

Labour shortages and employer preferences in retaining and recruiting older workers

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Abstract

Purpose – This article investigates whether employers are more likely to employ older workers when faced with a shortage of qualified labour. Furthermore, it analyses whether in such cases age stereotypes moderate employers' preferences towards four employment options: (1) supporting workers to continue until the retirement age, (2) encouraging workers to continue beyond the retirement age, (3) recruiting someone older than 55 and (4) (re)hiring someone who has retired.

Design/methodology/approach – Data were drawn from a survey conducted among Finnish employers in 2021 (response rate = 66%, $N = 1,442$). Applying factor analysis to questions about older workers' qualities compared to those of average workers, a distinction was made between perceptions of experience-related and adaptability-related qualities. Generalised ordered logistic regression models were estimated to analyse the relations of preferences for each employment option with experiencing recruitment problems, workplace age stereotypes and interactions between these.

Findings – Experiencing recruitment problems was positively related to preferences for hiring a retired person. Employers with difficulties in recruitment were more likely to support work until the retirement age and recruit someone over 55, but only if they had above-average positive perceptions of older workers' experience-related qualities. Employers confronted with recruitment difficulties were more likely to encourage workers to continue beyond the retirement age if they had more positive perceptions of older workers' adaptability-related qualities.

Originality/value – This study shows that, even when confronted with labour shortages and population ageing, workplace age stereotypes still pose a potential obstacle for employers to make the best use of an older workforce.

Keywords Older workers, Labour shortage, Employers, Recruitment, Age management, Age stereotypes
Paper type Research paper

Introduction

In recent years and especially since the Covid-19 pandemic, employers in many industrialised countries have encountered increasing difficulties in filling vacancies (Causa *et al.*, 2022). Labour shortages are predicted to grow further in the coming years due to population ageing and a decline in the size of the working age population. Faced with a lack of skilled workers, employers might start to look beyond the usual candidates (Conen *et al.*, 2011; Oude Mulders *et al.*, 2020). One reserve of thus far underused labour potential is older workers. Close to or just past their retirement age, older workers these days are often healthy, experienced and willing to work but, for a variety of reasons, might still exit the labour market early or be out of work.

One potential obstacle for older-worker employment are employers' age norms, ageist attitudes and negative stereotypes (Jensen *et al.*, 2019; Karpinska *et al.*, 2013a, b; Oude Mulders *et al.*, 2017, 2019; Tunney and Oude Mulders, 2022). It is possible that even if employers have difficulties in finding suitable employees, they still are not willing to employ older workers due to negative age stereotypes. However, research has also shown that employer attitudes and behaviour towards older workers can turn more positive when the labour market is tightening (Conen *et al.*, 2011; Taylor *et al.*, 2013).

In this study we explore whether employers who perceive difficulties in recruitment are more likely to employ older workers. Furthermore, we investigate the role of workplace age



stereotypes: do they moderate the relation between experiencing recruitment problems and preferences in employing an older workforce? The study uses data from a survey that was conducted among Finnish employers in 2021. To explore the variety in employment strategies, the study distinguishes between preferences to retain incumbent older workers or to recruit older workers from outside the organisation. Furthermore, a distinction is made between the willingness to retain or recruit those older than 55 (but below the retirement age) or those who are already eligible for a pension (and in some cases already retired).

Finland has one of the fastest ageing populations in Europe. The country's job vacancy rate grew steadily from 1.3% in 2015 to 2.5% in 2021 (Eurostat, 2023). Since the end of the COVID-19 lockdowns and subsequent economic recovery, there have been alarming reports in Finnish media about a lack of personnel in several sectors. At the same time, in the 55–64 age group the employment rate was 68.3% in 2021. This rate is relatively high when compared to many continental European countries, but substantially lower than that of Finns aged 25–54 (82.3%) and lower than among the 55–64 age group in the neighbouring Nordic countries. A recent Finnish study showed that in 2020, 17% of those eligible for an old-age pension were working while receiving an old age pension, while another 16% were not working but would like to work, at least from time to time (Polvinen and Kuivalainen, 2022). Therefore, it appears that older workers are a sizeable reserve for Finnish employers to tap into.

Theory and background

Employer strategies when faced with recruitment problems

Studies on the impact of recruitment problems resulting from labour shortages on employer preferences in employing older workers have produced mixed results. Linking labour shortages to ongoing demographic and economic changes, an Australian study found that employers were turning more positive towards recruiting and retaining older workers in a time of increasing shortage of labour (Taylor *et al.*, 2013). The study also suggested that this positive turn would be sustained in the future due to population ageing. Conen *et al.* (2011) similarly found a positive trend in preferences for older workers between 2000 and 2008 among employers in the Netherlands and a positive relation between experiencing recruitment problems and the likelihood to recruit and retain older workers. Also vignette studies showed positive associations of an organisation's recruitment problems with managers' preferences in recruiting and retaining older workers (Karpinska *et al.*, 2011; Oude Mulders *et al.*, 2014).

Other studies did not find direct relations of labour shortages with intentions to employ older workers (Oude Mulders and Henkens, 2019; Turek and Henkens, 2020; Tunney and Oude Mulders, 2022). Oude Mulders *et al.* (2020) showed that in the Netherlands, if confronted with a shortage of suitable personnel, around 10% of employers were ready to recruit more older workers, 17% would encourage workers to work until the pensionable age and 6% would encourage them to work beyond the pensionable age. The same study also showed that these options were less popular than, for example, recruiting more women, outsourcing labour or substituting technology for labour. Moreover, the study found almost no change in preferences to engage older workers in case of labour shortage between 2009 and 2017, indicating that although the population is ageing, Dutch employers' preferences for employing older workers did not grow. Despite mixed findings in the literature, we test the following hypothesis.

- H1. Employers confronted with recruitment problems due to labour shortages have greater preference for employing older workers.

The role of workplace age stereotypes

Besides preferring alternative ways to deal with labour shortages, it is possible that labour shortages are concentrated in occupations and sectors where older workers are considered overall less suited or less productive. Although studies have shown that there is no strong evidence for an objective unidirectional relation between age and job performance (Ng and Feldman, 2008), employers hold beliefs and expectations about workers based on their age. These workplace age stereotypes can mean that employers expect older workers to perform worse on some qualities while, at the same time, they may appreciate other qualities in them (Posthuma and Campion, 2009). As certain cognitive and physical abilities are expected to decline with age, older workers are often perceived to perform more poorly on qualities such as creativity, readiness to learn and the ability to adapt to new situations. Van Dalen *et al.* (2010) called these “hard” qualities. These qualities often relate to a worker’s flexibility and adaptability on the job (Jensen *et al.*, 2019). On the other hand, older workers are often rated more positively on qualities that require work experience and general expertise (Ng and Feldman, 2008). These can include general or firm-specific knowledge and problem-solving skills, but also “soft” qualities such as prosocial behaviour in the workplace, customer-oriented skills and reliability (Van Dalen and Henkens, 2020; Van Dalen *et al.*, 2010).

Previous studies have found that workplace age stereotypes may play a role in recruitment and retention decisions. In the study by Van Dalen *et al.* (2010), Dutch employers based their assessment of older-worker productivity on perceived hard qualities only, while in a Polish study soft qualities were perceived more important (Turek and Perek-Bialas, 2013). Dutch employers had a higher preference for hiring and training older workers if they were more positive about their soft qualities, while no significant associations were found with assessment of their hard qualities (Oude Mulders, 2020). Turek and Henkens (2020) found that job requirements such as computer skills, creativity and physical fitness as well as social skills lowered the chances of a person aged 50 or older being hired for the job in Poland. At the same time, Jensen *et al.* (2019) found no evidence that age stereotypes were translated into discriminatory recruitment and retention practices in Denmark. Little is known about the role of employers’ preconceptions about older workers’ qualities in employment decisions in the specific case of being confronted with recruitment problems. However, based on previous studies we expect that:

- H2. Employers who hold more positive views of older-worker qualities display greater preference for employing older workers when faced with recruitment problems.

Varieties of older-worker employment strategies

Employment of older workers can take various forms. First, it is important to distinguish between the options of retaining or recruiting older workers. Second, “older workers” is a rather broad classification in terms of age, and one can at least distinguish between options to employ workers who have yet not reached the pensionable age and options to retain or (re) hire those who have passed the pensionable age (Oude Mulders *et al.*, 2017). Figure 1 displays the four employment options that are examined in this article.

		Age of the worker	
		Below the pensionable age	Above the pensionable age
Employment options	Retain	1. Supporting workers to continue until the retirement age	2. Encouraging workers to continue beyond the retirement age
	Recruit	3. Recruiting someone older than 55	4. (Re)hiring someone who has retired

Source(s): Author’s own creation

Figure 1.
Options for employing older workers

Retaining older workers until or beyond the pensionable age might be a more attractive and obvious option for employers than recruiting “new” older workers. Recruitment usually is accompanied by information asymmetries: while the candidate might look good on paper and convince in an interview, they might be intentionally or unintentionally hiding information about themselves. Based on their workplace age stereotypes and statistical discrimination (Neumark *et al.*, 2019), employers might rate older workers lower on qualities such as health, flexibility and ability to learn, regardless of the quality of their CV.

When retaining, employers already know their older workers. Even if they believe that older workers’ performance on core tasks is deteriorating, they might appreciate them for qualities that come with long work experience and “organisational citizenship” (Ng and Feldman, 2008). Moreover, older workers might have firm-specific experience, knowledge and skills that is lost if they leave the company (Moen *et al.*, 2017). At the same time, retaining older workers could entail costs for training them to upgrade their skills or physical and ergonomic adjustments needed in the workplace (Hermansen and Midtsundstad, 2015; Lössbroek *et al.*, 2019; Van Dalen *et al.*, 2015). Employers might be willing to invest in such measures only if they are positive about the chances that older workers remain healthy, are willing to learn and able to adapt.

Overall, we expect that retaining incumbent older workers in times of labour shortage is a more attractive option than recruiting new older workers.

H3. The association of recruitment problems with employer preferences for retaining older workers is stronger than the association with employer preferences for recruiting older workers.

Moreover, it is expected that, considering the familiarity with incumbent older workers and the information asymmetries associated with older workers from outside the organisation, workplace age stereotypes play a greater role in recruitment than in retention.

H4. Employers’ perceptions of older-worker qualities more strongly moderate the association of recruitment problems with preferences for recruitment of older workers than the association with preferences for their retention.

As possibilities for early labour market exit have diminished and older workers are nowadays healthier and better educated, workplace support for older employees to continue working until the pensionable age has become more common (Järnefelt *et al.*, 2022b; Turek *et al.*, 2020). Therefore, employers might consider retaining and recruiting workers below the retirement age as an obvious solution when faced with recruitment problems, and it is likely that workplace age stereotypes play a more negligible role in the employment of “younger” older workers.

Retention and recruitment of workers above the retirement age is often subject to a different set of rules and incentives. Studies have shown that statutory retirement ages are strongly associated with employers’ retirement age norms (Henkens and Van Dalen, 2012; Riekhoff, 2023). Employers are more likely to consider someone who has passed the pensionable age to be too old to work. Furthermore, in many countries the statutory retirement age is also a mandatory retirement age, meaning that if employers want their employees to continue to work, they must rehire them [1]. Still, (re)hiring a retired former employee could be an attractive option if employers believe they can benefit from older workers’ skills and knowledge, especially when there is no need to pay full social insurance contributions or offer a permanent or fulltime contract.

This leads us to formulating the final two hypotheses. We expect that, when faced with recruitment problems, employing someone below the pensionable age is a more obvious choice for employers than employing someone past the retirement age.

- H5. The association between recruitment problems and employer preferences for employing older workers is stronger for workers below the pensionable age than for workers above the pensionable age.

At the same time, we expect workplace age stereotypes to be less important for employing older workers below the pensionable age than for employing workers who have passed the retirement age.

- H6. Employers perceptions of older-worker qualities more strongly moderate the association of recruitment problems with employment preferences for workers who have reached the pensionable age than for workers below the pensionable age.

Data and methods

Data

The current study uses employer survey data from Finland that was collected in the Spring 2021. The questionnaire was designed by researchers of the Finnish Centre for Pensions and aimed at exploring employers' attitudes and behaviour towards the pension system and an ageing workforce (Järnefelt *et al.*, 2022a, b). It was fielded by Statistics Finland in combination with their "Open vacancy survey" questionnaire, which collects data about employers' vacancies and recruitment four times per year among a rotating representative sample of 2,500 Finnish establishments of all sizes, both in the private and public sector. Larger organisations were oversampled, which is corrected for in the analysis with sampling weights.

The survey was sent to organisations by email with a link to respond online. In case they did not respond following a reminder, they were contacted by telephone. Due to combining the two questionnaires and the active surveying strategy of Statistics Finland the response rate was high: 66% ($N = 1,784$). Around 85% of the respondents answered online, while 15% answered by phone. Among the respondents, 37% was the owner or managing director of the organisation, 26% was a manager in charge of human resources, 19% held another management role, and another 19% held some other or unknown position within the company.

This study includes only organisations that had at least one employee older than 55 ($N = 1,442$). This selection is made, since we are interested in the possibilities for organisations to retain and recruit older workers. In case there are no older workers, they also cannot be retained. Moreover, questions about recruiting older workers may be too abstract to answer for representatives of organisations that have an exclusively young workforce.

Outcome variables

In this study, we investigate the preferences of employers to pursue each of the four employment options that were presented in Figure 1. Retention intentions below the pensionable age (option 1) are measured with the statement "We support older workers to continue work until the retirement age", which could be answered on a scale of one to four: "not at all", "not particularly", "to some extent" or "strongly". The degree of support for work beyond the retirement age (option 2) is measured by the statement "We encourage employees to continue work beyond the retirement age", which could be answered by "fully disagree", "somewhat disagree", "somewhat agree" or "fully agree". The same response alternatives were given for the third outcome variable which measures the willingness to recruit older workers (option 3) with the statement: "When recruiting a new worker, we could select someone older than 55". The fourth employment option of recruiting someone who is already retired is measured with the question "Could you offer work to someone already retired?" Respondents could answer with "not at all", "yes, only to former employees", "yes, only to new

employees” or “yes, to former and new employees”. Since few respondents answered “yes, only new employees” it is combined with the option for “yes, to former and new employees” in the analysis.

Explanatory variables

For our main explanatory variable, we use an item that asks: “Is the availability of qualified workforce an obstacle for recruitment?” It has the simple response options of either “yes” or “no”. The question is introduced in the part of the survey that addresses recruitment prospects for the coming year. It is preceded by a question that asks whether the organisation plans to reduce or increase staff or whether it will remain the same. The question used in our study follows up on this by asking whether the availability of qualified staff had any impact on these prospects. In other words, employers are asked if they expect that they would not reduce staff (in case they foresee a decline) or would increase staff, if there had not been a shortage of qualified labour. With this question we assume that employers have a fairly accurate sense of the situation in the labour market now and in the nearby future.

To operationalise employers’ workplace age stereotypes, we use a battery of ten questions through which respondents were asked how they view the performance of workers older than 55 on different items compared to that of an average worker. Answers were given on a scale from 1 (clearly weaker) to 5 (clearly better), where 3 indicates that older workers are perceived to perform similar to the average worker. The qualities in question are listed in Table 1. We applied factor analysis to inspect whether there are particular latent variables underlying these items and whether items can be combined to reduce the number of explanatory variables (DeVellis, 2003). Following varimax rotation, we find two factors with eigenvalues greater than 1. Table 1 displays the factor loadings of each of the items onto these two factors. The first seven items load more clearly onto factor one and the last three items onto factor two.

Factor one is interpreted to represent attitudes towards the qualities that are often appreciated in older workers, including social skills, work motivation and reliability, but also certain qualities that are often classified as “hard”, such as knowledge and skills and problem-solving skills. One common denominator is that these qualities are often gained by work experience in general or by long tenure with the same employer. Factor two represents perceptions of workers’ qualities related to adaptability to the needs of and changes in the organisation, including readiness to learn new things, ability to adjust to change, and performance on health and work ability, for which older workers are usually rated lower than younger workers (Van Dalen and Henkens,

Item	Factor 1 (experience-related qualities)	Factor 2 (adaptability-related qualities)
1. Independence and autonomy	<i>0.762</i>	0.133
2. Problem-solving skills	<i>0.745</i>	0.234
3. Reliability	<i>0.609</i>	0.017
4. Social and interaction skills	<i>0.580</i>	0.233
5. Knowledge and skills	<i>0.476</i>	0.198
6. Work motivation	<i>0.469</i>	0.283
7. Leadership and management skills	<i>0.457</i>	0.235
8. Readiness to learn new things	0.150	<i>0.619</i>
9. Ability to adjust to change	0.261	<i>0.569</i>
10. Health and work ability	0.190	<i>0.457</i>

Table 1. Factor loadings for employer views on the performance of workers older than 55 compared to that of an average worker

Note(s): Values in italics indicate that the item is grouped with the particular factor

Source(s): Finnish Centre for Pensions, Employer Survey 2021, own calculations

2020; Van Dalen *et al.*, 2010; Jensen *et al.*, 2019). We combined values for items 1–7 to create a single scale for experience-related qualities (Cronbach's $\alpha = 0.83$). The same was done for items 8–10 for adaptability-related qualities (Cronbach's $\alpha = 0.64$). Both five-point scales were standardised to run from -2 to 2 , where 0 means that older workers were assessed to perform the same on these qualities as average workers.

We control for several characteristics of the workplace. We distinguish between four broad groups of sectors: (1) Agriculture, manufacturing, construction, transport and storage, (2) Trade, hospitality and other services, (3) Business services, information and communication technology and (4) Public administration, education, and health and social services. Size of the organisation is a categorical variable consisting of three groups: those with 1–9 employees, with 10–49 employees and with more than 50 employees. Further we control for the current estimated share of employees older than 55 as well as the presence and share of workers with a higher tertiary educational degree. Dummies are included for organisations experiencing a somewhat or very uncertain financial situation (as opposed to somewhat or fully secure) and location in a city or town (as opposed to location in a village or in the countryside). We include a continuous variable for number of years the organisation has been in existence. Finally, we control for whether response was given online or by phone as well as for the position of the respondent within the organisation: Owner, CEO or head of office; HR manager; or other manager or staff. Summary statistics of the sample for all variables can be found in [Table 2](#).

Methods

Generalised ordered logit models (or partial proportional odds models) are used to analyse the outcome variables. While ordered logistic regression (or proportional odds regression) is commonly applied to models with ordinal outcome variables such as ours, the assumption of proportional odds is often violated in such models. This assumption prescribes that the coefficients for the relation between all pairs of groups of outcome variables should be equal. For example, the relation between an explanatory variable and a change from the lowest category “fully disagree” to all higher categories of the outcome variable should be the same as the relation between that explanatory variable and a change from the “fully disagree” and “somewhat disagree” categories to the remaining higher categories of the outcome variable, etc. This is often not the case for at least some of the explanatory variables, making the results of ordered logistic regression unreliable but also creating the risk of losing important nuances in the results (Williams, 2016). Generalised ordered logit models allow that the proportional odds assumption is applied when needed, and relaxed when applicable. Using the autofit-option in the `gologit2` package in Stata (Williams, 2006), we let the software identify the partial proportional odds model that best fits the data.

For each of the outcome variables, three models are estimated. The first model includes all explanatory and control variables as such. In the second model, an interaction term between the recruitment-problems and the experience-related qualities variable is included. The third model includes an interaction term between the recruitment-problems and the adaptability-related qualities variable. The models with interactions aim at exploring whether employers' workplace age stereotypes moderate the relation between recruitment problems and employment preferences.

Findings

Descriptive analysis

[Table 2](#) shows that the willingness of employers to retain and recruit older workers is substantial: 71% indicated that they support older workers strongly or to some extent, 62%

		All organisations	Without recruitment problems	With recruitment problems
<i>Outcome variables</i>				
Support workers to continue until retirement age, %	Not at all	3.7	4.6	1.9
	Not particularly	25.2	26.6	22.5
	To some extent	50.0	46.0	59.7
	Strongly	21.1	22.8	15.9
Encourage workers to continue beyond retirement age, %	Fully disagree	7.7	8.2	8.7
	Somewhat disagree	30.2	28.7	32.1
	Somewhat agree	45.3	46.2	41.2
	Fully agree	16.8	16.9	18.0
Recruit someone over 55, %	Fully disagree	3.3	3.3	2.7
	Somewhat disagree	11.9	11.8	11.7
	Somewhat agree	37.8	39.0	38.2
	Fully agree	47.0	45.8	47.4
Offer work to someone retired, %	Not at all	21.0	24.3	10.1
	Yes, to former employees only	46.1	42.6	57.7
	Yes, to former and new employees	32.9	33.1	32.2
<i>Main explanatory variables</i>				
Recruitment problems, %		23.3	0	100
Attitude towards older worker experience-related qualities, mean (SD)		0.64 (0.03)	0.63 (0.04)	0.71 (0.06)
Attitude towards older worker adaptability-related qualities, mean (SD)		-0.20 (0.03)	-0.15 (0.04)	-0.37 (0.07)
<i>Control variables</i>				
Sector, %	Agriculture, manufacturing, construction, transport and storage	28.2	26.4	40.5
	Trade, hospitality, other services	31.4	32.0	20.8
	Business services, IT	21.9	21.3	26.1
	Public administration, education, health and social services	18.5	20.3	12.6
Organisation size, %	1-9 employees	66.5	68.1	53.5
	10-49 employees	28.2	26.7	39.9
	50 or more employees	5.4	5.2	6.6
Share of workers aged 55+, mean (SD)		37.73 (1.59)	42.09 (1.97)	28.77 (2.58)
Presence of workers with upper tertiary education, mean (SD)		0.71 (0.3)	0.69 (0.3)	0.71 (0.06)
Share of workers with upper tertiary education (if present), mean (SD)		46.75 (2.08)	47.92 (2.52)	43.25 (3.76)

Table 2. Summary statistics of outcome and explanatory variables
(continued)

	All organisations	Without recruitment problems	With recruitment problems
Experiencing financial difficulties, mean (SD)	0.25 (0.02)	0.24 (0.03)	0.27 (0.05)
Age of organisation in years, mean (SD)	20.93 (0.68)	22.31 (0.83)	18.31 (1.22)
Located in urban area, mean (SD)	0.69 (0.03)	0.67 (0.03)	0.68 (0.06)
Response by phone instead of online, %	24.8	27.3	16.5
Respondent's position, %			
Owner, CEO, head of office	55.3	50.2	72.0
HR manager	17.5	19.5	10.7
Other manager or staff	27.2	30.2	17.4

Note(s): Sampling weights are applied

Source(s): Finnish Centre for Pensions, Employer Survey 2021, own calculations

Table 2.

indicated that they somewhat or fully agree that they encourage workers to continue beyond the retirement, 85% fully or somewhat agreed that they could recruit someone over 55, and 79% agreed that they could (re)hire someone who is already retired. Around 23% of the employers faced difficulties in recruitment. As expected, employers were, on average, somewhat more negative about older workers' adaptability-related qualities and more positive about experience-related qualities, although their assessment of older workers' qualities did not show large differences from their assessment of the average worker.

Generalised ordered logit models

Tables 3–6 display the results for the generalised ordered logistic regression models, reporting only coefficients of the main variables of interest. Full models with all controls can be found in the Appendix. Each table contains three models. In each model, if the parallel lines assumption is met, a coefficient is presented only in the first column, as the odds for a change from a lower group of response options to a higher group of response options for that explanatory variable remains the same. If the parallel lines assumption is not met, the model estimated the coefficients of the odds for each change between groups of response options separately.

Table 3 shows that recruitment problems in and of itself was not related with supporting workers to continue to work until the retirement age (Model 1). The association of the perception of experience-related qualities with preference for retention until the retirement age was also not statistically significant in Model 1. However, Model 2 – where the recruitment problem variable was interacted with the experience-related qualities variable – shows that perceptions of experience-related qualities can make a difference between not at all supporting workers to continue to work until retirement and the three higher categories ($b = 1.17$). Moreover, the interaction term with the recruitment-problem variable was positive and significant but only in comparing response items “not at all” and “not particularly” with “to some extent” and “strongly” ($b = 1.16$). This result suggests that employers who had more positive perceptions of older workers' experience-related qualities were at least less likely to hold the most negative attitude towards supporting older workers. In addition, for employers with recruitment problems, a positive perception of older workers' experience-related qualities can mean the difference between having an overall dismissive and overall accepting

	Model 1		Model 2		Model 3	
	NA vs NP, SE, S	NA, NP, SE vs S	NA vs NP, SE, S	NA, NP, SE vs S	NA vs NP, SE, S	NA, NP, SE vs S
Recruitment problems (ref. No recruitment problems)	0.67 (0.58)	-0.28 (0.24)	-0.20 _a (0.32)		0.60 (0.61)	0.49 (0.32)
Older worker experience-related qualities	0.21 _a (0.21)		1.17** (0.37)	-0.03 (0.27)	0.21 _a (0.21)	
Recruitment problems × experience-related qualities	-	-	-0.42 (0.60)	1.16** (0.41)	-	-
Older worker adaptability-related qualities	1.12** (0.34)	0.29 (0.20)	0.33 _a (0.18)		1.15*** (0.34)	0.27 (0.25)
Recruitment problems × adaptability-related qualities	-	-	-	-	-0.16 _a (0.35)	
Intercept	4.77*** (0.77)	-2.49*** (0.53)	2.95*** (0.73)	0.82 (0.49)	3.77*** (0.77)	0.58 (0.51)
N	1,280		1,280		1,280	

Note(s): NA = Not at all, NP = Not particularly, SE = To some extent, S = Strongly. Presented are coefficients with standard errors in brackets. ^aVariable meets the proportional odds assumption, only one coefficient is presented. Controls included for sector, organisation size, share of workers aged 55+, presence of workers with upper tertiary education, share of workers with upper tertiary education, experiencing financial difficulties, age of the organisation, location in urban area, response type and respondent's position within the organisation. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Source(s): Finnish Centre for Pensions, Employer Survey 2021, own calculations

Table 3. Generalised ordered logit regression: “we support workers to continue to work until the retirement age”

Table 4.
Generalised ordered
logit regression: “we
encourage workers to
continue to work
beyond the
retirement age”

	Model 1		Model 2		Model 3	
	FD vs SD, SA, FA	FD, SD vs SA, FA	FD vs SD, SA, FA	FD, SD vs SA, FA	FD vs SD, SA, FA	FD, SD, SA vs FA
Recruitment problems (ref. No recruitment problems)	0.28 _a (0.27)		0.65 [*] _a (0.32)		0.32 (0.35)	0.37 (0.36)
Older worker experience-related qualities	-0.09 _a (0.24)		0.04 _a (0.25)		-0.05 _a (0.22)	
Recruitment problems × experience-related qualities	-		-0.53 _a (0.44)		-	
Older worker adaptability-related qualities	0.76 ^{***} _a (0.28)		0.75 ^{***} _a (0.26)		0.60 [*] _a (0.28)	0.13 (0.46)
Recruitment problems × adaptability-related qualities	-		-		2.49 ^{***} (0.79)	
Intercept	1.78 ^{***} (0.56)	-0.08 (0.51)	1.69 ^{***} (0.57)	-0.18 (0.52)	-0.05 (0.51)	-2.13 ^{***} (0.60)
N		1,272		1,272		1,272

Note(s): FD = Fully disagree, SD = Somewhat disagree, SA = Somewhat agree, FA = Fully agree. Presented are coefficients with standard errors in brackets. ^aVariable meets the proportional odds assumption, only one coefficient is presented. Controls included for sector, organisation size, share of workers aged 55+, presence of workers with upper tertiary education, share of workers with upper tertiary education, experiencing financial difficulties, age of the organisation, location in urban area, response type and respondent's position within the organisation. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Source(s): Finnish Centre for Pensions, Employer Survey 2021, own calculations

	Model 1		Model 2		Model 3	
	FD vs SD, SA, FA	FD, SD, SA vs FA	FD vs SD, SA, FA	FD, SD, SA vs FA	FD vs SD, SA, FA	FD, SD, SA vs FA
Recruitment problems (ref. No recruitment problems)	0.44 _a (0.26)	-0.70 [*] (0.29)	-0.70 [*] (0.29)	-0.17 _a (0.26)	0.69 [*] (0.28)	0.69 [*] (0.28)
Older worker experience-related qualities	0.25 _a (0.27)	-0.17 _a (0.26)	-0.17 _a (0.26)	-0.17 _a (0.26)	0.27 _a (0.28)	0.27 _a (0.28)
Recruitment problems × experience-related qualities	-	1.79 ^{***a} (0.43)	1.79 ^{***a} (0.43)	-	-	-
Older worker adaptability-related qualities	0.20 _a (0.27)	0.29 _a (0.23)	0.29 _a (0.23)	-	0.02 _a (0.28)	0.02 _a (0.28)
Recruitment problems × adaptability-related qualities	-	-	-	-	0.74 _a (0.57)	0.74 _a (0.57)
Intercept	1.92 [*] (0.87)	0.35 (0.55)	2.26 ^{**} (0.87)	-1.72 ^{**} (0.54)	0.65 (0.55)	1.95 [*] (0.87)
N	1,283	1,283	1,283	1,283	1,283	1,283

Note(s): FD = Fully disagree, SD = Somewhat disagree, SA = Somewhat agree, FA = Fully agree. Presented are coefficients with standard errors in brackets. ^aVariable meets the proportional odds assumption, only one coefficient is presented. Controls included for sector, organisation size, share of workers aged 55+, presence of workers with upper tertiary education, share of workers with upper tertiary education, experiencing financial difficulties, age of the organisation, location in urban area, response type and respondent's position within the organisation. ^{*}*p* < 0.05, ^{**}*p* < 0.01, ^{***}*p* < 0.001

Source(s): Finnish Centre for Pensions, Employer Survey 2021, own calculations

Table 5. Generalised ordered logit regression: “when recruiting we could select someone over 55 years old”

	Model 1		Model 2		Model 3	
	NA vs FE, NE	NA, FE vs NE	NA vs FE, NE	NA, FE vs NE	NA vs FE, NE	NA, FE vs NE
Recruitment problems (ref. No recruitment problems)	1.31** (0.39)	0.33 (0.28)	0.39 _a (0.33)		1.29** (0.40)	0.32 (0.30)
Older worker experience-related qualities	-0.11 _a (0.22)		-0.19 _a (0.27)		-0.11 _a (0.22)	
Recruitment problems × experience-related qualities	-	-	1.24* (0.55)	0.00 (0.42)	-	-
Older worker adaptability-related qualities	0.59** _a (0.21)		0.61** _a (0.21)		0.60* _a (0.27)	
Recruitment problems × adaptability-related qualities	-	-	-	-	-0.05 _a (0.40)	
Intercept	0.97 (0.50)	-1.43** (0.47)	1.02* (0.50)	-1.40* (0.47)	0.97 (0.50)	-1.44** (0.48)
N	1,281		1,281		1,281	

Note(s): NA = Not at all, FE = Yes, to former employees only, NE = Yes, to former and new employees. Presented are coefficients with standard errors in brackets. ^aVariable meets the proportional odds assumption, only one coefficient is presented. Controls included for sector, organisation size, share of workers aged 55+, presence of workers with upper tertiary education, share of workers with upper tertiary education, experiencing financial difficulties, age of the organisation, location in urban area, response type and respondent's position within the organisation. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Source(s): Finnish Centre for Pensions, Employer Survey 2021, own calculations

Table 6.

Generalised ordered logit regression: "we could offer work to someone already retired"

attitude towards supporting work until the retirement age. Positive assessment of adaptability-related qualities made a considerable difference between not at all supporting workers to continue until the retirement age and at least some degree of support ($b = 1.12$ in Model 1 and $b = 1.15$ in Model 3) but, as shown in Model 3 in Table 3, did not change the relation between recruitment problems and the outcome variable.

Model 1 in Table 4 indicates that recruitment problems also had no direct association with encouraging workers to continue to work beyond the pensionable age. In Model 2 (Table 4), neither employers' assessment of older workers' experience-related qualities nor its interaction with the recruitment problems variable were related with employer preferences for encouraging workers to continue beyond the retirement age. Employers' perceptions of adaptability-related qualities were positively related to preferences for retention beyond the retirement age. Moreover, in comparison with the most negative "fully disagree" category, Model 3 in Table 4 shows that employers were more positive about encouraging workers to continue beyond the retirement age if they experienced recruitment problems and if their perception adaptability-related qualities in older workers was at least similar to that in the average worker (for the recruitment-problems dummy, $b = 2.65$). When comparing the "fully disagree" category with the three more positive response options, the perception of adaptability-related qualities was also considerably more important among employers with recruitment problems than among employers without (for the interaction term, $b = 2.49$).

No direct relation of recruitment problems with the likelihood of recruiting someone older than 55 was detected either (Model 1, Table 5). Model 2 in Table 5 shows a statistically significant negative coefficient for experiencing recruitment problems ($b = -0.70$) as well as a positive coefficient for the interaction term ($b = 1.79$). This result suggests that employers who experienced recruitment problems were less likely to recruit someone over 55 than employers without recruitment problems if they believed that experienced-related qualities in

older workers were the same as or worse than the average worker. At the same time, employers who believed that older workers perform better on experience-related qualities were more likely to recruit them. For employers without recruitment problems, their perception of older workers' experience-related qualities did not make a difference in their recruitment decision. Employer perceptions of adaptability-related qualities in older workers played no significant role in recruitment decisions in the models in [Table 5](#).

Finally, employers were more likely to (re)hire someone who has already retired if they were experiencing recruitment problems ($b = 1.31$, in Model 1), regardless of whether the retired person is a former or new employee ([Table 6](#)). In Model 1, the assessment of older workers' experience-related qualities showed no statistically significant association with preferences for (re)hiring a retiree. Yet, in Model 2, the coefficient for the recruitment-problems turned statistically insignificant, while the interaction term with the experience-related qualities variable was statistically significant ($b = 1.24$). This result might indicate that the positive effect of experiencing recruitment problems was at least partly due to those employers who also had more positive perceptions of older-workers' experience-related qualities. More positive assessment of adaptability-related qualities increased chances of hiring a retired person in all three models in [Table 6](#). Introducing an interaction term between the adaptability-related qualities variable and the recruitment-problem variable did not change the results (Model 3, [Table 6](#)).

Discussion and conclusions

This study investigated whether employers are more likely to employ older workers if they are faced with recruitment problems. We further analysed whether perceptions of older-worker qualities moderate the relation between experiencing recruitment problems and employers' willingness to recruit or retain older employees before and beyond the pensionable age. In general, we found that employers' attitudes towards employing older workers were rather positive, regardless of whether they were experiencing recruitment problems. Using factor analysis, perceptions of two types of qualities in older workers were identified: those that are related to older workers' experience and those that are related to their ability to adapt. In line with similar classifications in previous studies, employers' perceptions of the former were more positive than of the latter ([Turek and Perek-Bialas, 2013](#); [Van Dalen and Henkens, 2020](#); [Van Dalen et al., 2010](#)). Overall, however, we find that employers are more positive about older workers' qualities and employment chances than often may be assumed.

In contrast to our [Hypothesis 1](#), we found that experiencing difficulties in recruitment as such did not make employers more willing to support older workers to continue until the retirement age, encourage them work beyond the retirement age or recruit someone older than 55. However, employers who experienced recruitment problems were more likely to hire someone who had already retired. The lack of an unequivocal direct relation of recruitment problems with the willingness to employ older workers could be in line with previous studies that have suggested that employers might first explore other solutions, such as new technologies or recruiting foreign workers, rather than turning their gaze towards older workers ([Henkens and Van Dalen, 2012](#); [Oude Mulders et al., 2020](#)).

We found ample support for [Hypothesis 2](#): employer perceptions of older-worker qualities play an important role in employment preferences for older workers when experiencing recruitment problems. Experience-related qualities did not directly affect preferences for employing older workers. Yet, for employers with recruitment problems, a stronger positive relation was found of perceptions of older-worker experience-related qualities with the likelihood to support workers until the retirement age and recruit someone over 55. Also, having a more positive assessment of older workers' experience-related qualities partially explained why employers with recruitment problems were more willing to rehire someone

who has already retired. The results clearly suggest that employers who have difficulties in finding qualified staff are willing to consider retaining and recruiting older workers, but only if they generally believe that older workers are experienced and skilled enough.

Perceptions of older workers' adaptability-related qualities were found to have a direct positive relation with employers' readiness to retain workers until and beyond the retirement age, as well as hiring someone who has already retired. Moreover, employers with recruitment problems were more likely to encourage workers to continue beyond their retirement age if their perception of older workers' adaptability-related qualities were the same as or more positive than those of the average worker. Overall, these findings suggest that, regardless of recruitment problems, employers are unlikely to positively regard the employment of older workers if they believe that there is a risk that these workers become a liability to the organisation (Henkens and Van Dalen, 2012; Jensen *et al.*, 2019).

We did not find evidence for Hypothesis 3 stating that, in case of recruitment problems, employers prefer to retain incumbent older workers instead of recruiting older workers from outside the organisation. Still, we found that employers who experienced recruitment problems were more likely to prefer hiring a former employee, which could be considered a form of retention rather than attracting someone new. Former employees are familiar to the employer and may possess firm-specific skills, knowledge and "organisational citizenship", making them a particularly attractive option for employers in need of qualified personnel (Tunney and Oude Mulders, 2022; Henkens and Van Dalen, 2012).

Hypothesis 4 needs to be rejected. While we expected that in case of shortages of qualified staff, perceptions of older-worker qualities play a more prominent role in preferences for recruiting than retaining, we found that perceptions of qualities moderated associations with retention and recruitment both below and above the retirement age.

It was expected that recruitment problems would induce employers to prefer to employ older worker below rather than above the pensionable age (Hypothesis 5). However, the only direct association between recruitment problems and preferences for employing older workers was for the willingness to hire someone who has already retired. This finding is in line with previous studies in the Netherlands by Karpinska *et al.* (2011) and Oude Mulders *et al.* (2014). Therefore, the retirement age does not simply delineate when someone is "too old to work", but other considerations play a role as well. Besides being the earlier-mentioned source of (firm-specific) experience and knowledge, retirees often prefer to work on short-term or part-time contracts rather than permanent fulltime contracts (Polvinen and Kuivalainen, 2022), making them a flexible labour reserve for employers.

As we found that, in the face of recruitment problems, employer perceptions of older-worker qualities mattered both for employment preferences below and above the pensionable age, Hypothesis 6 is rejected as well. However, in line with previous studies we also found that perceptions of the specific types of qualities made a difference (Oude Mulders, 2020; Turek and Henkens, 2020). Perceptions of experience-related qualities moderated the relation between recruitment problems with both retention and recruitment preferences for workers below the retirement age in particular. Employers might look more favourably upon the employment of workers who have not yet reached their retirement age if older workers are perceived a source of relevant experience and knowledge to address a lack of qualified staff. At the same time, perceptions of adaptability-related qualities substantially moderated the relation between recruitment problems and preferences for encouraging employees to continue working beyond the retirement age. It is possible that having a more positive view on older workers' abilities to adapt to changing circumstances means that those employers expect that these workers will cope and that the costs of investing in older workers' training and workplace adjustment will not be too high (Hermansen and Midtsundstad, 2015; Lössbroek *et al.*, 2019).

There are some limitations to this study. Data were collected in the Spring 2021 when the Finnish labour market was still somewhat recovering from the contraction caused by the COVID-19 pandemic. This may have been a time when labour shortages were temporarily reduced, while employers did not perceive the employment of older workers as urgent. Still, almost one out of four of the investigated organisations experienced difficulties in recruitment. As labour shortages are likely to grow and the workforce is ageing, employer preferences for employing older workers might further increase in the future (Conen *et al.*, 2011; Järnefelt *et al.*, 2022b; Taylor *et al.*, 2013).

Another limitation that is common with survey-based research is non-response. We can never be entirely sure who are the employers who did not respond to the survey or to specific items. However, our response rate of 66% was high in comparison with similar studies in organisational research (Baruch and Holtom, 2008). Our high response rate is partly due to the active follow-up strategy. When the online form was left unanswered, the employers were contacted by phone. This improved reaching the smaller organisations that are often less likely to respond to surveys. In addition, weighting the data corrected for further possible selection and sampling biases.

Finally, while the study found that attitudes of employers towards various employment options are relatively positive, they might not necessarily translate into actual retention and recruitment decisions. Further research linking survey data with employer–employee register data or implementing correspondence or vignette studies could shed light on real-life employment practices in times of labour shortages (Karpinska *et al.*, 2013b; Oude Mulders *et al.*, 2014; Turek and Henkens, 2020).

The strength of this study was in showing that employers have different options in utilising an ageing workforce in times of labour shortage. Overall, employers seem willing to employ older workers. However, their perceptions of the strengths and weaknesses of older workers – regardless of whether these perceptions are rooted in reality – play a role in decisions to pursue any of these options. In line with previous research, both experience-related and adaptability-related qualities matter (Turek and Perek-Bialas, 2013; Van Dalen *et al.*, 2010), but in somewhat different ways in different employment options (Oude Mulders, 2020; Turek and Henkens, 2020). In the future, to combat shortages in the labour market and make most of the ageing workforce, investments should be made in both workers' experience-related as well as adaptability-related qualities, preferably already long before a worker becomes "old", to reduce employer concerns about retaining and recruiting.

The study also suggested that pressures arising from a tight labour market might draw some employers over the line to employ more older workers, but that this is not the case for all. Although societies in industrialised countries are ageing and older workers are, amongst others, better educated and healthier than before, there is no guarantee that employers' age norms and stereotypes automatically change along (Van Dalen and Henkens, 2020). Therefore, public policy should aim at addressing and improving workplace age stereotypes, not just of employers but of society as a whole.

Notes

1. Finland has a flexible retirement age where there is no need to dissolve an employment contract when an employee has reached the lower retirement age. Only when applying for an old-age pension or when reaching the upper retirement age of 68, the employment agreement must be ended.

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(The Appendix follows overleaf)

Appendix
Tables reporting all controls

	Model 1		Model 2		Model 3	
	NA, NP, SE, S	NA, NP, SE vs S	NA, NP vs SE, S	NA, NP vs SE, S	NA, NP vs SE, S	NA, NP, SE vs S
Recruitment problems (ref. No recruitment problems)	0.67 (0.58)	-0.28 (0.24)	-0.20 _a (0.32)		0.49 (0.32)	-0.32 (0.25)
Older worker experience-related qualities	0.21 _a (0.21)		1.17 ^{**} (0.37)	-0.03 (0.27)		0.21 _a (0.21)
Recruitment problems * experience-related qualities	-	-	-0.42 (0.60)	1.16 ^{**} (0.41)	-	-
Older worker adaptability-related qualities	1.12 ^{**} (0.34)	0.24 (0.22)	0.33 _a (0.18)		0.27 (0.25)	0.33 (0.23)
Recruitment problems * adaptability-related qualities	-	-	-	-		-0.16 _a (0.35)
Sector (ref. Agriculture, manufacturing, etc.)	0.21 _a (0.28)		0.17 _a (0.28)		0.21 _a (0.28)	
Trade, hospitality	0.49 _a (0.33)		0.47 _a (0.32)		0.50 _a (0.34)	
Business services, IT	0.46 _a (0.28)		0.40 _a (0.28)		0.47 _a (0.28)	
Public services	0.54 [*] (0.25)		0.55 [*] (0.25)		0.54 [*] (0.25)	
10-49 employees	0.80 ^{**} (0.28)		0.81 ^{**} (0.29)		0.80 ^{**} (0.30)	
50 or more employees	-0.03 [*] (0.01)	0.00 (0.01)	-0.04 ^{**} (0.01)	0.00 (0.01)	-0.03 ^{**} (0.01)	0.01 (0.01)
Organisation size (ref. 1-9 employees)						
Share of workers aged 55+						

(continued)

Table A1.
Generalised ordered logit regression: “we support workers to continue to work until the retirement age”

	Model 1		Model 2		Model 3	
	NA vs NP, SE, S	NA, NP, SE vs S	NA vs NP, SE, S	NA, NP vs SE, S	NA vs NP, SE, S	NA, NP vs SE, S
Presence of high-educated workers (ref. No high-educated workers)	-0.47 (0.63)	0.59 (0.41)	-0.24 (0.61)	-0.53 (0.36)	-0.47 (0.63)	-0.55 (0.36)
Share of high-educated workers	-0.00 _a (0.00)		-0.00 _a (0.00)		-0.00 _a (0.00)	
Financial difficulties (ref. No financial difficulties)	-0.24 _b (0.25)		-0.28 _a (0.25)		-0.24 _a (0.25)	
Age of organisation	0.05* (0.02)	0.01 (0.01)	0.07* (0.03)	-0.00 (0.01)	0.05* (0.02)	0.00 (0.01)
Urban area (ref. Village or countryside)	-0.24 _a (0.23)		-0.25 _a (0.22)		-0.24 _a (0.23)	
Response by phone (ref. online response)	-0.25 _a (0.30)		-0.25 _a (0.30)		-0.25 _a (0.30)	
Type of respondent (ref. CEO, owner, head)	0.89*** _a (0.27)		0.90*** _a (0.27)		0.89*** _a (0.27)	
	2.35*** (0.70)	0.32 (0.29)	2.48*** (0.73)	0.30 (0.29)	2.34*** (0.70)	0.32 (0.29)
manager/ staff	4.77*** (0.77)	0.59 (0.50)	2.95*** (0.73)	0.82 (0.49)	3.77*** (0.77)	0.58 (0.51)
Intercept		1,280		1,280		1,280
N						

Note(s): NA = Not at all, NP = Not particularly, SE = To some extent, S = Strongly. ^aVariable meets the proportional odds assumption, only one coefficient is presented. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Source(s): Finnish Centre for Pensions, Employer Survey 2021, own calculations

Table A1.

Table A2.
Generalised ordered
logit regression: “we
encourage workers to
continue to work
beyond the
retirement age”

	Model 1		Model 2		Model 3	
	FD vs SD, SA, FA	FD, SD vs SA, FA	FD vs SD, SA, FA	FD, SD vs SA, FA	FD vs SD, SA, FA	FD, SD vs SA, FA
Recruitment problems (ref. No recruitment problems)	0.28 _a (0.27)	0.65* _a (0.32)	0.65* _a (0.32)	0.65* _a (0.32)	2.65** (0.82)	0.32 (0.35)
Older worker experience- related qualities	-0.09 _a (0.24)	0.04 _a (0.25)	0.04 _a (0.25)	0.04 _a (0.25)	-0.05 _a (0.22)	-
Recruitment problems * experience-related qualities	-	-0.53 _a (0.44)	-0.53 _a (0.44)	-0.53 _a (0.44)	-	-
Older worker adaptability-related qualities	0.76** _a (0.28)	0.75** _a (0.26)	0.75** _a (0.26)	0.75** _a (0.26)	0.60* _a (0.28)	0.34 (0.51)
Recruitment problems * adaptability-related qualities	-	-	-	-	2.49** (0.79)	0.13 (0.46)
Sector (ref. Agriculture, manufacturing, etc.)						
Trade, hospitality	-0.10 _a (0.29)	-0.09 _a (0.29)	-0.09 _a (0.29)	-0.09 _a (0.29)	-0.13 _a (0.30)	
Business	0.41 _a (0.35)	0.42 _a (0.36)	0.42 _a (0.36)	0.42 _a (0.36)	0.36 _a (0.35)	
Business, IT	0.41 _a (0.35)	0.42 _a (0.36)	0.42 _a (0.36)	0.42 _a (0.36)	0.36 _a (0.35)	
Public	-0.01 _a (0.30)	0.02 _a (0.30)	0.02 _a (0.30)	0.02 _a (0.30)	-0.02 _a (0.30)	
Public services	0.30 (0.30)	0.30 (0.30)	0.30 (0.30)	0.30 (0.30)	0.30 (0.30)	
10-49 employees	0.32 _a (0.20)	0.32 _a (0.20)	0.32 _a (0.20)	0.32 _a (0.20)	0.31 _a (0.20)	
50 or more employees	0.50 _a (0.25)	0.48 _a (0.26)	0.48 _a (0.26)	0.48 _a (0.26)	0.50 _a (0.27)	
Share of workers aged 55+	0.01 _a (0.01)	0.01 _a (0.01)	0.01 _a (0.01)	0.01 _a (0.01)	0.01 _a (0.01)	
Presence of high- educated workers (ref. No high-educated workers)	0.27 _a (0.27)	0.26 _a (0.27)	0.26 _a (0.27)	0.26 _a (0.27)	0.24 _a (0.27)	

(continued)

Table A2.

	Model 1		Model 2		Model 3	
	FD vs SD, SA, FA	FD, SD vs SA, FA	FD vs SD, SA, FA	FD, SD vs SA, FA	FD vs SD, SA, FA	FD, SD vs SA, FA
Share of high-educated workers	-0.00 _a (0.00)		-0.00 _a (0.00)		-0.00 _a (0.00)	
Financial difficulties (ref. No financial difficulties)	-0.16 _a (0.31)		-0.14 _a (0.32)		-0.16 _a (0.30)	
Age of organisation	0.01 _a (0.01)		0.01 _a (0.01)		0.01 _a (0.01)	
Urban area (ref. Village or countryside)	-0.35 _a (0.22) ^{***}		-0.33 _a (0.22) ^{***}		-0.37 _a (0.21) ^{***}	
Response by phone (ref. online response)	1.30 ^{***} (0.36)		1.30 ^{***} (0.36)		1.24 ^{***} (0.34)	
Type of respondent (ref. CEO, owner, head)	0.65 _a (0.26) ^{**}		0.66 _a (0.26) ^{**}		1.45 ^{**} (0.43)	0.84 ^{**} (0.28)
HR manager		0.23 (0.29)		0.25 (0.29)		0.23 (0.28)
Other manager/ staff		-0.07 (0.37)		-0.05 (0.37)		-0.05 (0.28)
Intercept	1.78 ^{**} (0.56)	-0.08 (0.51)	1.69 ^{***} (0.57)	-0.18 (0.52)	1.60 ^{**} (0.60)	-2.13 ^{***} (0.60)
N		1,272		1,272		1,272

Note(s): FD = Fully disagree, SD = Somewhat disagree, SA = Somewhat agree, FA = Fully agree. ^aVariable meets the proportional odds assumption, only one coefficient is presented. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Source(s): Finnish Centre for Pensions, Employer Survey 2021, own calculations

Table A3.
Generalised ordered
logit regression: “when
recruiting we could
select someone over
55 years old”

	Model 1		Model 2		Model 3	
	FD vs SD, SA, FA	FD, SD vs SA, FA	FD vs SD, SA, FA	FD, SD vs SA, FA	FD vs SD, SA, FA	FD, SD vs SA, FA
Recruitment problems (ref. No recruitment problems)	0.44 _a (0.26)	-	-0.70 _a (0.29)	-	0.69 _a (0.28)	-
Older worker experience- related qualities	0.25 _a (0.27)	-	-0.17 _a (0.26) _{ab} **	-	0.27 _a (0.28)	-
Recruitment problems * experience-related qualities	-	-	1.79 _a (0.43)	-	-	-
Older worker adaptability-related qualities	0.20 _a (0.27)	-	0.29 _a (0.23)	-	0.02 _a (0.28)	-
Recruitment problems * adaptability-related qualities	-	-	-	-	0.74 _b (0.57)	-
Sector (ref. Agriculture, manufacturing, etc.)						
Trade, hospitality	0.35 _a (0.32)	-	0.32 _a (0.31)	-	0.34 _a (0.31)	-
Business	0.63 _a (0.33)	-	0.67 _a (0.33)	-	0.57 _a (0.32)	-
Business, IT	0.95 _{**} (0.32)	-	0.90 _{**} (0.33)	-	0.93 _{**} (0.32)	-
Public	0.95 _{**} (0.32)	-	0.90 _{**} (0.33)	-	0.93 _{**} (0.32)	-
services	0.76 _{**} (0.21)	-	0.82 _{**} (0.21)	-	0.77 _{**} (0.21)	-
10–49 employees	0.21 _a (0.83) _{**}	-	0.21 _a (0.92) _{**}	-	0.21 _a (0.86) _{**}	-
50 or more employees	0.27 _a (0.02) _{**}	-	0.27 _a (0.02) _{**}	-	0.27 _a (0.02) _{**}	-
Share of workers aged 55+	0.01 _a (0.28) _a	-	0.01 _a (0.31) _a	-	0.01 _a (0.26) _a	-
Presence of high-educated workers (ref. No high- educated workers)	0.36 _a (0.36)	-	0.31 _a (0.35)	-	0.26 _a (0.35)	-

(continued)

Table A3.

	Model 1		Model 2		Model 3	
	FD vs SD, SA, FA	FD, SD vs SA, FA	FD vs SD, SA, FA	FD, SD vs SA, FA	FD vs SD, SA, FA	FD, SD vs SA, FA
Share of high-educated workers	0.00 _a (0.00)		0.00 _a (0.00)		0.00 _a (0.00)	
Financial difficulties (ref.)	0.74 (0.73)	-0.72 (0.38)	0.70 (0.72)	-0.77* (0.37)	0.78 (0.74)	-0.69 (0.38)
No financial difficulties	-0.02 _a (0.01)		-0.02 _a (0.01)		-0.02 _a (0.01)	
Age of organisation	0.06 _b (0.24) _{bc}	0.05 (0.31)	0.02 _a (0.24) _{bc}		0.03 _a (0.24) _{bc}	0.08 (0.31)
Urban area (ref. Village or countryside)	1.10 ^{***} _a (0.38)		1.19 ^{***} _a (0.37)		1.11 ^{***} _a (0.38)	
Response by phone (ref. online response)	0.29 _a (0.25)		0.30 _a (0.26)		0.29 _a (0.25)	
Type of respondent (ref. CEO, owner, head)	0.27 _a (0.23)		0.23 _a (0.23)		0.24 _a (0.23)	
HR manager						
Other manager/ staff						
Intercept	1.92* (0.87)	0.35 (0.55)	2.26 ^{***} (0.87)	0.65 (0.55)	1.95* (0.87)	0.37 (0.55)
N		1,283		1,283		1,283

Note(s): FD = Fully disagree, SD = Somewhat disagree, SA = Somewhat agree, FA = Fully agree. ^aVariable meets the proportional odds assumption, only one coefficient is presented. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Source(s): Finnish Centre for Pensions, Employer Survey 2021, own calculations

		Model 1		Model 2		Model 3	
		NA vs FE, NE	NA, FE vs NE	NA vs FE, NE	NA, FE vs NE	NA vs FE, NE	NA, FE vs NE
Recruitment problems (ref. No recruitment problems)		1.31** (0.39)	0.33 (0.28)	0.39 _a (0.33)		1.29** (0.40)	0.32 (0.30)
Older worker experience-related qualities		-0.11 _a (0.22)		-0.19 _a (0.27)		-0.11 _a (0.22)	
Recruitment problems * experience-related qualities		-	-	1.24* (0.55)	0.00 (0.42)	-	-
Older worker adaptability-related qualities		0.59** _a (0.21)		0.61** _a (0.21)		0.60* _a (0.27)	
Recruitment problems * adaptability-related qualities		-	-	-	-	-0.05 _a (0.40)	
Sector (ref. Agriculture, manufacturing, etc.)	Trade, hospitality	0.58 _a (0.32)		0.57 _a (0.32)		0.58 _a (0.32)	
	Business services, IT	1.17*** _a (0.33)		1.17*** _a (0.33)		1.17*** _a (0.34)	
	Public services	1.30*** _a (0.33)		1.29*** _a (0.33)		1.30*** _a (0.33)	
Organisation size (ref. 1–9 employees)	10–49 employees	0.66* (0.27)	-0.01 (0.26)	0.71** (0.27)	-0.02 (0.26)	0.66* (0.27)	-0.01 (0.27)
	50 or more employees	0.95** (0.35)	-0.09 (0.31)	1.00** (0.35)	-0.10 (0.31)	0.95** (0.35)	-0.09 (0.31)
Share of workers aged 55+		-0.00 _a (0.01)		-0.00 _a (0.01)		-0.00 _a (0.01)	
Presence of high-educated workers (ref. No high-educated workers)		0.00 _a (0.31)		0.02 _a (0.31)		0.01 _a (0.31)	
Share of high-educated workers		-0.01 (0.00)	0.00 (0.00)	-0.01 (0.00)	0.00 (0.00)	0.01 (0.00)	0.00 (0.00)
Financial difficulties (ref. No financial difficulties)		0.07 _a (0.27)		0.08 _a (0.27)		0.07 _a (0.27)	
Age of organisation		0.00 _a (0.01)		0.00 _a (0.01)		0.00 _a (0.01)	
Urban area (ref. Village or countryside)		-0.44 _a (0.25)		-0.42 _a (0.25)		-0.44 _a (0.25)	
Response by phone (ref. online response)		-0.35 (0.39)	0.88*** (0.33)	-0.36 (0.39)	0.89** (0.33)	-0.35 (0.39)	0.88** (0.33)

Table A4. Generalised ordered logit regression: “we could offer work to someone already retired”

(continued)

		Model 1		Model 2		Model 3	
		NA vs FE, NE	NA, FE vs NE	NA vs FE, NE	NA, FE vs NE	NA vs FE, NE	NA, FE vs NE
Type of respondent (ref. CEO, owner, head)	HR manager	0.46 _a (0.27)		0.46 _a (0.27)		0.46 _a (0.27)	
	Other manager/staff	0.13 _a (0.27)		0.13 _a (0.28)		0.13 _a (0.28)	
Intercept		0.97 (0.50)	-1.43** (0.47)	1.02* (0.50)	-1.40* (0.47)	0.97 (0.50)	-1.44** (0.48)
<i>N</i>		1,281		1,281		1,281	

Note(s): NA = Not at all, FE = Yes, to former employees only, NE = Yes, to former and new employees.

^aVariable meets the proportional odds assumption, only one coefficient is presented. * $p < 0.05$,

** $p < 0.01$, *** $p < 0.001$

Source(s): Finnish Centre for Pensions, Employer Survey 2021, own calculations

Table A4.

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