

Running Head: INTERGENERATIONAL CONTACT AND HIRING DECISIONS

Intergenerational contact and hiring decisions about older workers

Ulrike Fasbender¹ and Mo Wang²

¹ Justus-Liebig-University Giessen

²University of Florida

Authors' Note

Ulrike Fasbender, Justus-Liebig-University Giessen, Department of Work and Organizational Psychology, Giessen, Germany; Mo Wang, Department of Management, Warrington College of Business, University of Florida, Gainesville, Florida, USA

Correspondence concerning this manuscript should be addressed to Ulrike Fasbender, Justus-Liebig-University Giessen, Department of Work and Organizational Psychology, 35394 Giessen, Germany, Email: ulrike.fasbender@psychol.uni-giessen.de

Please cite as:

Fasbender, U. & Wang, M. (in press). Intergenerational contact and hiring decisions about older workers. *Journal of Managerial Psychology*, 32 (3), 1-27. doi:10.1108/JMP-11-2016-0339

Purpose: Although many older workers wish to work longer, they may not be hired due to negative attitudes against them. The purpose of this study is to investigate the role of intergenerational contact in shaping hiring decisions. Drawing from the intergroup contact theory, we investigated affective and cognitive categorization reactions as predictors of decision-makers' willingness to hire older people and whether these relationships are moderated by intergenerational contact frequency and quality.

Design/methodology/approach: We tested our hypotheses using data from 232 employees with hiring power.

Findings: Results indicate that intergroup anxiety was negatively related to decision-makers' willingness to hire older people. Further, intergenerational contact frequency exacerbated the relationship between intergroup anxiety and willingness to hire older people; whereas intergenerational contact quality buffered the negative relationship. In addition, we found that intergenerational contact quality facilitated the positive relationship between perceived outgroup competence and willingness to hire older people.

Originality/value: These findings extend previous research on older worker employment. In particular, they demonstrate how intergenerational contact frequency and quality can be powerful means that influence age-related hiring decisions.

Keywords: age discrimination at work; attitudes toward older workers; competence stereotypes; intergroup anxiety; intergenerational contact frequency and quality; hiring-decisions about older people

Introduction

Even though it is illegal, age discrimination at work is still a common phenomenon in the UK and in many other countries around the world. In particular, hiring practices have been identified as a major issue in this respect (Truxillo et al., 2015). Although many older workers wish to work longer (Wöhrmann et al., 2016), possibilities may be denied to them due to negative attitudes of relevant decision-makers as possible *gatekeepers of jobs*. A recent population representative survey among 2,235 people aged 50 years or older revealed a substantial amount of perceived age discrimination in the UK (Department of Work and Pensions, 2015). More than half of all unemployed older workers felt that employers were not interested in hiring them because of their age (Department of Work and Pensions, 2015). These findings are supported by actual differences among older and younger people with regard to their average duration of unemployment. In the European Union, older people (aged 55 years and older; average duration of unemployment: 17.3 months) were on average unemployed for almost twice as long compared to younger people (aged 20 to 24; average duration of unemployment: 10.1 months) reported during the same year (OECD, 2016). Long duration of unemployment and the search for (re)employment are among the worst stressors that older people have to deal with (Klehe et al., 2012). At the same time, organizations may suffer from difficulties in integrating older workers with longer unemployment durations into the workplace (European Centre for the Development of Vocational Training, 2013). Therefore, the empirical investigation regarding the decision-making of hiring older people is important for society in general, and for employers and older people in particular.

Research regarding intergroup relations revealed that intergroup contact may be a promising approach for reducing prejudices toward others (Pettigrew and Tropp, 2006; Urick et al., 2017). With regard to older workers, intergenerational contact can have two aspects: the frequency and quality of interactions between people of different ages in the workplace. Surprisingly, research on intergenerational contact at work is scarce. Empirical work by

Iweins et al. (2013) showed that intergenerational contact facilitates a common identity of younger and older workers. Further, Henry et al. (2015) found that employees' high-quality contact with older workers was related to lower levels of age bias and turnover intentions, supporting the beneficial effect of intergenerational contact for improving relations between younger and older people in the workplace. However, to the best of our knowledge, no research has examined how intergenerational contact is shaping hiring decisions about older people.

To address this research gap, we investigate how intergenerational contact frequency and quality moderate the relationships between affective and cognitive categorization reactions and decision-makers' willingness to hire older people. In doing so, we make two contributions to the literature. First, we highlight decision-makers' affective categorization reactions (i.e., anxiety toward older workers) as an important predictor of their willingness to hire older people above and beyond cognitive categorization reactions (i.e., competence stereotypes). Second, we explicitly test the moderating roles of both intergenerational contact frequency and quality as boundary conditions for the effects of affective and cognitive categorization reactions. With regard to organizational practice, we contribute to the improvement of diversity management strategies in organizations by emphasizing possible ways to achieve age-balanced hiring practices.

Theoretical background

Willingness to hire older people

Categorizing self and others into groups (i.e., ingroup and outgroup) in relation to perceived similarities and differences to oneself has been described as a naturally occurring cognitive process (Allport, 1954; Fiske, 1998). This leads to affective (i.e., positive or negative feelings, such as anxiety), cognitive (i.e., positive or negative thoughts, such as competence stereotypes), and behavioral categorization reactions (i.e., positive or negative actions), which describe interdependent reactions toward members of the outgroup (e.g., older

workers) (Ryan et al., 2015). As one important behavioral categorization reaction toward older workers, previous research has argued that willingness to hire older people is closely related to managers' hiring decisions (Lu et al., 2011). In fact, a recent study has highlighted that decision-makers' intentions to hire or not to hire older workers guide their actual hiring behavior (Fasbender and Wang, 2017). In order to understand decision-makers' willingness to hire older people, researchers have mainly addressed cognitive categorization reactions (e.g., Abrams et al., 2016; Krings et al., 2011; Lu et al., 2011); whereas affective categorization reactions, in particular anxiety toward older workers, have been largely neglected. In the current study, we address outgroup competence and intergroup anxiety as individual factors to influence willingness to hire older people. Further, we shed light on the moderating roles of both intergenerational contact frequency and quality for the effects on decision-makers' willingness to hire older people. The conceptual model of this study is shown in Figure 1.

Outgroup competence and willingness to hire older people

Outgroup competence has been highlighted as an universal cognitive categorization reaction for outgroup members (Fiske et al., 2002). It reflects the perceived ability, such as creativity and intelligence of older workers. Cuddy et al. (2007) argue that higher levels of outgroup competence should lead to either active or passive facilitation behaviors (e.g., helping them or associating with them). Following this reasoning, higher levels of perceived competence of older workers should lead to higher levels of willingness to hire them. Previous research supports this notion. Experimental research by Krings et al. (2011) suggested that older workers were generally perceived to be less competent compared to younger workers. In hiring decisions, participants indicated their preference for younger over older workers; the relationship between applicants' age and interview intentions was found to be partially mediated by competence inferences. Thus, it is likely that there is a positive relationship between perceived outgroup competence and decision-makers' willingness to hire older people. To sum up, our first hypothesis reads:

H1: Outgroup competence is positively related to willingness to hire older people.

Intergroup anxiety and willingness to hire older people

As an affective categorization reaction, intergroup anxiety toward older workers refers to the anticipation of negative consequences for oneself when interacting with older workers and its arising negative feelings (Stephan and Stephan, 1985). In a predominantly youth-centered society, anxiety toward older workers is likely to stem from the fear of aging and death (Nelson, 2011). In the workplace, intergroup anxiety describes feeling awkward, uncomfortable or being afraid when working with older people. As experiencing anxiety is an unpleasant feeling, people are inclined to avoid situations in which they anticipate experiencing anxiety. For this reason, it is expected that anxiety toward older workers leads to avoiding future interactions with them, thus, reducing decision-makers' willingness to hire older people. Supporting this theorizing, a study by Bousfield and Hutchison (2010) revealed that anxiety toward elderly people led to negative behavioral intentions to engage with them. Therefore, a negative relationship between intergroup anxiety and willingness to hire older people is plausible. To sum up, our second hypothesis reads:

H2: Intergroup anxiety is negatively related to willingness to hire older people.

Intergenerational contact frequency and quality as boundary conditions

From a person-environment interactional perspective, we argue that intergroup contact frequency and quality are contextual factors that interact with individual affective and cognitive categorization reactions in predicting willingness to hire older people. Relying on the intergroup contact theory by Allport (1954), intergroup contact has been highlighted as one of the most promising approaches to reducing negative categorization reactions and improving intergroup relations. A meta-analysis by Pettigrew and Tropp (2006) revealed a negative relationship between intergroup contact and prejudices toward different target groups (i.e., sexual orientation, disability, race, ethnicity, mental illness, and elderly people). Its

application toward groups of different ages and hiring practices has been, however, fairly new.

Intergroup contact can be defined as “actual face-to-face interaction between members of clearly defined and distinguishable groups” (Pettigrew and Tropp, 2006, p. 754). With regard to interactions between people of different ages, scholars often specify this as intergenerational contact (e.g., Drury et al., 2016; Henry et al., 2015; Iweins et al., 2013). More precisely, intergenerational contact can be differentiated in terms of frequency (i.e., the number of interactions) and quality (i.e., the valence of interactional experience with older people) in the workplace. Previous research has shown conflicting results about the role of intergenerational contact frequency and quality. For example, a study by Tam et al. (2006) found intergenerational contact frequency (but not quality) to predict favorable implicit associations with older people; whereas a study by Bousfield and Hutchison (2010) revealed intergenerational contact quality (but not frequency) to predict young people’s attitudes and behavioral intentions toward older people.

In addressing this, we argue that the frequency of intergenerational contact serves as an amplifier of the effects of affective and cognitive categorization reactions on willingness to hire older people. This is because every interaction with older workers is likely to activate and bring out already existing affective and cognitive categorization reactions. Thus, high (vs. low) intergenerational contact frequency exacerbates the positive effect of outgroup competence but also the negative effect of intergroup anxiety on willingness to hire older people. In other words, we hypothesize:

H3a: Intergenerational contact frequency moderates the relationship between outgroup competence and willingness to hire older people in a way that the positive relationship is stronger when intergenerational contact frequency is high (vs. low).

H3b: Intergenerational contact frequency moderates the relationship between intergroup anxiety and willingness to hire older people in a way that the negative relationship is stronger when intergenerational contact frequency is high (vs. low).

To contrast, we argue that the quality of intergenerational contact facilitates the benefits and buffers the detriments of individual categorization reactions toward older people. This is because a positive contact experience with older workers is likely to modify existing affective and cognitive categorization reactions. For example, if younger workers' contact experience with older workers is positive, cooperative, and productive, it is likely that the negative impact of intergroup anxiety on their willingness to hire older people will be reduced. At the same time, it is likely that the positive impact of outgroup competence on their willingness to hire older people will be enhanced. Thus, high (vs. low) intergenerational contact quality can always be viewed as a facilitating factor in making hiring decisions about older people. To sum up, we hypothesize:

H4a: Intergenerational contact quality moderates the relationship between outgroup competence and willingness to hire older people in a way that the positive relationship is stronger when intergenerational contact quality is high (vs. low).

H4b: Intergenerational contact quality moderates the relationship between intergroup anxiety and willingness to hire older people in a way that the negative relationship is weaker when intergenerational contact quality is high (vs. low).

Method

Sample and procedure

Potential participants were recruited using self-selection sampling on professional social networks within the United Kingdom. More precisely, invitations to take part in the study were posted on online discussion forums related to human resource management topics. The inclusion criterion was that participants should have hiring power, thus including human resource specialists and managers, and divisional managers or project managers, who deal with

hiring decisions at work. We used structured online questionnaires to collect the data. Overall, the sample consisted of 238 participants of which six participants were excluded because of missing data. Therefore, the final sample size was 232. Participants worked in a broad array of industries ranging from health care to technology, media and telecommunications. Participants' ages ranged from 21 to 49 years, with a mean age of 34.70 years ($SD = 6.19$). Of the participants, 109 (47.0%) were female, 203 (87.5%) held a university degree (i.e., bachelor degree or higher) and 173 (74.6%) had supervisory responsibilities over subordinates at work. Further, 148 participants (63.8%) indicated that they engaged in a diversity training during the last 12 months.

Measures

In order to measure intergroup anxiety, outgroup competence, intergenerational contact quality and frequency, and willingness to hire older people, participants were instructed to indicate their experience with older people at work. We defined older workers as people at the age of 55 or older in line with previous studies about older workers (e.g., Ng and Law, 2014; Rupp et al., 2006).

Outgroup competence. Outgroup competence was measured by the means of six items from a scale developed by Fiske et al. (2002). Participants were asked to rate the degree they think older workers are competent, confident, capable, efficient, intelligent and skillful ranging on a seven-point scale from 1 (*not at all*) to 7 (*extremely*). In the current study, the scale showed a good internal consistency (Cronbach's $\alpha = .78$).

Intergroup anxiety. Intergroup anxiety was measured by the means of seven items adapted from Voci and Hewstone (2003). Participants were asked to imagine how they would feel in a hypothetical situation at work if they were the only young or middle-aged person among a group of other older workers (e.g., talking with them, working on a project with them). Respondents rated the degree they felt awkward, suspicious, embarrassed, annoyed and reverse coded happy, relaxed, open-minded on a seven-point scale ranging from 1 (*not at all*)

to 7 (*extremely*). The scale yielded a good internal consistency (Cronbach's $\alpha = .83$) in this study.

Intergenerational contact frequency. Intergenerational contact frequency was measured with one item adapted from Hassell and Perrewé (1995). Participants were asked to indicate how often they came in contact with older people at work (less than monthly, monthly, once a week, several times a week, or daily).

Intergenerational contact quality. Intergenerational contact quality was measured by the means of nine items adapted from Voci and Hewstone (2003). On a seven-point scale ranging from 1 (*totally disagree*) to 7 (*totally agree*), respondents indicated the degree to which their contact with older workers was positive, natural, cooperative, productive, superficial, upset, unpleasant, competitive, and involuntary. The latter five items were reverse coded so that higher scores indicated positive contact quality. The scale yielded a good internal consistency (Cronbach's $\alpha = .83$).

Willingness to hire older people. Willingness to hire older people was measured by the means of five items adapted from Hutchison et al. (2010). Respondents rated the degree they were willing to hire older people for their company on a five-point scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The five items were phrased as follows: "I appreciate hiring older people.", "I would look forward to hiring older people.", "If I had a choice I would rather not hire an older person.", "If I can avoid hiring older people, I do.", and "I would want to avoid hiring an older person." The latter three items were reverse coded so that higher scores indicated higher willingness to hire older people. The scale yielded a reasonable internal consistency (Cronbach's $\alpha = .76$) in this study.

Control variables. As the outcome variable may be affected by individuals' age, sex, and education, we included these variables in the analyses. To gain insight regarding the extent to which our results might be biased by common method variance, social desirability was controlled for using a 13-item scale (Reynolds, 1982). Further, we controlled for

participants' supervisor responsibility and whether they took part in a diversity training during the last 12 months to more rigorously examine the hypothesized effects.

Results

Preliminary analysis

Means, standard deviations, and correlations of all study variables are shown in Table 1. With regard to the control and moderator variables, willingness to hire older people was positively correlated with taking part in a diversity training during the last 12 months ($r = .17$, $p < .01$), intergenerational contact frequency ($r = .37$, $p < .01$), and quality ($r = .42$, $p < .01$). Moreover, willingness to hire older people was positively correlated with outgroup competence ($r = .34$, $p < .01$), but negatively correlated with intergroup anxiety ($r = -.46$, $p < .01$), providing preliminary support to Hypotheses 1 and 2.

We first conducted confirmatory factor analyses to evaluate the construct validity of our measures. Because the sample size is relatively small for the number of parameters to be estimated (lower than 5:1 ratio), which can lead to instability of the factor solution, we reduced the number of indicators on each scale to the more parsimonious three-per-factor solution for intergroup anxiety, outgroup competence and intergenerational contact quality scales, and two-per-factor solution for willingness to hire older people scale using item parceling techniques. The results support the four-factor model ($\chi^2 (38) = 77.70$, $p < .01$, CFI = .95, RMSEA = .07, SRMR = .04) over the one-factor solution ($\chi^2 (44) = 173.52$, $p < .01$, CFI = .83, RMSEA = .11, SRMR = .07) or the two-factor solution with anxiety, competence, and quality items loading on the same factor that captures all predictor variables at once ($\chi^2 (43) = 165.99$, $p < .01$, CFI = .84, RMSEA = .11, SRMR = .06). Therefore, the construct validity of the current measures is supported.

Hypotheses testing

Hierarchical multiple regression analysis is commonly used in research around the topic of aging in the workplace to identify the incremental validity of groups of predictors

added into the regression model (e.g., Damman and van Duijn, 2017; Fasbender et al., 2016; Perry et al., 1996; Wang et al., 2015). We therefore conducted a hierarchical multiple regression analysis in three steps to investigate the hypothesized relationships between outgroup competence, intergroup anxiety, intergenerational contact frequency and quality, and willingness to hire older people. First, we estimated the effects for the control variables as well as intergenerational contact frequency and quality on willingness to hire older people (Step 1). Second, the effects for outgroup competence and intergroup anxiety were estimated in addition to the control and moderator variables (Step 2). Third, the four interaction terms between the outgroup competence, intergroup anxiety, and intergenerational contact frequency and quality were added to the regression model (Step 3). The results of the regression analysis are presented in Table 2.

In Step 1, intergenerational contact frequency ($B = .12, p < .01$) and quality ($B = .26, p < .01$) were both positively related to willingness to hire older people. No significant effects were found for age, sex, education, supervisory responsibility, diversity training, and social responsibility. Together the variables entered in Step 1 explained 23% of variance in the dependent variable. Hypotheses 1 and 2 addressed the relationships between outgroup competence, intergroup anxiety and willingness to hire older people. In Step 2, the regression coefficients suggested that intergroup anxiety was negatively related to willingness to hire older people ($B = -.21, p < .01$), supporting Hypothesis 2. This indicates that higher levels of anxiety toward older workers are likely to decrease participants' willingness to hire them. However, regression coefficients suggested that outgroup competence did not significantly predict willingness to hire older people, thus not supporting Hypothesis 1. Together the variables entered in Step 2 explained 5% of variance in the dependent variable above and beyond control variables and moderators.

Hypotheses 3a and 3b addressed the moderating role of intergenerational contact frequency on the relationships between outgroup competence, intergroup anxiety, and

willingness to hire older people. In Step 3 of the regression analysis, the estimated coefficients showed that intergenerational contact frequency moderated the negative relationship between intergroup anxiety and willingness to hire older people ($B = -.10, p < .05$). A simple slope test was conducted to further examine the effect of intergroup anxiety under different conditions of intergroup contact frequency. According to the results, the negative effect of intergroup anxiety was only significant for participants with higher levels of intergenerational contact frequency (*simple slope* = $-.46, p < .01$), but not significant for participants with lower levels of intergenerational contact frequency (*simple slope* = $-.08, p > .05$). As can be seen in Figure 2a, a high (vs. low) intergenerational contact frequency exacerbates the negative relationship between intergroup anxiety and willingness to hire older people, supporting Hypothesis 3b. However, we found that intergenerational contact frequency did not significantly moderate the relationship between outgroup competence and willingness to hire older people, thus Hypothesis 3a was not supported.

Hypotheses 4a and 4b addressed the moderating role of intergenerational contact quality on the relationships between outgroup competence, intergroup anxiety, and willingness to hire older people. The estimated coefficients showed that intergenerational contact quality moderated the relationship between outgroup competence and willingness to hire older people ($B = .19, p < .01$). The moderation was plotted in Figure 2b. Results of a simple slope test showed that the positive effect of outgroup competence was only significant for participants with higher levels of intergenerational contact quality (*simple slope* = $.28, p < .01$), but not significant for participants with lower levels of intergenerational contact quality (*simple slope* = $-.18, p > .05$). In other words, a high (vs. low) intergenerational contact quality facilitated the positive relationship between outgroup competence and willingness to hire older people, supporting Hypothesis 4a.

Further, the estimated coefficients showed that intergenerational contact quality moderated the negative relationship between intergroup anxiety and willingness to hire older

people ($B = .23, p < .01$). According to the results of a simple slope test, the predictive effect of intergroup anxiety was only significant for participants with lower levels of intergenerational contact quality (*simple slope* = $-.61, p < .01$), but not significant for participants with higher levels of intergenerational contact quality (*simple slope* = $.07, p > .05$). As can be seen in Figure 2c, a high (vs. low) intergenerational contact quality buffers the negative relationship between intergroup anxiety and willingness to hire older people, supporting Hypothesis 4b. Together the variables entered in Step 3 explained 34% of total variance in the dependent variable and 6% above and beyond Step 2.

Discussion

One of the key aims of the present study was to investigate how intergenerational contact frequency and quality moderate the relationships between affective and cognitive categorization reactions and decision-makers' willingness to hire older people. We tested our hypotheses based on a sample of 232 employees with hiring power. To begin with, we found that intergroup anxiety was negatively related to decision-makers' willingness to hire older people. This finding adds to the literature on work relations between people of different ages (e.g., Henry et al., 2015; Iweins et al., 2013) and human resources management practices, in particular on hiring older people (e.g., Abrams et al., 2016; Krings et al., 2011) by emphasizing the importance of affective categorization reactions in hiring decisions. However, the current study did not find the hypothesized positive relationship between perceived outgroup competence and decision-makers' willingness to hire older people. Although outgroup competence was significantly and positively related to willingness to hire older people, the results of the regression analysis did not show a significant effect above the control variables and other predictors in the present study. This null effect is likely due to the high intercorrelation between outgroup competence and intergroup anxiety, highlighting the interdependent nature of affective and cognitive categorization reactions (Fasbender, 2016).

Future research should expand the investigation on affective and cognitive categorization reactions as predictors of age-related hiring decisions.

In addition, the present study shed light on the moderating roles of both intergenerational contact frequency and quality as boundary conditions for the expected effects on decision-makers' willingness to hire older people. As predicted, we found that intergenerational contact frequency exacerbated the relationship between intergroup anxiety and willingness to hire older people, whereas intergenerational contact quality buffered the negative relationship. Further, we found that intergenerational contact quality facilitated the positive relationship between outgroup competence and willingness to hire older people. Together, these findings indicated that the frequency of intergenerational contact served as an amplifier of affective categorization reaction's negative effect on willingness to hire older people, whereas the quality of intergenerational contact facilitated the benefits and buffered the detriments of individual categorization reactions toward older people. Consistent with the literature on intergroup contact theory (Allport, 1954; Pettigrew and Tropp, 2006), these findings emphasized the important role of intergenerational contact in shaping hiring decisions about older people. Whereas the quality of intergenerational contact can be regarded as always good in benefiting hiring decisions about older people, the frequency of intergenerational contact can be harmful as every interaction with older workers is likely to bring out already existing negative affective categorization reactions, such as intergroup anxiety. Although our results suggest that intergenerational contact frequency had a positive main effect on willingness to hire older people, it also strengthened the negative effect of intergroup anxiety on decision-makers' willingness to hire older people. In this regard, intergenerational contact frequency seems to function as a double-edged sword. On the one hand, it may facilitate familiarity with older workers and weaken the outgroup salience of older workers, thus breaking stereotypes and bias (Tam et al., 2006). On the other hand, it amplifies the effect of negative affective categorization reactions toward older workers.

However, we found that intergenerational contact frequency did not significantly moderate the relationship between outgroup competence and willingness to hire older people, which opens up new questions for future research. In particular, research can further investigate in what situations intergenerational contact frequency can be functional in supporting positive cognitive categorization reactions in shaping hiring decisions about older people. In addition, future research could explore the more complex pattern between intergenerational contact frequency and quality with regard to the relationship between intergroup anxiety and willingness to hire older people. Although we were not able to test a 3-way interaction in the current setting, one could speculate that intergenerational contact frequency could potentially buffer the negative relationship between intergroup anxiety and willingness to hire older people if the intergenerational contact experience is high (vs. low) in quality.

Theoretical and practical implications

Our study findings extend previous research on the decision-making of hiring older people. There are relevant implications for theory and practice. With regard to theory, the present study is among the first to examine how intergenerational contact is linked to organizational decision-makers' willingness to hire older people. In particular, we revealed intergroup contact frequency and quality as important boundary conditions for age-related hiring decisions. Although newer research attempts have broached the issue of intergenerational contact between people of different ages, it primarily focused either on non-work contexts (e.g., Drury et al., 2016; Hutchison et al., 2010) or on individual decision-making at work, such as turnover intentions (e.g., Griffin et al., 2016; Henry et al., 2015; Iweins et al., 2013). Expanding on this literature, the present study highlighted intergenerational contact as a means to shape age-related hiring decisions.

In particular, our findings shed light on affective and cognitive categorization reactions as relevant factors to explain decision-makers' willingness to hire older people as a behavioral categorization reaction. Building on previous research suggesting outgroup

competence to be important for hiring decisions (e.g., Krings et al., 2011), we highlight the predictive effects of intergroup anxiety and outgroup competence, in particular under high intergenerational contact quality as a beneficial condition. Our results show that affective categorization reactions (i.e., intergroup anxiety) can be more powerful than cognitive categorization reactions (i.e., outgroup competence) in predicting willingness to hire older people. This predictive effect may even be strengthened by frequent intergenerational contact, but it can also be buffered by high quality intergenerational contact. Further, high quality contact with older workers is likely to facilitate a positive relationship between perceived outgroup competence and decision-makers' willingness to hire older people. This supports the notion that a high contact quality between younger and older workers facilitates the benefits and buffers the detriments of affective and cognitive categorization reactions in hiring decisions about older people.

With regard to practice, the present study contributes to the improvement of diversity management strategies in organizations emphasizing possible mechanisms of age-balanced hiring practices. In particular, we reveal the importance of intergenerational contact quality for employees with hiring power. Previous research has recommended organizations to enable regular interactions between people of different ages. However, our findings suggest that it is important to recognize that intergenerational contact frequency may function as double-edged sword that can be beneficial and harmful at the same time in shaping hiring decisions. Therefore, organizations should pay more attention to nurture and promote high-quality intergenerational contact at work. As such, workplace interactions should be natural, cooperative, productive, and pleasant and to some degree perceived as voluntary. On the one hand, organizations need to be sensitive to potentially arising conflict and tensions as potential factors hindering intergenerational contact quality. On the other hand, organizations need to systematically facilitate high quality exchange. For example, organizations could initiate voluntary mentoring programs between younger and older workers (i.e., opportunities

for generativity; Henry et al., 2015) in combination with offering knowledge-related, advanced training to their employees (i.e., opportunities for development; Henry et al., 2015) in order to enhance high intergenerational contact quality at work.

Limitations and directions for future research

Notwithstanding the theoretical and practical implications of our findings, we acknowledge some limitations of this research and point to directions for future research. First, the cross-sectional nature of the data does not allow determining causal inferences. It is possible that the relationships between affective, cognitive, and behavioral categorization reactions are reciprocal. Yet, the possible reverse causation cannot explain the interaction effects between intergroup anxiety, outgroup competence and frequency and quality of intergenerational contact on decision-makers' willingness to hire older people. In addition, the potential existence of reciprocal effects does not impede the important role of intergenerational contact as feasible intervention to improve relations between younger and older people in the workplace. Nevertheless, future research should apply longitudinal and (quasi-)experimental designs to allow for more conclusive inferences about causality, in particular with regard to decision-making of hiring older people.

Second, given all our study variables were measured via self-report, common-method bias may be a concern. However, we controlled for social desirability in our analyses, which had a rather low correlation with willingness to hire older people as our outcome variable. Also, in the regression, social desirability did not significantly predict willingness to hire older people. This partly alleviates the concern of common-method bias with regard to our outcome variable, as the covariation between social desirability and self-report measures reflects the systematic error variance caused by the common rating source. Regardless, future research should consider collecting data from other sources other than the self, or include measures of actual hiring behavior as a means to avoid potential problems with common-method bias and to ensure criterion-related validity.

The current study also leaves some issues unaddressed and suggests areas for further investigation. As previous research highlighted “[age] bias and discrimination at each stage of the employment cycle” (Loretto and White, 2006), future research should also focus on investigating how to alleviate and prevent age discrimination in other areas of human resource management, including practices related to career opportunities, training and development, assignment of tasks, and retention and succession planning strategies (Marcus and Fritzsche, 2016). In this regard, intergenerational contact frequency and quality could be useful means to influence age-related human resource management practices and more broadly, to improve intergenerational relations at work.

References

- Abrams, D., Swift, H.J. and Drury, L. (2016), "Old and unemployable? How age-based stereotypes affect willingness to hire job candidates", *Journal of Social Issues*, Vol. 72, pp. 105–121.
- Allport, G.W. (1954), *The Nature of Prejudice*, Addison-Wesley, Reading, MA.
- Bousfield, C. and Hutchison, P. (2010), "Contact, anxiety, and young people's attitudes and behavioral intentions towards the elderly", *Educational Gerontology*, Vol. 36, pp. 451–466.
- Cuddy, A.J.C., Fiske, S.T. and Glick, P. (2007), "The BIAS map: Behaviors from intergroup affect and stereotypes", *Journal of Personality and Social Psychology*, Vol. 92, pp. 631–648.
- Damman, M., & van Duijn, R. (2017). Intergerational support in the transition from work to retirement. *Work, Aging and Retirement*, 3, 66-76.
- Drury, L., Hutchison, P. and Abrams, D. (2016), "Direct and extended intergenerational contact and young people's attitudes towards older adults", *British Journal of Social Psychology*, Vol. 55, pp. 522–543.
- Europoean Centre for the Development of Vocational Training, C. (2013), *Return to Work: Work-Based Learning and the Reintegration of Unemployed Adults into the Labour Market, Working Paper No. 21*, Luxembourg: Publications Office of the European Union.
- Fasbender, U. (2016), "Stereotypes, prejudice and discrimination toward older workers: A wind of change?", in Burke, R., Cooper, C. and Antoniou, A. (Eds.), *The Aging Workforce: Individual, Organizational and Societal Challenges*, Emerald Publishing, London, pp. 159–184.
- Fasbender, U. and Wang, M. (2017), "Negative attitudes toward older workers and hiring decisions: Testing the moderating role of decision makers' core self-evaluations",

Frontiers in Psychology, Vol. 7 No. 2057, pp. 1–10.

- Fasbender, U., Wang, M., Voltmer, J.-B. and Deller, J. (2016), “The meaning of work for post-retirement employment decisions”, *Work, Aging and Retirement*, Vol. 2, pp. 12–23.
- Fiske, S.T. (1998), “Stereotyping, prejudice, and discrimination”, in Gilbert, D.T., Fiske, S.T. and Lindzey, G. (Eds.), *The Handbook of Social Psychology Vol. 2*, 4th ed., Oxford University Press, Oxford, pp. 357–411.
- Fiske, S.T., Cuddy, A.J.C., Glick, P. and Xu, J. (2002), “A model of (often mixed) stereotype content: Competence and warmth respectively follow from perceived status and competition”, *Journal of Personality and Social Psychology*, Vol. 82, pp. 878–902.
- Griffin, B., Bayl-Smith, P., & Hesketh, B. (2016). The longitudinal effects of perceived age discrimination on the job satisfaction and work withdrawal of older employees. *Working, Aging and Retirement*, 2, 415-427.
- Hassell, B. and Perrewe, P. (1995), “An examination of beliefs about older workers: Do stereotypes still exist?”, *Journal of Organizational Behavior*, Vol. 16, pp. 457–468.
- Henry, H., Zacher, H. and Desmette, D. (2015), “Reducing age bias and turnover intentions by enhancing intergenerational contact quality in the workplace: The role of opportunities for generativity and development”, *Work, Aging and Retirement*, Vol. 1, pp. 243–253.
- Hutchison, P., Fox, E., Laas, A.M., Matharu, J. and Urzi, S. (2010), “Anxiety, outcome expectancies, and young people’s willingness to engage in contact with the elderly”, *Educational Gerontology*, Vol. 36, pp. 1008–1021.
- Iweins, C., Desmette, D., Yzerbyt, V. and Stinglhamber, F. (2013), “Ageism at work: The impact of intergenerational contact and organizational multi-age perspective”, *European Journal of Work and Organizational Psychology*, Vol. 22, pp. 331–346.
- Klehe, U.-C., Koen, J., Pater, I. De, Hedge, J. and Borman, W. (2012), “Ending the scrap heap? The experience of job loss and job search among older workers”, in Hedge, J. and

- Borman, W. (Eds.), *The Oxford Handbook of Work and Aging*, Oxford University Press, New York, NY, pp. 313–340.
- Krings, F., Sczesny, S. and Kluge, A. (2011), “Stereotypical inferences as mediators of age discrimination: The role of competence and warmth”, *British Journal of Management*, Vol. 22, pp. 187–201.
- Loretto, W. and White, P. (2006), “Employers’ attitudes, practices and policies towards older workers”, *Human Resource Management Journal*, Vol. 16, pp. 313–330.
- Lu, L., Kao, S.-F. and Hsieh, Y.-H. (2011), “Attitudes towards older people and managers’ intention to hire older workers: A Taiwanese study”, *Educational Gerontology*, Vol. 37, pp. 835–853.
- Marcus, J., & Fritzsche, B. A. (2016). The Cultural anchors of age discrimination in the workplace: A multilevel framework. *Work, Aging and Retirement*, 2, 217-229.
- Nelson, T.D. (2011), “Ageism: The strange case of prejudice against the older you”, in Wiener, R.L. and Willborn, S.L. (Eds.), *Disability and Aging Discrimination: Perspectives in Law and Psychology*, Springer, New York, NY, pp. 37–47.
- Ng, E.S.W. and Law, A. (2014), “Keeping up! Older workers’ adaptation in the workplace after age 55”, *Canadian Journal on Aging*, Vol. 33, pp. 1–14.
- Perry, E.L., Kulik, C.T. and Bourhis, A.C. (1996), “Moderating effects of personal and contextual factors in age discrimination”, *Journal of Applied Psychology*, Vol. 81, pp. 628–647.
- Pettigrew, T.F. and Tropp, L.R. (2006), “A meta-analytic test of intergroup contact theory.”, *Journal of Personality and Social Psychology*, Vol. 90, pp. 751–783.
- Reynolds, W.M. (1982), “Development of reliable and valid short forms of the Marlowe-Crowne Social Desirability Scale”, *Journal of Clinical Psychology*, Vol. 38, pp. 119–126.
- Rupp, D.E., Vodanovich, S.J. and Credé, M. (2006), “Age bias in the workplace: The impact

- of ageism and causal attributions”, *Journal of Applied Social Psychology*, Vol. 36, pp. 1337–1364.
- Ryan, K.M., King, E.B. and Finkelstein, L.M. (2015), “Younger workers’ metastereotypes, workplace mood, attitudes, and behaviors”, *Journal of Managerial Psychology*, Vol. 30, pp. 54–70.
- Stephan, W.G. and Stephan, C.W. (1985), “Intergroup anxiety”, *Journal of Social Issues*, Vol. 41, pp. 157–175.
- Tam, T., Hewstone, M., Harwood, J., Voci, A. and Kenworthy, J. (2006), “Intergroup contact and grandparent-grandchild communication: The effects of self-disclosure on implicit and explicit biases against older people”, *Group Processes & Intergroup Relations*, Vol. 9 No. 3, pp. 413–429.
- Truxillo, D.M., Finkelstein, L.M., Pytlovany, A.C. and Jenkins, J.S. (2015), “Age discrimination at work: A review of the research and recommendations for the future”, in Colella, A.J. and King, E.B. (Eds.), *The Oxford Handbook of Workplace Discrimination*, Oxford University Press.
- Urlick, M. J., Hollensbe, E. C., Masterson, S. S., & Lyons, S. T. (2017). Understanding and managing intergenerational conflict: An examination of influence and strategies. *Work, Aging and Retirement*, 3, 166-185.
- Voci, A. and Hewstone, M. (2003), “Intergroup contact and prejudice toward immigrants in Italy: The mediational role of anxiety and the moderational role of group salience”, *Group Processes & Intergroup Relations*, Vol. 6, pp. 37–54.
- Wang, M., Burlacu, G., Truxillo, D., James, K., & Yao, X. (2015). Age differences in feedback reactions: The roles of employee feedback orientation on social awareness and utility. *Journal of Applied Psychology*, 100, 1296-1308.
- Wöhrmann, A.M., Fasbender, U. and Deller, J. (2016), “Using work values to predict post-retirement work intentions”, *Career Development Quarterly*, Vol. 64, pp. 98–113.

Table 1

Means, standard deviations, and correlations for all of the variables

Variable	M	SD	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
<i>Demographic and control variables</i>													
1. Age	34.70	6.19	-										
2. Sex (1 = male)	0.53	0.50	.11	-									
3. Education (1 = university degree)	0.88	0.33	-.05	.04	-								
4. Supervisory responsibilities (1=yes)	0.75	0.44	.23**	.03	.17*	-							
5. Diversity training (1=yes)	0.64	0.48	.05	.15*	.12*	.18**	-						
6. Social desirability sum score	7.39	2.31	.11	.03	-.04	.07	.09	-					
<i>Moderator variables</i>													
7. Intergenerational contact frequency	2.44	1.30	.30**	.07	-.09	.06	.13*	.17*	-				
8. Intergenerational contact quality	4.76	0.98	.20**	-.11	.03	.18**	.08	.42**	.48**	-			
<i>Predictor variables</i>													
9. Outgroup competence	4.84	0.93	.02	-.08	.06	.20**	.19**	.31**	.31**	.65**	-		
10. Intergroup anxiety	3.35	1.08	-.13*	.07	-.08	-.15*	-.16*	-.32**	-.35**	-.69**	-.57**	-	
<i>Outcome variable</i>													
11. Willingness to hire older people	3.41	0.75	.10	.01	-.02	.10	.17**	.13	.37**	.42**	.34**	-.46**	-

Note. $N = 232$. * $p < .05$, ** $p < .01$.

Table 2

Results of multiple regression analysis for willingness to hire older people

Variable	Step 1		Step 2		Step 3	
	B	S.E.	B	S.E.	B	S.E.
<i>Control and moderator variables</i>						
1. Age	-0.01	0.01	-0.00	0.01	-0.00	0.01
2. Sex (1=male)	0.03	0.09	0.04	0.09	0.05	0.09
3. Education (1= university degree)	-0.08	0.14	-0.11	0.13	-0.17	0.13
4. Supervisory responsibility (1=yes)	0.04	0.11	0.04	0.11	0.04	0.11
5. Diversity training (1=yes)	0.19	0.10	0.14	0.09	0.12	0.09
6. Social desirability	-0.02	0.02	-0.02	0.02	-0.01	0.02
7. Intergenerational contact frequency	0.12**	0.04	0.12**	0.04	0.12**	0.04
8. Intergenerational contact quality	0.26**	0.06	0.09	0.07	0.09	0.07
<i>Main effects of predictor variables</i>						
9. Outgroup competence			0.03	0.06	0.04	0.06
10. Intergroup anxiety			-0.21**	0.06	-0.19**	0.06
<i>Interaction effects</i>						
11. Intergenerational contact frequency x outgroup competence					-0.06*	0.05
12. Intergenerational contact frequency x intergroup anxiety					-0.10*	0.04
13. Intergenerational contact quality x outgroup competence					0.19**	0.07
14. Intergenerational contact quality x intergroup anxiety					0.23**	0.05
<i>Model fit</i>						
R ²	0.23		0.28		0.34	
Δ R ²			0.05		0.06	
F Change (<i>df</i> ₁ , <i>df</i> ₂)	8.40** (8, 223)		7.64** (2, 221)		4.72** (4, 217)	

Note. N = 232. **p* < .05. ***p* < .01.

Figure 1

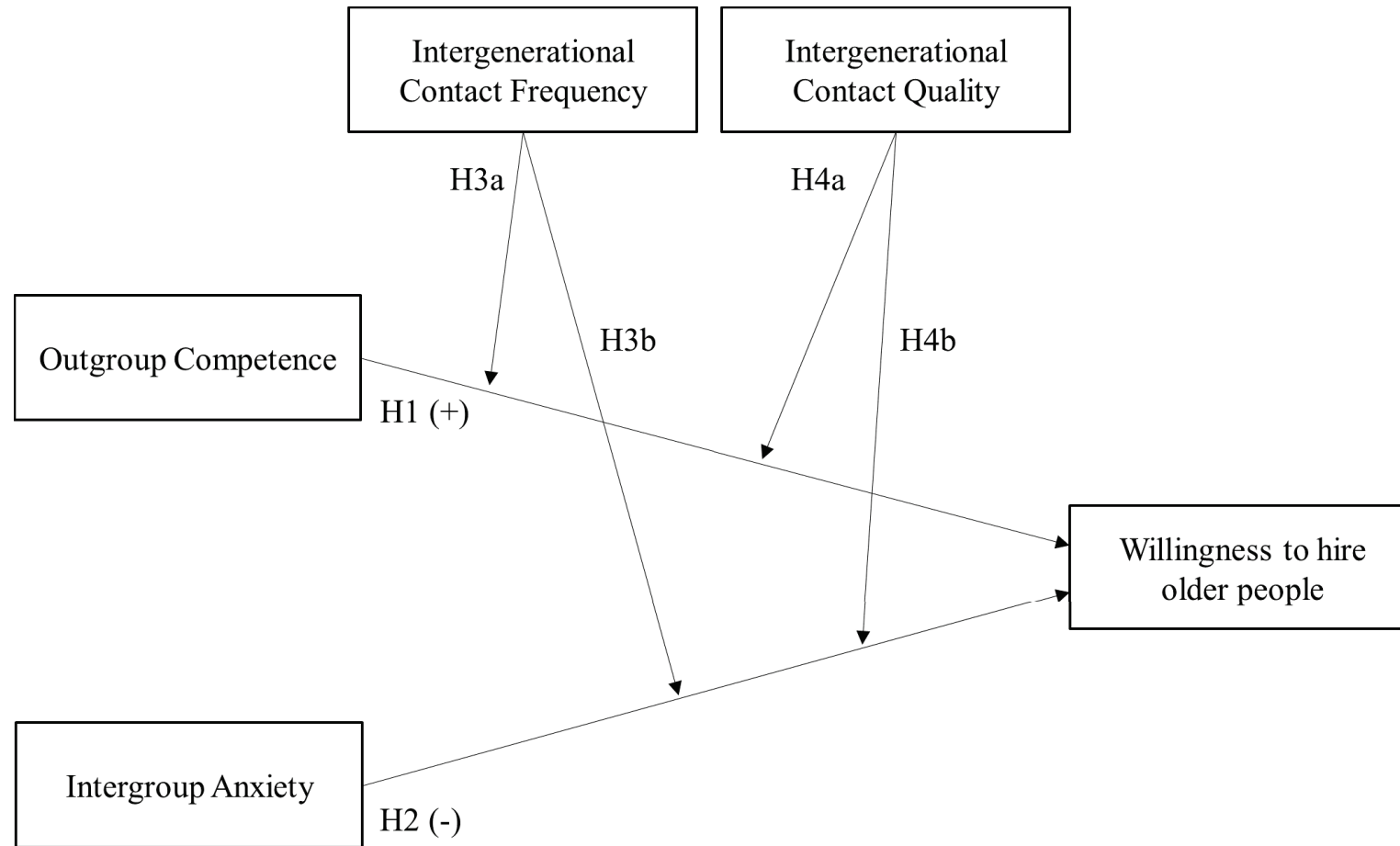
Conceptual model

Figure 2

- a) *Intergenerational contact frequency exacerbates the negative relationship between intergroup anxiety and willingness to hire older people*
- b) *Intergenerational contact quality moderates the relationship between outgroup competence and willingness to hire older people*
- c) *Intergenerational contact quality buffers the negative relationship between intergroup anxiety and willingness to hire older people*

