Learning to Stay Employable

The populations of many countries are aging (OECD, 2012) and people are required to stay longer in the workforce: to sustain national welfare systems, to help organizations thrive, and to pay their own bills. Consequently, governmental retirement policies (Billett, 2011) and organizational employment and retention policies (Colley, 2013) are being revised to encourage longer working lives and to combat the brain drain caused by the large number of senior workers retiring in the upcoming decade. This also puts strain on the individual employees, who are required to maintain their knowledge and flexibility in the context of new innovations. In this respect, scholars stressed the importance of employees' employability, i.e. the ability to identify and realize job and career opportunities (Fugate et al., 2004) due to a broad package of competencies, including occupational expertise, anticipation and optimization of the work environment, and personal flexibility (Van der Heijde and Van der Heijden, 2006).

Research and public discourse about the effects of age on employability often elide the complexity of the relationship. There, chronological age takes a prominent role despite its poor predictive power with rising age due to the increased heterogeneity among individuals with higher age (Carstensen, 2006). Similarly, effects of chronological age are rarely specified in detail and potential mediators are mostly excluded from discussion. This is problematic, since age and aging are related to several spheres: physical and mental characteristics, social attributions, political agenda, etc.

While learning activities are needed to improve one's competencies and in turn employability (Van der Heijden et al., 2009), research on the relationship between learning and the maintenance and development of employees' employability is scarce (De Vos et al., 2011). Also, while the demographic shift increased interest in the role of chronological age in relationship to learning and employability, previous studies produced inconclusive results (see

below). We investigate the effects of chronological age and formal and informal learning activities on employability. Specifically, we conducted a quantitative survey study among 780 employees of two Austrian organizations and one Dutch institution to research the effects of chronological age and formal and informal learning on employability.

Employability

The concept of employability evolved over the last century and was dynamically adapted to the situation on the labor market. For instance, Gazier (1998, 2001, cited by McQuaid and Lindsay, 2005) identified three waves of employability research. *First*, early in the 20th century, an absolute distinction between employable and unemployable based on whether one was able and willing to work was introduced. *Second*, in the 1950s and 1960s the perspective gradually shifted from focusing on the supply (i.e., ability and willingness to work) to also take into account the demand on the labor market. *Third*, the concept of employability was refined in the 1980s and 1990s to eventually focus on three areas: the outcomes on the labor market, the individual's responsibility to develop and maintain transferable skills due to the increased prevalence of cross-organizational careers (Hall, 2004), and the relativity of employability in terms of both supply and demand on the labor market (Brown et al., 2003).

As business becomes more and more fast paced and the rate of innovation accelerates, job descriptions are constantly subject to change. This makes it increasingly inappropriate to define employability in terms of specific labor market demands. Instead, Van der Heijde and Van der Heijden (2006) suggest a conceptualization of employability that is based on a range of broad competencies. Hence we define individuals' employability as "the continuous fulfilling, acquiring or creating of work through the optimal use of competences" (Van der Heijde and Van der Heijden, 2006, p. 453). In other words, the possession of certain competencies should allow employees to get, keep, or create work for themselves.

To become or stay employable, a package of competencies (Wright and Snell, 1998), that includes social and adaptive competencies (Fugate et al., 2004; Rodriguez et al., 2002) on top of technical domain knowledge, needs to be considered. Technical and adaptive competencies are especially prevalent in public discourse and academic research (Ashford and Taylor, 1990; De Cuyper et al., 2008; De Vos et al., 2011) and often targeted by stereotypes against older employees (Brownell and Powell, 2013). Therefore, we focus on *occupational expertise* (technical knowledge), *anticipation and optimization* (proactive, self-initiated screening and preparation for potential changes in job and career requirements and conditions), and *personal flexibility* (reactive adaptation and resilience to change) (Van der Heijde and Van der Heijden, 2006). In other words, we see employees as employable if they not only have vast technical knowledge about their working domain, but also are attentive to contextual changes and resilient towards change imposed on them.

We are especially interested in how the employees themselves rate their employability (Fugate et al., 2004). This is in line with previous studies, which suggest that perceived employability is more important than potential employers' (equally subjective) rating, since employees act based on their own perceptions (Van Emmerik et al., 2012). Similarly, Kinnunen et al. (2011) argue that the importance of self-appraised employability can be inferred from Lazarus and Folkman's (1984) transactional stress theory: employees who perceive themselves as highly employable feel less threatened by the environment, experience less strain (Berntson and Marklund, 2007), and perform better (Kinnunen et al., 2011).

Learning Activities: Formal and Informal Learning

Van der Heijden et al. (2009) argue that learning is essential for enhancing one's employability. Likewise, Crouse, Doyle, and Young (2011) find several positive outcomes of learning, such as confidence, openness for change, and competence, when interviewing HR professionals. De Vos et al. (2011), too, find that employee participation in competency

development initiatives positively affects their self-perceived employability in their study among 561 employees of a large financial institution in Belgium.

While learning may happen formally, i.e. inside a structure deliberately created for that purpose, it is especially informal learning that has recently received a lot of attention. Informal learning is less structured, more in control of the learner, often a by-product of some other activity, and happening unconsciously (Livingstone, 2001; Marsick and Watkins, 2001; Mulder, 2013). Several studies suggest that informal learning is a more efficient form of learning than traditional formal learning offered through trainings and seminars (Berings et al., 2008; Billett, 2002; Eraut, 2007; Gorard et al., 1999; Van der Heijden et al., 2009). As these two forms are opposing ends on a continuum (Eraut, 2004), we take both into account simultaneously.

Formal learning includes all designed learning that happens in a structured context and that may lead to formal recognitions, such as diplomas or certificates (Colardyn and Bjornavold, 2004). In-company trainings, seminars, and workshops are examples of such formal learning activities. Empirical research finds that undertaking formal learning activities contributes to one's employability. For instance, Groot and Van den Brink (2000) have studied the effects of education and training on employability among Dutch employees and find positive effects. Sanders and De Grip's (2004) study among low-skilled workers confirms a positive effect of formal training on intra-firm employability, but does not find any effect of training on external employability. Van der Heijden and colleagues (2009) report positive relationships between formal learning and occupational expertise and anticipation and optimization. These consistent findings suggest formal learning to positively affect employability.

Hypothesis 1: Formal learning positively affects employability in terms of occupational expertise, anticipation and optimization, and personal flexibility.

Eraut (2004) distinguishes implicit, reactive, and deliberative informal learning. Implicit learning is unconscious and not recognized by the learners themselves. Eraut (2004) argues that learning from experience mostly has such an implicit component – for example during the process for (workplace) socialization. Reactive learning is more conscious. This learning is intended and has a component of reflection. However, it happens in midst of some other activity and therefore receives only partial attention. Deliberate learning happens in work situations where time is specifically allotted for learning (Tynjälä, 2012). Eraut (2007) identifies encounters and relationships at work and opportunities for receiving feedback and support as important factors for learning at work. Additionally, he mentions participation in group activities, work alongside others, and consultations among the activities most conducive for learning. Similarly, Bamberger (2009) states that information, feedback, and help seeking are important components of work-related informal learning. Since this indicates a high importance of the social component of workplace learning, we emphasize learning from others in this article.

Studies researching the link between informal learning and employability (and related concepts, such as career success (Cheramie, 2013)) often find a positive relationship. Van der Heijden et al. (2009) researched this relationship among non-academic university employees. They find informal networking within and outside their own organization (Bozionelos, 2003) to positively affect employees' employability. Feedback seeking, i.e. search for information targeted at evaluating and reflecting upon work processes and the self (Anseel et al., 2007), has been related to positive outcomes such as goal attainment (Ammons, 1956) and performance (Kluger and DeNisi, 1996).Van der Rijt et al. (2012) report feedback seeking to affect perceived career development positively among employees in the financial sector in an early career stage. They note that it is especially the quality of feedback sought that positively impacts perceived career development – not so the mere frequency of feedback. These findings suggest a positive effect of informal learning activities on employability.

Hypothesis 2: Informal learning, i.e. information seeking, feedback seeking from the supervisor and from colleagues, and help seeking, positively affects employability in terms of occupational expertise, anticipation and optimization, and personal flexibility.

Chronological Age, Learning, and Employability

Age is a very broad concept that may be viewed from different perspectives (Schalk et al., 2010). For instance, *functional age*, which is based on the ability of a person to perform certain tasks on a daily basis (Sharkey, 1987), *psychological age*, which refers to how old a person feels subjectively (Stephan et al., 2012), *organizational age*, which is based on the tenure in the same organization, *life-span age*, which considers biological and societal factors in an integrative way and focuses on the roles people take during their lives (Schulz and Heckhausen, 1996), or *chronological age*, which is a measure of time passed since birth.

Both in research and practice, chronological age is used most prominently. This is also true in research about employability, where chronological age is often included in the analyses – at least as a covariate. Many studies find negative relationships between age and employability (Raemdonck et al., 2012; Rothwell and Arnold, 2007; Van der Heijden, 2002; Wittekind et al., 2010) and related concepts, such as workability (Nielsen, 1999), career opportunities, and proactivity towards development (Van Veldhoven and Dorenbosch, 2008). Contrarily, other studies present insignificant effects of age on occupational expertise, anticipation and optimization, and personal flexibility (Van der Heijden et al., 2009) or positive effects of age on self-perceived employability (Patrickson and Ranzijn, 2003).

These inconsistent findings may hint at conceptual weaknesses of chronological age as a measure, which are often ignored. It hardly is chronological age per se that causes differences in employees' employability. Rather, these effects are often mediated by, for instance, effects attributable to a certain generation or period of time (Hall et al., 2007; Meriac et al., 2013), stereotypes about age (Ahmed et al., 2012), accumulated work experience. or, as

we will argue, the involvement with formal and informal learning activities. Chronological age per se is a weak predictor, given that people make different formative experiences throughout their lives and therefore become more heterogeneous the older they get (Carstensen, 2006; Staudinger and Bowen, 2011). Consequently, the predictive value of age diminishes. Despite these shortcomings, both practitioners and researchers often use chronological age as an easy to measure proxy for the physical, cognitive, social, and emotional changes associated with human development (Pitt-Catsouphes et al., 2009) without making clear hypotheses how this effect can be explained.

With respect to the relation between *age and formal learning*, most studies indicate that older people are less interested in attending formal trainings (Kanfer and Ackerman, 2004; Livingstone, 1999; Warr and Birdi, 1998; Warr, 2001) and also are offered fewer opportunities to do so (Grima, 2011; Urwin, 2006; Van Vianen et al., 2011). This negative relationship may be explained by negative stereotypes against older workers (Kunze et al., 2013; Maurer et al., 2003; Wrenn and Maurer, 2004) and by financial considerations, as the potential pay-off period for any investments in employees is shorter the closer the employee is to retirement age.

Findings of studies researching a link between *chronological age and informal learning* are inconclusive. Specifically, while Tikkanen (2002) and Gupta et al. (1999) find a decreased use of informal learning and feedback seeking among older workers, respectively, and Van der Heijden et al. (2009) note decreasing networking activity with increasing age, Livingstone (1999) finds “that [older people] spend nearly as much time on informal learning as middle-aged adults” (p. 13). Schulz and Stamov-Roßnagel (2010), too, find no significant difference between different ages in their sample of 470 employees of a German mail-order firm and argue that “[i]nformal learning might offer more opportunities to compensate for cognitive ageing effects so that negative age differences might disappear” (p. 395). Indeed,

Berg and Chyung (2008) find a positive correlation between age and engagement in informal learning when surveying 125 workplace learning and performance improvement professionals. Kyndt, Dochy, and Nijs (2009) find that younger employees (20 - 29 years) receive the fewest opportunities for feedback and knowledge acquisition (e.g., from work groups, project teams, guest speakers). Conversely, middle aged employees (30 - 39 years) get the most opportunities for feedback and knowledge acquisition. Interestingly, when it comes to acquiring information, the oldest employees score higher and the middle aged employees score the lowest.

It appears that there is a decisive difference between formal and informal learning when it comes to their role in the relationship between chronological age and employability. When seeking information, feedback and help from others, individuals are more in control of their own learning effort (Marsick and Watkins, 2001) and less dependent on their employers' resources or others' stereotypes. Thereby employees are also more independent of the negative age effects mentioned above. Furthermore, it is important to note that after continuous confrontation with ageism, also the older employees themselves may accept these stereotypes as true (Kunze et al., 2013). While this may lead to a lower performance in formal training situations, this might not be the case for informal learning activities, as they are often not even perceived as learning by the learners themselves (Eraut, 2004, p. 249). Thus the negative self-perceptions of one's intellectual capabilities might be circumvented.

We aim to contribute further evidence for the relationship between chronological age and employability. In extension of the literature, we hypothesize that formal learning is a mediator that conveys negative indirect effects of chronological age on employability. Since employees are less dependent on employers' resources when learning informally, we do not propose such an indirect effect via informal learning.

Hypothesis 3: Chronological age negatively affects occupational expertise, anticipation and optimization, and personal flexibility indirectly via formal learning but not via informal learning.

In sum, the conceptual model includes chronological age, formal and informal learning activities, and employability (Figure 1).

< Figure 1: Conceptual model. >

Methods

Procedure and Participants

We conducted studies in three organizations: a Dutch educational institution, an Austrian federal chamber, and an Austrian IT company. In collaboration with the respective Human Resource Departments, we adapted the questionnaires to the specific settings of the organizations. 4,153 employees were asked to participate in the online survey in September to December 2012. 814 (20%) questionnaires were returned, of which 780 (19%) were complete and used for further analyses: 613 of the Dutch educational institution, 90 of the Austrian chamber, and 77 of the Austrian IT company. The response rates of the latter two organizations (75% and 50%, respectively) exceed or match the average response rates found in comparable web based surveys (Baruch and Holtom, 2008; Cook et al., 2000) while the response rate of the Dutch educational institution (16%) is lower. However, a wave analysis (i.e., a comparison of early and late respondents (Rogelberg and Stanton, 2007)) found no statistical differences for the employability scales. This result gives us confidence that the results are not skewed by non-response bias, especially when considering the generally lower response rates for web surveys and surveys in the education sector (Baruch and Holtom, 2008).

The respondents were 18 to 69 years old (M = 40.66, SD = 11.19) and were on average 3.92 (SD = 4.65) years on their current job. 643 (82%) have attained a higher education degree, 462 (59%) were female.

Instruments

We gauged the three dimensions of *employability* – occupational expertise, anticipation and optimization, and personal flexibility – using Van der Heijde and Van der Heijden's (2006) items. Respondents answered on a 5-point Likert-scale (1 = *almost never*, 5 = *very often*); these self-reports are in line with our conceptualization of self-appraised employability. While we confirmed the original factor structure on an item level (RMSEA = 0.06, $\chi^2/df = 3.47$, CFI = 0.90, TLI = 0.88) and achieved satisfactory Cronbach's alphas (α = 0.77 to 0.92, see Table 1) and Guttman's lambdas ($\lambda 2$ = 0.78 to 0.92), we randomly assigned each item to one of three parcels per dimension to achieve a better relation between the number of parameters and the given sample size in the further analyses (Little et al., 2002). This model achieved an even better fit (RMSEA = 0.04, $\chi^2/df = 2.30$, CFI = 0.99, TLI = 0.98).

Respondents were asked about the days spent in *formal learning* activities in the last year. To aid memory, they had to base their answer on various types of learning activities (e.g., hours spent on conferences or hours spent in seminars), of which the sum was calculated.

Several kinds of *informal learning* were tested: *information seeking*, *feedback seeking from the supervisor* and *from colleagues,* and *help seeking*. The respective subscales of Author's (2014) informal learning questionnaire were used. Respondents answered on a 5-point Likert-scale (1 = *almost never*, 5 = *very often*). The factor structure of the scales was confirmed (RMSEA = 0.05, $\chi^2/df = 2.93$, CFI = 0.98, TLI = 0.97) and satisfactory reliability was achieved (α = 0.66 to 0.86; $\lambda 2$ = 0.66 to 0.86).

<Table 1 about here>

Furthermore, we included several personal and contextual variables, which have been previously found to affect employability. This includes *chronological age*, *gender*, *highest level of education*, and *years of experience on the current job* (Mancinelli et al., 2010; Watson and Grant, 2012; Wittekind et al., 2010). Since we noticed large differences of years of experience on the current job among the organizations, we assigned the cases to groups based on their experience relative to the rest of the sample. Specifically, we formed three groups (low experience, medium experience, high experience) based on the 33,33% and 66,66% percentile for each sample, and then grouped the cases with low experience, medium experience, and high experience together.

Analyses

First, we checked and confirmed the normality and homogeneity of variance assumptions for the dataset. *Second*, we explored the relations between the variables in bivariate correlation analyses. *Third*, we tested the hypotheses using structural equation modeling using Maximum Likelihood estimation in Mplus 7 (Muthén and Muthén, 2012). The dataset does not contain any missing data.

Results

Table 2 shows strong intercorrelations among the dimensions of employability ($r = 0.439$, $p < 0.01$ to $r = 0.526$, $p < 0.01$) and positive correlations between them and measures of formal and informal learning activities. This indicates that employees, who, for instance, believe to have wide occupational expertise, also perceive themselves to be flexible in adjusting to changes in their work or their environment. This could be caused by their information, feedback, and help seeking behavior, which correlates positively with all dimensions of employability.

The correlation analyses also show effects of chronological age on both employability and actual learning behavior. Chronological age correlates positively with occupational

expertise ($r = 0.214$, $p < 0.01$) and personal flexibility ($r = 0.089$, $p < 0.05$), but negatively with anticipation and optimization ($r = -0.109$, $p < 0.01$). Furthermore, chronological age is negatively correlated to formal learning ($r = -0.103$, $p < 0.01$) and feedback seeking from the supervisor ($r = -0.254$, $p < 0.01$) and from colleagues ($r = -0.094$, $p < 0.01$).

We performed one-way analyses of variance (ANOVA) and found significant differences for all dimensions of employability (occupational expertise $F(2, 777) = 54.422$, $p < 0.01$; anticipation and optimization $F(2, 777) = 26.645$, $p < 0.01$; personal flexibility $F(2, 777) = 11.529$, $p < 0.01$). The following analyses and interpretations need to take into account these differences among the samples.

<Table 2 about here>

The structural equation modeling analyses show good model fit (Byrne, 2010; Hu and Bentler, 1999): $\chi^2/df = 3.23$, RMSEA = 0.05, TLI = 0.90 and CFI = 0.93 (see Tables 3 and 4 for the measurement and structural model, respectively). In partial support of Hypothesis 1, we find a positive effect of formal learning on anticipation and optimization ($\beta = 0.146$, $p < 0.01$). Furthermore, we find a positive effect of feedback seeking from colleagues on anticipation and optimization ($\beta = 0.215$, $p < 0.01$). Help seeking affects all three dimensions of employability (occupational expertise: $\beta = 0.134$, $p < 0.01$; anticipation and optimization: $\beta = 0.128$, $p < 0.05$; personal flexibility: $\beta = 0.210$, $p < 0.01$) while information seeking affects anticipation and optimization ($\beta = 0.494$, $p < 0.01$), personal flexibility ($\beta = 0.179$, $p < 0.01$), and to a weaker extent also occupational expertise ($\beta = 0.074$, $p < 0.10$). This largely supports Hypothesis 2.

<Table 3 about here>

<Table 4 about here>

< Figure 2> *Note*. Insignificant relationships and covariates are hidden to improve readability.

We find significant direct effects of chronological age on occupational expertise ($\beta = 0.177$, $p < 0.01$) and personal flexibility ($\beta = 0.211$, $p < 0.01$). Furthermore, results show one negative indirect effect of chronological age on anticipation and optimization via formal learning ($\beta = -0.014$, $p < 0.05$). This partially supports Hypothesis 3.

Outside our main model of investigation, we find that the organization, the level of education, and the relative job experience play a significant role for employability. Specifically, the employing organization explains differences in occupational expertise and anticipation and optimization. The level of education has a negative effect on all dimensions of employability: occupational expertise ($\beta = -0.094$, $p < 0.05$), anticipation and optimization ($\beta = -0.141$, $p < 0.01$), and personal flexibility ($\beta = -0.102$, $p < 0.05$). Relative job experience affects occupational expertise positively ($\beta = 0.122$, $p < 0.01$). These effects will be discussed in the next section.

Discussion

Fueled by the increasing presence of interorganizational careers, the demographic shift, and the high rate of innovation, employability – and its relationship to age – is high on the agenda of human resource managers. We argue that it not the employees' chronological age per se that makes the difference in employability. Instead, we propose that the actual undertaking of formal and informal learning activities has substantial effects. Therefore, we set out to research the effects of formal and informal learning activities and chronological age on occupational expertise, anticipation and optimization, and personal flexibility. The results allow two broad conclusions. *First*, the undertaking of learning activities increases one's employability. While we found formal learning to affect especially anticipation and optimization positively, informal learning activities such as information and help seeking contribute to all three dimensions: occupational expertise, anticipation and optimization, and personal flexibility. Feedback seeking from colleagues only affects anticipation and

optimization. In sum, it is important to note that while both formal and informal learning may be functional to improve overall employability, there still might be differences in terms of specific learning contents. For example, the finding that formal learning affects predominantly anticipation and optimization might indicate that formal learning activities are especially well suited to learn about new domains. Informal learning, for which also effects on occupational expertise and personal flexibility were found, may subsequently be efficient for further developing knowledge, skills, and abilities.

Second, we found evidence for indirect effects of chronological age on employability via formal learning activities. This is in line with previous reports of negative effects of chronological age on the undertaking of formal learning activities (Kanfer and Ackerman, 2004; Warr, 2001) and positive effects of formal learning activities on employability (Groot and Van den Brink, 2000; Sanders and De Grip, 2004; Van der Heijden et al., 2009). One reason for the reduced participation in formal learning activities of older employees is the unwillingness of employers to send older people to trainings (Grima, 2011; Van Vianen et al., 2011), often due to non-inclusive and discriminatory employer attitudes and policies (Billett and Van Woerkom, 2008). Informal learning, however, is less dependent on the employers' resources and we did not find information, feedback, and help seeking to mediate the relationship between chronological age and employability. When considering the strength of effects on employability of informal learning relative to those of formal learning, this suggests that informal learning is important especially for older employees to maintain their employability.

Next to the findings in our main model under investigation, we found relative experience on the current job to affect occupational expertise positively. This is in line with the notion that experience is a key component for developing expertise (Ericsson, 2006).

We included three organizations that are located in different countries, sectors, and cultures. This allows us to make statements that are more generalizable than research conducted in one sample only. However, the analyses revealed that there are differences between the participating organizations and our level of analysis does not allow us to work out what factors exactly make the difference. For instance, it is probable that the competencies needed to accomplish the tasks in the Austrian chamber, which mainly concern the consolidation of diverging interests within the setting of a fast moving economy, are different to the competencies required to sell IT solutions and give consulting on them, as needed in the IT organization. Therefore, task characteristics, such as task complexity (Campbell, 1988), may play a role. However, since these organizations are embedded in different regulatory, cultural, and linguistic environments, the data collected are not sufficient to investigate the differences more deeply – further research is required to address this topic of contextual differences.

We found negative effects of education on employability. This is unexpected, as employability is often mentioned as a goal of education efforts (Herr, 1987; Knight and Yorke, 2002), However, our specific sample is already very highly educated – 82% of the respondents had obtained a higher education degree. In this case, higher education may also mean a very high level of specialization, and consequently less flexibility on the labor market. Future research could explore a potentially curvilinear relationship between these concepts.

The self-reported scores of learning activities and employability may raise concerns about common method variance (Podsakoff and Organ, 1986). However, since self-appraised employability scores are well supported by theory and empirical evidence (Kinnunen et al., 2011; Van Emmerik et al., 2012) and all instruments used showed high construct validity, we are confident that our approach is appropriate (Conway and Lance, 2010). Nevertheless,

future research may use different methods and different sources. After all, previous research found employees to rate themselves higher than their employers (Van der Heijde and Van der Heijden, 2006) and higher than their labor market success would suggest (Patrickson and Ranzijn, 2003).

Furthermore, unlike most preceding research, we focused on formal and informal learning simultaneously. However, learning is a broad concept and we necessarily had to focus on specific forms of learning only. We focused on informal learning in a social context (i.e., information, feedback, and help seeking) and ignored other facets, such as the learning value of the job itself, which has previously been found to play an important role (Van der Heijden and Bakker, 2011). While we are confident that our measurement of formal learning activities gives adequate information to assess our hypotheses, it is possible that other features than the mere quantity of formal learning activities have an effect. Future research could close this gap by studying the relationships between other forms and measures of formal and informal learning, age, and employability. In a similar vein, the inconclusive relationship between informal learning and employability still needs consideration and clarification in future research.

Implications and Conclusions

The evidence found calls once more for closer examination of stereotypes against older employees and questions the predominant use of chronological age as decisive criterion in organizational and national policies. In the recent public debate about retirement age and other workplace-related discussions, chronological age plays a much more prominent role than the findings presented here suggest it should. Based on the findings, we recommend to step back from this one-sided practice and to look at other, more predictive factors, too. Furthermore, the results advocate increased education against age stereotypes – not only to generate a level playing field between different age groups, but also to increase the self-

confidence of older employees. After all, increased employability is not only beneficial for the individual employee, but for the employing organization as well (Van der Heijde and Van der Heijden, 2006).

Findings show that formal and especially informal learning improve one's employability – with all the associated benefits for the individual and the employing organization (Arocena et al., 2006). This suggests that learning should be supported and stimulated for employees – irrespective of their chronological age. For individuals it is especially important to be aware about the strong effects of informal learning on their employability. The effects on employability are not only stronger compared to those of formal learning, but while the employer's consent may be needed to spend money and time to attend formal learning activities, the employees themselves are in greater control when it comes to informal learning.

From an employers' perspective it is crucial to understand the consequences of limiting older employees' access to formal learning activities. In our fast paced business world, learning activities are required to maintain – not only to develop – employability. In general, both researchers and practitioners are reminded and encouraged to investigate the supposedly direct effects of chronological age with greater scrutiny. Relying on weak predictors such as chronological age may lead to unwanted consequences – especially in times of the demographic shift.

While we discussed the implications on the individual and organizational level, it is important to also note the implications for policy. The age dependency ratio, which relates the number of people outside the active workforce to the working age population, is expected to rise significantly within the next decade. It is therefore essential to increase older employees' employability and participation in the labor market to maintain the current standard of living (Ilmarinen, 2001). The recommendations to combat ageism, to support formal and informal

learning activities, and to be more reflective on the use of chronological age in general are therefore also applicable on the level of national and international policy.

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