Ulrike Fasbender and Mo Wang

Negative attitudes toward older workers and hiring decisions: Testing the moderating role of decision-makers' core self-evaluations, *Frontiers in Psychology* (2017)

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Available on RADAR: 13.01.2017

This document is the author's accepted version.

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Negative Attitudes toward Older Workers and Hiring Decisions:

Testing the Moderating Role of Decision Makers' Core Self-evaluations

Ulrike Fasbender[1] and Mo Wang[2]

[1]Oxford Brookes University

[2]University of Florida

Correspondence concerning this article should be addressed to Ulrike Fasbender, Centre for Diversity Policy Research and Practice, Oxford Brookes University, United Kingdom, Business School, Wheatley Campus, Oxford OX33 1HX, Email: u.fasbender@brookes.ac.uk, Phone: +44 (0)1865 48 5465

1   **Abstract**

2   Organizational hiring practices have been charged for unfair treatment on the grounds

3   of age. Drawing on theories of planned behavior and core self-evaluations, this research

4   investigated the impact of negative attitudes toward older workers on hiring decisions and

5   examined the moderating role of decision-makers' core self-evaluations. We tested our

6   hypotheses based on a structured online questionnaire and a vignette study using a sample of

7   102 participants working in human resource management with hiring power across different

8   industries. As predicted, negative attitudes toward older workers were positively related to

9   avoidance of hiring older people, which in turn was negatively related to the likelihood to

10   select the oldest candidate. Because hiring decisions are not only about the hiring subject but

11   also about the decision-maker, we tested the moderating role of decision-makers' core self-

12   evaluations. Results showed that core self-evaluations buffered the relationship between

13   negative attitudes toward older workers and avoidance of hiring older people. Theoretical

14   implications of the findings with regard to hiring decisions about older people and practical

15   recommendations to improve diversity management strategies and age-balanced hiring

16   practices in organizations are discussed.

17

18   *Keywords:* core self-evaluations, avoidance tendencies, hiring decisions, negative

19   attitudes toward older workers, selection likelihood, hiring bias

20

1   **Introduction**

2   Although age discrimination is against the law in many industrialized countries

3   (Lahey, 2010), it is still a common phenomenon in hiring. A recent meta-analysis on age and

4   reemployment success after job loss by Wanberg, Kanfer, Hamann, and Zhang (2016)

5   revealed that older people receive fewer offers ($\rho = -.11$), are less likely to obtain

6   reemployment after job loss ($\rho = -.15$), and take longer to find reemployment (reemployment

7   speed: $\rho = -.17$). In particular, people over the age of 50 suffer from longer unemployment

8   periods. Organizational hiring practices have often been challenged for unfair treatment on the

9   grounds of age (Truxillo, Finkelstein, Pytlovany, & Jenkins, 2015). Although many older

10   people wish to work until an older age (Wöhrmann, Fasbender, & Deller, 2016), they may be

11   denied the opportunity due to relevant decision-makers' negative attitudes toward older

12   workers. There is a substantial amount of research showing that older people face

13   disadvantages in applying for jobs. In fact, existing field experiments based on

14   correspondence testing almost always show substantial age discrimination in hiring processes

15   (e.g., Albert, Escot, & Fernández-Cornejo, 2011; Gringart & Helmes, 2001; Neumark, Burn,

16   & Button, 2016; Riach & Rich, 2010).

17   Drawing on the theory of planned behavior (Ajzen, 1991), one explanation for the

18   unfair treatment of older applicants is that negative attitudes toward older workers reign

19   within organizations and lead to discrimination against them (Shore & Goldberg, 2005). Thus,

20   age-related negative attitudes are thought to underlie discriminatory behaviors such as lower

21   hiring rates for equally qualified older (vs. younger) job applicants. Despite their centrality for

22   explaining age discrimination, they have not yet received much attention in organizational

23   research on age bias in hiring (Finkelstein & Farrell, 2007; Finkelstein, King, & Voyles,

24   2015; Shore & Goldberg, 2005). There are numerous studies that investigated the existence of

25   negative attitudes toward older workers (for review see for example Posthuma & Campion,

26   2009) but only few studies show their direct link to hiring decisions and the underlying

1   mechanisms. For example, a field study by Lu, Kao, and Hsieh (2011) showed that positive

2   attitudes toward older workers were positively related to mangers' intention to hire older

3   people. Further, experimental research by Krings, Sczesny, and Kluge (2011) revealed that

4   participants, who had more favorable attitudes toward older workers (i.e., high competence)

5   were more likely to suggest an older applicant for a job interview. However, these studies

6   neglect the role that decision-makers' self-concept plays during the hiring process.

7   Taking this into account, we argue that decision-makers' core self-evaluations –

8   defined as a fundamental, bottom-line assessment of one's ability, merit and efficacy (Judge,

9   Erez, Bono, & Thoresen, 2003) – is a positive self-concept and can buffer the impact of

10   negative attitudes toward older workers on decision-makers' avoidance tendencies, which in

11   turn can determine their actual hiring decisions. Although the idea that decision-makers' self-

12   concept and social identity can jointly influence hiring decisions has been highlighted before

13   (Lewis & Sherman, 2003), no study has examined how core self-evaluations may interfere the

14   relationship between negative attitudes toward older workers and avoidance of hiring older

15   people.

16   To address this research gap, we investigate negative attitudes toward older workers in

17   hiring decisions and examine the moderating role of core self-evaluations. In particular, we

18   make two contributions to the literature. First, we explore the process of age discrimination in

19   hiring by disentangling discriminatory attitudes, intentions, and behavior. In particular, we

20   reveal avoidance tendencies as a mediator between negative attitudes toward older workers

21   and hiring decision. Second, we test the moderating role of decision-makers' core self-

22   evaluations in buffering the negative impact of age-related negative attitudes in the

23   workplace. As most research demonstrates the problem of discriminatory behavior rather than

24   to facilitate its prevention, identifying potential moderators is essential in challenging age

25   discrimination in hiring. As a result, our study has important implications to organizational

1   practice in terms of training and development of decision-makers with regard to their self-

2   concept.

3   **Theoretical Background**

4   **Hiring Decisions about Older People**

5   Because chances of being hired are lower for older people, researchers have been

6   searching for potential factors and circumstances to counter disadvantages that older people

7   have to face in hiring. Previous research has mainly investigated environmental circumstances

8   influencing employers' hiring decisions about older people (Earl, Taylor, & McLoughlin,

9   2015). As such, scholars have indicated that experienced difficulties in recruiting or labor

10   shortages in general are likely to facilitate hiring older people (Taylor, McLoughlin, Brooke,

11   Di Biase, & Steinberg, 2013). On the other hand, high cost pressure is likely to lower older

12   people's hiring chances as that has been found to lower the probabilities for older workers to

13   receive training and development (e.g., Erber & Danker, 1995; Loretto & White, 2006). Also,

14   legal approaches (i.e., stronger age discrimination laws at the state level) aiming at improving

15   equal opportunities for younger and older people have been found to be rather dysfunctional

16   for older people in times of low labor demands (i.e., economic recession) (Neumark &

17   Button, 2014). Therefore, research needs to continue its search for relevant factors underlying

18   hiring decisions about older people. In the current study, we investigate negative attitudes

19   toward older workers in hiring decisions and highlight the moderating role of core self-

20   evaluations. Based on the theory of planned behavior (Ajzen, 1991) and the core self-

21   approach (Judge, Locke, & Durham, 1997), we argue that hiring decisions are not only about

22   finding the most suitable candidate for a certain job vacancy, but also about one's internal

23   evaluation of the potential consequences of the hiring decision for one's self-concept.

24   **Negative Attitudes toward Older Workers and Hiring Decisions**

25   According to the theory of planned behavior (Ajzen, 1991), behavior (i.e., the hiring

26   decision) is determined by intention (i.e., the hiring intention) as the most proximal predictor,

which in turn is entirely influenced by attitudes, norms and perceived behavioral control

toward the behavior. Ajzen's theory of planned behavior is a well-established conceptual

framework that has been frequently used to explain hiring decisions about members of

discriminated groups (e.g., Ang, Ramayah, & Amin, 2015; Araten-Bergman, 2016; Lu et al.,

2011). In particular, attitudes (i.e., negative attitudes toward older workers) have been

highlighted as important mechanism to influence the decision-making process of hiring older

people (e.g., Posthuma & Campion, 2009; Truxillo et al., 2015).

In the hiring context, attitude reflects decision-makers' affective or cognitive

evaluation of the hiring targets (e.g., older people). For example, one decision-maker may

think older workers are harder to train for jobs; whereas another might believe older people

are more dependable at work (Fasbender, 2016). Further, it is assumed that one's positive

attitudes lead to approach, whereas one's negative attitudes lead to avoid certain behaviors,

such as hiring older people. This notion is partly supported by Lu et al. (2011), who found

that managers' positive attitudes toward older workers were positively related to their

intention to hire older people as opposed to avoid hiring them. Avoidance of hiring older

people can be conceptualized as the intention not to hire older people, which eventually leads

to an actual decision of not hiring a particular older person. Meta-analytical findings reveal

that negative attitudes are more powerful in predicting important behavioral outcomes then

positive attitudes do (Meisner, 2012). We therefore propose that negative attitudes toward

older workers are likely to increase decision-makers' avoidance tendencies of hiring older

people. In turn, it is likely that avoidance tendencies result in actual behavior, such as

selecting younger candidates instead of equally qualified older candidate in the hiring

situation. To sum up, our first two hypotheses read:

H1: Negative attitudes toward older workers are positively related to avoidance of

hiring older people.

1   *H2: Avoidance of hiring older people is negatively related to the likelihood of*

2   *selecting the equally qualified oldest candidate in the hiring situation.*

3   Having introduced avoidance tendencies as the underlying mechanism, we draw a link

4 between negative attitudes toward older workers and selecting the oldest candidate in the

5 hiring situation. Taking Hypotheses 1 and 2 together, we assume that there is a negative

6 relationship between negative attitudes toward older workers and selection likelihood, which

7 is expected to be mediated by avoidance of hiring older people. Previous research partly

8 supports this notion. Early research by Perry, Kulik, and Bourhis (1996) found that bias

9 against older workers was related to lower evaluation of an older applicant among business

10 students. Similarly, Krings et al. (2011) showed that biased beliefs about older workers led to

11 age discrimination at selection among business students and also among HR professionals.

12 These studies point at a negative relationship between negative attitudes toward older workers

13 and selection likelihood. However, based on the theory of planned behavior (Ajzen, 1991), we

14 argue that the hiring decision is not directly undertaken but intended prior to the actual

15 decision. Thus, we propose an indirect effect of negative attitudes toward older workers and

16 selection likelihood via avoidance of hiring older people.

17   *H3: There is a negative relationship between negative attitudes toward older workers*

18   *and the likelihood of selecting the equally qualified oldest candidate in the hiring*

19   *situation, which is mediated by avoidance of hiring older people.*

20 **Core Self-evaluations as Moderator**

21   Core self-evaluations can be defined as a positive self-concept referring to basic

22 conclusions that individuals hold about themselves (Judge & Bono, 2001). Initially, Judge,

23 Locke, and Durham (1997) have introduced core self-evaluations as a superordinate construct

24 capturing self-esteem, generalized self-efficacy, locus of control, and emotional stability

25 traits. Based on Cattell's personality theory (1965), these traits were identified following three

26 important criteria: evaluation-focus, fundamentality, and scope. Of the four traits, self-esteem

1   has been described as "the most fundamental manifestation of core self-evaluations as it

2   represents the overall value that one places on oneself as a person" (Judge & Bono, 2001, p.

3   80). Further, generalized self-efficacy constitutes one's ability to perform, cope, and be

4   successful; internal locus of control reflects the belief of being able to control a broad array of

5   factors in one's live; and finally, high emotional stability (vs. low neuroticism) refers to being

6   confident, secure and steady (Judge & Bono, 2001). Since its initial introduction, there has

7   been a substantial amount of evidence supporting the construct validity of core self-

8   evaluations (e.g., Gardner & Pierce, 2009; Judge et al., 2003; Stumpp, Muck, Hülsheger,

9   Judge, & Maier, 2010). Besides, core self-evaluations have been found to be powerful in

10   predicting a range of important work-related outcomes. Results of a meta-analysis by Chang,

11   Ferris, Johnson, Rosen, and Tan (2012) suggest that core self-evaluations hold positive

12   relationships with job satisfaction ($\rho = .36$), goal commitment ($\rho = .42$), intrinsic motivation

13   ($\rho = .33$), task performance ($\rho = .19$) and organizational citizenship behaviors ($\rho = .23$) but

14   negative relationships with turnover intentions ($\rho = -.26$) and counterproductive work

15   behavior ($\rho = -.17$).

16   Despite its importance for individuals' work-related outcomes, research has so far

17   neglected the impact of core-self evaluations on others in the workplace. Particularly, it is

18   unknown to what extent decision-makers' core self-evaluations are related to hiring older

19   people. Addressing the decision-maker perspective, we argue that as people often derive some

20   aspects of their self-concept from the groups they belong to (Tajfel & Turner, 1986), they are

21   motivated to achieve self-enhancement and self-esteem by developing a positive

22   distinctiveness between the ingroup and outgroup (i.e., the self-esteem hypothesis; Abrams &

23   Hogg, 2010). As such, decision-making is influenced by people's motivation to maximize

24   their positive self-concept. In order to maintain a positive self-concept, people are keen on

25   seeing their ingroup members in the most favorable light possible, whereas outgroup members

26   are perceived as a potential threat to one's self. Core self-evaluations can function as a source

1   of self-protection against external threats (Judge et al., 1997). Therefore, the perceived threat

2   from outgroup members in a hiring decision is likely to be higher for people with low core

3   self-evaluations. In other words, people with low core self-evaluations are particularly

4   vulnerable to discriminate against outgroup members in making hiring decisions when

5   holding negative attitudes toward them, whereas people with high self-evaluations are less

6   vulnerable.

7   Previous research has mainly addressed the impact of self-esteem on discriminatory

8   behavior. A meta-analysis revealed that both low and high self-esteem individuals tend to

9   hold ingroup bias (Aberson, College, Healy, & Romero, 2000). There is also research

10 showing that emotional stability may impact managers' hiring decisions about members of

11 discriminated groups (i.e., comparing native and immigrant job candidates) (Horverak,

12 Sandal, Bye, & Pallesen, 2013). Core self-evaluations as a superordinate construct consisting

13 of self-esteem, self-efficacy, locus of control, and emotional stability can be regarded as the

14 baseline for any self-categorization process. We therefore argue that decision-makers' core

15 self-evaluations can buffer the impact of negative attitudes toward older workers on decision-

16 makers' avoidance tendencies, which in turn determine their actual hiring decisions. To sum

17 up, our fourth hypothesis reads:

18   *H4: Core self-evaluations moderate the relationship between negative attitudes*

19   *toward older workers and avoidance of hiring older people in a way that the positive*

20   *relationship is weaker when core self-evaluations are high (vs. low).*

21

22   **Method**

23 **Design, Sample and Procedure**

24   We used a structured online questionnaire and a vignette study to collect the data.

25 A vignette study was designed to understand to what extent the hiring decisions may be

26 influenced by applicants' age as a proxy for discriminatory behavior. Vignette methodology

1   has been described as a systematic approach in achieving both internal and external validity

2   (Aguinis & Bradley, 2014). In the current study, participants were given a job description for

3   a managerial position vacancy for a fictitious company and were required to choose the best

4   candidate based on their Curriculum Vitae (CV) for this vacancy. Three candidates' CVs were

5   designed to indicate equivalent work experience in a series of pilot studies (see Materials and

6   Piloting below), but the candidates' ages were varied (i.e., 38, 49, and 60 years). Participants

7   were then asked to prioritize CVs for hiring. Whether the participant selected the 60-year old

8   candidate for the vacancy constituted the dependent variable in this study.

9   Potential participants living in the United States were invited to take part using a

10 professional research platform (i.e., Call For Participants), where they were offered gift

11 voucher as compensation for their participation. As with other online crowdsourcing

12 mechanisms (i.e., Amazon's Mechanical Turk), the data obtained can be regarded as reliable

13 as the data collected via traditional methods (Buhrmester, Kwang, & Gosling, 2011).

14 Participants were included if they currently worked in human resource management and had

15 hiring power on their jobs. In other words, our sample contains human resource managers

16 dealing with hiring decisions on a daily basis. Also, we checked the amount of time that

17 participants spent on the task and eliminated participants who spent very little time to

18 complete the study in order to ensure sufficient data quality. In total, 165 participants

19 completed the study across different industries ranging from industrial goods to technology,

20 media and telecommunications. Of these, 51 participants were excluded because they reported

21 to have no hiring power at work. Another 12 participants were excluded because they spent

22 very little time to complete the study. Overall, the final sample consisted of 102 participants

23 of which 64 (62.7%) were male and 87 (85.3%) held a higher education degree. Participants'

24 ages ranged from 22 to 52 years, with a mean age of 36.10 years (SD = 6.64). Of the excluded

25 participants, 35 (55.56%) were male and 48 (76.19 %) held a higher education degree; the

26 percentage of participants did not statistically differ from the percentage of participants in the

1   final sample (sex: χ^2 [1, N = 165] = 0.84, p = .36; education: χ^2 [1, N = 165] = 2.17, p = .14).

2   Further, they were a bit younger compared to participants of the final sample (t[163] = 2.93, p

3   < .01); their ages ranged from 25 to 46 with a mean age of 33.19 years (SD = 5.37).

4   **Materials and Piloting**

5   Following the procedure of Derous, Ryan, and Nguyen (2012), two pilot studies were

6   conducted to ensure the equivalence of the templates used as study material. Three templates

7   were designed so that work experience over the last ten years shown on the CV corresponds

8   to the job description used in the main study. The work experience was matched to the job

9   description based on information available on common job search platforms (e.g., Indeed and

10   Monster). A priori power analysis (calculated in G*Power) revealed a sample size of at least

11   42 participants to detect a small to medium effect (f = .20) for the one-way repeated measures

12   Analysis of Variance (ANOVA) with a test power of 80 %. Participants of the pilot samples

13   were recruited via the same professional research platform (i.e., Call For Participants) used in

14   the main study. The initial pilot sample of 50 participants evaluated the different templates

15   presented according to the job description. Participants have been asked to evaluate the

16   person-job fit with five items on a 7-point Likert-type scale (1 = *not at all* to 7 = *extremely*).

17   One example item was: "Candidate [X] is qualified for this job." One-way repeated measures

18   analysis of variance (ANOVA) revealed significant differences between the three templates

19   (F(1.71, 83.83) = 6.54, p < .01). Post hoc tests were conducted to compare all pairs of

20   templates. Results of pairwise t-tests showed that the templates were slightly different from

21   each other as there were significant differences between one template with the other two

22   (Template 2: M=6.01, SD=.70 and Template 1: M= 6.24, SD=.64, t(49) = 2.01, p < .05;

23   Template 2 and Template 3: M=6.38, SD=.70, t(49) = -3.31, p < .01). Therefore, the

24   templates were revised and tested for a second time. To revise the templates, the work

25   experience presented was again carefully matched to the job description. Further, more

26   attention was paid to small differences in language use. The second pilot sample consisted of

1   42 participants. This time, results of the one-way repeated measures ANOVA did not show

2   significant differences between the templates (Template 1: M= 6.03, SD=.72; Template 2:

3   M=6.02, SD=.83; Template 3: M=6.03, SD=.87, $F(2, 82) = .02$, $p = .98$); these templates were

4   used in the main study.

5   **Measures**

6   **Negative attitudes toward older workers.** Participants' negative attitudes toward

7   older workers were measured by the means of their responses to the negatively framed items

8   of the Beliefs about Older Workers Questionnaire from Hassell and Perrewe (1995).

9   Respondents rated the degree to which they were holding negative beliefs about older people

10   in the work context on a seven-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly

11   agree*). One example item was: "Most older workers cannot keep up with the speed of modern

12   industry." The 15 items yielded a good internal consistency (Cronbach's α =.88) in this study.

13   **Core self-evaluations.** Core self-evaluations were measured by the means of the Core

14   Self-Evaluations Scale (Judge et al., 2003). Respondents rated their endorsement to several

15   statements about themselves on a seven-point scale ranging from 1 (*strongly disagree*) to 7

16   (*strongly agree*). One example item was: "I am confident I get the success I deserve in life."

17   The scale yielded an acceptable internal consistency (Cronbach's α =.71) in this study.

18   **Avoidance of hiring older people.** Avoidance of hiring older people was measured

19   by the means of three items adapted from Hutchison, Fox, Laas, Matharu, and Urzi (2010).

20   Respondents rated the degree they were avoiding to hire older people if they can on a 5-point

21   scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The three items were: "If I had

22   a choice I would rather not hire an older person.", "If I can avoid hiring older people, I do.",

23   and "I would want to avoid hiring an older person." The scale yielded a good internal

24   consistency (Cronbach's α =.81) in this study.

25   **Selection of the oldest candidate.** Selection of the oldest candidate was measured

26   with one item related to the task of prioritizing applicants' CVs for hiring. The responses to

1 this task were coded as a dichotomous variable (i.e., 0 = *not selecting the oldest candidate*; 1

2 = *selecting the oldest candidate*). Because the different CVs were tested for equivalence with

3 regard to applicants' work experience (see Materials and Piloting above), not selecting the

4 oldest candidate serves as a proxy for discriminatory behavior. Of the 102 participants, 25

5 participants (24.5%) ranked the oldest candidate to be the most suitable person for the

6 described job vacancy, which is below the chance level (33.3%) if no discrimination was

7 present.

8 **Control variables.** As the outcome variable may be affected by participants' age, sex,

9 and education, we included these variables as covariates in the analyses. In addition, we

10 controlled for social desirability using a 13-item scale (Reynolds, 1982) to provide a more

11 conservative examination of the hypothesized relationships and to gauge the extent to which

12 our results might be biased by common method bias (Wang, Burlacu, Truxillo, James, & Yao,

13 2015).

14 **Results**

15 **Preliminary Analysis**

16 The descriptive statistics and correlations of all study variables are shown in Table 1.

17 Avoidance of hiring older people was positively correlated with negative attitudes toward

18 older workers ($r = .62, p < .01$) providing initial support for Hypothesis 1. Further, negative

19 attitudes toward older workers were negatively related to participants' age ($r = -.25, p < .05$)

20 and to core self-evaluations ($r = -.27, p < .01$). Correlations with sex, education, and social

21 desirability were weaker and not significant. Selection of the oldest candidate was negatively

22 related to avoidance of hiring older people ($r = -.16, p < .10$), providing initial support for

23 Hypothesis 2. Given the low base rate of selecting the oldest candidate, this relationship can

24 be regarded as quite substantial. Correlations with selection of the oldest candidate were

25 weaker (and not statistically significant) for age, sex, education, social desirability, core self-

26 evaluations, and negative attitudes toward older workers.

1 **Hypothesis Testing**

2   To investigate the hypothesized relationships between negative attitudes toward older

3 workers, core self-evaluations, avoidance of hiring older people, and selecting the oldest

4 candidate, we used path analysis to analyze the data. In Mplus 7.31 (Muthén & Muthén,

5 2015), we applied robust maximum likelihood estimator (MLR) and logistic link function

6 because the dependent variable (i.e., selection of the oldest candidate) was dichotomous in

7 nature (Yuan & Bentler, 2008). We tested our hypotheses by including all variables and

8 hypothesized effects simultaneously in the model. We then compared the partial against the

9 full mediation model (the partial mediation model has a direct effect from negative attitudes

10 toward older workers to the dependent variable). The fit indices for the two models are

11 presented in Table 2. Due to the use of MLR estimator, chi-square based fit indices are not

12 available to evaluate model fit. Therefore, we rely on information criteria (i.e., Akaike

13 Information Criterion [AIC], Bayesian Information Criterion [BIC], and Sample-size

14 Adjusted Bayesian Information Criterion [SABIC]) to determine which model fit to the data

15 better while being parsimonious (Preacher, Cai, & MacCallum, 2007). Lower values of AIC,

16 BIC, and SABIC indicate the most optimal balance between model fit and parsimony. The

17 results indicated that the hypothesized full mediation model had lower values of AIC, BIC,

18 and SABIC as compared to the partial mediation model and can therefore be considered as the

19 most parsimonious and better-fitting model. The estimated path model showing relationships

20 between control variables, negative attitudes toward older workers, core self-evaluations,

21 avoidance of hiring older people, and selecting the oldest candidate is presented in Figure 1.

22 With regard to the control variables, only age was negatively related to avoidance of hiring

23 older people ($\gamma = -.03$, $p < .01$), indicating that older decision-makers reported lower

24 avoidance tendencies toward hiring older people.

25   Hypotheses 1-3 addressed the relationships between negative attitudes toward older

26 workers and selection of the oldest candidate. The path coefficients suggested that negative

1   attitudes toward older workers were positively related to avoidance of hiring older people ($\gamma =$

2   .89, $p < .01$), supporting Hypothesis 1. This indicates that decision-makers, who reported

3   more negative attitudes toward older workers, were more likely to avoid hiring them. In turn,

4   avoidance of hiring older people was negatively related to selecting the oldest candidate ($\gamma = -$

5   .49, $p < .05$, OR $= 0.61$). This result supports Hypothesis 2 and indicates that decision-makers,

6   who reported one-unit higher avoidance tendencies toward hiring older people, were 0.61

7   times less likely to select the oldest candidate in this study. With regard to the relationship

8   between negative attitudes toward older workers and selecting the oldest candidate, the

9   compound coefficient suggested that there was a negative indirect effect via avoidance of

10   hiring older people (*indirect effect* $= -.44$, $p < .05$). This result supports Hypothesis 3 and

11   indicates that there was a negative relationship between negative attitudes toward older

12   workers and selecting the oldest candidate, which is mediated by decision-makers' avoidance

13   of hiring older people.

14   Hypotheses 4 addressed the moderating role of core self-evaluations. The estimated

15   coefficients showed that core self-evaluations moderated the relationship between negative

16   attitudes toward older workers and avoidance of hiring them ($\gamma = -.33$, $p < .05$). Simple slope

17   analysis revealed that the positive relationship was weaker when core self-evaluations were

18   high (*simple slope* $= 0.63$, $z = 3.93$, $p < .01$) than when core self-evaluations were low (*simple*

19   *slope* $= 1.16$, $z = 7.20$, $p < .01$). As can be seen in Figure 2, high (vs. low) core self-

20   evaluations buffered the positive relationship between negative attitudes toward older workers

21   and avoidance of hiring older people, supporting Hypothesis 4.

22   **Discussion**

23   The aim of the current study was to investigate the impact of negative attitudes toward

24   older workers on hiring decisions and to examine the moderating role of decision-makers'

25   core self-evaluations. We tested our hypotheses based on a structured online questionnaire

26   and a vignette study using a sample of 102 decision-makers with hiring power across different

1   industries. Results of the vignette study revealed that only 24.5% of participants ranked the

2   oldest candidate to be the most suitable person for a given job vacancy, which is below the

3   chance level of 33.3%. The selection likelihood can be regarded as a proxy for discriminatory

4   behavior because the three candidates were equally qualified.

5   We found that negative attitudes toward older workers were positively related to

6   avoidance of hiring older people, which in turn was negatively related to the likelihood to

7   select the oldest candidate. Further, the present study revealed an indirect effect of negative

8   attitudes toward older workers and selection likelihood via avoidance of hiring older people.

9   Consistent with the literature on the theory of planned behavior (Ajzen, 1991) and hiring

10 decisions about members of discriminated groups (e.g., Ang et al., 2015; Araten-Bergman,

11 2016; Krings et al., 2011; Lu et al., 2011; Perry et al., 1996), these findings confirm that

12 negative attitudes toward older workers as hiring subjects lead to avoidance tendencies, which

13 in turn result in an actual decision not to hire older people.

14   Moreover, the current study revealed the moderating role of decision-makers' core

15 self-evaluations in hiring decisions about older people. As predicted, we found that core self-

16 evaluations buffered the relationship between negative attitudes toward older workers and

17 avoidance of hiring older people. In line with the literature on self-concept, social identity and

18 hiring decisions (Lewis & Sherman, 2003), this finding highlights decision-makers' core self-

19 evaluations as a relevant mechanism in challenging age discrimination in hiring. As older

20 people can be a threat to younger and middle-aged decision-makers' self-concept, people with

21 low core self-evaluations are particularly susceptible to discriminate against others when

22 holding negative attitudes toward them, whereas people with high self-evaluations are less

23 susceptible to discriminate against others during hiring decisions. Thus, decision-makers'

24 high (vs. low) core self-evaluations can reduce the impact of negative attitudes toward older

25 workers on decision-makers' avoidance tendencies, which in turn determine their actual

26 hiring decisions.

1   **Theoretical and Practical Implications**

2   The findings of the current study extend previous research on hiring decisions about

3   older people and offer relevant theoretical and practical implications. With regard to theory,

4   we extend previous knowledge on age discrimination in hiring by disentangling

5   discriminatory attitudes, intentions, and actual decision-making. Although negative attitudes

6   toward older workers are thought to underlie discriminatory behaviors such as lower hiring

7   rates for equally qualified older (vs. young and middle-aged) job applicants, they have not

8   received much attention in organizational research on hiring bias (Finkelstein & Farrell, 2007;

9   Shore & Goldberg, 2005). Numerous studies have investigated the existence of negative

10 attitudes toward older workers (Posthuma & Campion, 2009) but very few studies show the

11 direct link to hiring decisions and its underlying mechanisms. The present study confirms the

12 previous notion that hiring decisions about older people are intended before the actual

13 decision is made and that this hiring intention (i.e., avoidance vs. approach tendency) is

14 strongly influenced by decision-makers' negative attitudes toward older workers as hiring

15 subject.

16   Moreover, the present study highlights that hiring decisions are not only about finding

17 the most suitable candidate for a certain job vacancy but also about protecting one's self-

18 concept. Most notably, our findings shed light on the moderating role of decision-makers'

19 core self-evaluations. In particular, we reveal that decision-makers' core self-evaluations can

20 buffer the impact of negative attitudes toward older workers on decision-makers' avoidance

21 tendencies, which in turn determine their actual hiring decisions. This supports the previous

22 notion that decision-making is influenced by people's motivation to maximize their positive

23 self-concept (Lewis & Sherman, 2003). In general, people are keen on seeing their ingroup

24 members in the most favorable light possible, whereas outgroup members are perceived as a

25 potential threat to one's self. This potential threat is stronger for people with low (vs. high)

26 core self-evaluations. In hiring, decision-makers with low core self-evaluations are therefore

1   more susceptible to discriminate against older people when holding negative attitudes toward

2   them as compared to decision-makers with high core self-evaluations. Future studies need to

3   replicate our study findings in order to consolidate theoretical implications about the

4   moderating role of decision-makers' core self-evaluations.

5   With regard to practice, the current study contributes to the improvement of diversity

6   management strategies in organizations facilitating age-balanced hiring practices. To begin

7   with, organizations need to tackle the issue of often existing negative attitudes toward older

8   workers. As such, negative attitudes toward older workers should be reduced and positive

9   attitudes toward older workers should be encouraged, for instance, by shaping a positive age

10   climate and an age-friendly organizational culture leading to an appreciation of age diversity

11   at work. Previous research has shown that intergenerational contact may be able to facilitate

12   positive views toward older people at work (Henry, Zacher, & Desmette, 2015; Iweins,

13   Desmette, Yzerbyt, & Stinglhamber, 2013). In the workplace, regular and high quality

14   exchange among decision-makers with different ages may be therefore effective in

15   transforming negative attitudes into positive views toward older workers.

16   Another angle to look at age-balanced hiring practices, is to focus on decision-makers'

17   self-concept. Because hiring decisions are not only about the hiring subject but also about the

18   decision-maker, it is important to ensure that decision-makers carry positive basic conclusions

19   about themselves reducing the risk of being vulnerable for discriminatory mechanisms in

20   hiring. This may be achieved by selecting or promoting decision-makers based on their core

21   self-evaluations. However, Chang et al. (2012) point out that "researchers and practitioners

22   must ascertain whether the use of CSE [core self-evaluations] leads to adverse impact" (p.

23   114), before using such measures for staffing. An alternative may be to train decision-makers'

24   core self-evaluations. Although core self-evaluations are defined as a superordinate construct

25   capturing self-esteem, generalized self-efficacy, locus of control, and emotional stability traits

26   (i.e., stable characteristics), it is almost certain that core self-evaluations are malleable and can

change over time. For instance, research has reported changes in self-esteem (Orth,

Trzesniewski, & Robins, 2010), self-efficacy (e.g., West, Bagwell, & Dark-Freudeman, 2008)

and emotional stability traits (Roberts, Walton, & Viechtbauer, 2006) over time. Thus,

workplace interventions (e.g., personal training and development activities) may be able to

enhance core self-evaluations among decision-makers and in turn support positive

organizational outcomes. Further research is needed to assess the effectiveness of these

interventions and to estimate to what extend core self-evaluations can be changed in the

workplace.

Limitations and Directions for Future Research

Notwithstanding the theoretical and practical implications of our findings, we address

the limitations of this research and highlight directions for future research. First, the cross-

sectional design does not allow for causal inferences. In fact, it is possible that the

relationships between negative attitudes toward older workers, decision-makers' core self-

evaluations and hiring decisions about older people are bi-directional. However, the possible

reverse causation cannot explain the interaction effect between negative attitudes toward older

workers and decision-makers' core self-evaluations on hiring decisions about older people.

Nevertheless, future studies should adopt longitudinal and (quasi-)experimental research

designs to allow for more conclusive findings.

Second, given that our study variables were assessed via self-reported data, common-

method bias could be a concern. However, we controlled for social desirability in our

analyses, which had a rather low correlation with avoidance of hiring older people as mediator

($r = -.17$) and selecting the oldest candidate as outcome variable ($r = -.07$). Also, in our final

path model, social desirability has not been found to significantly predict the mediator or the

outcome variable. This partly reduces the concern for common-method bias, as the

covariation of social desirability and self-reported data represents a rather small systematic

1   error variance explained by the common rating source (Smith & Ellingson, 2002; Wang et al.,

2   2015).

3   Third, the number of vignettes has been limited to three candidates (i.e., aged 38, 49,

4   60 years), which oversimplifies the hiring decision and therefore may reduce external validity.

5   Future research should replicate our study findings using a larger number of vignettes in order

6   to rule out the potential concern for external validity. Future studies can also vary vignettes by

7   using additional person characteristics (e.g., gender, race/ethnicity, social status) to

8   understand the intersectionality of social categorizations as previous research has revealed

9   double jeopardy against applicants having a multiple stigmatized background (Derous et al.,

10   2012). In addition, hiring decisions about older people may depend on the job type. For

11   example, previous research has shown that age-related hiring bias may differ in relation to

12   whether the job role is of low or high status (Abrams, Swift, & Drury, 2016). Varying

13   candidates' profiles as well as investigating different types of jobs can help to understand the

14   complex interplay between job candidate, job type, and decision-maker during hiring

15   decisions.

16   Fourth, the present study has mainly focused on the fit between the candidate and the

17   job. Even if a person is hired because of his or her qualifications with regard to the demands

18   of the job, there is no guarantee that this person will fit to the organization. More recent

19   approaches on hiring decision-making emphasize on the importance of person-organization

20   fit, describing the compatibility between employees and the organization, which has been

21   found to predict relevant work attitudes ($\rho = .31$; including job satisfaction and organizational

22   commitment), job performance ($\rho = .15$; including task performance and contextual

23   performance such as organizational citizenship behavior), and turnover ($\rho = .24$), respectively

24   (Arthur Jr., Bell, Villado, & Doverspike, 2006). Given the importance of these outcome

25   variables, future research should investigate the impact of negative attitudes on the decision-

26   making about hiring older people with regard to the varying organizational contexts. Also, it

1   would be worth investigating how shared negative attitudes in the organization (e.g., age

2   discrimination climate; Kunze, Boehm, & Bruch, 2011) influence older workers'

3   employment-related decisions (e.g., withdrawal and early retirement; Griffin, Bayl-Smith, &

4   Hesketh, 2016; Zaniboni, 2015), as well as to what extent the decision-makers' core self-

5   evaluations can moderate these effects.

6   Moreover, the current study leaves some issues unaddressed and suggests directions

7   for further investigation. As this study was tailored toward the cultural environment of the

8   United States, future research needs to replicate our findings in other countries. Particularly, it

9   is relevant to explore whether the link between negative attitudes toward older workers, core

10   self-evaluations, and hiring decisions about older people are generalizable across different

11   cultures. Recently, North and Fiske's (2015) cross-cultural meta-analysis found relevant

12   differences between Eastern and Western cultures regarding their attitudes toward older

13   people, which may be reflected in hiring decisions. Also, the impact of core self-evaluations

14   on hiring decisions is expected to differ across cultures. Some scholars have stated that

15   people's self-concept should be more influential in individualistic than in collectivistic

16   cultures (e.g., Judge & Hurst, 2008; Markus & Kitayama, 1998), yet, Chang and colleagues'

17   (2012) meta-analytical findings suggest that the relationships between employees' core self-

18   evaluations and different work-related outcomes were stronger for collectivistic (vs.

19   individualistic) cultures. Thus, future research ought to consider cultural differences in

20   understanding the relationships between decision-makers' core self-evaluations, their negative

21   attitudes toward older workers, and decisions about hiring them. In addition, future research

22   could explore different moderators as a means to inhibit age discrimination in hiring, such as

23   decision-makers' age group salience, their motivation to respond without prejudice, and

24   organizational values and norms.

25

26

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1 Table 1

2 *Means, standard deviations, and correlations for all of the variables (N = 100-102)*

Variable	M	SD	1.	2.	3.	4.	5.	6.	7.	8.
1. Age	36.10	6.64	-							
2. Sex (1 = male)	0.63	0.49	.10	-						
3. Education (1 = university degree)	0.85	0.36	-.15	-.03	-					
4. Social desirability sum score	6.95	2.07	.22*	.10	.00	-				
5. Core self-evaluations	4.43	0.78	.23*	.02	.27**	.37**	-			
6. Negative attitudes toward older workers	3.42	0.67	-.10	.10	$.15^{\dagger}$	$-.17^{\dagger}$	-.10	-		
7. Avoidance of hiring older people	3.15	1.00	-.25*	.10	.06	-.14	-.27**	.62**	-	
8. Selection of the oldest candidate (1=yes)	0.25	0.43	-.00	.06	-.02	-.07	-.01	-.05	$-.16^{\dagger}$	-

3 †$p<.10$, *$p < .05$, **$p < .01$.

4

5

6

1   Table 2

2   *Fit indices for structural models (N = 100)*

Model	Loglikelihood	AIC	BIC	SABIC
Mediation model (partial) with interaction	**-160.809**	353.617	395.300	344.768
Mediation model (full) with interaction	-161.001	**352.003**	**391.080**	**343.706**

3   *Note.* Bold entries signify the lowest values in each column, AIC = Akaike Information Criteria, BIC = Bayesian
4   Information Criteria, SABIC = Sample-size Adjusted Bayesian Information Criteria
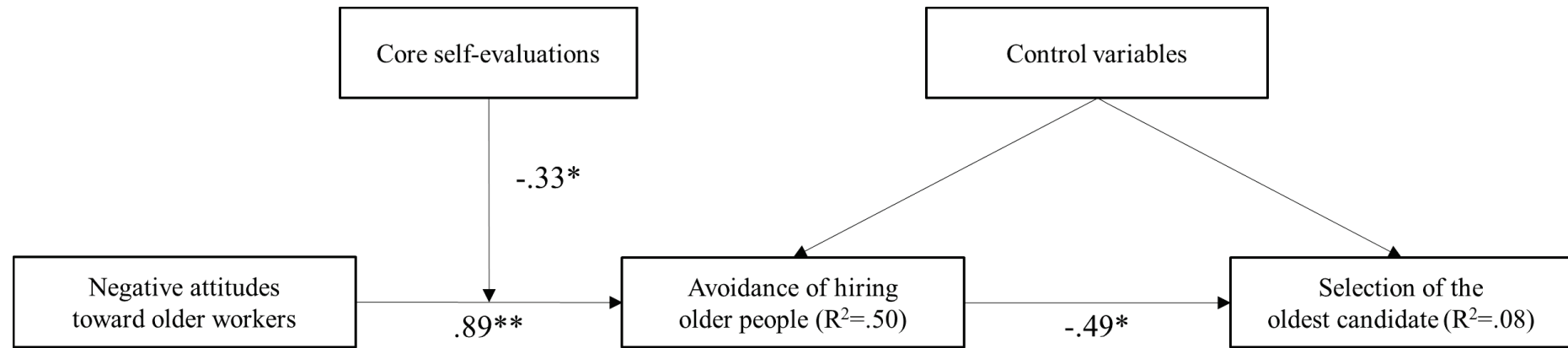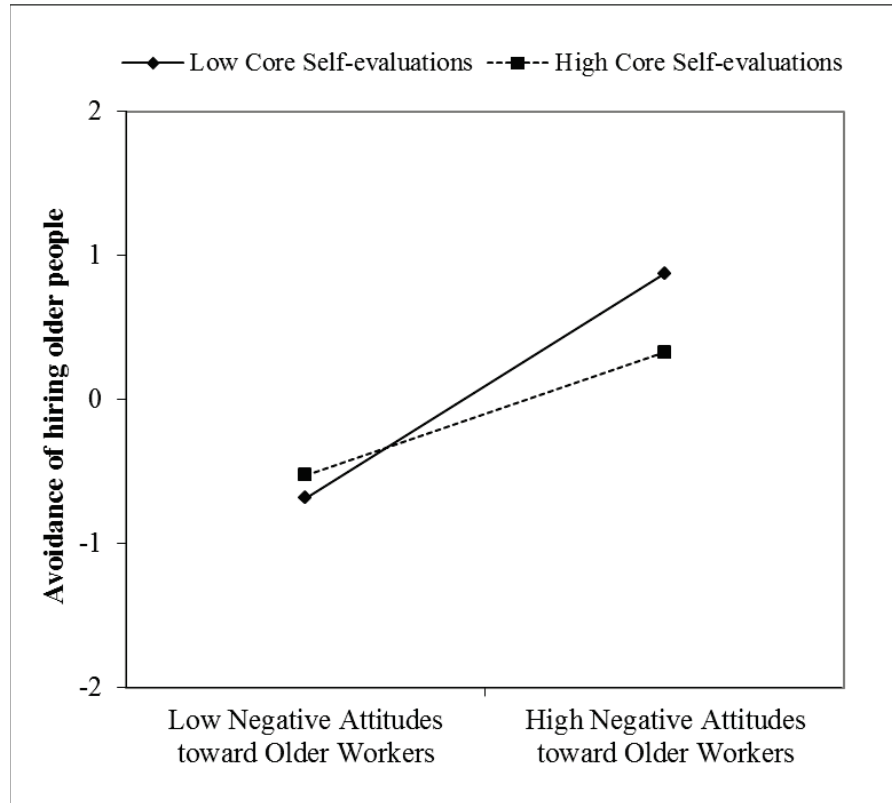5

6

1   Figure 1

2   *Estimated path model showing relationships between negative attitudes toward older workers, core self-evaluations, avoidance of hiring older*

3   *people, and selection of the oldest candidate with unstandardized coefficients (N = 100)*

4   *p<.05, **p<.01.

5

1   Figure 2

2   *Core self-evaluations moderate the relationship between negative attitudes toward older workers and avoidance of hiring older people*

3