working life needs to contain pathogenic and salutogenic effects, which in turn affect employability. The swAge model (sustainable working life for all ages) aims to visualise and organise this complexity, and make the connections more understandable [2,3,25]. The swAge model is a theoretical model of nine different determinant areas of significance for a sustainable working life for all ages, which relate to four spheres of determination and reason regarding employability, the possibility of being able to and willing to participate in working life, as well as to different age definitions, i.e.:

- Health impacts of the work environment, which relate to biological age and ageing [25] and include the following determinant areas:
  1. self-rated health, diagnoses, and functional diversity,
  2. physical work environment with unilateral movements, heavy lifting, risk of accidents, climate, chemical exposure, and risk of contagion,
  3. mental work environment with risk of stress and fatigue syndrome, threats, and violence, and
  4. working hours, work pace, and the possibility of recuperation during and between work shifts.

A sufficiently sound health is a prerequisite for employability and to participate in working life [20,24,26–29]. However, professional work also affects biological ageing, by wear and tear caused by the physical and mental work environments, the possibility to recuperate during and between work shifts, but also by the strengthening impacts of our work [17,18,24,26,30,31,36–39].

- Financial incentives, which relate to chronological age [25] and its association with society’s control of various financial incentives, for example the pension system and social insurance systems. Economic and financial incentives include the following determinant area:
5. the effects of the personal financial situation on individuals’ needs and willingness to work.

Professional work contributes to the upkeep of livelihood, food, and living expenses, and is often the main source of funding for individuals’ lives \[17–19,22,24–26,32\]. Insufficient employability due to ill health, lack of support, and lack of skills risk resulting in exclusion from working life and a poorer financial situation for the individual, not least in bad times, through sick leave, unemployment, early retirement, etc. \[20,24,26,30,40–42\].

Social inclusion, relations and participation, i.e., attitudes in the social context the individual find themselves, are considered, as well as whether the individual feels included or excluded in the group and whether they receive sufficient social support from the environment when needed, relate to social age and ageing during the life span \[25\] and include the following determinant areas:

6. the personal social environment, with family, friends, and leisure context, and
7. the social work environment with leadership, discrimination, and the significance of the social work context for the individuals’ work.

Human beings are herd animals; working life can contribute to the experience of participation and inclusion in a group as well as to a sense of security \[17,18,21,24,26,27,34,43\]. On the other hand, working life can also contribute to the experience of exclusion and neglect, or even discrimination \[23,26,27,43\]. However, every employee has a personal life and factors in their social environment outside work, their personal relationships also affect the individual’s opportunities and willingness to work \[24,26,35,37,38,43,44,50\]. This also affects the individual’s employability.

Execution of work tasks relate to cognitive age and ageing \[25\], intelligence, abilities, memory, learning, and instrumental support, and include the following determinant areas:

8. motivation, satisfaction, and stimulation through the execution of work tasks, and
9. knowledge, competence, and the importance of competence development for the individual’s work.

Working life is constantly changing and employees must be and remain employable in relation to the requirements of knowledge and skills in order to be able to execute their work tasks and activities \[17–19,24,26,27,34,45–55\]. Work tasks and activities can be a source of motivation, stimulation, and joy through the challenge to learn new things and develop, however, it can also be a source of boredom, dissatisfaction, and stagnation from which individuals want to make their exit as soon as possible \[17,18,24,26,32,34,43,48,55–64\].

2. Materials and Methods

The research design was quantitative and included empirical data from a cross-sectional survey.

2.1. Study Population

Working in the public sector has been associated with early withdrawal from working life in previous studies \[7,8\], as described above. Because of this we wanted to investigate the public sector; the study population consisted of managers in one of the largest municipalities in Sweden. The subjects were identified through the staff directory of employees and included the 456 managers employed in the specific municipality, i.e., a total investigation of all managers. Therefore, the study population all had the same employer. To use a study population who are in the same situation (e.g., employer and, therefore, having the same regulations, such as policies regarding employment conditions, rehabilitation policies, and retirement policies), has previously been stated as a way to increase the reliability of the study results \[45\].

The data were collected through a web survey. The managers in the study population were sent a questionnaire through their electronic work mail. After two reminders, 249 individuals responded to the questionnaire. The final study population corresponded to a response rate of 54.6%. The participating managers belonged to all sectoral work areas.
in the municipality, i.e., the following sectoral work areas: educational work (child, adolescent, and adult education) (38.6%); administration, support functions (HR, finance, law, administrative support function, management, communication, and digitization) (21.7%); care, health care, rehabilitation work, housing, and home care service (14.5%); social and curative work (11.6%); technology, IT, city environment, water maintenance, electric operation maintenance, and food distribution (9.2%); library, archive, culture, tourism, and municipality leisure activities (4.4%).

In the total study population, the gender distribution was 30% male and 70% female managers, and the respondents to the survey were 29% male managers and 71% female managers. The age distribution in the final study group was 27–65 years of age, with a median age of 50 years. That corresponded exactly to the age distribution of 27–65 years and a median age of 50 years for the managers in the total study population in the participating municipality. Additionally, 96% of responding managers worked 40 h/week (full-time), and 90% were managers (i.e., had a managerial position) in a full-time position. However, we did not have any exact figure of the distribution of managers working full-time or part-time in the total municipality, but this is a total investigation of all managers in the municipality and a Human Resources officer stated that the results were comparable to the distribution in the total municipality.

2.2. The Questionnaire

The questions and statements used in the questionnaire of this study have been tested and previously used in other studies [17, 24, 26, 29]. The selected questions and statements were based on previous studies performed by our research group [56–58], a literature review [25], and other surveys [59–63]. The questionnaire contained various action proposal statements that the managers would state whether they agreed with or did not agree with, regarding whether these actions could contribute to employees being able and willing to continue working until an older age. The statements in the questionnaire associated to employees’ work situation and were subdivided into the nine theoretical themes of the swAge model [1], i.e.,: (1) health; (2) physical work environment; (3) mental work environment; (4) work schedule, work pace, and time for recuperation; (5) personal finances; (6) personal social environment; (7) social work environment; (8) stimulation and motivation through work tasks; and (9) knowledge, skills, and competence. The action proposal statements in the analysis related to eight of the nine determinant areas in the swAge-model, i.e., no measure activity proposal related to the area (6) personal social environment.

The final questionnaire was tested in a group of 15 individuals who responded to the web questionnaire and provided comments, both on the questions themselves as a cognitive testing and readability of items, and on the process, i.e., how it worked to receive information letters and the questionnaire sent to them via e-mail and their experience of answering the questionnaire online. The evaluation of this pilot process resulted in a few, very small reformulations of question statements, i.e., grammatical and targeting adjustments.

Furthermore, the questionnaire included questions regarding at what age managers classified their female and male employees as senior employees, for how long they thought they would be able to work themselves, and when they themselves wanted to retire.

2.3. Statistical Analysis

The analysis was conducted using the statistical software program IBM SPSS Statistics 25. In the analysis, we were interested in the managers’ answers to the different statements regarding measure activities and how these were associated with the outcome of two specific questions. We used the statistical method of logistic regression analysis to investigate the aims of the study, i.e., the association between different factors in the work situation measured by statements and the two outcomes in this study: whether the managers believed that their employees ‘want to work until 65 years of age or older’ versus ‘can work until 65 years of age or older’. The logistic regression analysis generated odds ratios (OR),
as well as 95% confidence intervals (CI) and \( p \)-values, for the statements’ association with the two outcomes.

The first question was whether the responding managers believed their employees would want to work until 55–59, 60–64, 65 or 66 years of age, or older, and the second question was whether the responding managers believed their employees would be able to work until 55–59, 60–64, 65 or 66 years of age, or older. The answering options were dichotomised at 65 years of age (i.e., working until <65 years of age versus \( \geq 65 \) years of age).

The independent variable statements’ response options, i.e., different statements regarding measure activities, were dichotomised from four to two variables, i.e., from both ‘highly agree’ and ‘partly agree’ to just ‘agree’, and from both ‘partly disagree’ and ‘highly disagree’ to just ‘disagree’.

The logistic regression analysis and the result tables in the result paragraph are structured based on the nine determinant areas of the swAge-model and their division into the four actions spheres was used in the analysis thematization, i.e., health impacts of the work environment, financial incentives, social inclusion, relations and participation, execution of work tasks [2]. However, the action proposal statements used in the analysis related to eight of the nine determinant areas of the swAge-model, i.e., there was unfortunately no measure activity proposal in the questionnaire related to the determinant area ‘personal social environment’.

We used the following analytical strategy for each of the two outcomes for our investigated research questions:

(1) To examine the action proposal statements’ association with whether the managers believe that their employees ‘can work’ in an extended working life, we started with univariate analysis, i.e., we evaluated the associations for one statement at a time in association with the outcome. In the second step, we analysed one of the nine areas at a time. In each area we kept the statement with the lowest \( p \)-value (if \( p < 0.05 \)) and tentatively included all other statements, one at a time, from that area. In the third step, we kept the two statements with the lowest \( p \)-values (if both \( p < 0.05 \)) in each area, if there were more than one statement in the different areas, and tentatively included the remaining statements one at a time. This procedure continued for as long as the \( p \)-values for all included statements were <0.05.

(2) To examine the action proposal statements’ association with whether the managers believe that their employees ‘want to work’ in an extended working life we started with univariate analysis, i.e., we evaluated the associations for one statement at a time in association to the outcome. In the second step, we analysed one of the nine areas at a time. In each area we kept the statement with the lowest \( p \)-value (if \( p < 0.05 \)) and tentatively included all other statements, one at a time, from that area. In the third step, we kept the two statements with the lowest \( p \)-values (if both \( p < 0.05 \)) in each area, if there were more than one statement in the different areas, and tentatively included the remaining statements one at a time. This procedure continued for as long as the \( p \)-values for all included statements were <0.05.

3. Results

The managers stated different ages to be the possible average retirement age for their employees, i.e., until what age on average they believed their employees would be able to and would want to work. The proportion of managers who stated that most of their employees ‘can work until 65 years of age or older’ was 77%. The proportion of managers who stated that most of their employees ‘wanted to work until 65 years or older’ was 58%. However, the proportion of responding managers stating that they themselves ‘could work until 65 years of age or older’ was 86%. The proportion of managers ‘wanting to work until 65 years of age or older’ was 43%.

In this study, we analysed managers’ attitudes towards measures and action proposals for senior employees. Therefore, the managers were also asked when they considered their
employees to be senior workers. The managers’ responses stated a median age of 60 years of age to perceive their employees as senior, for both female and male employees.

3.1. Measures and Action Proposals to Enable Employees’ Ability to Work until 65 Years of Age or beyond

Logistic regression analysis was used to investigate the 28 possible measures and action proposals associated to managers believing that their employees can work until 65 years of age or older (Table 1). The highest statistically significant corresponding odds ratio (OR) were the action proposals “Decreased physical work demands”; “Other work tasks in the workplace”; and “Rotation between different work tasks to decrease physical workload and strain”. Additionally, the action proposals “Rotation between different work tasks to decrease mental workload and strain” and “Decreased mental work demands” were statistically significant and associated to managers believing that their employees would be able to work until 65 years of age or older.

Finally, multivariate modelling was conducted to examine which of these statistically significant action proposals ultimately were associated with managers’ attitudes to their senior employees being ‘able to work’ until 65 years of age or older. In the end, the multivariate model contained only one statistically significant proposed measure activity, of all the 28 proposed measures, thus, it appeared to be of the greatest importance for the managers’ beliefs whether their employees ‘could work’ in an extended working life, i.e., “Decreased physical work demands” from the determinant sphere ‘Physical work environment’.

Table 1. Measure activity statements associated to whether the managers believe their employees’ “can work”, outcome for the statements. The corresponding odds ratios (OR), significant value (P) and 95% confidence intervals (CI) obtained from logistic regression. ORs in the univariate estimates and the multivariate modelling indicate different measures in relation to the managers’ belief that their employees’ can work until 65 years of age or beyond.

| Measure Activity Statements Associated to Whether the Manager Believe Their Employees’ “Can Work”, Outcome for the Statements | Univariate Estimates | Final Statistic Significant Variables after Multivariate Modelling |
|---|---|---|
| | Action sphere | Determinant areas | Measures to increase employees’ ability to work until 65 years of age or longer | OR | P | 95% CI | OR | P | 95% CI |
| | Health impacts of the work environment | Self-rated health and diagnoses | Compulsory exercise/health care to keep employees in mental and physical shape until an older age | 1.190 | 0.567 | 0.656–2.161 |
| | | Physical work environment | Decreased physical work demands | 2.885 | 0.001 | 1.568–5.310 |
| | | | Rotation between different work tasks to decrease physical workload and strain | 2.128 | 0.019 | 1.132–4.002 |
| | | Mental work environment | Rotation between different work tasks to decrease mental workload and strain | 1.881 | 0.040 | 1.030–3.433 |
| | | | Decreased mental work demands | 1.823 | 0.051 | 0.997–3.333 |
| | | | Increased self-monitoring of work | 1.355 | 0.322 | 0.742–2.475 |
| | | Work schedule, work pace and recuperation | Change in the organization of working hours | 1.806 | 0.069 | 0.955–3.412 |
| | | | Increased time for recuperation between work shifts | 1.755 | 0.071 | 0.952–3.231 |
| | | | Decreased working hours | 1.952 | 0.188 | 0.721–5.282 |
| | | | Possibility to take breaks when needed | 1.302 | 0.402 | 0.702–2.412 |
| | | | Decreased work pace | 1.106 | 0.772 | 0.559–2.191 |
| | Financial incentives | Personal finance | Higher salary | 1.050 | 0.881 | 0.555–1.988 |
| | | | Decreased pension to keep employees from retiring prematurely | 1.372 | 0.404 | 0.653–2.883 |
3.2. Measures and Action Proposals to Enable Employees’ Willingness to Work until 65 Years of Age or beyond

The 28 possible measures and action proposals were also analysed in association to managers believing that their employees ‘want to work’ until 65 years of age or older (Table 2). The highest statistically significant association was with the area work schedule, work pace, and recuperation, i.e., “Decreased work pace” and “Increased time for recuperation between work shifts”. Furthermore, the measure activities belonging to the area stimulation, motivation and self-crediting through work tasks, i.e., “Other work tasks in the workplace when needed”, proved to be statistically significant and associated with the managers believing that their employees would ‘want to work’ until 65 years of age and older.

To examine which of these univariate statistically significant action proposals were primarily associated with managers’ believing that their senior employees ‘want to work’ until 65 years or older, a multivariate modelling was performed. The final multivariate model contained only one statistically significant measure and action proposal of all the 28 proposed measures, i.e., ‘Decreased work pace’ from the determinant sphere ‘Working hours, work pace and time for recuperation’, which appeared to be of the greatest importance to the managers’ believing that their employees ‘want to’ continue working in an extended working life.

### Table 1. Cont.

| Social inclusion, relations and participation | Personal social environment | - |
|---------------------------------------------|-----------------------------|---|
| Social work environment                     |                             |   |
| Change of work tasks in the workplace when needed | 2.230 0.015 | 1.170–4.251 |
| Increased opportunity of development at work | 1.584 0.132 | 0.871–2.879 |
| Increased work satisfaction                 | 1.583 0.144 | 0.857–2.925 |
| Increased opportunity of changing occupation and career at an older age | 1.242 0.480 | 0.681–2.264 |
| That employees to a greater extent can focus on the work tasks they experience as being the most important and interesting in their work | 1.224 0.508 | 0.673–2.227 |
| New job within their occupational area      | 1.157 0.683 | 0.575–2.327 |
| Increased career opportunities              | 1.133 0.695 | 0.606–2.119 |
| Rotation between different work tasks and activities to increase stimulation | 1.097 0.766 | 0.598–2.010 |
| Competence, skills, knowledge development   |                             |   |
| Competence development oriented toward the needs of the workplace | 1.190 0.571 | 0.653–2.167 |
| Competence development oriented toward the needs of the employee | 1.130 0.690 | 0.621–2.054 |
| Opportunity of receiving new knowledge      | 1.025 0.936 | 0.563–1.864 |
Table 2. Measure activity statements associated to whether the managers believe their employees’ “want to work”, outcomes for the statements. The corresponding odds ratios (OR), significant value (P), and 95% confidence intervals (CI) obtained from logistic regression. ORs in the univariate estimates and the multivariate modelling indicate different measures in relation to the managers’ belief that their employees’ can work until 65 years of age or older.

| Action sphere                      | Determinant areas                          | Measures to increase employees’ ability to work until 65 years of age or longer | Univariate Estimates | Final Statistic Significant Variables after Multivariate Modelling |
|-----------------------------------|---------------------------------------------|--------------------------------------------------------------------------------|----------------------|---------------------------------------------------------------|
|                                   | Self-rated health and diagnoses             | Compulsory exercise/health care to keep employees in mental and physical shape until an older age | OR: 1.285, P: 0.330, 95% CI: 0.776–2.129 | | |
| Health impacts of the work environment | Physical work environment                   | Decreased physical work demands | OR: 1.541, P: 0.103, 95% CI: 0.917–2.592 | | |
|                                   | Mental work environment                     | Rotation between different work tasks to decrease physical workload and strain | OR: 1.089, P: 0.768, 95% CI: 0.618–1.918 | | |
|                                   | Change in the organization of work hours    | Increased time for recuperation between work shifts | OR: 1.719, P: 0.037, 95% CI: 1.032–2.862 | | |
|                                   | Decreased working hours                     | Decreased work pace | OR: 1.761, P: 0.144, 95% CI: 0.824–3.763 | | |
|                                   | Possibility to take breaks when needed      | Possibility to take breaks when needed | OR: 1.431, P: 0.176, 95% CI: 0.852–2.402 | | |
| Financial incentives              | Personal social environment                 | Increased participation in work | OR: 1.473, P: 0.147, 95% CI: 0.873–2.485 | | |
|                                   | Social work environment                      | Increased participation in work | OR: 1.611, P: 0.089, 95% CI: 0.930–2.788 | | |
|                                   | Change of work tasks in the workplace when needed | Increased opportunity of development at work | OR: 1.249, P: 0.391, 95% CI: 0.752–2.077 | | |
|                                   | Increased work satisfaction                  | Increased work satisfaction | OR: 1.379, P: 0.246, 95% CI: 0.801–2.374 | | |
| Social inclusion, relations and participation | Stimulation, motivation and self-crediting through work tasks | Increased opportunity of changing occupation and career at an older age | OR: 1.212, P: 0.461, 95% CI: 0.726–2.023 | | |
|                                   | That employees to a greater extent can focus on the work tasks they experience as being the most important and interesting in their work | | OR: 1.166, P: 0.555, 95% CI: 0.700–1.944 | | |
| Execution of work tasks           | New job within their occupational area      | New job within their occupational area | OR: 1.158, P: 0.618, 95% CI: 0.651–2.061 | | |
|                                   | Increased career opportunities              | Increased career opportunities | OR: 1.205, P: 0.489, 95% CI: 0.711–2.041 | | |
|                                   | Rotation between different work tasks and activities to increase stimulation | Rotation between different work tasks and activities to increase stimulation | OR: 1.077, P: 0.779, 95% CI: 0.643–1.802 | | |
| Competence, skills, knowledge development | Competence development oriented toward the needs of the workplace | Competence development oriented toward the needs of the workplace | OR: 1.066, P: 0.803, 95% CI: 0.644–1.767 | | |
|                                   | Opportunity of receiving new knowledge       | Opportunity of receiving new knowledge | OR: 1.139, P: 0.615, 95% CI: 0.685–1.894 | | |
4. Discussion

The workplace enables employees’ access to measures that facilitate labour force participation through the employer, i.e., through the manager. Furthermore, there is a difference between employees wanting to and being forced to work in an extended working life [2,3,24,26,42,57,58]. Previous research states that certain areas determine whether individuals ‘can work’ or ‘want to work’, and that these areas are significant to the individual’s employability, retirement and retirement planning [2,3,24–26,57,58]. In an organisation or enterprise, primarily the manager makes decisions regarding these determinant areas. Consequently, the manager’s attitudes are of great importance in order to enable a sustainable longer working life. It is important to define the age of a senior worker in order to take measure and actions to increase senior employees’ possibilities of an extended working life. In this study, the managers interpreted their employees as senior workers at 60 years of age on average, for both male and female employees. In a study conducted in the UK, managers considered their female employees to be senior employees at 48 years of age, while they considered male employees to be senior employees at 51 years of age [27]. Therefore, there appears to be some different cultural and/or some structural societal attitudes in different countries. These different attitudes regarding when an employee is a senior worker could perhaps affect the employees’ access to measures and action proposals in order to increase the chances of an extended working life.

4.1. The Importance of Measures

The structure of the discussion below follows the nine determinant areas of the swAge-model, divided in to the four actions spheres, i.e., ‘Health impacts of the work environment’, ‘Financial incentives’, ‘Social inclusion, relations and participation’, and ‘Execution of work tasks’.

4.1.1. Health Impacts of the Work Environment

1. Self-rated health and diagnoses

The results of this study showed that organisational measures related to the determinant area ‘self-rated health and diagnoses, i.e., organisational ‘compulsory exercise and health care to keep employees in mental and physical shape until an older age’, did not prove a statistically significant association to whether the managers believed their employees would be able to or want to work until 65 years of age or older. However, individuals’ health is very important to their work life participation and maintained employability [2,3,24–30,43]. Nevertheless, a reflection is whether the organisation and managers should force employees to be in mental and physical shape, or if that crosses the boundaries of the individual’s integrity. However, different organisational activities are needed in order to prevent, promote, and empower employees’ health. It appears to be important for managers and the organisation to reflect on nudging healthy choices, without crossing the boundaries of the employee’s integrity, if they want their employees to work in an extended working life.

2. Physical work environment

The analysis of measures in this study stated that the most important measures associated with managers believing they could enable their employees to work in an extended working life, i.e., the highest statistically significant OR, were measures belonging to the area physical work environment, i.e., to decrease physical work demands and increase rotation between different work tasks to decrease strain and physical work demands. In the multivariate modelling, ‘Decreased physical work demands’ was the only statistically significant action proposal associated with whether the managers believe their employees would be able to work until 65 years or longer. A poor physical work environment and work conditions increase the risk of work accidents, leave people worn out, and push them to leave working life early [2,3,24–26,31–33]. Therefore, activities to increase a healthy
physical work environment are of great importance to the possibility of employability until an older age.

3. Mental work environment

The analysis of this study showed that managers believing that measures and activities to decrease the mental work demands, as well as measures to promote and increase rotation between different work tasks in order to decrease the strain of mental demands, proved to be statistically significant to managers believing that their employees would be able to work until 65 years of age or older. Furthermore, mental work conditions, stress, and lack of control in the execution of work tasks have been mentioned as increasingly important predictors for people’s sickness absence and retirement planning [2,3,24–26,34–36]. If an employee is on sickness absence at a young age due to mental work conditions, how should they be able to work in an extended working life? Therefore, organisations and managers need to be aware of the connection between stress and an extended working life, and reflect on activities to create a healthy mental work environment for all age groups.

4. Working hours, work pace, and time for recuperation

The action proposals ‘decreased work pace’ and ‘increased time for recuperation between work shifts’ showed the highest statistical significance regarding what the participating managers believed could increase their employees’ possibility of wanting to work until 65 years of age or older in this study. Several previous studies highlight a moderate work pace and working hours and have also shown that senior employees need increased time for rest and recuperation [2,3,24–26,37–39,43,56]. In an analysis of employees’ own attitudes regarding whether they ‘can’ and ‘want to’ work until 65 years of age and older, ‘working hours, work pace, and time for recuperation’ proved to be mainly statistically significant to whether senior employees would be able to work in an extended working life [24,26,43,57,58]. This result is probably due to the fact that senior employees in general need increased time for rest, to heal from (work) injuries, and for recuperation [3,25,38,43,50,56]. Therefore, action proposals related to the determinant area ‘working hours, work pace, and time for recuperation’ appear to be of great importance in order to facilitate an extended working life.

4.1.2. Financial Incentives

5. Personal finance

The determinant area ‘financial incentives’ included research regarding whether the risk of poverty keeps employees in the workforce or whether it is possible to quit working with sufficient personal financial well-being [2,3,24–26,40–42]. In this study, we investigate this area through asking the managers whether ‘higher salary’ or ‘decreased pension to keep employees from retiring prematurely’ would be successful measure activities in order to increase their senior employees’ possibility of working until 65 years of age or older. However, these measure proposals were not statistically significant to whether the managers believed their senior employees would be able to or would not want to work until 65 years of age or older. Additionally, previous studies state that salary and financial incentives are very important reasons to participate in working life, however, they are not sufficiently motivating if the work situation is poor and the employees have the possibility to choose other financial incomes, such as from the retirement system [24,42,43,56–58]. To force individuals to continue working in a poor work situation and work environment could also cost them their employability, because of injuries and health problems. Therefore, it is not successful to just try to control and regulate individuals’ choices to work in a longer working life with financial incentives. All of the nine determinant areas in the work situation need to be good enough to the senior employee.
4.1.3. Social Inclusion, Relations, and Participation

6. Personal social environment

The personal social environment and attitudes in surrounding society influence an employee’s withdrawal from working life, e.g., through marital status, whether the life partner is working, or whether the senior employee wants to spend more time with relatives and leisure pursuits [2,3,24–26,43–45]. However, no action proposals and measures were associated to this determinant area in the questionnaire; therefore, we could unfortunately not investigate the managers’ attitudes towards measure activities in this area.

7. Social work environment

What the management and leadership in the organisation is like, whether the attitudes are positive towards and between employees, whether workers are included in the organisation, or whether there is a stereotypical idea of senior employees as stagnant and an encumbrance, affects the social work environment [2,3,17,24–26,46,47]. The manager has got a very important role in the social work environment to influence the norms and strategies in the workplace [2,3,24–26,36,43,46,47]. However, the results stated that the measure proposals belonging to this area, i.e., action proposals to increase employees’ experience of participation in work or increased unity and well-being, did not prove to be statistically significant to whether the managers believed their senior employees would be able to or would not want to work until 65 years of age or older. It appears to be important that managers increase their reflections regarding the effect of relationships, social participation and group dynamics in the workplace, and on their employees work life participation and possibility of a sustainable working life.

4.1.4. Execution of Work Tasks

8. Stimulation, motivation, and self-crediting through work tasks

There were eight different activity proposals associated with the determinant area ‘stimulation, motivation, and self-crediting through work tasks’. However, of these eight, only one action proposal, ‘change of work tasks in the workplace when needed’ was statistically significant to whether the managers believed that their senior employees would be able to work. Moreover, it was not statistically significant to whether the managers believed their employees would want to work. However, according to previous studies, motivating and simulating work tasks have an impact on employees’ attitudes and willingness to participate in an extended working life [2,3,24–26,43,48–50]. Furthermore, possibilities of changing work tasks if necessary are important to stimulation to a maintained employability until an older age. Therefore, managers appear to need to reflect on whether their employees have stimulating and motivating work tasks, and if not, to take action and measures in the organization to change this if they want their employees to continue working in an extended working life.

9. Competence, skills, and knowledge development

Previous studies state that the level of education, competence, and possibility of skills development, and the possibility to utilize skills in work tasks are factors of importance to employability and participation in an extended working life [2,3,24–26,51–53]. However, the managers participating in this study did not appear to regard competence as a measure of importance to increase the employees’ possibility of an extended working life, i.e., there was no statistically significant association between the managers’ attitudes towards the employees’ abilities and the competence measures to increase employees’ participation in an extended working life. This is notable due to the rapid ongoing development of working life and work tasks. If the managers do not think it is important to continuously develop the senior employees’ competence, skills, and knowledge through organisational measures or action proposals, it appears to be difficult for senior employees to keep up with the developments and remain employable.
4.2. Limitations and Strengths of the Study

The study design is cross-sectional; a limitation is that it only provided results from one point in time. However, this study is the baseline measurement in a longitudinal study regarding factors impacting an extended working life, and will be followed up when the employees leave their working life.

Many of the responding managers were women, which could be a limitation. However, this reflected and corresponded with the fact that the majority of the total study population were women, and a larger amount of female managers are employed in the examined Swedish municipality.

Even though the municipal participating in the study was the eighth largest in Sweden with 456 managers identified in the study, a potential weakness was that 46.4% of the managers in the original study population chose not participate. Still, the response rate was 54.6%, compared to other studies this was an expected and normal response rate of surveys. Furthermore, the average age was 50.4 years of age with a range of 25–67 years of age. Therefore, most managers appear to be in the later stage of their career. Perhaps a study population with younger managers would have caused different results. However, in Swedish working life and in the municipal sector on average, the average age among managers is high, as in most industrial countries; therefore, the study population reflects the general composition of the labour force [4–6].

A strength of this study was that all respondents had the same employer. This factor minimised the risk of different employment conditions, rehabilitation policies, and retirement policies and could increase the reliability of the results [55]. On the other hand, it is a limitation, because it is the specific situation of this employer that is investigated. Another strength of this study was that it is a total sampling including all managers in the investigated municipality. Additionally, the questionnaire was sent out after a review of the theoretical basis of the area, the swAge-model, and the majority of the statements in the questionnaire have been used in previous studies and validated. Another strength of this study was the possibility to examine differences between determinant areas of importance to whether employees can and whether employees want to work, respectively, and which were identified as very important to retirement and retirement planning in previous studies [2,3,24–26,57,58,64]. However, a limitation was that one of the determinant areas, i.e., ‘personal social environment’, was not represented by any measure or action proposal.

Furthermore, despite earlier studies having stated differences between factors related to whether employees ‘can work’ versus ‘want to work’, to the best of our knowledge, no other previous studies have analysed different measure and action proposals associated to whether managers believe their employees ‘can’ versus ‘want to’ work in an extended working life.

4.3. Future Research Proposals

In this study, measure and activity proposals were investigated in association to municipality managers’ attitudes. To make the entire working life more age friendly and increase the employability and sustainability of working life, this and similar research questions need to be investigated in several additional work sectors. Working conditions are generally improving in most countries. However, the pace of progress is gradual; the progress has not been as fast for some groups of workers since the progress is stated to depend on the type of work contract, the sector, and the level of educational attainment [1]. Many individuals are struggling to combine work and non-work commitments. Flexible working arrangements can solve these difficulties. However, they also bring challenges. For example, remote work offers more freedom to choose when and where to work, although the lack of boundaries, in terms of time and place, can also result in longer working hours at higher intensity and with greater difficulty to disconnect from work. Especially, the COVID-19 pandemic has highlighted this blurring of lines between work and personal life. It is important that the managers’ attitudes towards senior employees are positive, if
society wants a larger amount of people to have the chance of participating in working life until an older age, due to the demographic development which causes a larger amount of older people needing to earn a living.

A notable result in this study was also that 77% of the managers stated that most of their employees ‘could work until 65 years of age or older’, but 58% of the managers stated that most of their employees ‘wanted to work until 65 years or older’. At the same time, 86% of the responding managers stated that they themselves could work until 65 years of age or older, but only 43% of managers wanted to work until 65 years of age or older. Previous studies have stated that managers and CEOs more frequently withdrew early from working life for retirement. Furthermore, they have an increased financial possibility to leave working life earlier than common employees [42]. Therefore, in future research it is of interest to investigate why managers usually believe that they are ‘able to work’ until an older age than their employees, but why they ‘wanted to work’ until 65 years of age and older, less often than they thought their employees would.

5. Conclusions

Knowledge regarding organisational measure activities that could increase employees’ ability and willingness to voluntary work until 65 years of age and older in a sustainable way is very important, especially since the retirement age is being postponed in many countries. Governments certainly have an important role to play in establishing the framework through regulations if working life should be extended on until an older age. However, employees’ employability is not only a matter for societies due to the demographic development, but is also a central part of an organisation’s structure and development for employees and employers alike. However, it is the employer and the manager who are responsible for enabling employees’ access to measures in the workplace and possibility of maintained employability. Therefore, the aim of this cross-sectional study was to evaluate managers’ attitudes towards action proposals and measures that could increase their employees’ participation in an extended working life.

The results stated a difference between what measure activity managers believe affected whether their employees ‘can work’ until age 65 and older and whether their employees ‘want to work’ until age 65 and older. The managers participating in this study believed their employees ‘can work’ until age 65 and beyond if there were measure activities and actions in the organisation that would decrease the physical work demands, such as increased possibilities of changing work tasks in the workplace when needed; possibilities of rotation between different work tasks to decrease physical as well as mental workload and strain; and possibilities to decrease mental work demands. Additionally, the measure activities with the strongest associations to whether managers believe that their employees ‘want to work’ until age 65 and older in the organisations were decreased work pace and increased time for recuperation between work shifts. However, it is of utmost importance that the employees experience that they both can and want to continue working in an extended working life, if the situation is to be sustainable for both the employer and the employees.

Improving working conditions is crucial for public health in society, as well as to individual workers and employers [1,4–9]. Many different aspects in job quality need to be considered in order to improve working conditions [1–3]. The nine determinant areas of the swAge model for a sustainable working life and employability was used as a model for analysis. Furthermore, the swAge model could be used by managers to examine the workplace and find out what activities and measures are needed, because every workplace is unique, likewise, every employee is unique. In many dimensions of job quality, the workplace is where change happens, offering the best outcomes for workers and employers, boosting performance, improving job quality, and make employees’ employability sustainable in a longer working life through increasing employee autonomy, facilitating employee involvement, and promoting training and learning. Individuals’ employability until an older age depends on the health impacts of the work environments’;
financial incentives; social inclusion, relations, and participation; and the execution of work tasks and activities. To make a work situation and work environment sustainable for an extended working life, the different measures and actions need to fit the employee, the work tasks and the workplace organisation. Therefore, the employee, through the manager, needs to know what measures are necessary to be taken for their own employees.

The managers’ perspectives on measures and action proposals associated to whether employees ‘can’ and ‘want’ to work in this study will hopefully contribute to an increased understanding in society and in the organisational process of creating a sustainable extended working life.

Author Contributions: Conceptualization, K.N. and E.N.; Data curation, K.N.; Formal analysis, K.N. and E.N.; Investigation, K.N.; Methodology, K.N.; Project administration, K.N.; Supervision, K.N.; Writing—original draft, K.N. and E.N.; Writing—review & editing, E.N. All authors have read and agreed to the published version of the manuscript.

Funding: This study was funded by AFA Insurance (Sweden): 170298. The financiers were neither involved nor had any role in the design of the study, the data collection, the analysis, the interpretation of data, or in the writing of this paper.

Institutional Review Board Statement: The study was conducted according to the ethical codes and principles expressed in the Declaration of Helsinki and was approved by The Regional Ethical Review Board in Lund (no 2018/27).

Informed Consent Statement: Informed consent to participate was collected from the participants in the survey.

Data Availability Statement: The data used in this study are managed by the authors. To access this data please contact the authors.

Conflicts of Interest: The authors declare no conflict of interest.

References

1. Eurofond. Health and Well-Being at Work. Available online: https://www.eurofound.europa.eu/topic/health-and-well-being-at-work. (accessed on 2 January 2022).
2. Nilsson, K. A sustainable working life for all ages—The swAge-model. *Appl. Ergon.* **2020**, *86*, 103082. [CrossRef] [PubMed]
3. Nilsson, K.; Nilsson, E. Organisational Measures and Strategies for a Healthy and Sustainable Extended Working Life and Employability—A Deductive Content Analysis with Data Including Employees, First Line Managers, Trade Union Representatives and HR-Practitioners. *Int. J. Environ. Res. Public Health* **2021**, *18*, 5626. [CrossRef] [PubMed]
4. OECD. Pensions at a Glance 2017: OECD and G20 Indicators; OECD Publishing: Paris, France, 2017. [CrossRef]
5. Eurostat. Active Ageing and Solidarity between Generations—A Statistical Portrait of the European Union 2012; Publications Office of the European Union: Luxembourg, 2011.
6. European Commission. *Demography Report*; Publications Office of the European Union: Luxembourg, 2015.
7. Hess, M. Rising preferred retirement age in Europe: Are Europe’s future pensioners adapting to pension system reforms? *J. Aging Soc. Policy* **2017**, *29*, 245–261. [CrossRef] [PubMed]
8. Sweden’s Municipalities and Regions. Meet the Welfare Skills Challenge—Recruitment Report 2020; Sweden’s Municipalities and Regions: Stockholm, Sweden, 2020.
9. The Swedish Work Environment Authority. *Work-Related Disorders 2018*; The Swedish Work Environment Authority: Stockholm, Sweden, 2018.
10. Rehman, J.; Hawryszkiewycz, I.; Sohaib, O.; Soomro, A. Developing intellectual capital in professional service firms using high performance work practices as toolkit. In Proceedings of the 53rd Hawaii International Conference on System Sciences, Maui, HI, USA, 7–10 January 2020.
11. Marimuthu, M.; Arokiasamy, L.; Ismail, M. Human Capital Development and Its Impact on Firm Performance: Evidence from Developmental Economics. *J. Int. Soc. Res.* **2009**, *2*, 265–272.
12. McClean, E.; Collins, C.J. High-Commitment HR Practices, Employee Effort, and Firm Performance: Investigating the Effects of HR Practices Across Employee Groups Within Professional Services Firms. *Hum. Resour. Manag.* **2011**, *50*, 341–363. [CrossRef]
13. Messersmith, J.G.; Guthrie, J.P. High Performance Work Systems in Emergent Organizations: Implications for Firm Performance. *Hum. Resour. Manag.* **2010**, *49*, 241–264. [CrossRef]
14. Nadler, D.A.; Gerstein, M.S.; Shaw, R.B. *Organizational Architecture: Designs for Changing Organizations*, 1st ed.; Jossey-Bass: San Francisco, CA, USA, 1992.
15. Nonaka, I.; Takeuchi, H. *The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation*; Oxford University Press: Oxford, UK, 1995.

16. Obeidat, B.Y.; Abdallah, A.B.; Aqqad, N.O.; Akhoershiedah, A.H.O.; Maqableh, M. The Effect of Intellectual Capital on Organizational Performance: The Mediating Role of Knowledge Sharing. *Commun. Netw.* 2017, 9, 1–27. [CrossRef]

17. Nilsson, K. Managers’ attitudes to their older employees—a cross-sectional study. *Work* 2018, 59, 49–58. [CrossRef]

18. Nilsson, K. Attitudes of managers and older employees to each other and the effects on the decision to extended working life. In *Older Workers in a Sustainable Society*; Labor Education & Society; Ennals, R., Salomon, R.H., Eds.; Peter Lang Verlag: Frankfurt, Germany, 2011; pp. 147–156.

19. Oakman, J.; Wells, Y. Retirement intentions: What is the role of push factors in predicting retirement intentions? *Ageing Soc.* 2013, 33, 988–1008. [CrossRef]

20. Johnston, D.W.; Wang-Sheng, L. Retiring to the good life? The short-term effects of retirement on health. *Econ. Lett.* 2009, 103, 8–11. [CrossRef]

21. Nilsson, K.; Nilsson, E. Can They Stay or Will They Go? A Cross Sectional Study of Managers’ Attitudes towards their Senior Employees. *Int. J. Environ. Res. Public Health* 2022, 19, 1057. [CrossRef]

22. Saurama, L. Experience of Early Exit: A Comparative Study of the Reasons for and Consequences of Early Retirement in Finland and Denmark in 1999–2000; Finnish Centre for Pension Studies: Helsinki, Finland, 2004.

23. Stypinska, J.; Konrad Turek, K. Hard and soft age discrimination: The dual nature of work-place discrimination. *Eur. J. Ageing* 2017, 14, 49–61. [CrossRef] [PubMed]

24. Nilsson, K.; Rignell-Hydbom, A.; Rylander, L. Factors influencing the decision to extend working life or to retire. *Scand. J. Work. Environ. Health* 2011, 37, 473–480. [CrossRef] [PubMed]

25. Nilsson, K. Conceptualization of ageing in relation to factors of importance for extending working life—a review. *Scand. J. Public Health* 2016, 44, 490–505. [CrossRef] [PubMed]

26. Nilsson, K. The Influence of Work Environmental and Motivation Factors on Seniors’ Attitudes to an Extended Working Life or to Retire. A Cross Sectional Study with Employees 55–74 Years of Age. *Open J. Soc. Sci.* 2017, 5, 30–41. [CrossRef]

27. McGoldrick, A.E.; Arrowsmith, J. Discrimination by age: The organizational response. *Commun. Netw.* 2017, 9, 1–27. [CrossRef]

28. Pietiläinen, O.; Laaksonen, M.; Rahkonen, O.; Labelma, E. Self-rated health as a Predictor of Disability Retirement—The Contribution of Ill-Health and Working Conditions. *PLoS ONE* 2011, 6, e25004. [CrossRef] [PubMed]

29. Nilsson, K.; Rignell-Hydbom, A.; Rylander, L. Factors influencing the decision to extend working life or to retire. *Scand. J. Work. Environ. Health* 2011, 37, 473–480. [CrossRef] [PubMed]

30. Nilsson, K.; Rignell-Hydbom, A.; Rylander, L. How is self-rated health and diagnosed disease associate with early or deferred retirement: A cross sectional study with employees aged 55–64. *BMC Public Health* 2016, 32, 886. [CrossRef]

31. Karlsson, N.E.; Carstens, J.M.; Gjesdal, S.; Alexandersson, K.A.E. Work and Health. Risk factors for disability pension in a population-based cohort of men and women on long-term sick leave in Sweden. *Eur. J. Public Health* 2008, 18, 224–231. [CrossRef]

32. Sauré, P.; Zoabi, H. *Retirement Age Across Countries: The Role of Occupations*; Swiss National Bank Working Papers 6/2012; Swiss National Bank: Zurich, Switzerland, 2011; Available online: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1940452 (accessed on 10 March 2020).

33. von Bonsdorff, M.E.; Rantanen, T.; Törmäkangas, T.; Kulmala, J.; Hinrichs, T.; Seitsamo, J.; von Bonsdorff, M.B. Midlife work ability and mobility limitation in old age among non-disability and disability retirees: A prospective study. *BMC Public Health* 2016, 16, 154–161. [CrossRef]

34. Kunze, F.; Reas, A.M.L. It Matter How Old You Feel: Antecedents and Performance Consequences of Average Relative Subjective Age in Organizations. *J. Appl. Psychol.* 2015, 100, 1511–1526. [CrossRef]

35. Hovbrandt, P.; Carlsson, G.; Nilsson, K.; Albin, M.; Häkansson, C. Occupational balance as described by older workers over the age of 65. *J. Occup. Sci.* 2019, 26, 40–52. [CrossRef]

36. Canivet, C.; Choi, B.K.; Karasek, R.; Moghaddassi, M.; Staland-Nyman, C.; Östergren, P.-O. Can high psychological job demands, low decision latitude, and high job strain predict disability pensions? A 12-year follow-up of middle-aged Swedish workers. *Int. Archiv Occup. Environ. Health* 2013, 86, 307–319. [CrossRef] [PubMed]

37. Mykleutun, R.; Furunes, T. The Ageing Workforce Management Programme in Vatenfall AB Nordic, Sweden. In *Older Workers in a Sustainable Society*; Labor Education & Society; Ennals, R., Salomon, R.H., Eds.; Peter Lang Verlag: Frankfurt, Germany, 2011; pp. 93–106.

38. Furunes, T.; Mykleutun, R. Managers’ Decision Latitude for Age Management: Do Managers and Employees have the same (implicit) Understanding? In *Older Workers in a Sustainable Society*; Labor Education & Society; Ennals, R., Salomon, R.H., Eds.; Peter Lang Verlag: Frankfurt, Germany, 2011; pp. 107–116.

39. Laaksonen, M.; Metsä-Simola, N.; Martikainen, P.; Pietiläinen, O.; Rahkonen, O.; Gould, R.; Partonen, T.; Labelma, E. Trajectories of mental health before and after old-age and disability retirement: A register-based study on psychotropic drugs. *Scand. J. Work. Environ. Health* 2012, 38, 409–417. [CrossRef]

40. Cobb-Clark, D.A.; Stillman, S. The Retirement Expectations of Middle-aged Australians. *Econ. Rec.* 2009, 85, 146–163. [CrossRef]

41. Brenes-Comacho, G. Favourable changes in economic well-being and self-rated health among the elderly. *Soc. Sci. Med.* 2011, 72, 1228–1235. [CrossRef] [PubMed]
42. Nilsson, K.; Östergren, P.-O.; Kadefors, R.; Albin, M. Has the participation of older employees in the workforce increased? Study of the total Swedish population regarding exit working life. *Scand. J. Public Health* 2016, 44, 506–516. [CrossRef] [PubMed]
43. Nilsson, K. Why work beyond 65? Discourse on the decision to continue working or retire early. *Nord. J. Work. Life Stud.* 2012, 2, 7–28. Available online: http://www.nordicwl.com/nilsson-2012-why-work-beyond-65-discourse-on-the-decision-to-continue-working-or-retire-early/ (accessed on 1 January 2022). [CrossRef]
44. Gyllensten, K.; Wentz, K.; Häkansson, C.; Nilsson, K. Older assistant nurses’ motivation for a full or extended working life. *Ageing Soc.* 2019, 39, 2699–2713. [CrossRef]
45. Friis, K.; Ekholm, O.; Hundrup, Y.A.; Obel, E.B.; Grombaek, M. Influence of health, lifestyle, working conditions, and sociodemography on early retirement among nurses: The Danish Nurse Cohort Study. *Scand. J. Public Health* 2007, 35, 3–30. [CrossRef]
46. Jensen, P.H.; Juul Møberg, R. Age Management in Danish Companies: What, How and How Much? *Nord. J. Work. Life Stud.* 2012, 2, 49–65. [CrossRef]
47. Cheung, F.; Wu, A.M.S. An investigation of predictors of successful aging in the workplace among Hong Kong Chinese older workers. *Int. Psychogeriatr.* 2012, 24, 449–464. [CrossRef]
48. Jokela, M.; Ferrie, J.E.; Gimeno, D.; Chandola, T.; Head, J.; Vahtera, J.; Westerlund, H.; Marmot, M.G.; Kivimäki, M. From Midlife to early Old Age. Health trajectories Associated with Retirement. *Epidemiology* 2010, 21, 284–290. [CrossRef] [PubMed]
49. Oude Hengel, K.; Blatter, B.M.; van der Molen, H.F.; Bongers, P.M.; van der Beek, A.J. The effectivness of a construction worksite prevention program on work ability, health, and sick leave: Results from a cluster randomized controlled trial. *Scand. J. Work Environ. Health* 2013, 39, 456–467. [CrossRef] [PubMed]
50. Hovbrandt, C.; Håkansson, C.; Karlsson, G.; Albin, M.; Nilsson, K. Prerequisites and driving forces behind an extended working life among older workers. *Scand. J. Occup. Ther.* 2017, 28, 171–183. [CrossRef] [PubMed]
51. Mather, M. Aging and cognition. *Cogn. Sci.* 2010, 1, 346–362. [CrossRef]
52. Backes-Gellner, U.; Schneider, M.R.; Veen, S. Effect of Workforce Age on Quantitative and Qualitative Organizational Performance: Conceptual Framework and Case Study Evidence. *Organ. Stud.* 2011, 32, 1103–1121. [CrossRef]
53. Doyle, Y.G.; McKee, M.; Sherriff, M. A model of successful ageing in British populations. *Eur. J. Public Health* 2012, 22, 76–77. [CrossRef]
54. Forma, P.; Tuominen, E.; Väänänen-Tomppo, I. Who wants to continue at work? Finnish pension reform and the future plans of older workers. *Eur. J. Soc. Secur.* 2005, 7, 227–250.
55. Li, C.-Y.; Sung, F.-C. A review of the healthy worker effect in occupational epidemiology. *Occup. Med.* 1999, 49, 225–229. [CrossRef]
56. Bengtsson, E.; Nilsson, K. Older Worker; Swedish National Institute of Working Life: Malmö, Sweden, 2004.
57. Nilsson, K. Older Workers Attitude to an Extended Working Life. Differences between Occupations in Health and Medical Care; Elanders Gotab: Stockholm, Sweden, 2006; Volume 10, pp. 1–69. Available online: http://nile.lub.lu.se/arbarch/aio/2006/aio2006_10.pdf (accessed on 1 January 2022).
58. Nilsson, K. Who Can and Want to Work until 65 Years or beyond? A Study with Employed in Health and Medical Care; Elanders Gotab: Stockholm, Sweden, 2005; Volume 14, pp. 1–35. Available online: https://gupea.ub.gu.se/bitstream/2077/4345/1/ah2005_14.pdf (accessed on 1 January 2022).
59. Karasek, R.; Theorell, T. Healthy Work. Stress, Productivity and the Reconstruction of Working Life; Basic Books: New York, NY, USA, 1990.
60. Torgén, M.; Stenlund, C.; Ahlberg, G.; Marklund, S. A Sustainable Working Life to All Ages; Swedish National Institute of Working Life: Stockholm, Sweden, 2001.
61. Jönsson, S.; Tranquist, J.; Petersson, H. Between Client and Organization. Mental Work Environment in Human Service Work; Swedish National Institute of Working Life: Malmö, Sweden, 2003.
62. Antonovsky, A. Unraveling the Mystery of Health—How People Manage Stress and Stay Well; Jossey-Bass Publishers: San Francisco, CA, USA, 1987.
63. Nilsson, K. Retirement or Working Life? The Work Force 55 Years of Age and Older in Health and Medical Care; Swedish National Institute of Working Life: Malmö, Sweden, 2005.
64. swAge-Model. Available online: https://swage.org/en.html (accessed on 11 June 2021).