Human resource practices, perceived employability and turnover intention: Does age matter?

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Abstract

This paper investigates the age specificities in the link between employee's perceived external employability and turnover intention and how the use of human resource practices moderates this relationship. Results show that the use of motivation-enhancing HR practices induces a larger retention effect for younger and middle-aged employees than for older ones, whereas the turnover intention effects of flexibility-enhancing HR practices are stronger for the middle-age and older groups than for the younger groups. Moreover, the use of HR practices that stimulate employees' motivation, such as training, participation, voice and teamwork, plays a stronger role in retaining highly employable younger employees, while the use of HR practices that offer flexibility, such as flexible working time, teleworking and work-life balance, enables retaining highly employable older employees.

Keywords: Age, HR practices, perceived external employability, turnover intention.

Introduction

Employees' turnover intention (or intention to quit, Böckerman and Ilmakunnas, 2009) is considered as an important work-related attitude - along with job satisfaction, organizational commitment, perceived organizational support, employee engagement and job involvement. Turnover intention is shown to be the best predictor of actual turnover (e.g. Böckerman and Ilmakunnas, 2009; Van Breukelen et al., 2004), a subject of utmost importance due to the impending shortage of highly skilled workers, as employees with better skills and abilities will be those who tend to leave, whereas those who remain are the ones who cannot find other jobs. Retention policy is thus a crucial element of human resource (HR) management, especially the retention of older employees who are the guardians of valuable expertise and knowledge (e.g. Sumbal et al., 2017; Delfgaauw, 2007a).

Employee age has been associated to organizational attachment, motivations and turnover intention. Studies on how to deal with turnover intention across the lifespan have provided inconsistent results. Healy et al. (1995), looking at the bivariate link between chronological age and voluntary turnover using meta-analysis, reported that the age-turnover association was near to inexistent. Peltokorpi et al. (2015) also reported any association between age as moderator in the relationship between organizational embeddedness and turnover intention. By contrast, conducting a meta-analysis of 49 studies published between 1990 and 2008, Ng and Feldman (2010) found evidence that younger employees (under 50) are more likely than their older colleagues to leave their job, this relationship depending on moderators such as racial minority membership, organizational tenure or education level. Finegold et al. (2002) indicated that, for the under-30s, satisfaction with opportunities to develop technical skills and pay linked to individual performance has a stronger negative relationship with the intention to leave their current job than for those over 45, reporting a statistically significant but small effect of age.

We contribute to existing literature in several ways. First, we shed new light on the topic of subjective employment alternatives and turnover intention, considering the specificities of employees' age. We accordingly propose a first analysis of age-differentiated perceived external employability and turnover intention. Second, to the best of our knowledge, no former research has investigated what specific HR practices fit better with the work attitudes of employees belonging to different age groups, taking into account contextual factors such as perceived external employability. We thus investigate the role of HR practices in moderating the turnover effects of perceived employability among different age groups. Third, we are able to provide robust estimators of employees' turnover intention, taking into account their perceived employability and their use of HR practices. We take advantage of a large dataset of official employee statistics, referring to a sample of 16,896 observations representing the active population of Luxembourg's private labour market and containing a large set of job characteristics, socio-demographic characteristics and firm heterogeneity.

Theoretical background and hypotheses

Age-related changes in expectations and motives

Age may explain changes in employees' work attitudes by affecting their needs, their expectations regarding future prospects, and their values at a particular stage in life. Scholars have suggested explanations for why work-related attitudes, including the intention to quit, change with age. First, rooted in the life-span psychology and the socio-emotional selectivity theories (Kanfer and Ackerman, 2004; Kooij et al., 2011), younger and older workers may differ in terms of emotional reactions. Changes in individual attitudes may be related to changes in people's subjective well-being and mental health. Older adults may be more likely to maximize positive emotional experiences than negative ones, so as to make the best of the

limited time they perceive they have left (Carstensen and Mikels, 2005; Mather and Carstensen, 2005). While young adults have been associated with more intense emotional reactions to negative stimuli and adversity at work, older people are likely to be more able to understand and control their emotions (Bruine de Bruin et al., 2014; Chapman and Hayslip, 2006). As a result, older workers are supposed to maintain better work attitudes and to be less likely to search for another job in the face of adverse events or working conditions.

Second, research on decision-making and social relationships across the lifespan has also indicated age-related changes in needs and work values, such as the importance of pay and promotion or work expectations (Kanfer and Ackerman, 2004; Ng and Feldman, 2010). While the prime-aged might be more oriented towards fulfilling social needs, young individuals might display greater motivation to fulfil their growth needs, such as pursuing more challenging opportunities, having new work goals and developing their career (Ebner et al., 2006; Jans, 1989). In addition, older adults in their middle and later career periods, may occupy more attractive positions with higher power and status (Kalleberg and Loscocco, 1983), thus may be more likely – relative to younger colleagues – to strive for stability, as they take on broader organizational roles and quality social relationships with colleagues, family and friends, which offer them fulfilment of their status and affiliation needs. Older adults may therefore lower their work-related expectations and have more realistic job expectations.

Third, linked to cognitive perceptions, older workers may feel that their employability is low because of the employers' stereotypes regarding the decline of job performance with age.[2] Indeed, age stereotypes influence employers' judgments but not only: from workers too. Raemdonck et al. (2017) indicate that activating negative age stereotypes tended to worsen

[2] We thank an anonymous reviewer for pointing this important aspect.

memory performance, memory self-efficacy and views of ageing in old people. This means that avoiding negative stereotypes about older workers may have a positive effect on their learning and development and, in turn, their performance.

Relationship between perceived employability and turnover intention

Perceived employability represents the subjective perception employees have about their ease of movement (March and Simon, 1958) and their job alternatives (Mobley et al., 1979). The employability paradox assumes that employee development is a risk for employer in the form of increased turnover intention (e.g. De Cuyper and De Witte, 2011). Empirical analyses show controversial results. Hom et al. (1992) found a positive association between perceived employability and turnover intention, while no evidence was found by Berntson et al. (2010). De Cuyper et al. (2011) however showed that perceived employability and turnover intention become positive related when job resources are low (such as job control and social support from superiors and colleagues). Nelissen et al. (2017), testing the employability paradox, found that perceived external employability induces turnover intention, but only in case of upward career development. Recently, Rodrigues et al. (2020) find that high investment in career development practices reinforces the positive association between perceived employability and organizational attachment and the negative association between employability and turnover intention.

Age-related differences in the link between turnover intention and HR practices

Literature on strategic HR management (Böckerman et al., 2012; White and Bryson, 2013) often refers to HR systems such as motivation-enhancing practices (e.g. communication, teamwork, voice, up-skilling and performance appraisal) and incentive-related practices (e.g. teleworking and work-life balance). These frameworks provide a better understanding of the relationship between HR practices and employees' attitudes: each HR bundle is aimed at

different goals in specific contexts (Bal and De Lange, 2015). We analyse the bundle of HR practices regrouping all those that are aimed at enhancing the work environment and employees' motivation (Martin, 2017): e.g. voice, participation, communication, training and teamwork. In line with Bal and De Lange (2015), Heywood and Miller (2014) and Stirpe et al. (2017), we also take into account a bundle of HR practices enhancing the flexibility for employees: work-life balance, flexible working time and teleworking.

Strategic HR researchers mostly adopt social exchange theory to explain how various aspects of HR practices affect employees' work attitudes. The idea is that HR practices can directly influence an employee's desire to move (March and Simon, 1958): employees who are satisfied with HR practices may have less motivation to leave their job, and hence turnover will be lower. However, according to the job demands-resources model (Bakker and Demerouti, 2007; Schaufeli and Bakker, 2004), employees' attitudes depend not only on the resources provided by HR practices such as flexibility, promotion, involvement and job control, but also on the demands induced by HR practices, such as stress and work overload, which could affect employees' well-being. Thus, HR practices may also induce adverse effects on employees' attitudes: employees experiencing positive HR practices may also perceive the pressure of increasingly higher performance that could, in turn, have adverse consequences on job strain (Ramsay et al., 2000) and employees' stress, work pressure and anxiety (Wood et al., 2012). Jensen et al. (2013) examined relationships among HR practices, job control, employee anxiety, role overload and employee turnover intentions. They highlighted several negative consequences on employees' turnover intentions when HR practices are implemented with low levels of job control. Taking into account the "resources" provided by HR practices (e.g. empowerment, discretion and job control) and the "demands" (stress, overload and anxiety), empirical evidence consistently provides some support for positive relationships between HR practices and employees' attitudes such as job satisfaction,

organizational commitment, motivations, organizational citizenship behaviour and pride (e.g. Knight and White, 2017). Regarding the role of age in these relationships, the meta-analysis of 83 studies provided by Kooij et al. (2010) underlines that the positive relationships are strengthened for older ages for flexible work schemes and weakened when HR practices relate to individual career development.

Only a few studies have explored the issue of age in relation to turnover intention and HR practices. Stirpe et al. (2017) assess the link between retention rate and HR practices, with the age structure in the workplace as a moderator. Bal and Dorenbosch (2015) also used workplace survey data to analyse the age-related differences in the relationship between HR practices and organizational performance, such as absenteeism and turnover.

In this article, we propose an analysis at the employee level to investigate age-related differences in the relationship between motivational practices and voluntary turnover. Since values, expectations and priorities are likely to change with ageing, as stated in the previous sub-section, we expect that some HR practices are less suitable for older workers (Khilji and Wang, 2007). Compared with their older colleagues, younger employees with their larger perspective regarding the future pay greater attention to the development of their career and to financial aspects. As the motivation-enhancing HR practices (quality circle, job rotation, participation, voice, teamwork and training) aim to provide opportunities for involvement and career progression, these practices may be more valuable for younger employees and influence their turnover intention more than for older ones. The underlying hypothesis is that the younger employees are more positive about the “resources” provided by motivation-enhancing HR practices and less adversely influenced by the “demands” generated by these practices:

Hypothesis 1. *Motivation-enhancing HR practices are more valuable for younger employees, in the sense that effects of these practices on turnover intention are stronger for younger employees than for older employees.*

By contrast, as older employees in their later career period may be more aware of the shorter time horizon, they may have more salient concerns about the stabilization and the quality of social relationships with colleagues, family and friends that offer them fulfilment of their social status and affiliation needs. They may therefore lower their work-related expectations and have more realistic job expectations. Accordingly, the use of flexibility-enhancing HR practices aiming at fulfilling these needs and motives may be more suited to retain older employees than younger employees:

Hypothesis 2. *Flexibility-enhancing HR practices are more valuable for older employees, in the sense that the effects of these practices on turnover intention are stronger for older employees than for younger employees.*

HR practices moderating the relationship between employability and turnover intention

HR practices satisfy the employee's needs, thus serving as an indication that the organization values employees' contribution. In turn, employees would respond by tending to remain within the organization (Cole and Bruch, 2006). If employees feel that their organization is disrespectful towards them, they will express their intention to leave it. Organizational actions are interpreted by employees as symbolic of their organization's commitment to them, which, in turn, contributes to organizational support (Armstrong-Stassen and Ursel, 2009). However, while research has generally assumed that HR practices influence all employees in the same way, employees' motives and needs change with age (e.g. Kooij et al., 2014; Ng and

Feldman, 2010; Zwick, 2015), suggesting that older workers may react differently to HR practices than their younger colleagues.

In Hypothesis 1, we suggest that HR practices that enhance employees' motivation – such as job rotation, communication, voice, teamwork, training or quality circle – are likely to be more valuable for younger employees, in that they may reduce their turnover intention more than for older employees. In this sub-section, we combine perceived external employability and motivation-enhancing practices in relation to turnover intention. We draw our argument from the unfolding model of turnover (Lee and Mitchell, 1994), highlighting that employees do not just intend to quit without events or "shocks" that force them to evaluate their job. If voluntary turnover leads to a better job with improved earnings or working conditions, employees perceiving themselves as having high employability will consider quitting as an option unless their employer mitigates the adverse turnover effect of job opportunities through appropriate HR practices. Accordingly, we consider whether the adverse turnover effects of perceived external employability for the younger age group could be mitigated by motivation-enhancing HR practices. The underlying hypothesis is that in the case of high ease of movement, the resources generated by these practices – such as commitment, empowerment and improved career prospects – may alleviate the adverse effect of employability in such a way that younger employees are less motivated to quit:

> ***Hypothesis 3.*** *Motivation-enhancing HR practices mitigate the effects of high-perceived external employability or turnover intentions more for the younger group than for the older one.*

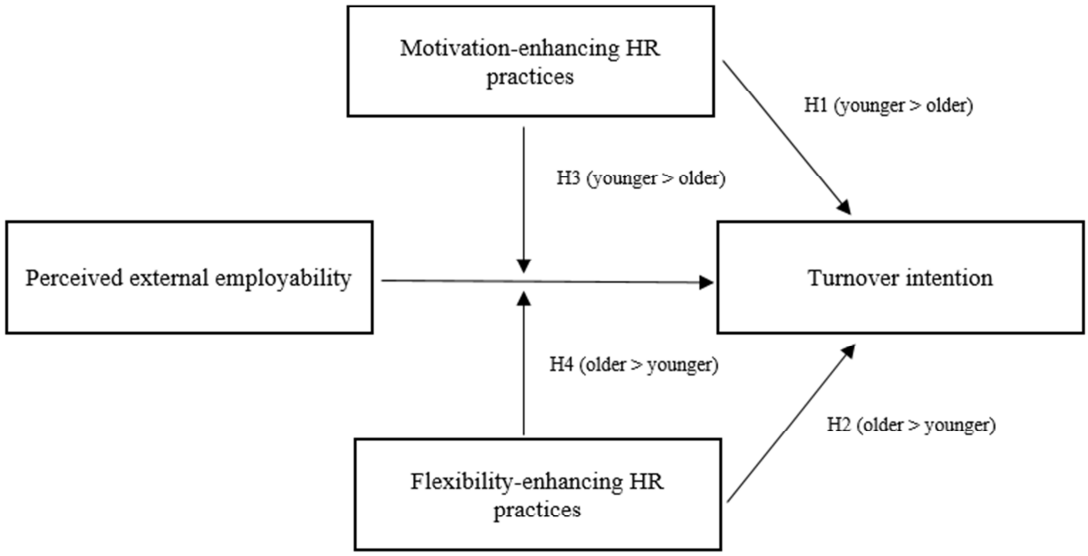
In the same vein, we also relate perceived external employability and flexibility-enhancing HR practices to turnover intention. Hypothesis 2 suggests that older employees place more value on flexibility-enhancing HR practices than younger employees do, with the result that

older employees are more likely than younger employees to stay with an organization when flexibility-enhancing HR practices are implemented. Here, we again draw our argument from the unfolding model of turnover (Lee and Mitchell, 1994) developed for hypothesis 3, to examine people intending to quit without any events or "shocks" that force them to evaluate their job. The idea is that if voluntary turnover leads to a job with better earnings or working conditions, employees perceiving high employability will consider quitting as an option unless the firm mitigates the adverse turnover effect of job opportunities through appropriate HR practices:

Hypothesis 4. *Flexibility-enhancing HR practices mitigate the effects of high-perceived external employability on turnover intentions more for the older group than for the younger one.*

Figure 1 illustrates the moderating role of HR practices on the relationship between perceived external employability and turnover intention:

Figure 1: Study framework



Data and methodology

Data

The data comes from a nationally representative employee survey for Luxembourg conducted in 2013 using the guidelines provided by the MEADOW Consortium (2010). The questionnaire of Working Conditions and Quality of Work Life survey was sent to a stratified random sample of employees ranging from 16 to 65 years of age, who had worked for at least twelve months in any workplace in the private sector with 15 or more employees. The dataset constitutes a large representative sample of 16,896 employees working in the Grand-Duchy of Luxembourg. It covers 68 per cent men and 32 per cent women and representing the active population of Luxembourg's private sector labour market. The employment protection legislation is above the one observed at the Organization for Economic Cooperation and Development (OECD) average and the unemployment rate is around 6 percent. The annual average wage is the highest in Europe. The labor market is characterized by a highly international, multicultural and multilingual working environment. More than half of the active population is cross-border employees from neighboring countries such as Belgium, France, and Germany. As in most of Western European countries, the private sector is characterized by the predominance of services. Hence, the paper gives results on employees' working conditions in a continental Europe service economy and includes not only Luxembourgish employees but also French, Belgian, German, and some other nationalities.

The sampling design was based on the principle of random selection. The weights used in all of the following analyses ensure that the distributions, by country of residence, nationality, gender, age, white- and blue-collar workers, economic activity, and size class of the organization in which the employee works, are representative of people at work in the private

sector. This method prevents the bias problem linked to the fact that employees with bad working conditions or low job satisfaction were more likely to respond or not to the survey.

Three age groups[3] are used: (1) 16 to 29 (early adulthood) (n = 2,522 – 16%); (2) between 30 and 49 (middle adulthood) (n = 11,454 – 64%); and (3) age 50 and over (late adulthood) (n = 2,920 – 20%).[4] The two first age groups refer to the "younger workers" category.

Variables

Intention to quit

Similar to Delfgaauw (2007b), voluntary turnover is based on the question: "Have you tried to leave your current job in the last 12 months?" with three possible answers "No, not at all", "Yes, I have been looking around" or "Yes, I have intensively searched". As only less than 6 per cent of the weighted sample gave the third answer, a dummy variable for the intention to quit was constructed and the two last answers grouped together (33 per cent of the weighted sample).

Main variable of interest: Perceived external employability

The employability variable measurement is in line with Berntson et al. (2010) and De Cuyper et al. (2011): "If you were to lose or leave your present job, do you think it would be difficult for you to find an equivalent job?" with answers on a scale from 1 to 4 (1 = very difficult; 2 = quite difficult; 3 = quite easy; 4 = very easy). Due to a low number of responses for some

[3] We do not have access to chronological age

[4] The number of observations relates to the non-weighted number of employees in the sample, whereas the percentages are weighted statistics.

alternatives, the scale was recoded from 1 to 3. The mean of the employability measurement is 1.99 with a standard deviation of 0.73. Table 1 presents the cross-tabulations of perceived external employability.

- INSERT TABLE 1 ABOUT HERE -

Independent variables: HRM practices

Several scholars have highlighted the need to simultaneously implement HR practices in order to strengthen their synergistic effects (Ostroff and Bowen, 2000), using a "bundle" (Huselid, 1995). Bundles of HRM practices generate beneficial interplays of the elements of a system, such that an increase in the use of one practice enlarges the returns earned from increasing another. In line with the literature (e.g. Böckerman et al., 2012; Martin, 2017; White and Bryson, 2013), we take into account 4 practices that enhance employees' motivation: voice, communication, training and teamwork. The bundle *MotivationHR* is an additive index capturing the intensity to which employers are committed to motivate employees in the workplace, taking the value 0 when none of the practices are implemented and 4 when all practices are available.

Following Bal and De Lange (2015), Heywood and Miller (2014) and Stirpe et al. (2017), we construct an index referring to personnel policies that favour flexibility including 3 practices: teleworking, flexible work time and work-life balance. This index, *FlexibilityHR*, is additive, being equal to 0 if any practice is available and 3 if all are present.

Control variables

In line with research on turnover intention (Cottini et al., 2011; Böckerman and Ilmakunnas, 2009), control variables are also introduced: harmful working conditions, individual characteristics (gender, age, education, etc), job characteristics (permanent contract, tenure,

occupations, etc.).[5] Appendix 1 gives the definitions of the variables and descriptive statistics.[6]

All the variables derive from the same source, implying that our research holds the risk of being contaminated by common method variance. However, as the items for the construction of the variables are derived from different modules of the survey, the risks may be tempered. Because of the nature of our dependent variable (turnover intention), we carried out a Probit estimation. The estimated marginal effects are presented in Tables 2 and 3. As the Chow test is significant (*p-value* = 0.0015), we accordingly divide the sample into separate age groups in order to capture the age differences in turnover intention in relation to perceived external employability and HR practices.

Results

Table 2 presents results for the entire sample without distinguishing age groups.

- INSERT TABLE 2 ABOUT HERE -

The estimated marginal effect[7] of the interaction term between motivation-enhancing HR practices and employability is negative and significant (Model 3). The interaction term between flexibility-enhancing HR practices and employability is also significant and negative (Model 4). However, the results in Model 5 – where all the interaction terms are included –

[5] The estimates may suffer from the omitted-variable bias such as personality traits that are likely to be linked to voluntary turnover. Unfortunately, we do not have this information in our dataset.

[6] We do not report details on control variables nor discuss related research findings because of space limitations.

[7] As the interaction terms in a Probit model are tricky to interpret, we interpret only the significances, not the magnitudes. These results are similar to the ones obtained with OLS models. For the sake of the paper's length, we do not report them in the paper

indicate that HR practices aimed at motivation no longer mitigate the adverse effect of employability on turnover, as the interaction term is no longer significant.

Next, we address the main issue of this paper, which is to assess the age-related differences in the relationship between HR practices, perceived employability and turnover. Table 3 reports results for the three age groups: the younger group (under 30), the middle-age group (between 30 and 49) and the older group (50 and above). Model 6 in Table 3 shows the results with only HR practices and employability, after controlling for other explanatory variables and controls.[8] Models 7 to 9 progressively include the two-way interaction terms between HR practices and employability.

In Hypothesis 1, we predicted that motivation-enhancing HR practices are more valuable for younger employees, in that these practices may induce retention effects that are greater for younger employees than for older ones. The results in Table 3 (Models 6 to 9) show that motivation-enhancing HR practices have a significant negative effect on the turnover intention of the younger and the middle-age groups. These practices are not associated with the turnover intentions of older employees. These findings provide clear evidence that there are age-related differences in the turnover effects of motivation-based HR practices. Hypothesis 1 is thus corroborated.

- INSERT TABLE 3 ABOUT HERE -

For Hypothesis 2, results in Table 3 show a significant negative effect of flexibility-enhancing HR practices on turnover intention for all age groups. This finding is somewhat surprising, as previous empirical and theoretical arguments lead us to expect a strong negative effect for older employees. However, looking at Model 9, after including the interaction terms

[8] Due to lack of space, we do not report results of other explanatory and control variables here. The results are available on request from the corresponding author.

between HR practices and employability, flexibility-enhancing HR practices are no longer significantly related to the turnover intention of younger employees. That is, HR practices aimed at aiding flexibility have a stronger retention effect for middle-aged and older employees than for younger ones. Consistent with H2, there are age-related differences in the link between these HR practices and turnover intention.

Hypothesis 3 relates to whether motivation-enhancing HR practices mitigate the adverse turnover effects of high-perceived employability more for the younger group than for the older one. The estimated marginal effect of the two-way interaction term is negative and significant among the younger and middle-age groups, while no evidence is found for the older group, indicating that younger and middle age employees benefiting from HR practices such as participation, voice, teamwork or training are more likely than older employees to search for another job. H3 is hence corroborated as motivation-enhancing HR practices mitigate the adverse effect of perceived external employability differently, depending on employee's age.

For Hypothesis 4 (existence of age-related differences between flexibility-enhancing HR practices, employability and turnover intention), we examined whether practices aimed at increasing flexibility can mitigate the negative effect of employability on turnover intention, and to what extent this differs depending on age. Models 7 and 9 show negative and significant interaction terms between flexibility-enhancing HR practices and perceived external employability among middle-age and older employees, while no evidence is found for the younger group. The theoretical arguments developed above support the idea that HR practices such as teleworking, flexible working time or work-life balance are effective with regard to discouraging highly employable workers of older age versus younger ones to voluntary leave an organization. These HR practices are efficient in terms of retaining not only older employees but also middle-age ones. H4 is thus corroborated.

Discussion and conclusion

The negative age-turnover relationship is well documented in the literature. However, to develop suitably differentiated practices to retain employees of different age groups, we need more accurate results in order understand people's mobility patterns across the lifespan (Bal and De Lange, 2015). We contribute to existing literature on voluntary turnover by studying the link between turnover intention and perceived employability and the moderating role of HR practices in this employability-turnover link, while taking into account age-related changes in individuals' motives and needs. Our sample was enough large to be divided into sub-samples of age groups, allowing us to investigate turnover patterns related to different age groups.

HR practices differentially affect the turnover intention of younger and older employees. Specifically, motivation-enhancing HR practices induce a larger retention effect for younger and middle-aged employees than for older ones. By contrast, the turnover intention effects of flexibility-enhancing HR practices are stronger for the middle-age and older groups than for the younger groups. In addition, HR practices mitigate the adverse effects of perceived employability on turnover intention differently, depending on age. HR practices that stimulate employees' motivation, such as training, participation, voice and teamwork, play a stronger role in retaining highly employable younger employees, while HR practices that offer flexibility, such as flexible working time, teleworking and work-life balance, play a stronger role in retaining highly employable older employees. These findings are in line with theoretical arguments suggesting that specific HR practices tend to have a more notable retention effect for employee groups that benefit more from them (Stirpe and Zárraga-Oberty, 2017; Heywood and Miller, 2014). For example, as motivation-enhancing HR practices provide opportunities for involvement and career progression, these practices are

more valuable for younger employees and influence their turnover intention more than for their older colleagues. By contrast, as older employees in their middle and later career periods tend to strive more for stability and social relationships, relative to younger adults, HR practices aimed at offering them better fulfilment of social status and work-life balance discourage them from voluntarily leaving.

This article suggests that policies for retaining highly employable staff with better skills and core competences are crucial from an organization's point of view. Hence, in light of the assumption that highly employable people are also high achievers (De Cuyper et al., 2014; Van der Heijde and Van der Heijden, 2006), the most productive employees would be the first to voluntary leave if appropriate HR practices are lacking. Our results strongly highlight the complexity of managing HR as a means to retain employees according to their age. Some HR practices appear to be effective for employees of the middle and older age groups, while other practices appear to be more efficient in terms of reducing voluntary quitting by highly employable younger workers. Managers should therefore pay careful attention to the varying effects of HR practices on retaining employees.

Practical policy conclusions can be drawn from this study which provides evidence that HR practices may have differentiated effects according to the age of the employee. We show that the use of motivation-enhancing HR practices induces a larger retention effect for younger and middle-aged employees than for older ones, whereas the turnover intention effects of flexibility-enhancing HR practices are stronger for the middle-age and older groups. Besides, the use of HR practices that stimulate employees' motivation, such as training, participation, voice and teamwork, plays a stronger role in retaining highly employable younger employees, while the use of HR practices that offer flexibility, such as flexible working time, teleworking and work-life balance, enables retaining highly employable older employees. Such results have important public policy consequences in countries where the

state tries to regulate the ageing workforce by providing specific incentives and financial support (in various ways: tax exemption, direct funds, etc.) according to which type of age group they want to help. In most cases, the help of the state will be oriented towards the very young to favor their labor insertion into the market place, or the older ones who could have difficulties finding another job if they leave the company before their age of retirement. Hence, all these public policy issues are tightly linked to the degree of involvement of the state (or local/regional collectivities) into firms' policies.

Yet our study suffers from a number of limitations. Potential measurement error may be important for the interpretation of the estimates. Using cross-sectional survey data, we are not able to account for measurement errors by using techniques such as instrumental variables, structural equation modeling or errors-in-variables modeling. Future research should take the effects of measurement error into account. A second one is linked to the fact that we do not distinguish specific to the job training vs general training. This part of the learning by working on the certain job is the specific human capital. The role of firm-specific vs general human capital does play a role on turnover intention and perceived employability if we extend Kriechel and Pfann (2005)'s results: workers of the more specific job activities are shown to remain longer unemployed and to get lower wages. Hence we believe that such workers have lower turnover intentions as they know that it will be very difficult for them to find another job, especially if they cannot reuse part of their specific human capital gained with their experience. Thus, training aimed at increasing general human capital may favor older workers' employability[9]. While most employers do not invest in older workers and older employees rarely receive on-the-job training (Armstrong-Stassen and Ursel, 2009), theory

[9] We thank an anonymous reviewer for pointing us the different types of training and their potential effect on turnover intentions.

tells us that employees are reluctant to invest in firm specific skills because such investments may come at the cost of developing general skills, thereby reducing their attractiveness in the labor market (Coff and Raffiee, 2015). This is why these authors develop a theory that perceived firm-specific human capital may be more important than objective firm-specific human capital in influencing these outcomes pertaining to employee mobility and an investment dilemma. The type of training provided and the difference between objective and perceived firm specific human capital should be considered in future studies. Another avenue for further research is the synergistic effects of individual HR practices on employees' work attitudes or, in a more systemic approach, bundles or systems. Further analyses should also replicate our study in different settings and especially in other countries to ensure the generalizability of our findings.

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Table 1. Employability and turnover intention

	Employability			
Turnover intention	1: very difficult	2: quite difficult	3: quite easy or very easy	Total
No	2,837	4,438	2,213	9,488
	30.07	45.91	24.03	100
	74.02	66.41	62.12	67.37
Yes	1,067	2,317	1,376	4,760
	21.8	47.95	30.25	100
	25.98	33.59	37.88	32.63
Total	3,904	6,755	3,589	14,248
	27.37	46.57	26.06	100
	100	100	100	100

Notes: In each cell, the first entry is the number of observations, the second is the percentage proportion of the row total and the third is the percentage proportion of the column total.

Table 2: Marginal effects of HR practices as moderator in the link between employability and turnover intention

	Turnover intention				
	Model 1	Model 2	Model 3	Model 4	Model 5
Employability	0.034***	0.034***	0.035***	0.032***	0.040***
	(0.006)	(0.006)	(0.006)	(0.005)	(0.007)
MotivationHR		-0.022***	-0.025***	-0.023***	-0.023***
		(0.005)	(0.005)	(0.005)	(0.005)
FlexibilityHR		-0.024***	-0.019***	-0.020***	-0.020***
		(0.006)	(0.006)	(0.006)	(0.006)
MotivationHR*Employability			-0.036*		-0.028
			(0.019)		(0.020)
FlexibilityHR*Employability				-0.041*	-0.035**
				(0.017)	(0.018)
Observations	16,896	16,896	16,896	16,896	16,896
Wald chi-square	2282.74	2345.05	2145.04	2078.85	2198.25
Pseudo R^2	0.185	0.184	0.198	0.210	0.204

Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table 3: Marginal effects of HR practices as moderatoring the link between employability and turnover intention according to age

	Turnover intention											
	Model 6			**Model 7**			**Model 8**			**Model 9**		
	Under 30	**30–49**	**Over 50**	**Under 30**	**30–49**	**Over 50**	**Under 30**	**30–49**	**Over 50**	**Under 30**	**30–49**	**Over 50**
Employability	0.065***	0.032***	0.018**	-0.077***	0.036***	0.021**	0.069***	0.039***	0.022**	0.071***	0.038***	0.023**
	(0.017)	(0.007)	(0.009)	(0.018)	(0.008)	(0.010)	(0.018)	(0.008)	(0.010)	(0.019)	(0.008)	(0.010)
MotivationHR	-0.037***	-0.031***	0.004	-0.036**	-0.030*	0.07	-0.038***	-0.032***	0.002	-0.027*	-0.031***	0.006
	(0.013)	(0.006)	(0.008)	(0.011)	(0.005)	(0.007)	(0.013)	(0.006)	(0.008)	(0.015)	(0.006)	(0.009)
FlexibilityHR	-0.029*	-0.022***	-0.025**	-0.030*	-0.026***	-0.024**	-0.025*	-0.021**	-0.026**	-0.031	-0.016**	-0.023**
	(0.016)	(0.007)	(0.010)	(0.016)	(0.007)	(0.010)	(0.015)	(0.007)	(0.015)	(0.019)	(0.007)	(0.010)
MotivationHR*Employability				-0.110***	-0.055**	-0.048				-0.072**	-0.002*	-0.048
				(0.037)	(0.022)	(0.039)				(0.025)	(0.026)	(0.042)
FlexibilityHR*Employability							-0.039	-0.069***	-0.054*	0.014	-0.052**	-0.027*
							(0.040)	(0.019)	(0.031)	(0.049)	(0.021)	(0.041)
Observations	2,522	11,454	2,920	2,522	11,454	2,920	2,522	11,454	2,920	2,522	11,454	2,920
Wald chi-square	380.17	1670.22	371.35	374.52	1684.41	372.0	382.12	1654.58	384.05	379.02	1672.57	372.00
Pseudo R^2	0.235	0.179	0.201	0.231	0.175	0.210	0.234	0.178	0.232	0.233	0.179	0.265

Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Appendix 1. Variable definitions and descriptive statistics

Variables	Description	Mean
Turnover intention	Equal to 1 if the employee looks for a new job during the last 12 months and 0 otherwise	0.3263
Employability (1-3)	Level of difficulty to find an equivalent job. 1 = very difficult; 2 = quite difficult; 3 = quite easy or very easy.	1.9866 (0.73)
MotivationHR	Bundle of four HR practices: Voice, Participation, Training and Teamwork, taking the value 0 when none of the practices is implemented and 4 when all the practices are available.	1.51
FlexibilityHR	Bundle of three HR practices: Flexible work time, Telework policy and Work life balance, taking the value 0 when none of the practices is implemented and 3 when all the practices are available.	0.87
Voice	Equal to 1 if the employee participate in decisions concerning major changes within firm and 0 otherwise	0.1277
Participation	Equal to 1 if the employee participate in meeting(s) between the management board and employees and/or in internal survey(s) organized by the management board and 0 otherwise	0.5407
Training	Equal to 1 if the employee participate in training paid by firm during the last 12 months and 0 otherwise	0.4160
Team	Size of working team. Equal to 1 if five co-workers and more and 0 otherwise	0.7718
Telework policy	Equal to 1 if the employee has the permission to perform teleworking from home and 0 otherwise	0.1000
Work life balance	Equal to 1 if existence of policies for work-life balance and 0 otherwise	0.41
Flexible work time	Equal to 1 if possibility of flexible working hours and 0 otherwise	0.3824
Harm working conditions	Exposure to noise interference, vibrations, radiation, moving heavy loads, continuous physical activities, etc. On a scale from 0 (never) to 10 (all the time)	0.3346
Too high educational level	Equal 1 if employee thinks that he/she is overqualified for his/her work and 0 otherwise	0.2742
Too low skills	Equal 1 if employee thinks that he/she would work more efficiently if he/she possessed supplementary skills	0.5980
Age 30–49 (Ref. < 30)	Age group	0.6363
50 and above		0.2025
Male	Equal to 1 if male and 0 if female	0.6768
German (Ref. Luxembourger)	Equal to 1 if German and 0 otherwise	0.1311
Belgian	Equal to 1 if Belgian and 0 otherwise	0.1505
French	Equal to 1 if French and 0 otherwise	0.3129
Portuguese	Equal to 1 if Portuguese and 0 otherwise	0.1420
Other nationality	Equal to 1 if other nationality and 0 otherwise	0.0830
Living with partner	Equal to 1 if living with partner and 0 otherwise	0.7980
Child	Equal to 1 if having children and 0 otherwise	0.5928
Secondary (Ref. Lower than secondary)	Education	0.4485
Higher than secondary		0.3684
Discrimination	Equal to 1 if the employee is subject to discrimination based on sexual, age, nationality, 0 otherwise	0.1267
Permanent contract	Equal to 1 if the employee has permanent contract, 0 otherwise	0.9375
Tenure	Tenure in months	123.3472 (99.15)
Union	Equal to 1 if member of a trade union, 0 otherwise	0.3186
Part-time	Equal to 1 if the employee works part-time, 0 otherwise	0.1164

Professional and managers (Ref. Non-qualified operatives)	Employees profession	0.2048
Associate professionals		0.1960
Clerical		0.1477
Sales and service personnel		0.1079
Craft		0.1534
Plant operatives		0.0900
50–99 employees (Ref. 15–49 employees)		0.1405
100–249 employees		0.2026
250 employees and more		0.4083
Construction (Ref. Manufacturing)	Business sector	0.1498
Trade, accommodation and food service		0.1896
Transportation and storage		0.0869
IT and communications		0.0583
Finance		0.1906
Other services		0.1682
Local unemployment (2.88–14.42)	Unemployment rate in the firm's municipality location	7.5478 (2.56)
Better wage outside (0.26–2.43)	Ratio between the median wage in the business sector salary and the firm's median wage	0.998 (0.16)
Upper third of employment growth	Equal to 1 if the employment growth of the firm is in the upper third of sample employment growth, and 0 otherwise	0.2957
Observations		16,896

Note: Standard deviations are reported in parentheses for non-binary variables.