

Monograph

Young at heart, old at work? Relations between age, (meta-)stereotypes, self-categorization, and retirement attitudes☆



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ABSTRACT

The aims of this study were to examine how workers' negative age stereotypes (i.e., denying older workers' ability to develop) and negative meta-stereotypes (i.e., beliefs that the majority of colleagues feel negative about older workers) are related to their attitudes towards retirement (i.e., occupational future time perspective and intention to retire), and whether the strength of these relationships is influenced by workers' self-categorization as an "older" person. Results of a study among Dutch taxi drivers provided mixed support for the hypotheses. Negative meta-stereotypes, but not negative age stereotypes, were associated with fewer perceived opportunities until retirement and, in turn, a stronger intention to retire. Self-categorization moderated the relationships between negative age (meta-)stereotypes and occupational future time perspective. However, contrary to expectations, the relations were stronger among workers with a low self-categorization as an older person in comparison with workers with a high self-categorization in this regard. Overall, results highlight the importance of psychosocial processes in the study of retirement intentions and their antecedents.

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Due to the aging of the population across the globe, the age composition of workforces will change dramatically over the next decades. These demographic changes, i.e. graying and dejuvenization of the labor market, will result in new challenges for organizations, including the issue of how to retain older workers active in the workforce (Hertel, Van der Heijden, De Lange, & Deller, 2013). There are already some initiatives that aim to encourage older workers to continue working, and to reduce early retirement (Euwals, De Mooij, & Van Vuuren, 2009; OECD, 2014). However, retirement age has become a more fluid concept (Shultz & Wang, 2011), and therefore the relationship between age-related constructs and workers' retirement attitudes is in need for more empirical research.

The extent to which workers develop retirement attitudes may be dependent on the stereotypical beliefs that people in the organization hold regarding older workers (Finkelstein, Ryan, & King, 2013). Up to now, extant scholarly research found inconsistent results regarding the influence of negative age stereotypes (such as being slow and conservative) on retirement attitudes (Desmette & Gaillard, 2008; Maurer, Barbeite, Weiss, & Lippstreu, 2008; Van der Heijden, De Lange, Demerouti, & Van der Heijde, 2009). To gain

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more insight into these issues, we propose in this article that the relationship between negative age stereotypes and retirement intentions can be explained by workers' occupational future time perspective (FTP; Zacher & Frese, 2009), and by the extent to which workers categorize themselves as younger or older workers (Finkelstein et al., 2013). Occupational FTP is defined as workers' beliefs about how much time they have left until their retirement and how they perceive that time (Zacher & Frese, 2009). Workers with a high occupational FTP perceive many opportunities and goals that they can pursue until their retirement, while workers with a low occupational FTP perceive their future opportunities and goals to be limited.

In this study, we will use social identity theory (Tajfel & Turner, 1979) and self-categorization theory (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987) as guiding theoretical frameworks. Fig. 1 depicts our conceptual model. More specifically, we aim to examine how age (meta-)stereotypes are related to retirement intentions through occupational FTP. Meta-stereotypes refer to the beliefs about the stereotypes held by the members of the 'out-group' as perceived by the in-group. Earlier research by Capowski (1994) suggested that the negative effect of age stereotypes will, through a disillusionment of workers, result in unmotivated behavior at the workplace. Based on Beehr's (1986) model on retirement behavior, we focus on workers' perceived remaining time and opportunities before their retirement (i.e. occupational FTP) as well as their intention to retire, and argue that these are important predictors of actual retirement decisions. We also investigate whether the relations between (meta-)stereotypes, occupational FTP, and retirement intentions are contingent upon self-categorization as an older worker. By testing this model, we contribute to a further understanding of the processes leading up to the development of retirement intentions.

1. Occupational FTP and intention to retire

Beehr (1986), in his review of the retirement literature, postulated that intentions to retire are strongly related to actual retirement. Indeed, this relationship has been supported in many studies (e.g., Feldman, 1994; Feldman & Beehr, 2011; Wang & Shultz, 2010). Because for many workers actual retirement may take place in the distant future, a practical limitation in studying retirement behavior is that employees need to be followed over long periods of time. However, it is highly recommended to investigate their retirement intentions as an important alternative, as they are assumed to determine workers' motivation and their actual retirement behavior (Beehr, 1986; Kooij, Lange, Jansen, & Dijkers, 2008).

Occupational future time perspective is an age-related construct that includes workers' perceptions of their remaining time and opportunities at work (Zacher & Frese, 2009). The concept was derived from the more general notion of future time perspective in the aging and life span developmental literature (Lang & Carstensen, 2002). Future time perspective is a core construct in socioemotional selectivity theory (Carstensen, 2006), which focuses on the motivational consequences of a changing time horizon and hypothesizes that individuals select goals in accordance with their perceptions of the future as being limited or open-ended (Lang & Carstensen, 2002). According to this theory, young people, in general, perceive time as open-ended (holding a 'time since birth' perspective) and are therefore especially motivated by growth or knowledge-related goals (new information or social interactions) that may be useful in the more distant future. In contrast, older people, in general, perceive their remaining time as more limited (holding a 'time till death' perspective) and are therefore more motivated by short-term emotion-related goals, such as deepening their existing relationships. Similar to the 'time till death' perspective, thinking about the timing of one's retirement is an established concept within retirement research (Beehr, 1986; Wang & Shultz, 2010). Socioemotional selectivity theory (Carstensen, 2006; Lang & Carstensen, 2002) may explain why people with a low occupational FTP are more likely to plan to retire early. When people perceive fewer opportunities to achieve their work-related goals in the future, and when they perceive time until retirement as running out, they will be more likely to plan to retire early, as they see no future in their work anymore, and no goals to pursue in their work. Based upon the outline given above, we formulated the following hypothesis:

H1. Higher occupational FTP is related to lower intention to retire.

2. Age-related (meta-)stereotypes and retirement attitudes

2.1. The influence of stereotypes on retirement intentions

Since the review by Beehr (1986), several studies have examined the antecedents of (early) retirement and working after retirement age (e.g., Feldman & Beehr, 2011; Griffin & Hesketh, 2008). The most influential models in this field of research have focused on

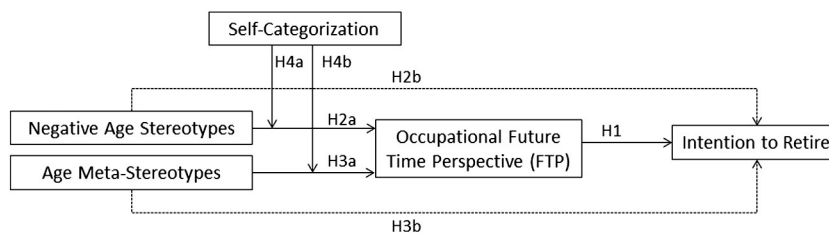


Fig. 1. Conceptual model.

retirement decision-making, and perceived retirement as a (rational) choice to decrease commitment to one's current job, or to leave the workforce as a whole (Wang & Shultz, 2010). However, the intention to retire is also likely to be influenced by psychosocial perceptions, such as age stereotypes (Wang & Shultz, 2010). In line with Maurer et al. (2008), age stereotypes are defined as 'cognitive structures that store beliefs and expectations about the characteristics of older people'. From an evolutionary point of view, stereotypes are useful as they allow us to organize our thoughts by 'placing' people in specific categories (Finkelstein et al., 2013). According to Kunda and Spencer (2003), stereotypes serve two important purposes. First, they enable individuals to make sense of the world without being overwhelmed by the enormous amount of details and nuances they experience in everyday lives. Second, as Fein and Spencer (1997) suggested, stereotypes can be used as a tool for self-enhancement.

Another theory stressing the importance of categorization processes is social identity theory (Tajfel & Turner, 1979). According to this theory, one's personal identity is (partly) defined by the groups one belongs to (i.e., one's in-groups, e.g., younger workers), and while striving to achieve a positive self-image, people tend to hold more positive stereotypes regarding their in-groups compared to their respective out-groups. In a work-related context, younger or older workers may be perceived as in- or out-groups. For example, younger people can perceive themselves as belonging to the category of younger workers, in case the latter constitutes the majority at work, and whose members have more agentic traits in comparison to older people (Gekoski & Knox, 1990). As a result, the minority of older workers may face (negative) stereotypes from their younger counterparts, and may have a hard time deriving a positive self-image from categorizing themselves as belonging to the group of older workers.

In particular, older people are consistently categorized as warm, yet incompetent people (Cuddy & Fiske, 2002; Cuddy, Norton, & Fiske, 2005). These stereotypes are also found in the workplace, where older workers are perceived as less competent and less motivated to learn new things when compared to their younger counterparts (Desmette & Gaillard, 2008). However, these perceptions seem to be in contrast with their actual performance (Ng & Feldman, 2008). Furthermore, Van der Heijden et al. (2009) found that older workers face biased perceptions from their supervisors regarding their level of employability, which appeared to have important consequences for their chances for career success. Hence, especially with regards to development and learning, stereotypes towards older workers are prevalent in the workplace (Maurer et al., 2008; Posthuma & Campion, 2009). Moreover, Maurer et al. (2008) found a negative association between older workers' beliefs about the ability to develop themselves and their intention to retire. Consequently, these negative age-related stereotypes may negatively impact the retirement intentions of workers.

More specifically, negative stereotypes may have a detrimental effect on the stereotyped person when placed in a situation in which this person may confirm these stereotypes. For example, when primed with negative stereotypes towards their own age group, older people showed a decrease in memory performance and higher cardiovascular stress (Levy, Slade, Kunkel, & Kasl, 2002; Stein, Blanchard-Fields, & Hertzog, 2002). In a similar vein, Geller and Stroh (2004) argued that negative development ability stereotypes play a central role in predicting a declining motivation, and, eventually, the retirement of older workers. They advocated that the 'self-fulfilling prophecy' of the belief in stereotypes comprises an indirect effect of stereotypes implying that people come to understand what is expected from them by looking for cues and role definitions provided by others.

In the work context, internalized stereotypes are also prone to negatively affect older workers' intentions; for example, their willingness to take on challenging work assignments may decrease, and their intention to retire may increase (Finkelstein et al., 2013). Hence, it is likely that these negative age stereotypes are negatively related to occupational FTP, and subsequently to retirement intentions. Specifically, when workers hold negative age stereotypes, they will be more likely to perceive fewer work-related opportunities in the future, since they become disillusioned about future possibilities for older workers (see also Capowski, 1994). Moreover, this lower occupational FTP will result in a higher intention to retire, and hence, we expect a mediating effect as well. Therefore, Hypothesis 2 is formulated as follows:

H2a. Higher extent of negative age stereotypes is related to lower occupational FTP.

H2b. Occupational FTP mediates the relationship between negative age stereotypes and the intention to retire.

2.2. Meta-stereotypes

Besides negative age stereotypes, workers can also hold negative age-based meta-stereotypes (Finkelstein et al., 2013). Perspective taking is generally accepted to be a constructive way of perceiving the world. However, when combined with knowledge about prominent stereotypes on certain groups, perspective taking can also have a distorting effect on attitudes and behavior (Vorauer, Martens, & Sasaki, 2009). If a person thinks that another person will perceive him or her in terms of negative stereotypes, then taking the other's perspective can overshadow a possible constructive interaction. The assumed underlying construct in this regard is called meta-stereotypes and involves the beliefs people expect other people to have (Vorauer et al., 2009). Hence, meta-stereotypes concern the beliefs about the stereotypes held by the members of the 'out-group' as perceived by the in-group.

Theories on inter-group relations (Hornsey & Hogg, 2000) reveal that when faced with an inter-group context where us versus them (e.g., younger versus older workers) distinctions are salient, people will internalize the stereotypes that others have of a particular group (such as negative stereotypes of others in the organization towards older workers; Gordijn, 2002). As meta-stereotypes imply an activation of the group context (one has to think about what members of the out-group think about the in-group of older workers), workers will more likely adjust their behavior towards the negative meta-stereotype ('younger workers think that older workers should retire early'), and will therefore report a more constrained occupational FTP, and consequently a higher intention to retire. Based on the above, Hypothesis 3 is formulated as follows:

H3a. Higher extent of negative age meta-stereotypes is related to lower occupational FTP.

H3b. Occupational FTP mediates the relationship between negative age meta-stereotypes and the intention to retire.

3. The effects of self-categorization as an older worker

Finally, workers are not only categorized by others in terms of their age, but they also categorize themselves in terms of being more or less “young” or “old”. Importantly, the extent to which workers categorize themselves as being part of the group of older workers, may influence the extent to which they are prone to be affected by age stereotypes. In fact, we assume that this self-categorization process is crucial for the aforementioned relationships between negative age-related (meta-)stereotypes and retirement attitudes. This assumption is based on self-categorization theory (Turner et al., 1987), which proposes that the accessibility of a particular stereotype, and its fit with a particular situation, will determine which of these identities becomes more salient in a particular situation (Haslam, Oakes, Reynolds, & Turner, 1999). The more a certain (meta-)stereotype is salient, the more likely that people will see themselves, to a large extent, in terms of the respective social group, and its associated characteristics. This means that the specific group’s identity will largely describe what the identity of its members is, and will also prescribe what attitudes, and behaviors they should have in a given situation (Hornsey, 2008). For example, when an older worker believes that the prototypical behavior of older people is to retire early, and when this person identifies strongly with the group of older workers, there is a greater likelihood that he or she will retire early as well. Hence, self-categorization as older worker should strengthen the assumed relationship between age-related (meta-)stereotypes and occupational FTP. Hence, H4 is formulated as follows:

H4. Self-categorization as older worker moderates the relationships of (a) negative age stereotypes and (b) age meta-stereotypes with occupational FTP, with stronger negative relationships among workers with high compared to low self-categorization as older worker.

4. Method

4.1. Participants and procedure

Many studies on careers and retirement have been conducted in North-America (Boyacigiller & Adler, 1991). To add to this literature, we focus on a less often studied population of taxi drivers in The Netherlands, as this sample is somewhat different, yet very relevant, for the understanding of retirement dynamics. Taxi drivers, even though they have regular contact with colleagues, also conduct much of their work alone, which gives the opportunity to distinguish their own stereotypes from meta-stereotypes (or the beliefs attributed to colleagues). The retirement eligibility for taxi drivers is generalizable to many other sectors in The Netherlands, with an official retirement age of 67. The collective labor agreements, however, allow employees to retire at 62 (CLA Taxi, 2014). This is generalizable to the Dutch context (CBS Centraal Bureau voor de statistiek, 2014). Further, depending on personal savings plans or financial decisions, employees can make a personalized choice for when they actually retire.

A questionnaire was distributed among 1012 taxi drivers in five different cities employed by a major Dutch transport company. We consulted the participating company and made sure that the overall questionnaire length did not exceed 30 min of completion time. We therefore used shortened scales for some of the measures. 168 employees completed the questionnaire (response rate of 16.7%). Their ages ranged from 21 to 70 years, with a mean age of 54.8 ($SD = 9.0$). The average age in this sample is very close to what Ashbaugh and Fay (1987) found to be the average age in research on ‘older workers’ (53.4 years). 70.8% were male [compared to 59% in the entire Dutch working population (CBS Centraal Bureau voor de statistiek, 2014)]. Furthermore, the participating women were significantly younger compared to the men ($M_{age\ women} = 48.9$; $SD_{age\ women} = 8.54$, versus $M_{age\ men} = 57.18$; $SD_{age\ men} = 8.08$; $t = 5.80$, $p < .001$). Despite the low response rate, our sample can be considered representative for the entire population of the organization, who show similar demographic statistics (e.g., 65.3% men, and 47.5% aged 55 or older). Generally, the taxi drivers have permanent contracts (64%), and therefore relative high job security, even though the taxi industry has also been affected by the global crisis.

4.2. Measures

4.2.1. Negative age stereotypes

Eight items were selected from the original 12-item scale from Maurer et al. (2008; $\alpha = .83$). A group of five expert scholars was formed to choose the most appropriate items in the scale, in consultation with the participating organization. For instance, the item “If an older worker participated in a work-related workshop or seminar, he/she would probably not be able to learn much from it” was deleted from the measure, as workshops and seminars are somewhat uncommon for the workers in our sample. An example item is “Older workers have a hard time learning new skills”. Response categories ranged from 1 = ‘totally agree’ to 5 = ‘totally disagree’. The measure of *negative age meta-stereotypes* ($\alpha = .76$) was based on original meta-stereotype items developed by Gordijn and Boven (2009). Gordijn and Boven (2009) developed a scale measuring meta-stereotypes of HIV-patients; i.e., what these patients thought how other people would stereotype them. We constructed a meta-stereotype towards older workers scale, replacing HIV with older workers, and further adapting the items to accurately reflect stereotypes towards older workers. These were selected from a previous study on age stereotypes

(Spears, Gordijn, Dijksterhuis, & Stapel, 2004). The scale included six (negatively worded) items, an example item being: “I believe the majority of my colleagues feel negative about older workers” (1 = ‘totally agree’ to 5 = ‘totally disagree’).

4.2.2. Occupational FTP

Occupational FTP ($\alpha = .80$) was measured using an adapted version of the future time perspective scale (Carstensen & Lang, 1996; Lang & Carstensen, 2002). To reflect a future time perspective in relation to work and retirement, we changed the words ‘in the future’, with ‘until my retirement’, and added ‘in my work’ to reflect the context of work. Previous research has demonstrated the reliability and validity of this measure (Zacher & Frese, 2009). The three items are: “I expect to set a lot of new work goals before my retirement”, “I feel I have a lot of time left till retirement”, and “Before my retirement, I can do anything I want to do in my job.” (1 = ‘absolutely not’ to 7 = ‘absolutely’).

4.2.3. Self-categorization

Self-categorization was determined using pictorial measures that measure self-in-group categorization as suggested by Schubert and Otten (2002). This measure consists of a line with two different circles, a smaller one representing the self, and a larger one representing the group. Participants to the study were asked to rate themselves using the pictorial measure as how they perceived themselves in relation to older people. The responses were rated on a 7-point scale (1 = furthest away; 7 = closest to group of older workers). The self-in-group measure was chosen as it prevents group members confusing the identification with the group as a whole with a personal identification with some of the group members, by presenting the group as a single entity (Schubert & Otten, 2002). Schubert and Otten (2002) provided support for the validity of this measure.

4.2.4. Intention to retire

Intention to retire ($\alpha = .84$) was measured using four items. The literature distinguishes between measures of motivation to continue working (e.g., Armstrong-Stassen & Ursel, 2009; Bal, De Jong, Jansen, & Bakker, 2012), and measures of early retirement intentions. While there is a conceptual difference between the motivation to continue working after the retirement age and the intention to retire early, we focused on measuring early retirement intentions. We therefore adapted existing scales of Armstrong-Stassen and Ursel (2009) and Gaillard and Desmette (2008). The items were rated on a seven-point scale, ranging from 1 = ‘totally disagree’ to 7 = ‘totally agree’. An example item was: “I would like to stop working as soon as possible”.

4.2.5. Control variables

Gender, age, education, perceived health, and job autonomy were included as control variables, as they have been related to early retirement (Beehr, 1986). *Perceived health* was measured with one item: ‘How would you generally describe your health?’ (1 = ‘bad’ to 5 = ‘excellent’). Furthermore, *job autonomy* ($\alpha = .72$) was measured using a three item-scale from Schreurs and Taris (1998). An example item was: “My job allows me to make many decisions on my own”, 1 = ‘strongly disagree’, 4 = ‘strongly agree’.

4.3. Statistical analysis

4.3.1. Measurement models

We conducted an exploratory factor analysis on the scales under study (negative age stereotypes, meta-stereotypes, occupational FTP, intention to retire, and job autonomy), producing five factors, with all items loading their respective factors. Subsequently, measurement models including all multi-item scales were tested by means of confirmatory factor analyses (CFA with Lisrel 8.80; Jöreskog & Sörbom, 2008). Established goodness-of-fit indices were used (Hu & Bentler, 1999). A five-factor model reached an acceptable fit ($\chi^2 = 455.28, p < .001; df = 232; RMSEA = .076; SRMR = .067; NNFI = .89; CFI = .91; IFI = .91$). All of the items loaded higher than .40 on their respective scales, and there was no indication of cross-loading of items on other factors. This model fitted significantly better than a one-factor model with all of the items loading on one factor ($\Delta\chi^2 = 1009.73, p < .001; \Delta df = 10$).

Table 1

Means, standard deviations, reliabilities, and correlations of the study variables.

Variable	M	SD	1	2	3	4	5	6	7	8	9	10
1. Age	54.76	9.02	–									
2. Gender	0.71	–	.42**	–								
3. Education	2.07	0.69	.21**	.26**	–							
4. Subjective health	3.15	0.73	–.10	–.03	.09	–						
5. Self-categorization	3.76	1.99	.34**	.23**	.11	–.01	–					
6. Negative age stereotypes	2.52	0.66	–.16*	–.05	–.17*	–.08	–.04	(.83)				
7. Meta-stereotypes	2.49	0.67	–.09	–.04	–.05	.03	.12	.48**	(.76)			
8. Job autonomy	2.95	0.63	–.17*	–.07	–.01	.03	.05	–.08	–.23**	(.72)		
9. Occupational FTP	2.82	1.04	–.47**	–.18*	–.07	.09	–.26**	–.13	–.26**	.24**	(.80)	
10. Intention to retire	2.55	1.00	–.13	–.08	–.22**	–.05	.01	.24**	.28**	–.15	–.19*	(.84)

Note. $N = 168$. Gender: 0 = female, 1 = male. FTP = future time perspective. Reliabilities (α), where available, are reported in parentheses along the diagonal.

* $p < .05$.

** $p < .01$.

Bootstrapped moderated mediation analyses were conducted to test the hypotheses, using 5000 bootstraps (Hayes, 2013). The independent variables were centered to avoid multicollinearity (Aiken & West, 1991). This allowed us to test the complete model at once for each independent variable, while maintaining sufficient statistical power to obtain robust results (Hayes, 2013). We ran different models for negative age stereotypes and for meta-stereotypes, while in each analysis controlling for the other independent variable. Significant interactions were plotted using simple slope analysis and we calculated slopes one SD below and one SD above the mean for self-categorization (Aiken & West, 1991). We also included interactions of age with the independent variables, to rule out alternative explanations of age rather than self-categorization as an older person moderating the relations.

5. Results

Table 1 shows the descriptive statistics and correlations of the variables under study. Age was positively related to self-categorization ($r = .34, p < .01$), indicating that older workers were more likely to categorize themselves as older people. Moreover, age and self-categorization were negatively related to occupational FTP ($r = -.47$ and $r = -.26, p < .01$), indicating lower occupational FTP among older workers and among those with high self-categorization as an older worker.

H1 predicted that higher occupational FTP was related to lower intention to retire. Table 2 shows the results of the bootstrap regression analyses for negative age stereotypes, and shows that the relation was indeed negative ($B = -.2325, p < .01$), supporting H1. H2a and H2b predicted that occupational FTP mediated the relationship between negative age stereotypes and intention to retire. Negative age stereotypes were unrelated to both occupational FTP ($B = -.1274, ns$) and intention to retire ($B = .1254, ns$). The indirect effect of negative age stereotypes on intention to retire was non-significant ($B = .0296, ns$). Therefore, both H2a and H2b were rejected. H3a and H3b predicted that occupational FTP mediated the relation between negative age meta-stereotypes and intention to retire. Table 3 shows the results for the bootstrap analyses for negative age meta-stereotypes. Higher age meta-stereotypes were related to lower occupational FTP ($B = -.3847, p < .01$), supporting H3a. Meta-stereotypes were unrelated to intention to retire ($B = .1816, ns$). Hence, H3b was rejected, as we did not find a significant mediation effect. However, the indirect effect of meta-stereotypes on intention to retire via occupational FTP was positive ($B = .0824$, confidence interval: .0140–.2149).

H4a predicted an interaction between age stereotypes and self-categorization in relation to occupational FTP. The interaction significantly predicted occupational FTP ($B = .1278, p < .05$). Fig. 2 shows the interaction pattern. The relationship was negative for workers with low self-categorization ($B = -.3816, p < .05$) and non-significant for workers with high self-categorization ($B = .1267, ns$). The indirect effect of age stereotypes on intention to retire via occupational FTP was positive ($B = .0887$, confidence interval: .0114–.2346). Hence, for workers with a low self-categorization, negative age stereotypes were related to lower occupational FTP through which intention to retire was higher. This rejects H4a. H4b predicted that self-categorization moderates the relation between meta-stereotypes and occupational FTP. The interaction was also significantly related to occupational FTP ($B = .1088, p < .05$). Fig. 3 shows that the relation between meta-stereotypes and occupational FTP was strongly negative for workers with low self-categorization ($B = -.4935, p < .001$), while not significant for the workers with high self-categorization ($B = -.2759, ns$). The indirect effect of meta-stereotypes on intention to retire via occupational FTP was positive ($B = .1288$, confidence interval: .0202–.3264). Thus, for low self-categorization workers, meta-stereotypes were related to lower occupational FTP through which intention to retire was

Table 2
Bootstrapped regression analyses predicting occupational FTP and intention to retire.

	Occupational FTP		Intention to retire	
	B	SE	B	SE
<i>Control variables</i>				
Gender	.0932	.1666	.0202	.1807
Education	.0167	.1026	-.2528*	.1111
Subjective health	.0636	.09354	-.0335	.1015
Job autonomy	.1745	.1118	-.1448	.1221
Meta-stereotypes	-.3370**	.1203	.1557	.1344
Age	-.0569***	.0094	-.0237	.0113
<i>Independent variables</i>				
Age stereotypes (AS)	-.1274	.1188	.1254	.1292
Self-categorization (SC)	-.0413	.0371	.0187	.0404
<i>Interactions</i>				
AS * SC	.1278*	.0555	.0985	.0611
AS * Age	-.0015	.0133	-.0087	.0145
<i>Mediator</i>				
Occupational FTP			-.2325**	.0865
F	8.76***		3.33***	
R ²	.36		.19	

Note. $N = 168$. FTP = future time perspective. Unstandardized coefficients (B) and standard errors (SE) are reported. For bootstrapping, 5000 resamples were requested.

* $p < .05$.

** $p < .01$.

*** $p < .001$.

Table 3

Bootstrapped regression analyses predicting occupational FTP and intention to retire.

	Occupational FTP		Intention to retire	
	B	SE	B	SE
<i>Control variables</i>				
Gender	.0820	.1679	.0032	.1827
Education	.0069	.1028	−.2575*	.1118
Subjective health	.0371	.0940	−.0427	.1023
Job autonomy	.1760	.1123	−.1478	.1231
Age stereotypes	−.1415	.1197	.1226	.1308
Age	−.0545***	.0092	−.0212	.0110
<i>Independent variables</i>				
Meta-stereotypes (MS)	−.3847**	.1209	.1816	.1357
Self-categorization (SC)	−.0426	.0372	.0143	.0406
<i>Interactions</i>				
MS * SC	.1088*	.0525	.0206	.0579
MS * Age	−.0097	.0131	−.0084	.0142
<i>Mediator</i>				
Occupational FTP			−.2142*	.0868
F	8.58***		3.08***	
R ²	.35		.18	

Note. $N = 168$. FTP = future time perspective. Unstandardized coefficients (B) and standard errors (SE) are reported. For bootstrapping, 5000 resamples were requested.

* $p < .05$.

** $p < .01$.

*** $p < .001$.

higher. This rejects H4b as well. For both moderated regression analyses, we included an interaction between age and age (meta-)stereotypes, both of which were unrelated to occupational FTP (age stereotypes: $B = -.0015$, ns ; meta-stereotypes: $B = -.0097$, ns). Hence, we can conclude that it was self-categorization and not age that moderated the relationships.

6. Discussion

This study is the very first one to examine relations between negative age stereotypes, age meta-stereotypes, and self-categorization processes in relation to retirement attitudes (i.e., occupational FTP and retirement intention). First, our results reveal that in particular negative age meta-stereotypes about older workers were related to occupational FTP and, subsequently, retirement intentions. Moreover, our results revealed interaction effects of self-categorization in the relationships of age stereotypes and meta-stereotypes with occupational FTP. In contrast to expectations, low categorization as an older worker enhanced the negative effects of age (meta-)stereotypes in relation to occupational FTP, which subsequently related to higher retirement intention. According to person–environment fit literature (Edwards, 2008), a *misfit* between one's personal identity (e.g., low categorization as an older worker) and one's work resulting from negative stereotypes may be associated with a higher retirement intention. When one does not identify as being part of the group of older workers, age (meta-)stereotypes impede one's self-categorization because they run counter

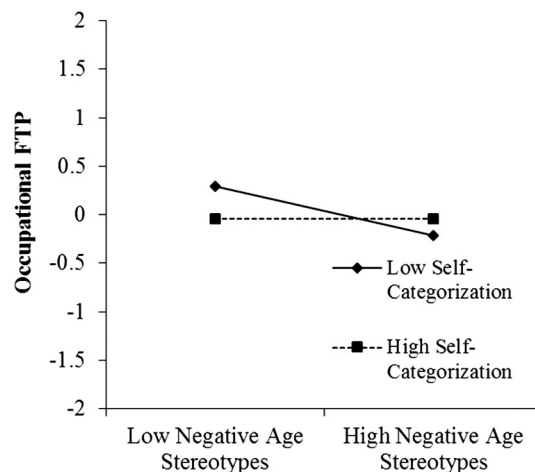


Fig. 2. Interaction between age stereotypes and self-categorization in relation to occupational future time perspective (FTP).

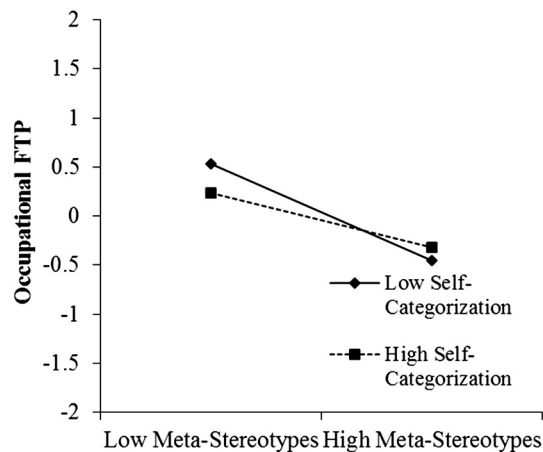


Fig. 3. Interaction between meta-stereotypes and self-categorization in relation to occupational future time perspective (FTP).

to the beliefs one has about the self-identity. Hence, workers will be more likely to be affected by stereotypes when they contradict their own identity as not being part of the group of older workers. Workers, however, who classify themselves as old, due to a self-fulfilling prophecy effect, will likely have a lower occupational FTP and higher retirement intentions (Kooij et al., 2008). Negative stereotypes about older workers will merely confirm their self-identity as being an older worker looking forward to retirement, and hence relations between negative age (meta-)stereotypes and occupational FTP will be weaker.

The results did not show significant relations between age stereotypes with occupational FTP and retirement intentions. A potential explanation for these findings may be that having negative stereotypes about older workers does not necessarily impact workers' retirement attitudes, as they might not apply these stereotypes to themselves in particular, yet, rather to their older counterparts. However, they only become manifest indeed when one has these stereotypical beliefs *and* one feels old and therefore applies them to oneself, or in case one holds them and feels rather young. We found similar results for meta-stereotypes, that is to say, neither a significant direct effect on intention to retire nor a mediation effect was found, while they appeared to be directly related to lower occupational FTP. Moreover, self-categorization moderated the relations of both age stereotypes and age meta-stereotypes in a similar way.

6.1. Theoretical implications

The results have several theoretical implications. First, the study shows that occupational FTP was negatively associated with calendar age, and thereby proving to be a useful variable when testing lifespan theories considering retirement. While lifespan studies have mainly focused on adjustment in the change from work to retirement (Wang & Shultz, 2010), the influence of the decreasing time perspective until retirement has additional value in studies dealing with one's occupational lifespan (Schwall, 2012; Zacher & Frese, 2009). This study further showed that negative age stereotypes are related to early retirement intentions. Our results suggest that people are negatively affected by internalized negative stereotypes, which is positively related to higher intention to retire (Greller & Stroh, 2004), but this effect may be especially applicable to workers who report a low identification with the group of older workers. As a result, the perceived negative age stereotype in the workplace may be perceived by these "young at heart" workers as a person-environment misfit (Edwards, 2008) to which these workers respond with a stronger detrimental effect regarding their occupational FTP. Consequently, they may perceive fewer opportunities in their work-related future, and may retire earlier. A similar negative relation was found between age meta-stereotypes and occupational FTP, and stronger effects were found for the meta-stereotypes in relation to occupational FTP when workers reported a low categorization.

Furthermore, negative relations were found between age stereotypes and meta-stereotypes and occupational FTP. This relation is in line with, and can be further explained by, socioemotional selectivity theory (e.g., Carstensen, 2006), which poses that balancing emotional states is prioritized over future-oriented goals, when one perceives time as ending, that is, when experiencing a limited time perspective. Under these circumstances, one will start to value the importance of one's social surroundings higher, when compared to open-ended goals, like developing oneself (Carstensen, Fung, & Charles, 2003). Socioemotional selectivity theory may therefore explain the strong relations of age (meta-)stereotypes with occupational FTP.

Our study further revealed meaningful stronger effects among workers who do not categorize themselves as old. These results are in line with self-categorization theory by Turner et al. (1987), which posits that people strive to maintain a positive self-image. When employees who categorize themselves as being younger are faced with negative stereotypes, they may experience a misfit between their personal identity and their work (Edwards, 2008). Research has shown that self-categorization may have negative effects especially when expectations about decline with age are present (Haslam et al., 2012). Age (meta-)stereotypes create such expectations, through which those who still feel "young at heart" are additionally affected by these stereotypical beliefs. Stereotypes cause a threat to one's self-image, causing people to compensate through incorporating limited views of their occupational FTP (Tajfel & Turner, 1979).

6.2. Limitations

With respect to the role of self-categorization, our results reveal a similar pattern as found in earlier research by Desmette and Gaillard (2008). This suggests that the pictorial scale of self-categorization is an adequate measure. However, the measure does not differentiate between the different components of identification (e.g., cognitive versus emotional identification), but only reveals the extent to which people perceive themselves as being part of a certain group. Therefore, we advocate to supplement this scale by other measures of identification (especially tapping into the emotional significance of group membership).

Furthermore, because our group of participants consisted of taxi drivers, our results cannot merely be generalized. Moreover, our sample size and the response rate were relatively small, and therefore, more empirical work is needed to more safely conclude about the generalizability of our study. It might be that only the more reflective taxi drivers may have responded to the questionnaire, and these workers may be more or less prone to stereotyping (Haslam et al., 2012; Reynolds, 2010). Moreover, while taxi driving involves much more time spent with clients than with colleagues, there is evidence that interactions with clients provides an important way for taxi drivers to maintain their health and well-being (Facey, 2010). Further, men were overrepresented in the current study, and the relations may differ in contexts where more women are working (Bal et al., 2012). Moreover, the emergence and the impact of negative stereotypes may differ greatly among sectors. Future research can therefore examine whether our results can be replicated using samples in other sectors and more representative samples.

Another possible limitation is the use of self-report measures which might have resulted in common-method bias. The issue of common-method variance is less pertinent to studies that focus on moderated relationships as being the case in the current study (Siemsen, Roth, & Oliveira, 2010). Specifically, Siemsen et al. (2010) showed that common-method variance actually makes it more difficult to detect statistically significant interactions, thus yielding more conservative tests of interaction models. In addition, results of a confirmatory factor analysis suggest that the measures had sufficient discriminant validity. Finally, the study was based on a cross-sectional design, which implies that causal inferences cannot be made. Further research using longitudinal approaches is needed to shed more light on the directions of the relationships under study.

6.3. Suggestions for further research

The present study suggests that people are increasingly influenced by meta-stereotypes when aging, herewith supporting the assumed importance of the aforementioned socio-emotional selectivity theory (Carstensen et al., 2003) in one's occupational life. However, more research is needed to further validate these ideas. Apart from the focus upon the cognitive component, stereotype research could also include the affective component (prejudice), and the behavioral component (i.e., discrimination; Cuddy & Fiske, 2002). This would also enable scholars to test whether the effect of negativity, the affective component as posed by Desmette and Gaillard (2008), is more influential in case one measures more specific cognitive elements of age attitudes. Moreover, social identity theory is used in this paper to understand how older workers develop retirement attitudes based upon perceptions of stereotypes in the workplace. Future research could further disentangle the role of identity processes in perceptions towards retirement, and the role of identity development during later phases of the career (Haslam et al., 2012). For instance, a narrative approach to researching the ways taxi drivers make sense of the retirement process may further elucidate the dynamics of how stereotyping may affect retirement attitudes and intentions. Finally, a longitudinal design might have additional value when testing the direction of causality between the model variables, and for examining important new psychosocial developmental processes of retirement across time (Kooij, Bal, & Kanfer, 2014; Shultz & Wang, 2011). For instance, the time one has been active in a particular sector or industry (e.g., how long one has been a taxi driver) may also determine the extent to which one is susceptible to stereotyping.

6.4. Practical implications

Because this research shows that both negative age stereotypes and negative age *meta*-stereotypes influence occupational FTP and retirement intentions, we propose that both types of stereotypes towards the older workers need to be addressed. The study shows that retirement intentions may not only result from the interaction of negative stereotypes and one's own perceptions of being an older worker, but also the extent to which one perceives that others have stereotypes about them as being an older worker. As the need for continuing working after the retirement age increases (Bal et al., 2012), organizations also need to ensure that workers are motivated to do so, and should aim to create an organizational climate where age stereotypes and meta-stereotypes are addressed, and where cohesion among coworkers arises from positive interactions between younger and older workers. To ensure positive effects, contact with older workers should be based on perceptions of an equal status, with institutional support, involving cooperation, and allowing for the development of close relationships (Allport, 1954). Finally, while managers should generally discourage age categorization at work, a special approach seems warranted for those employees who experience a misfit between their chronological age and their self-categorization, as in particular for this category of workers, negative consequences in terms of retirement attitudes are highly prevalent. In times wherein retaining aging workers in the workforce is of utmost importance, managers will gain honor by tailor-made HR practices taking into account psychosocial processes such as stereotyping and individual workers' attitudes towards retirement (Bal et al., 2012).

References

- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. CA: Sage: Thousand Oaks.

- Allport, G. W. (1954). *The nature of prejudice*. Cambridge, MA: Perseus Books.
- Armstrong-Stassen, M., & Urseel, N. D. (2009). Perceived organizational support, career satisfaction, and the retention of older workers. *Journal of Occupational and Organizational Psychology*, 82(1), 201–220.
- Ashbaugh, D. L., & Fay, C. H. (1987). The threshold for aging in the workplace. *Research on Aging*, 9, 417–427.
- Bal, P. M., De Jong, S. B., Jansen, P. G. W., & Bakker, A. B. (2012). Motivating employees to work beyond retirement: A multi-level study of the role of I-deals and unit climate. *Journal of Management Studies*, 49, 306–331.
- Beehr, T. A. (1986). The process of retirement: A review and recommendations for future investigation. *Personnel Psychology*, 39, 31–55.
- Boyacigiller, N. A., & Adler, N. J. (1991). The parochial dinosaur: Organizational science in a global context. *Academy of Management Review*, 16, 262–290.
- Capowski, G. (1994). Ageism: The new diversity issue. *Management Review*, 83, 10–15.
- Carstensen, L. L. (2006). The influence of a sense of time on human development. *Science*, 312, 1913–1915.
- Carstensen, L. L., & Lang, F. R. (1996). *Future time perspective scale*. Stanford University.
- Carstensen, L. L., Fung, H. H., & Charles, S. T. (2003). Socioemotional selectivity theory and the regulation of emotion in the second half of life. *Motivation and Emotion*, 27, 103–123.
- CBS Centraal Bureau voor de statistiek (2014). <http://www.cbs.nl>
- CLA Taxi (2014). http://www.sociaalfondstaxi.nl/sociaalfondstaxi/download/cao/cao-boekje_2014-2015.pdf
- Cuddy, A. J. C., & Fiske, S. T. (2002). Doddering but dear: Process, content, and function in stereotyping of older persons. In T. D. Nelson (Ed.), *Ageism: Stereotyping and prejudice against older persons* (pp. 3–26). Cambridge, MA: MIT Press.
- Cuddy, A. J. C., Norton, M. I., & Fiske, S. T. (2005). This old stereotype: The pervasiveness and persistence of the elderly stereotype. *Journal of Social Issues*, 61, 267–285.
- Desmette, D., & Gaillard, M. (2008). When a “worker” becomes an “older worker”: The effects of age-related social identity on attitudes towards retirement and work. *Career Development International*, 13, 168–185.
- Edwards, J. R. (2008). Person-environment fit in organizations: An assessment of theoretical progress. *Academy of Management Annals*, 2, 167–230.
- Euwals, R., De Mooij, R., & Van Vuuren, D. (2009). *Rethinking retirement*. The Hague: CPB Report.
- Facey, M. (2010). ‘Maintaining Talk’ among taxi drivers: Accomplishing health-protective behaviour in precarious workplaces. *Health & Place*, 16, 1259–1267.
- Fein, S., & Spencer, S. J. (1997). Prejudice as self-image maintenance: affirming the self through derogating others. *Journal of Personality and Social Psychology*, 73, 31–44.
- Feldman, D. C. (1994). *The decision to retire early: A review and conceptualization*. *Academy of Management Review*, 19, 285–311.
- Feldman, D. C., & Beehr, T. A. (2011). A three-phase model of retirement decision making. *American Psychologist*, 66, 193–203.
- Finkelstein, L. M., Ryan, K. M., & King, E. B. (2013). What do the young (old) people think of me? Content and accuracy of age-based metastereotypes. *European Journal of Work and Organizational Psychology*, 22, 633–657.
- Gaillard, M., & Desmette, D. (2008). Intergroup predictors of older workers' attitudes towards work and early exit. *European Journal of Work and Organizational Psychology*, 17, 450–481.
- Gekoski, W. L., & Knox, V. J. (1990). Ageism or healthism? Perceptions based on age and health status. *Journal of Aging and Health*, 2, 15–27.
- Gordijn, E. H. (2002). Meta-stereotypes and meta-prejudice: Some suggestions for future research. *Revista de Psicologia Social*, 17, 283–286.
- Gordijn, E. H., & Boven, G. (2009). Loneliness among people with HIV in relation to locus of control and negative meta-stereotyping. *Basic and Applied Social Psychology*, 31, 109–116.
- Greller, M. M., & Stroh, L. K. (2004). Making the most of 'late-career' for employers and workers themselves: Becoming elders not relics. *Organizational Dynamics*, 33, 202–214.
- Griffin, B., & Hesketh, B. (2008). Post-retirement work: The individual determinants of paid and volunteer work. *Journal of Occupational and Organizational Psychology*, 81(1), 101–121.
- Haslam, C., Morton, T. A., Haslam, S. A., Varnes, L., Graham, R., & Gamaz, L. (2012). “When the age is in, the wit is out”: Age-related self-categorization and deficit expectations reduce performance on clinical tests used in dementia assessment. *Psychology and Aging*, 27, 778–784.
- Haslam, S. A., Oakes, P. J., Reynolds, K. J., & Turner, J. C. (1999). Social identity salience and the emergence of stereotype consensus. *Personality and Social Psychology Bulletin*, 25, 809–818.
- Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York: Guildford Press.
- Hertel, G., van der Heijden, B., De Lange, A., & Deller, J. (2013). Facilitating age diversity in organizations – Part II: Managing perceptions and interactions. *Journal of Managerial Psychology*, 28, 857–866.
- Hornsey, M. J. (2008). Social identity theory and self-categorization theory: A historical review. *Social and Personality Compass*, 2, 204–222.
- Hornsey, M. J., & Hogg, M. A. (2000). Assimilation and diversity: An integrative model of subgroup relations. *Personality and Social Psychology Review*, 4, 143–156.
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6, 1–55.
- Jöreskog, K., & Sörbom, D. (2008). *Lisrel 8.72*. Chicago: Scientific Software International.
- Kooij, D., Lange, A. H., Jansen, P., & Dijkers, J. (2008). Older workers' motivation to continue to work: five meanings of age: A conceptual review. *Journal of Managerial Psychology*, 23, 364–394.
- Kooij, D. T., Bal, P. M., & Kanfer, R. (2014). Future time perspective and promotion focus as determinants of intraindividual change in work motivation. *Psychology and Aging*, 29, 319–328.
- Kunda, Z., & Spencer, S. J. (2003). When do stereotypes come to mind and when do they color judgment? A goal-based theoretical framework for stereotype activation and application. *Psychological Bulletin*, 129, 522–544.
- Lang, F. R., & Carstensen, L. L. (2002). Time counts: Future time perspective, goals, and social relationships. *Psychology and Aging*, 17, 125–139.
- Levy, B. R., Slade, M. D., Kunkel, S. R., & Kasl, S. V. (2002). Longevity increased by positive self-perceptions of aging. *Journal of Personality and Social Psychology*, 83, 261–270.
- Maurer, T. J., Barbeite, F. G., Weiss, E. M., & Lippstreu, M. (2008). New measures of stereotypical beliefs about older workers' ability and desire for development. *Journal of Managerial Psychology*, 23, 395–418.
- Ng, T. W., & Feldman, D. C. (2008). The relationship of age to ten dimensions of job performance. *Journal of Applied Psychology*, 93, 392–423.
- OECD (2014). *Ageing and Employment Policies: Netherlands 2014*. OECD publishing.
- Posthuma, R. A., & Campion, M. A. (2009). Age stereotypes in the workplace: Common stereotypes, moderators, and future research directions. *Journal of Management*, 35, 158–188.
- Reynolds, L. (2010). Aging and disability awareness training for drivers of a metropolitan taxi company. *Activities, Adaptation & Aging*, 34(1), 17–29.
- Schreurs, P. J. G., & Taris, T. W. (1998). Construct validity of the demand-control model: A double cross-validation approach. *Work & Stress*, 12, 66–84.
- Schubert, T. W., & Otten, S. (2002). Overlap of self, ingroup, and outgroup: Pictorial measures of self-categorization. *Self and Identity*, 1, 353–376.
- Schwall, A. R. (2012). Defining age and using age-relevant constructs. In J. W. Hedge, & W. C. Borman (Eds.), *The Oxford Handbook of Work and Aging* (pp. 169–186). New York: Oxford University Press.
- Shultz, K. S., & Wang, M. (2011). Psychological perspectives on the changing nature of retirement. *American Psychologist*, 66, 170–179.
- Siemsen, E., Roth, A., & Oliveira, P. (2010). Common method bias in regression models with linear, quadratic, and interaction effects. *Organizational Research Methods*, 13, 456–476.
- Spears, R., Gordijn, E., Dijksterhuis, A., & Stapel, D. A. (2004). Reaction in action: Intergroup contrast in automatic behavior. *Personality and Social Psychology Bulletin*, 30, 605–616.
- Stein, R., Blanchard-Fields, F., & Hertzog, C. (2002). The effects of age-stereotype priming on the memory performance of older adults. *Experimental Aging Research*, 28, 169–181.

- Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. Austin, & S. Worche (Eds.), *The social psychology of intergroup relations* (pp. 33–48). Pacific Grove, CA: Brooks-Cole.
- Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., & Wetherell, M. S. (1987). *Rediscovering the social group: A self-categorization theory*. Oxford: Basil Blackwell.
- Van der Heijden, B. I. J. M., De Lange, A. H., Demerouti, E., & Van der Heijde, C. M. (2009). Age effects on the employability-career relationship. *Journal of Vocational Behavior*, 74, 156–164.
- Vorauer, J. D., Martens, V., & Sasaki, S. J. (2009). When trying to understand detracts from trying to behave: Effects of perspective taking in intergroup interaction. *Journal of Personality and Social Psychology*, 96, 811–827.
- Wang, M., & Shultz, K. S. (2010). Employee retirement: A review and recommendations for future investigation. *Journal of Management*, 36, 172–206.
- Zacher, H., & Frese, M. (2009). Remaining time and opportunities at work: Relationships between age, work characteristics, and occupational future time perspective. *Psychology and Aging*, 24, 487–493.