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ARTICLE

# The voluntariness of retirement-transitions: a European cohort-study

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**Abstract**

Involuntary retirement has negative effects on an individual's health and satisfaction with life. However, it remains unknown whether the recent European policy shift from early retirement towards extending working lives has impacted retirement voluntariness.

This study examines how socio-demographic factors affect retirement voluntariness, which is classified as 'involuntary' (*e.g.* being laid off), 'voluntary' (*e.g.* wanting to spend more time with family) or 'regular' (*e.g.* reaching the state pension age). The analysis is based on SHARE data (Survey of Health, Ageing and Retirement in Europe), covers ten European countries and differentiates between two retirement cohorts (1994–2004 and 2005–2015) during which the policy shift took place.

At the individual level, we find that gender and socio-economic status correlate with retirement voluntariness. At the company level, the sector of employment and job tenure also show an association with retirement voluntariness. The results indicate that, between the two cohorts, the share of those who experience their retirement as 'regular' has increased, while the share with 'involuntary' retirement has decreased. However, these shifts differ by educational groups, with a stronger increase of voluntary retirement for those with high education, suggesting a rise in social inequalities in retirement-transitions, likely owing to an accumulation of (dis)advantages over the lifecourse.

**Keywords:** cohort-study; forced retirement; involuntary retirement; pension; retirement; retirement-transitions; SHARE data; voluntary retirement

## Introduction

Retirement itself has undergone enormous changes over time, influenced by social, economic and demographic factors. In early industrial societies retirement was often associated with poverty and exclusion; people worked into old age and only a few

could afford to retire. This changed in the period following the Second World War. Retirement was institutionalized and secured by the (welfare) state, which enabled many workers to enjoy a peaceful and secure retirement. This has again changed since around the 1980s. Retirement and pension transitions have become more flexible and many people are working longer. A variety of retirement models have been established and the reasons for or against longer working lives are diverse (Phillipson 1998).

In this context, retirement is often seen as a critical lifecourse transition in later life (Beehr 1986). However, retirement-transitions are not the same for all individuals and are not exclusively linked to reaching the statutory retirement age. Rather, they are shaped by personal, job-related and national factors. Depending on the reasons for retirement – such as personal health issues, job loss or family responsibilities – retirement-transitions can be (at least) classified as either voluntary or involuntary (Hofäcker et al. 2016). Whether a retiree sees this transition as voluntary or involuntary greatly affects how s/he adjusts to retirement (Van Solinge and Henkens 2007). The sense of control or agency over the decision to retire, as well as how attractive retirement seems, plays a key role in whether someone views retirement as voluntary or involuntary (Hyde et al. 2015). Involuntary retirement has been shown to negatively impact life satisfaction (*e.g.* Dingemans and Henkens 2014) and health (*e.g.* Van der Heide et al. 2013).

The factors or determinants influencing whether retirement is voluntary have changed significantly in recent decades owing to the ageing of societies (Stiemke and Hess 2022). This demographic shift impacts nearly every aspect of society, including social security systems (Harper 2015). A key concern is that a decreasing number of workers is supporting an increasing number of retirees, who are living longer and requiring more health care and long-term care services. This could lead to financial strains on health care, insurance and public pension systems that rely on pay-as-you-go models. In response, policy makers have introduced various measures to delay retirement and boost older workers' participation in the labour force.

Since the early 2000s, these policies, which are broadly similar across European countries but vary in timing and implementation, include raising the statutory retirement age, restricting early retirement options, allowing for work-retirement combinations and creating incentives to keep working after retirement. Other efforts promote health and workability, combat age discrimination and introduce active labour market policies (*e.g.* Organisation for Economic Co-operation and Development (OECD) 2019a). Owing to these reforms, both the actual retirement age and the employment rate of older workers have increased (OECD 2019b). Further potential reasons for this development are the general good development of the labour market in some countries, rising female labour market participation as well as demographic trends (Hess et al. 2016). These shifts highlight the need for further research into the voluntariness of retirement-transitions, considering societal, individual and occupational factors.

The main research question of this article is: how has the voluntariness of retirement changed between retirement cohorts against the background of a changing pension policy context, new demographic development and changed labour markets? This article contributes to the literature in three key ways: First, it compares ten European countries to present the distribution of voluntariness of retirement across Europe. Second, it examines different cohorts to explore whether and to what extent the

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voluntariness of retirement-transitions changed over time, and if there have been shifts in the factors influencing it. To the best of the authors' knowledge, this type of cohort comparison has not been conducted before. Third, it introduces an expanded concept of retirement voluntariness. Previous studies typically categorized retirement as either voluntary (*e.g.* choosing to retire to spend more time with family) or involuntary (*e.g.* retiring owing to poor health). However, as Beehr (1986: 34) suggests, 'voluntary versus involuntary retirement … are more accurately conceived as continuous rather than dichotomous variables'. Building on Radl (2013a), the article at hand adds a third category, regular retirement, which refers to retiring upon reaching the official retirement age and is considered neither fully voluntary nor involuntary. By incorporating three categories instead of two, this approach provides a more nuanced understanding of retirement voluntariness.

## Retirement voluntariness: determinants and outcomes

Retirement-transitions can be distinguished not only by their timing but also in terms of their voluntariness. Retirement decisions are often seen as an 'individual decision under given opportunity structures defined by national, workplace and sociodemographic factors' (Hofäcker et al. 2016: 41). These factors influence how voluntary or involuntary the retirement is.

In this article, the reasons for retiring are categorized into three types – voluntary, regular and involuntary – based on the individual's level of choice or agency. Voluntary retirement refers to reasons that involve a high degree of personal agency, such as the desire for more leisure time or retiring alongside a partner. Involuntary retirement, on the other hand, includes reasons with little or no personal agency, such as job loss or health problems. We define reaching the edibility age for a pension, which at first glance does not allow any conclusions about retirement voluntariness, as regular retirement. Same or similar operationalizations (but without the 'neutral' category of regular retirement) were previously done by, for example, Hofäcker et al. (2016), Hyde and Dingemans (2017), Madero-Cabib and Kaeser (2016) and Radl (2013b). However, a simple two-category system (voluntary versus involuntary) only partially reflects the complexity of retirement-transitions (Shultz et al. 1998). By introducing the third category – regular retirement – we aim to provide a more detailed understanding of retirement voluntariness. Still, it remains unclear how individuals who retire regularly would perceive the voluntariness of their retirement.

The consequences of involuntary retirement are manifold. Unsurprisingly, involuntary retirement has a negative impact on wellbeing (Bender 2012; Dingemans and Henkens 2014; Hershey and Henkens 2014; Radó and Boissonneault 2020; Richardson et al. 2019; Smith 2006) and can increase the risk of depression or other mental health issues (Hyde et al. 2015; Park and Kang 2016; Welsh et al. 2016). Involuntary retirement is generally associated with poorer physical health as well (Dave et al. 2008; Mosca and Barrett 2014; Rhee et al. 2016; Van der Heide et al. 2013; Van Solinge 2007). It can also lead to higher alcohol consumption compared to those who retire voluntarily (Bacharach et al. 2008; Zantinge et al. 2014) and an increased likelihood of smoking (Henkens et al. 2008). Additionally, involuntary retirees often experience lower income

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or dissatisfaction with their financial situation (Bonsang and Klein 2012; Denton et al. 2013).

The ability to choose the type and timing of one's retirement-transition plays a crucial role in determining retirement voluntariness. As Hyde et al. (2015: 382) argue, 'it is not the form of employment exit per se but the degree of choice that the person is able to exert over leaving work that is important'. This degree of choice is determined by both external structural forces and individual agency. Structural forces refer to arrangements on the meso and the macro levels, such as workplace policies or national regulations, while agency is seen as an individual's ability to make free, independent choices (Hyde and Dingemans 2017). However, agency is not entirely free from external influences; it is shaped by social norms and personal circumstances, such as education (Barker 2005).

Factors that grant individuals more agency are more likely to result in voluntary retirement. In the family context (*e.g.* having a partner or children), we assume that these factors increase the 'attractiveness' of retirement, making voluntary transitions more desirable. However, we see these family-related factors not as stand-alone drivers of retirement voluntariness but rather as interacting with other factors to shape the overall decision-making process.

### *Determinants*

Several studies have explored factors that influence the voluntariness of retirement-transitions (Stiemke and Hess 2022). Age is a key determinant of the voluntariness of retirement-transitions, as younger individuals are more likely to experience involuntary retirement, particularly before reaching the statutory retirement age (Dorn and Sousa-Poza 2010; Ebbinghaus and Radl 2015; Hofäcker et al. 2016; Hyde and Dingemans 2017; Madero-Cabib and Kaeser 2016; Van Solinge and Henkens 2007). Gender also plays a role; research indicates that men are more likely to be involuntarily retired than women (Ebbinghaus and Radl 2015; Hofäcker et al. 2016; Madero-Cabib and Kaeser 2016; Radl 2013a). Foreign-born individuals tend to face involuntary retirement more frequently (Ebbinghaus and Radl 2015; Madero-Cabib and Kaeser 2016). Higher levels of formal education are associated with a greater likelihood of considering retirement-transitions as voluntary (Hofäcker et al. 2016; Hyde and Dingemans 2017; Radl 2013b). Unsurprisingly, job loss, displacement, lay-off and redundancy are involuntary determinants of retirement (Steiber and Kohli 2017; Szinovacz and Davey 2005; Van Solinge and Henkens 2007), as are transitions through disability pension schemes (Steiber and Kohli 2017; Szinovacz and Davey 2005). Marital status is another influential factor; married people whose partner is still employed are more likely to perceive their transition as involuntary (Radl 2013b, 2013a; Radl and Himmelreicher 2015).

Health is a critical individual-level factor, as poor health increases the likelihood of involuntary retirement (Szinovacz and Davey 2005; Van Solinge and Henkens 2007; Welsh et al. 2018). Additionally, higher income (Radl 2013a), having children (Szinovacz and Davey 2005) and being employed part-time (for women) (Steiber and Kohli 2017) are associated with voluntary retirement. Conversely, experienced unemployment (Steiber and Kohli 2017) and a mismatch between preferred and actual

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retirement timing (Szinovacz and Davey 2005; Van Solinge and Henkens 2007) are linked to involuntary retirement.

Retirement-transitions are inherently linked to labour (market) factors, such as the sector of employment. Employees in agriculture and mining (Ebbinghaus and Radl 2015) and those in the public sector (Hofäcker et al. 2016) are more likely to retire voluntarily, while the self-employed tend to experience the opposite trend (Madero-Cabib and Kaeser 2016). Additionally, research by Hofäcker and Naumann (2015) and Radl (2013b) indicates that voluntary retirement-transitions are more likely in larger firms. Employees who have access to an occupational pension are also more likely to retire voluntarily (Madero-Cabib and Kaeser 2016), although Szinovacz and Davey (2005) found this effect to be significant only for men. Regarding job tenure, Radl (2013b) discovered that longer tenure is associated with voluntary retirement, whereas Szinovacz and Davey (2005) found this correlation only for women.

In terms of the impact of recent reforms aimed at delaying retirement and extending working lives, there is limited research available for most European countries. Steiber and Kohli (2017) found that the risk of involuntary retirement decreases for more recent retirement cohorts, owing to increasing retirement ages. A comparative analysis of two retirement cohorts in Germany by Stiemke and Hess (2020) revealed that the influence of education on the voluntariness of retirement-transition has significantly increased for men. These initial findings suggest varying conditions owing to policy change, but further investigation is needed.

As previously noted, the influencing factors and the consequences of involuntary retirement are complex and interrelated. For example, while poor health can predict involuntary retirement, the transition itself can also lead to deteriorating health. Therefore, the role of retirement voluntariness as a mediator in this relationship is not entirely clear.

## Hypotheses

We propose five hypotheses regarding how the voluntariness of retirement-transitions has changed, with a special focus on the role of education. Our primary interest lies in how political changes from early to late retirement have had an impact on retirement voluntariness. In recent decades, most European pension systems have envolved to reductions in benefit levels and a stepwise increase of the statutory retirement age.[1] In addition, there have been various approaches to increase the employment rate of older workers (OECD 2019a). To investigate these dynamics, we compare two retirement cohorts (1996–2005 and 2006–2015) and derive three competing hypotheses.

First, we assume that the new policy of delayed retirement has reduced older workers' agency, thereby increasing the likelihood of involuntary retirement.

**H1a:** Later retirement cohorts have a higher likelihood to retire involuntarily.

Second, we expect that, as many early retirement options have been closed or made financially less appealing, the proportion of individuals working until the regular state pension age will increase.

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**H1b:** Later retirement cohorts have a higher likelihood to retire regularly.

Finally, we can argue that during the early retirement policy era, many workers were pushed into involuntary early retirement, but the recent policy shift may now provide them with greater agency over their retirement-transition.

**H1c:** Later retirement cohorts have a higher likelihood to retire voluntarily.

In addition to the three hypotheses regarding cohort differences, we also anticipate variations in the impact of the cohort effects between those with high and low education. With the policy shift towards a longer working life, concerns are raised about increasing social inequalities. For instance, early retirement pathways provided crucial options for older workers with low or limited skills to mitigate financial disadvantages in the event of job loss (Hofäcker and Naumann 2015).

We hypothesize that individuals with low education will experience a more significant increase in involuntary retirement as they are more vulnerable to the reduction in agency, leading to a higher likelihood of involuntary retirement in the later cohort. Conversely, we expect that those with high education will have a higher likelihood of voluntary retirement.

**H2a:** The assumed increase of involuntary retirement in the later retirement cohort is stronger for those with low education.

**H2b:** The assumed increase of voluntary retirement in the later retirement cohort is stronger for those with high education.

Prior research (see earlier in this article) has demonstrated that various factors can influence the voluntariness of retirement-transitions. We assume that factors that enhance an individual's agency also positively influence the likelihood of a voluntary retirement-transition (Hyde et al. 2015). A selection of these factors is included as control variables in our analysis.

For instance, higher socio-economic status increases agency by providing greater financial independence, better labour market opportunities, less-hazardous working conditions and overall better health, thereby increasing the likelihood of voluntary retirement. To examine the influence of the socio-economic status, we use (formal) education as a proxy (Hofäcker and Naumann 2015). Additionally, we assume that men on average have greater agency in retirement-transitions owing to more continuous employment biographies and higher income (Edge et al. 2017), which gives them more financial leeway in old age.

While relationship status and having children may not directly relate to agency, they significantly influence retirement decisions (Matthews and Fisher 2012). For example, having a partner or (grand)children may enhance the attractiveness of retirement, as individuals can spend more time with loved ones. According to previous research, there is a correlation between the presence or expectation of grandchildren and the transition to retirement, particularly for older women (Lumsdaine and Vermeer 2015).

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In most European countries, employment security is linked to individual job tenure. It is therefore more difficult for employers to dismiss older workers who have been employed for a particularly long time (Hyde and Dingemans 2017). Additionally, it is often not desirable for employers to let go of employees who possesses high firm-specific knowledge and experience (Bennett and Möhring 2014). Access to pension systems and the level of pension entitlements are in most countries related to an individual's employment history (Hofäcker 2010). While this does not directly relate to permanent employment at one company, the likelihood of unemployment is lower, as described earlier. Finally, job tenure also correlates with good job positions and high earnings. Older workers with long job tenure are more likely to benefit from seniority wages, occupational health care and pension programmes (Bennett and Möhring 2014). Therefore, we assume that high job tenure increases the agency of older workers regarding their retirement-transitions and thus they have a higher likelihood of voluntary retirement. A similar assumption can be made for civil servants, who typically enjoy favourable working conditions, high job security and substantial pension entitlements (Clark and Postel-Vinay 2009; Rainey et al. 2009).

## Method

### *Data*

The data used for the analysis are taken from the Survey of Health, Ageing and Retirement in Europe (SHARE), which is a multi-disciplinary and cross-national panel database that provides detailed microdata on health, socio-economic status and social and family networks of individuals aged 50 or older (Börsch-Supan et al. 2013). Since 2004, the survey has gathered data from 28 European countries and Israel, with around 140,000 respondents across Waves 1 to 8. For further information, see Börsch-Supan and Jürges (2005) and Malter and Börsch-Supan (2017).

### *Sample*

For our analysis, we use data from Wave 1 (2004) to Wave 6 (2015), excluding Wave 3 (SHARELIFE) since it was a retrospective special survey. The sample consists of ten European countries that participated in the five waves: Austria, Belgium, Denmark, France, Germany, Greece, Italy, Spain, Sweden and Switzerland. The sample was restricted to retirees who exited the labour market between the ages of 55 and 70 in the years 1996 to 2015. Based on this, we created two retirement cohorts: 1996–2005 and 2006–2015. The division not only is straightforward but also aligns well with policy changes in the countries we analyse. In the 1990s and early 2000s, many countries reduced pension benefits by modifying the pension formula. Afterward, reforms focused in particular on extending working lives (Queisser 2015). Thus, we assume that those in each cohort made their retirement decisions under different conditions. The final sample includes 3,572 cases: 1,473 in Cohort I (retired between 1996 and 2005) and 2,099 in Cohort II (retired between 2006 and 2015).

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**Table 1.** Sample description with variables used in analysis separated by cohorts

| | Cohort I (1996–2005) | Cohort II (2006–2015) |
|---|---|---|
| Age at interview (average) | 68.00 | 68.70 |
| Gender (% women) | 38.76 | 47.82 |
| Education (% tertiary [ISCED]) | 19.93 | 29.72 |
| Children (% yes) | 87.39 | 87.60 |
| Grandchildren (% yes) | 85.32 | 72.21 |
| Partner (% no) | 31.11 | 32.06 |
| Age at retirement (average) | 62.61 | 62.96 |
| Employment (%) | | |
| – *Employee* | 67.84 | 57.37 |
| – *Civil servant* | 9.87 | 26.96 |
| – *Self-employed* | 22.29 | 15.66 |
| Job tenure in years (average) | 27.96 | 26.28 |

*Source*: SHARE Waves 1–2, 4–6 (own calculations).

## *Variables*

The dependent variable in our analysis is the voluntariness of retirement, operationalized into three characteristics: involuntary, voluntary and regular. It was built based on the respondent's self-reported reasons for retirement. We see the reasons 'made redundant', 'own ill health' and 'ill health of relative or friend' as involuntary transitions to retirement. The reasons 'was offered an early retirement option/window (with special incentives or bonus)', 'to retire at the same time as spouse or partner', 'to spend more time with family' and 'to enjoy life' are considered voluntary retirement. Regular retirement applies when respondents 'became eligible for public pension/private occupational pension/private pension'.

Table 1 shows the characteristics of the sample for both retirement cohorts. There are notable differences in gender (around 9 per cent more women in the younger cohort) and education (approximately 10 per cent more individuals with tertiary education in the younger cohort). The increase in women can be attributed to rising female labour market participation, while the higher education level reflects broader educational expansion. Additionally, we observe differences in the type of employment: around 10 per cent fewer employees, 17 per cent more civil servants and 7 per cent fewer self-employed individuals in the younger cohort.

## *Statistical methods*

We conduct a multinominal regression analysis to assess whether the voluntariness of retirement has changed between the cohorts, while controlling for potential confounding effects. Additionally, we include interactions with education and gender to test our hypotheses H2a and H2b, and to examine potential gender differences in retirement decisions.

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**Table 2.** Detailed distribution of voluntariness of retirement in per cent

| Country | N | Cohort I (retired 1996–2005) | | | Cohort II (retired 2006–2015) | | |
|---|---|---|---|---|---|---|---|
| | Cohort I/ Cohort II | Involuntary | Regular | Voluntary | Involuntary | Regular | Voluntary |
| Austria | 70/201 | 12.86 | 78.57 | 8.57 | 8.96 | 87.06 | 3.98 |
| Belgium | 140/226 | 16.43 | 60.71 | 22.86 | 10.18 | 72.12 | 17.70 |
| Denmark | 113/192 | 31.86 | 30.97 | 37.17 | 22.40 | 17.19 | 60.42 |
| France | 127/140 | 13.39 | 63.78 | 22.83 | 8.57 | 70.00 | 21.43 |
| Germany | 222/267 | 19.37 | 61.26 | 19.37 | 14.61 | 62.17 | 23.22 |
| Greece | 173/135 | 6.36 | 89.02 | 4.62 | 5.19 | 91.85 | 2.96 |
| Italy | 115/175 | 7.83 | 87.83 | 4.35 | 2.86 | 96.00 | 1.14 |
| Spain | 152/258 | 14.47 | 71.05 | 14.47 | 9.30 | 77.13 | 13.57 |
| Sweden | 284/330 | 21.13 | 46.83 | 32.04 | 9.70 | 57.58 | 32.73 |
| Switzerland | 77/175 | 7.43 | 66.86 | 25.71 | 16.43 | 60.71 | 22.86 |
| **Overall** | **1473/2099** | **15.89** | **64.29** | **19.82** | **10.29** | **68.27** | **21.44** |

*Source*: SHARE Waves 1–2, 4–6 (own calculations).

## Results

### *Descriptive results*

Table 2 summarizes the incidence of voluntary, regular and involuntary retirement-transitions for both cohorts. In Cohort I (1996–2005) 16 per cent of individuals retired involuntarily, 20 per cent retired voluntarily and 64 per cent retired regularly. In Cohort II (2006–2015) 10 per cent retired involuntarily, 21 per cent voluntarily and 68 per cent regularly. Based on our sample, the share of involuntary retirement has decreased, while the share of regular retirement and voluntary retirement has increased.

A closer examination of the country comparison reveals that involuntary retirement has decreased in all countries except Switzerland. Italy and Sweden saw the most notable reduction, with involuntary retirement more than halving. Austria, Belgium, Denmark, France and Spain experienced decreases of about one-third, with Italy showing the strongest relative decline. In Cohort II, involuntary retirement is most common in Denmark, Germany and Switzerland, while it is lowest in Italy and Greece.

Conversely, regular retirement-transitions have increased in all countries except Denmark and Switzerland. The rise is especially pronounced in Greece and Italy, where more than 90 per cent of Cohort II retirees transitioned regularly. Voluntary retirement increased relatively strongly between cohorts only in Denmark. In contrast, there was a noticeable decline in voluntary retirement in Austria, Greece and Italy, which also have the lowest overall rates of voluntary retirement. In Sweden the share of voluntary retirement remained steady, while it declined in varying degrees in other countries. Denmark has the highest share of voluntary retirement in Cohort II, with more than 60 per cent, followed by Sweden with about one-third of all retirement-transitions.

The descriptive results suggest that retirement-transitions are becoming increasingly standardized when comparing the two cohorts, with fewer individuals retiring for self-determined reasons. This trend indicates a shift towards more regular, predetermined retirement patterns over time.

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**Table 3.** Results of multinominal logistic regression on voluntariness of retirement-transition in relative risk ratios and robust standard error in brackets

| | Regular | | | Voluntary | | |
|---|---|---|---|---|---|---|
| Age at interview in years | 1.05 | | (0.03) | 0.99 | | (0.03) |
| Gender[a]: Man | 0.81 | | (0.14) | 1.04 | | (0.20) |
| Education[b]: Tertiary (ISCED) | 1.60 | * | (0.35) | 1.86 | ** | (0.43) |
| Children[c]: Yes | 1.10 | | (0.20) | 1.01 | | (0.21) |
| Grandchildren[d]: Yes | 1.18 | | (0.17) | 1.29 | | (0.21) |
| Partnership[e]: Partner | 1.02 | | (0.13) | 1.31 | * | (0.18) |
| Age at retirement in years | 1.31 | *** | (0.04) | 1.02 | | (0.03) |
| Employment status[f] | | | | | | |
| – Civil servant | 1.56 | *** | (0.26) | 1.27 | | (0.23) |
| – Self-employed | 0.72 | * | (0.12) | 1.05 | | (0.19) |
| Job tenure in years | 1.01 | ** | (0.01) | 1.02 | *** | (0.01) |
| Cohort[g]: Cohort II | 1.77 | ** | (0.34) | 2.13 | *** | (0.45) |
| Interaction Cohort* Gender | 1.17 | | (0.26) | 0.79 | | (0.31) |
| Interaction Cohort* Education | 0.46 | ** | (0.13) | 0.63 | | (0.18) |

*Notes*: N = 3,557; Pseudo $R^2 = 0.162$.
Model controls for country fixed-effects using country dummies.
Levels of significance: $^*p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$.
Reference categories: [a]Women; [b]Non-tertiary (ISCED); [c]No children; [d]No grandchildren; [e]No partnership; [f]Employee; [g]Cohort I.
*Source*: SHARE Waves 1–2, 4–6 (own calculations).

## *Multivariate results*

Table 3 presents the results of the multinomial logistic regression using relative risk ratios; values over one indicate a positive correlation, while values below one indicate a negative correlation. The analysis reveals that individuals with higher education and longer job tenure have a lower probability of involuntary retirement, supporting the argument that higher agency decreases the risk of involuntary retirement.

However, contrary to this argument, the likelihood of voluntary retirement is not higher for men and civil servants. Nevertheless, civil servants perceive their retirement significantly more likely as regular compared to non-civil servants. No significant effect was found for having children and grandchildren, but having a partner increases the chance of voluntary retirement.

When comparing the two retirement cohorts, the results show an increase in both regular and voluntary retirement-transitions for the younger cohort, supporting our hypotheses H1b (higher likelihood to retire regularly for younger retirees) and H1c (higher likelihood to retire voluntarily for younger retirees).

We calculate predicted probabilities because interpretating interaction effects in logit-based regressions can be challenging, and predicted probabilities provide a straightforward way of understanding the interaction effects. As shown in Figure 1, the cohort differences for men and women are negligible. However, the significant interaction effect between cohort and education in the regression models reveals

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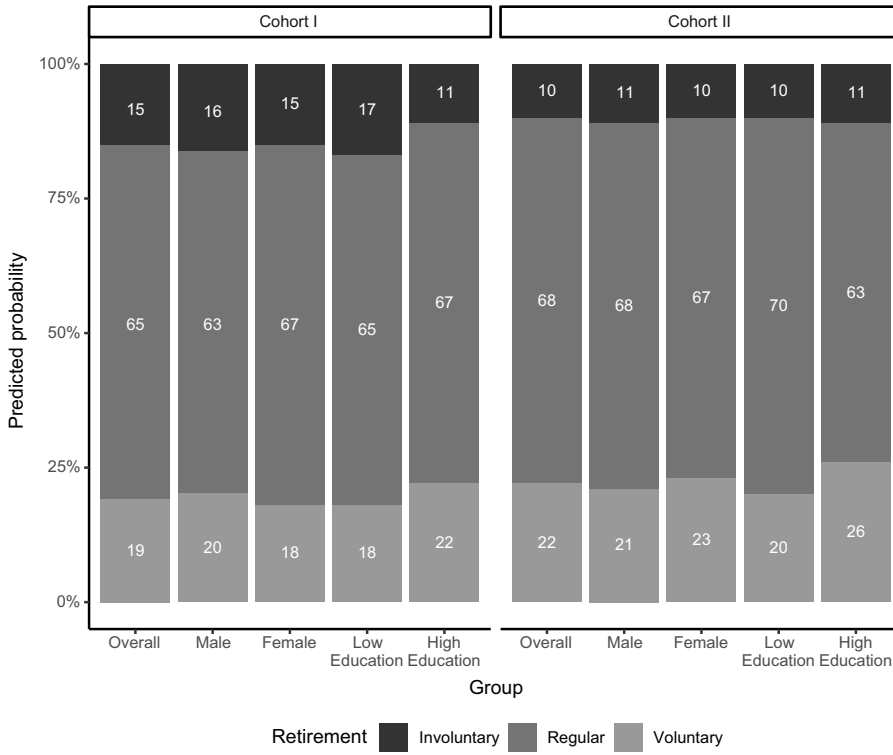


**Figure 1.** Predicted probabilities based on the regression analysis in Table 3.
*Source*: SHARE Waves 1–2 and 4–6 (own calculations).

notable educational differences in the effect of the cohort. The decrease in involuntary retirement and increase in regular retirement is stronger for individuals with lower education, while the increase in voluntary retirement is stronger for those with high education, supporting H2b (higher likelihood in voluntary retirement for those with high education in the later cohort).

Contrary to our hypothesis H1a (higher likelihood to retire involuntary for younger retirees), we observed a decline in involuntary retirement across both cohorts. To ensure the robustness of our results, we analysed different cohort designs (1996–2000; 2001–2005; 2006–2010; 2011–2015). The results remain consistent, showing a linear trend in the chronological comparison with fewer involuntary and more regular retirement-transitions.

## Discussion

The context of retirement, one of the most important transitions in the lifecourse, is undergoing fundamental changes. In respond to demographic ageing, policy makers have introduced reforms aimed at delaying retirement and extending working lives. This study examines whether the voluntariness of retirement has changed in recent years across ten European countries.

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Our main findings show that the share of retirement perceived as involuntary has decreased between the two retirement cohorts, while regular and voluntary retirement have increased. This might be explained by policies promoting longer working lives, encouraging individuals to work until reaching the statutory pension age, which would be interpreted as regular retirement. Additionally, with a shrinking workforce and an increased demand for (qualified) older workers (Naegele and Hess 2020), forced retirement owing to a lack of employment opportunities should become less common, leading to a decline in involuntary retirements. This finding aligns with Steiber and Kohli (2017).

However, the increases of voluntary and regular retirement vary by different groups, indicated by the significant interaction of cohort and education. The rise in voluntary retirement is driven by individuals with higher education, while the increase in regular retirement is more pronounced among those with lower education. Similar educational differences in cohort comparison of retirement voluntariness were also found for German men by Stiemke and Hess (2020).

The results for the control variables are consistent with prior research. Individuals in a relationship, those with higher education and those retiring at an older age are more likely to experience voluntary and/or regular retirement (Denton et al. 2013; Dorn and Sousa-Poza 2010; Ebbinghaus and Radl 2015; Hofäcker et al. 2016; Hyde and Dingemans 2017; Madero-Cabib and Kaeser 2016; Radl 2013a; Van Solinge and Henkens 2007). Additionally, longer job tenure is associated with a lower likelihood of involuntary retirement (Madero-Cabib and Kaeser 2016; Radl 2013b). In the case of women, previous research has shown that they are more likely to care for grandchildren than men, with similar patterns in Central and South-Eastern European countries as in the Mediterranean countries (Zanasi et al. 2023). It can be assumed that for many women, the feeling of truly entering retirement is diminished owing to the ongoing transition between paid work and care responsibilities.

When interpreting the results of this analysis, several limitations should be acknowledged. First, the dependent variable might be somewhat imprecise in measuring the voluntariness of retirement, as it is based on an operationalization of reasons for retirement. While the question asks 'For which reasons did you retire?', some answers, such as 'made redundant', could refer to leaving a job, which often leads to retirement in older age but not necessarily. However, Hyde and Dingemans (2017: 232) argue that 'the distinction between retirement and other forms of employment exit in later life is becoming increasingly blurred'. Additionally, it is possible that respondents, especially in the older cohort (who retired between 1996 and 2005), may not accurately recall their reasons for retiring, given that the first wave of the SHARE occurred in 2004. Second, while we describe country differences, we cannot provide causal explanations for these based on our research so far. In addition, although the policy shift towards delaying retirement and extending working lives is a pan-European development, one also must acknowledge the country differences within Europe. In general, we must be careful to not make causal claims as the data are analysed only through a cohort comparison. Third, retirement perception was operationalized, meaning that we cannot draw conclusions about each individual's intentions. For example, some employees may have intentionally sought dismissal in order to (voluntarily) retire from working life. Lastly, we do not know how those respondents we operationalized as 'regular

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retirees' (who became eligible for public pension/private occupational pension/private pension) actually feel about reaching the retirement age, whether they view it as a positive or a negative experience. People reaching pension eligibility age may have different feelings about it, but our data do not capture this aspect.

Acknowledging these limitations, the study makes three key contributions. First, following indications of previous research, it operationalizes the voluntariness of retirement into three categories – voluntary, regular and involuntary. This allows for a more precise description and understanding of retirement voluntariness. Had the study distinguished only between voluntary and involuntary retirement and categorized 'became eligible for public pension/private occupational pension/private pension' as voluntary retirement (as done in many previous studies, *e.g.* Hofäcker et al. 2016), the findings would have shown a strong increase in voluntary retirement among the lower educated. This would neglect the education difference in the shift from voluntary to regular and voluntary retirement. Second, the study uses a cohort comparison to explore how retirement voluntariness has changed over time, providing a fresh perspective on existing research. By comparing cohorts, the study captures the development of retirement voluntariness and sheds light on shifts in retirement-transitions. Third, the country comparison across ten European countries enables the study to differentiate the development of retirement by country and, hence, institutional context. To the authors' knowledge, such a far-reaching analysis has not been previously published, even though not all specifics can be explained.

Future research should focus more closely on the reasons behind retirement decisions across different cohorts and countries. It would be particularly interesting to explore how global crises, such as the 2007 financial crisis or the Covid-19 pandemic, have affected the voluntariness of retirement. Additionally, examining individual reasons for retirement in more detail – such as retiring to care for relatives – would provide deeper insights. Qualitative research could play a crucial role in enhancing our understanding of the voluntariness of retirement-transitions and the personal motives driving these decisions.

From a societal perspective, the results contradict recent concerns about increasing inequalities in the transition from work to retirement (Hofäcker et al. 2019), as we observe a decrease in involuntary retirement, a strong increase of regular retirement and a slight increase of voluntary retirement. However, our results do not provide insight into whether the increase in regular retirement, defined as 'becoming eligible for a pension', is viewed positively by those affected. It is likely that many retirees had to continue working until reaching the official retirement age, often owing to social and economic pressures that may not align with their personal preferences (Hess 2017).

The results also highlight the difference between educational groups: the rise in regular retirement is mainly driven by individuals with lower education, while the likelihood of voluntary retirement has increased among those with higher education. Hofäcker et al. (2019) would explain this trend by noting that the first group faces financial pressure to work longer to ensure a sufficient pension, whereas the higher-educated group has greater agency in shaping their retirement-transitions. Policy makers, employees, trade unions and other stakeholders should strive to increase the agency of all older workers and, thus, further increase the share of voluntary retirement-transitions.

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## Note

1. For an overview of pension policies and descriptive data regarding retirement, we recommend OECD (2013–2023) *Pensions at a Glance*. Paris: OECD Publishing.

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