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Published online: 19 Dec 2017.

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Buffers or Boosters? The Role of HRM Practices in Older Workers' Experience of Stereotype Threat

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ABSTRACT

Building on the social identity approach and the HRM literature, this two-wave cross-sectional study examined the effects of negative age-based metastereotypes on the age-based stereotype threat experience of older workers and on organizational disidentification. The moderator role of HRM practices in the relationship between negative age-based metastereotypes and age-based stereotype threat was also investigated. Older workers survey results ($n = 469$) from 14 manufacturing companies indicated that negative age-based metastereotypes correlate positively with stereotype threat. Moderation results showed that age-awareness HRM practices (training for older workers) reinforced age-based stereotype threat, whereas general HRM practices (recognition and respect) impaired it. The article suggests that the combination of age-based metastereotypes with a stereotype threat framework contributes to further understand older workers' beliefs and attitudes. It also indicates that to be effective, HRM practices should emphasize positive social identities older workers share with their colleagues, rather than giving older workers special treatment that may, after all, reinforce stigmatization.

Ageing workforces have been transforming the organizational landscape in most Western countries (Boehm, Kunze, & Bruch, 2014; van Rooij, 2012). Portugal is no exception with the average employment rate of workers aged between 50 and 60 years old growing from 62.6% in 2013 to 67.6% in 2016 (Statistics Portugal, 2017). In the current demographic context, age is becoming a more salient social category for age-based sub-grouping and for self-categorizing, and a major diversity category in organizational settings (Pugh, Dietz, Brief, & Wiley, 2008). Negative stereotypes about older workers in the workplace far exceed positive beliefs about this group (Posthuma & Campion, 2009). Accurate or not, older workers are likely to wonder whether managers and co-workers endorse those stereotypes and for that reason they fear being judged and treated according to them (Kalokerinos, von Hippel, & Zacher, 2014), thus triggering experiences of age-based stereotype threat (Kray & Shirako, 2011). These experiences are likely to be intensified in organizational contexts where negative age-based metastereotypes prevail (Finkelstein, King, & Voyles, 2015; Finkelstein, Ryan, & King, 2013; Voyles, Finkelstein, & King, 2014). Age-based metastereotypes are beliefs

about the stereotypes held by the members of the outgroup as perceived by the ingroup which may yield intergenerational tensions. In particular, this study focuses on older workers' age-based metastereotypes regarding their younger colleagues age group. Moreover, the stereotype threat literature also suggests that a prolonged threat experience may activate coping mechanisms such as disidentification with stigmatized workers feeling that the organization does not value their contribution and regards them as unwelcome organizational members (Casad & Bryant, 2016; Kray & Shirako, 2011; Steele, Spencer, & Aronson, 2002).

Against this background, extending the productive working life requires not only work interventions in accordance with older workers' attitudes, characteristics, and preferences (Kooij, Jansen, Dikkers, & De Lange, 2014), but also managerial actions to retain older workers (Walker, 2005) and deter age biases that may discourage these workers from remaining in the workforce (Bal et al., 2015). Although a growing body of literature has investigated stereotype threat's boundary conditions (Kray & Shirako, 2011; Roberson & Kulik, 2007; Shapiro, 2011; Steele et al., 2002), a comprehensive view of age-related stereotype threat interactions is far from being accomplished. To shed some more light on how age threats may be moderated by workplace interventions, this study looks at the role played by human resource management (HRM) practices in the stereotype threat nomological network, particularly in the relationship between negative age-based metastereotypes and age-based stereotype threat.

Building on the social identity approach and on the HRM literature, this study has two major goals. First, given that recent reviews highlighted the need for more investigation on the relationship between stereotype threat and disidentification in organizational settings (Walton, Murphy, & Ryan, 2015), it examines the mediating role played by one form of stereotype threat—group-reputation threat with outgroup as source—in the relationship between negative age-based metastereotypes and older workers' organizational disidentification. Second, it investigates the role of HRM practices as moderators of the relationships between negative age-based metastereotypes and stereotype threat. Following recent calls to investigate further the effects of HRM practices on workplace outcomes (Avery & McKay, 2010), this study contends that age-awareness HRM practices, that is, practices explicitly targeted to older workers (Hennekam & Herrbach, 2015) exacerbate the relationship between negative age-based metastereotypes and age-based stereotype threat. Conversely, general HRM practices like recognition and respect are likely to lessen those relationships.

This study aims to contribute to the literature on the effects of negative age-based metastereotypes in the age-based stereotype threat nomological network, and doing so in various ways. By putting the spotlight on older workers beliefs about other age-groups' beliefs (age-based metastereotypes), and on how older workers interpret age management efforts, this study hopes to overcome the prevailing view that has been relying heavily on managers' beliefs (Roberson & Kulik, 2007). On the other hand, by extending stereotype threat and age-metastereotype research to organizational settings, in particular to the manufacturing sector, it seeks to raise managers' awareness of the potential detrimental effects of negative age bias in the workplace (Kalokerinos et al., 2014). Additionally, this study aims to broaden the research about the role played by HRM practices in the older workers experience of stereotype threat (Hennekam & Herrbach, 2015). Another contribution pertains to the examination of a particular form of stereotype threat. One of the limitations of unidimensional conceptualizations of stereotype threat is that they either focus on concerns about the self (e.g., Steele & Aronson, 1995) or concerns about group reputation (e.g., Aronson et al.,

1999) without acknowledging the implications of pointing to different targets in their conceptualizations. Against this background, and following the call by Shapiro and Neuberg (2007) for the stereotype threat experience to entail distinct processes contingent on the source and target of the threat, this study seeks to contribute to the ongoing debate about stereotype threat dimensionality (Xavier, Fritzsche, Sanz, & Smith, 2014). It does so by exploring a stereotype threat dimension included in the multi-threat framework suggested by Shapiro and Neuberg (2007)—the target of the stereotype threat. Moreover, in a context of increasing organizational age diversity mainly due to ageing workforces in most industrialized countries (Pugh et al., 2008), this study intends to contribute to the debate about the merits of HRM interventions in retaining older workers. Specifically, HRM interventions that target discrete organizational groups like older workers are examined to find out whether these age-awareness HRM practices, unlike HRM practices in general, may be, after all, a costly solution for organizations and for older workers.

Theoretical Background and Hypotheses

Workplace Ageism

According to the social identity approach, a term used to refer to hypotheses and contributions generated by social identity theory (Tajfel & Turner, 1979), and by self-categorization theory (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987), the diversity of attributes like age contributes to separate the population of social units (e.g., organizations) in classes such as "old" and "young." Briefly, the social identity approach contends that self-categorization, group memberships, and social identities play a crucial role in any intergroup setting as they shape individuals' perceptions, attitudes, and behaviors. Given that "categorizing a person as 'old' may create a subset of predominantly negative constructs which are more accessible and more likely to be employed in evaluating that person" (Perdue & Gurtman, 1990, p. 213), and that this age bias is automatic, unintentional, and unconscious, ageism tends to be perpetuated. Against this background, it is claimed that the social identity approach theoretical lens may contribute to explain the extent to which ageism influences older workers day-to-day worklife.

Ageism refers to the emergence of a set of conceptions about society and work age division embodied by attitudes and discriminatory practices usually against older people (Butler, 1969). Currently, ageism tends to be defined in broader terms, to the extent it may potentially target any age group. The workplace is the context where age discrimination is most likely to occur and to affect in particular older individuals (European Commission, 2012; Furunes & Mykletun, 2010). Still, there are studies showing that not only older employees, but also very young employees are among those most affected by age discrimination (Duncan & Loretto, 2004). Besides age discrimination, ageism encompasses two other interconnected dimensions: age stereotypes and age prejudices. Scholars have highlighted the interconnectedness of ageist attitudes and beliefs by showing that negative attitudes to the elderly and to the ageing process are related with negative stereotypes about the capabilities and sociability of older individuals (Braithwaite, Lynd-Stevenson, & Pigram, 1993). Moreover, ageism measures like the Fraboni Scale of Ageism (Fraboni, Saltstone, & Hughes, 1990) showed that ageism involves both cognitive and affective processes. In fact, this scale was designed to capture the affective component of ageism and to supplement its cognitive

dimension by measuring antilocution, avoidance, and discrimination of the elderly. The cognitive, affective, and behavioral dimensions of ageism are embodied by stereotypes, prejudices, and discrimination, respectively. Regardless of the dimension under analysis, ageism represents a bias that undervalues individuals based on their perceived age group membership. Workplace age stereotypes are widely shared beliefs and expectations about workers based on their age (Posthuma & Campion, 2009). Stereotypes are based on the process of categorization and group membership and they are a central aspect of intergroup behavior by allowing group members to make sense of particular intergroup relationships. Although terms like "positive ageism" have been included in comprehensive reviews about different forms of ageism (e.g., Palmore, 1999) to refer to positive stereotypes and attitudes toward, for example, older individuals' wisdom, negative stereotypes about older workers in the workplace far exceed positive beliefs about this age group (Ng & Feldman, 2012; Posthuma & Campion, 2009). Scholars have emphasized numerous widespread negative stereotypes about older workers: less motivated, more resistant and less willing to change, less trusting, less healthy, more vulnerable to work-family imbalance, poorer performers, and generally less willing to participate in training (Ng & Feldman, 2012; Posthuma & Campion, 2009; van Rooij, 2012). Notwithstanding, several studies suggest that some negative stereotypes about older workers may not be based on empirical grounds (Bertolino, Truxillo, & Fraccaroli, 2013; Laczko & Philipson, 1991; Ng & Feldman, 2008). For instance, regarding the poor performance stereotype, meta-analytical data provided evidence that older workers are at least as productive as their younger counterparts, as long as objective ratings are taken into consideration (Waldman & Avolio, 1986). Furthermore, research with a longitudinal dataset covering the entire manufacturing sector in Portugal over a 22-year period showed that "older workers are worthy of their pay in the sense that their contribution to production exceeds their contribution to the wage bill" (Cardoso, Guimarães, & Varejão, 2011, p. 15). Even though work performance does not seem to be influenced by age differences (Bertolino et al., 2013; Ng & Feldman, 2008), older workers are likely to wonder whether managers and co-workers endorse negative stereotypes about the aged and thus to fear being judged and treated according to them. Several research findings seem to support this concern. Waldman and Avolio (1986) reported that supervisory ratings showed a slight tendency to be lower for older employees, and Rupp, Vodanovich, and Credé (2006) found that these employees receive harsher sanctions for job-related mistakes than younger employees. In the same vein, and in line with the social identity approach, older workers tend to evaluate their ingroup members more favorably than younger workers (Bertolino et al., 2013), and younger individuals had significantly higher ageism scores on the Fraboni Scale of Ageism (Fraboni et al., 1990) than their older counterparts (Rupp, Vodanovich, & Credé, 2005).

Irrespective of whether or not stereotypes are evidence-based, negative stereotypes about older workers performance and capabilities are diverse and widespread (Posthuma & Campion, 2009), and thus their detrimental effects to the workforce dynamics cannot be neglected. Negative workplace stereotypes about older workers have the potential to contribute to intergroup tensions, hinder the full use of older workers qualities, discourage them from remaining in the workforce, and prevent them from getting fully attached and identified with the organization (Finkelstein et al., 2015). At an organizational level, they provide the basis for prejudiced attitudes and discriminatory behaviors in both organizational personnel decisions and organizational day-to-day life (Guillaume et al., 2014). At the micro-level, negative stereotypes may lay the foundations for self-fulfilling prophecies based on

stigmatized group membership self-categorization (Gaillard & Desmette, 2010), and they are likely to increase older workers' concern of being stereotyped that constitutes stereotype threat (Kalokerinos et al., 2014). Moreover, when perceived as psychological threats, the activation of negative age stereotypes in the workplace, besides influencing workplace relationships, will also influence stereotyped individuals' attitudes toward the organization.

Age-Based Stereotype Threat

Gender and race are traditional social categories in workplace stereotype threat research. In recent years, scholars have turned their attention to the identification of the antecedents and consequences of age-related stereotype threat in organizations (Kalokerinos et al., 2014; Kray & Shirako, 2011). Arguably, a day-to-day concern of older workers is the meaning of age in the workplace. At the same time age-related beliefs in work settings are slowly being shaped at the macro level by societal stereotypes (Shiu, Hassan, & Parry, 2015), at the organizational level, the perspective toward age diversity may influence the older workers everyday work experience. When both these perspectives echo an undesirable view of older workers, it is likely that negative societal stereotypes are made salient and stereotype threats are more easily triggered (Roberson, Deitch, Brief, & Block, 2003).

Steele and Aronson (1995, p. 797) defined stereotype threat as "being at risk of confirming, as self-characteristic, a negative stereotype about one's group". Researchers on stereotype threat often conceptualize the construct with a single dimension as the concern about representing a stigmatized group or the concern about the self-image (Shapiro, Williams, & Hambarchyan, 2013). Yet, Shapiro and Neuberg (2007, p. 108) consider stereotype threat a multidimensional construct that entails "six qualitatively distinct core stereotype threats" taking six different forms or combinations of the target of the threat (the self or the group) and the source of the threat (the self, ingroup members, or outgroup members). The target of the threat refers to whether the concern about confirming a negative stereotype impacts the individual's own-reputation (own-reputation threat) or the ingroup image (group-reputation threat), whereas the origin of the concern may be oneself, outgroup members, or ingroup members. As a result, stereotype threat can take the following forms (Shapiro & Neuberg, 2007): (a) self-concept threat, (b) own-reputation threat (outgroup as source), (c) own-reputation threat (ingroup as source), (d) group-concept threat, (e) group-reputation threat (outgroup as source), and (f) group-reputation threat (ingroup as source).

Recent research has highlighted the usefulness of a multidimensional approach by suggesting that the effectiveness of different stereotype threat interventions in reducing stigmatized individuals' vulnerability to stereotype threat is contingent on the target of the threat (Haslam, Eggins, & Reynolds, 2003; Posthuma & Campion, 2009; Roberson & Kulik, 2007; Shapiro et al., 2013). For instance, in their experimental work, Shapiro et al. (2013) showed that ingroup role model interventions were only successful at protecting against group-as-target stereotype threats. On the other hand, self-as-target stereotype threats were only buffered by other type of interventions such as self-affirmation in domains other than the threatening domain. Taken together, these findings provide support for further research on the antecedents and outcomes of different forms of stereotype threat, which in turn may lead to more effective stereotype threat interventions (Shapiro et al., 2013; Xavier et al., 2014). In this way, this study focuses on one of the stereotype threat forms suggested by Shapiro and Neuberg (2007), the group-reputation threat with the outgroup as source.

Negative Age-Based Metastereotypes

Against a background of widespread negative age stereotypes about older workers (Posthuma & Campion, 2009), it has been argued that attributed beliefs about social groups such as metastereotypes may trigger stereotype threat (Finkelstein et al., 2015; Voyles et al., 2014). Age-based metastereotypes are individual beliefs concerning stereotypical beliefs other age groups hold about the individual's ingroup (Finkelstein et al., 2013). In this study, younger workers are the age group targeted by older workers' age-based metastereotypes. Unlike stereotype threat, metastereotypes do not inevitably involve worry or fear of being stereotyped. Therefore, it is likely that metastereotypes are a primary condition in the stereotype threat nomological network (Finkelstein et al., 2015). There has been scant research exploring age beliefs about one's ingroup attributed to outgroup members (for notable exceptions see Bal et al., 2015; Finkelstein et al., 2013). A better understanding of what older workers believe younger workers think about older workers would help managers increase the effectiveness of age management efforts. In sum, research on age-based metastereotypes may contribute to hinder stereotyping negative consequences, both regarding workers well-being and organizational outcomes (Finkelstein et al., 2015). Therefore, the following hypothesis was formulated:

> *Hypothesis 1*: Negative age-based metastereotypes are positively related to group-reputation threat.

Organizational Disidentification

Stereotype threat scholars have argued that besides performance impairment, stereotype threat also influences the identity development of the stigmatized group members (Casad & Bryant, 2016; Kray & Shirako, 2011; Steele et al., 2002). In fact, stereotype threat attitudinal consequences may go beyond short-term work disengagement and lead to long-term defensive mechanisms such as disidentification (Roberson & Kulik, 2007; Steele, 1997; Steele et al., 2002). When the threat is persistent, "it can pressure disidentification, a reconceptualization of the self and of one's values so as to remove the domain as a self-identity, as a basis of self-evaluation" (Steele, 1997, p. 614). Furthermore, organizations do not always instill workers with a sense of belonging and satisfaction, either because employee and organization attributes are conflicting (Elsbach & Bhattacharya, 2001), or because the organizational climate is not inclusive and, therefore, stereotyped group members' feelings of threat become more salient (Becker & Tausch, 2014).

Organizational disidentification refers to workers' psychological detachment or distance from the organization they self-evaluate as being different from, or in moral conflict with the organization's values or ideologies (Elsbach & Bhattacharya, 2001; Kreiner & Ashforth, 2004). According to the social identity approach (Tajfel & Turner, 1979; Turner et al., 1987), disidentification occurs when organizational membership represents a negative aspect of the self. Once organizational membership is not seen in a positive light, workers are likely to engage in protective coping mechanisms that psychologically distance themselves from the organization. Still, it has been argued that even disidentified workers may remain in the organization for long periods of time thus posing a serious threat to organizational long-term interests (Kreiner & Ashforth, 2004). Several negative implications of organizational

disidentification have been reported. Disidentification has been negatively associated with organizational reputation, and positively with psychological contract breach and cynicism (Kreiner & Ashforth, 2004). Given that job withdrawal responses (e.g., lateness, absenteeism, turnover) may arise as a consequence of psychological withdrawal coping mechanisms understanding the organizational disidentification antecedents is particularly important.

Based on the above discussion, it seems reasonable to posit that just as age-based stereotype threat is likely to activate organizational disidentification, negative age-based metastereotypes will also influence organizational disidentification (Casad & Bryant, 2016). Recent research has shown that negative age-based metastereotypes about older workers are directly associated with fewer perceived opportunities at work and indirectly with stronger retirement intentions (Bal et al., 2015). Along the same vein, it is suggested that besides triggering feelings of threat among stereotyped group members, negative age-based metastereotypes are likely to distance older workers from the organization when the organizational climate is not perceived as age-inclusive. In sum, organizational disidentification is an important phenomenon both for scholars and managers, particularly in ageist work settings. As such, more research on the conditions in which it evolves is clearly warranted. The following hypotheses are, therefore, formulated:

> *Hypothesis 2*: Negative age-based metastereotypes are positively related to organizational disidentification.
> *Hypothesis 3*: Group-reputation threat mediates the relationship between negative age-based metastereotypes and organizational disidentification.

Boundary Condition: HRM Practices

Steele et al. (2002, p. 397) argued that "stereotype threat is best thought of as a predicament of a person in a situation." Given that stereotype threat is prompted by one's interpretation of situational contexts (Casad & Bryant, 2016; Kulik, 2014), it is admitted that stereotype threat may be influenced by workplace interventions. Workplace interventions refer to activities that introduce change(s) in one or more elements of the work setting in order to increase organizational effectiveness (Zabel & Baltes, 2015). In light of increasing age diversity in organizations, workplace interventions may be a key moderator of older workers experience of stereotype threat (Finkelstein et al., 2015; Posthuma & Campion, 2009). Building on Armstrong-Stassen and Schlosser's (2011) argument that HRM practices are likely to counteract demographic cues that trigger stereotype threat, it is suggested that HRM practices moderate the relationship between age-based negative metastereotypes and age-based stereotype threat. More specifically, since interventions have the potential to reframe cognitions like negative age-based metastereotypes (Casad & Bryant, 2016), and negative age-based metastereotypes may be interpreted either as threats or challenges (Finkelstein et al., 2015), more investigation is needed to understand whether workplace interventions lead to a threat or a challenge reaction. Similarly, the stereotype threat framework would also benefit from more scholarship on the effects of HRM practices (Kulik, 2014).

As the workforce ages, managing age diversity and negative age cognitions require specific attention (Walker, 2005). Age management encompasses "measures that combat age barriers and/or promote age diversity" (Naegele & Walker, 2006, p. 3) and its central aim is to foster an inclusive climate (Guillaume et al., 2014; Scott, Heathcote, & Gruman, 2011) in which all age cohorts can express their diverse qualities. Given that workers abilities and

needs change with age, HRM practices should accommodate these age-related differences (Hennekam & Herrbach, 2015; Kooij, Jansen, Dikkers, & De Lange, 2010; 2014; van Rooij, 2012). With the age-related needs and preferences in mind, some organizations have started designing age-awareness HRM practices (Armstrong-Stassen, 2008; Hennekam & Herrbach, 2015; Kooij et al., 2014). Although the "one best way" in age management is yet to be found (Walker, 2005), there is an array of HRM practices that may be used to retain older workers: flexible working options, work/life balance policies, specific training, mentoring/coaching, performance evaluation, recognition and respect, and working conditions redesign (Armstrong-Stassen, 2008; Herrbach, Mignonac, Vandenberghe, & Negrini, 2009; Kooij et al., 2010; Pinto, Ramos, & Nunes, 2014). Some HRM practices are more appropriate for some jobs and industries than others. For instance, it has been argued that the manufacturing sector may not be able to offer flexible work patterns (Pinto et al., 2014).

This study investigates the moderating role played by two HRM practices (training for older workers, and recognition and respect) in the relationship between negative age-based metastereotypes and age-based stereotype threat. Whereas training targets specifically older workers (age-awareness practice), recognition and respect is considered a general HRM practice targeted to every worker. Research on how organizations may implement effective training for older workers may provide useful insights for hampering age threats in the workplace (Herrbach et al., 2009; Kooij et al., 2010; Kulik, 2014; Posthuma & Campion, 2009). Moreover, the provision of training opportunities is highly valued by older workers providing them with a sense of organizational support (Hennekam & Herrbach, 2013; Pinto et al., 2014). Several studies showed that recognition and respect is one of the general HRM practices most valued by older workers (Pinto et al., 2014), and a pivotal strategy to keep older workers in the workforce (Armstrong-Stassen, 2008). Moreover, feeling useful and respected allows older workers to pursue a positive social identity (Hennekam & Herrbach, 2015), thereby counteracting age-based stereotype threats.

The impact of HRM practices on older workers effectiveness, retention, and well-being has been investigated in the context of the social exchange theory among other theoretical frameworks. Studies building on social exchange theory (Armstrong-Stassen & Ursel, 2009) argue that older workers tend to reciprocate to organizational efforts by adopting desirable work beliefs and behaviors and avoiding counterproductive behaviors (Kooij et al., 2010). This social exchange process refers to "actions contingent on the rewarding reactions of others, which over time provide for mutually and rewarding transactions and relationships" (Cropanzano & Mitchell, 2005, p. 890). According to this framework, the provision of age-awareness HRM practices may mitigate the effects of negative age-based metastereotypes by raising stereotype targets engagement to refute the negative metabelief (Finkelstein et al., 2015). In this way, these practices have a symbolic value by signaling workers the organization's plans toward older workers and portraying organizational values that respect their social identity.

Life-span theories such as the selection, optimization, and compensation theory (Baltes, Staudinger, & Lindenberger, 1999), and the socio-emotional selectivity theory (Carstensen, Isaacowitz, & Charles, 1999) were the underlying conceptual frameworks in recent efforts to map research on workplace interventions' effectiveness (Zabel & Baltes, 2015) and to propose HR bundles for ageing workers (Kooij et al., 2014). While the former theory argues that the utility and effectiveness of HRM practices changes with age (Kooij et al., 2010), the latter focus on the older workers need to feel socially interconnected (Hennekam & Herrbach, 2015), which may be difficult in a context of deeply engrained negative age-based metastereotypes and age-based stereotype threat.

While each of these frameworks may offer valuable insights on the role played by age-awareness and general HRM practices in the relationships between older workers beliefs, attitudes, and behaviors, this paper contends that social identity theory is the most appropriate framework to explore the role of HRM practices. Building on social identity theory tenets and in recent research on the relationship between the provision of HRM practices and the retirement decision (Hennekam & Herrbach, 2013, 2015), it is argued that age-awareness HRM practices such as training for older workers are likely to reinforce age-based stereotype threat among a disadvantaged group like older workers. Although taking into account the needs of older workers, hence reflecting a contingency perspective of HRM, this age-awareness HRM practice may not foster identity safety among stereotyped workers. Specific HRM practices for older workers have the potential to cue age as a stigmatizable characteristic, which in turn may drive heightened levels of threat among older workers. Furthermore, as the aim of the HRM practices may backlash, the positive attitudes and behaviors expected by social exchange theory, namely, by the reciprocity norm, may be at risk. In fact, practices that segment the workforce on the basis of age groups may bring about perceptions of special treatment, inequality, and even resistance to those practices (Hennekam & Herrbach, 2015). Thus, instead of facilitating workplace success, these practices increase the age threat at least in two ways. On the one hand, these practices are likely to foster older workers' endorsement of negative stereotypes about their own age group; on the other, negative age stereotypes held by outgroup members are expected to be reinforced, as special treatment practices may be interpreted by outgroup members as an organizational recognition of older workers ineffectiveness (Heilman, 1996). As a result of this increase in negative stereotyping by outgroup members, negative age-based metastereotypes may become more salient and frequently activated. Moreover, HRM practices for older workers may prompt feelings of exclusion on non-targets. All in all, age-awareness HRM practices effects may sometimes rebound yielding increased salience of negative stereotypes (Heilman, 1996) and vulnerability to age threats (Streets & Major, 2014). By making the age group more salient, and activating negative stereotypes about older workers, both in the targets' and non-targets' eyes, HRM practices for older workers may have unintended negative effects (Heilman, 1996). Older workers may interpret the adoption of these practices targeting their age group as a formal recognition that older workers are less valuable members of the workforce, which in turn may cause worry, concern, and apprehension, that is, increased levels of group-reputation threat. By the same token, it is anticipated that recognition and respect practices may mitigate age-based stereotype threat by providing value and inclusion for stereotyped individuals, and at the same time, due respect (Guillaume et al., 2014). Unlike training for older workers, recognition and respect practices communicate to all organizational members the value and usefulness of older workers allowing them to construct a positive social identity (Kulik, 2014). Hypotheses 4 were then formulated as:

> *Hypothesis 4a*: Training for older workers moderates the relationship between negative age-based metastereotypes and group-reputation threat, so that the path is stronger when the perceived level of training is higher.
> *Hypothesis 4b*: Recognition and respect moderate the relationship between negative age-based metastereotypes and group-reputation threat, so that the path is weaker when the perceived level of recognition and respect is higher.

In order to test this study's hypotheses, a research model was developed (Figure 1).
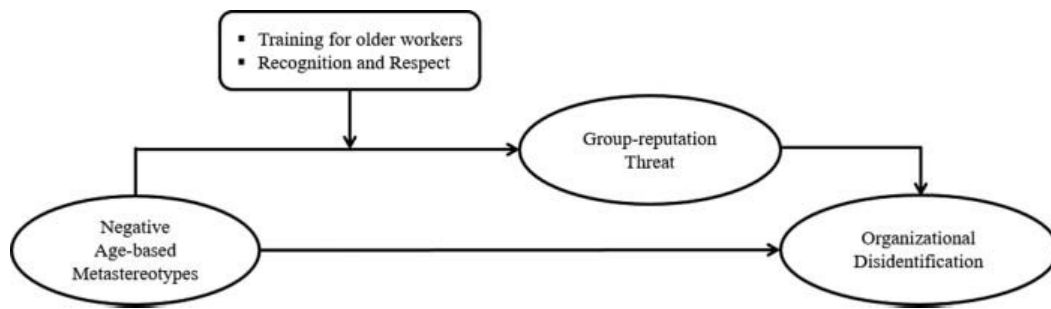
Figure 1. Proposed moderated mediation research model.

Method

Participants and Procedure

Participants were 469 blue-collar workers aged 50-to-63 (302 males, 166 females, 1 unknown) working in 14 manufacturing companies located in Portugal. 79% of the participants work in large companies (with more than 249 workers). Most respondents were married (81%) and about 70% had only completed basic education. The average age of participants was 53.91 years ($SD = 3.37$), the average tenure in the organization 23.87 years ($SD = 10.23$), and the average seniority in the job 19.37 years ($SD = 11.36$).

All but one of the scales included in the survey were selected drawing on past theoretical and empirical research. Reliable selected scales were then translated into Portuguese by a translation expert by means of a translation/back-translation procedure. The items included in the negative age-based metastereotypes scale were selected from previous studies on age stereotypes in the workplace (Posthuma & Campion, 2009) and on the age metastereotyping literature (Finkelstein et al., 2013, 2015). A final selection of the items was made from interviews with expert scholars, and from consultations with HR managers and workers. The items were developed according to Hinkin's (1998) guidelines, namely, item generation, pilot questionnaire administration, and item reduction.

After the permission from the HR managers to conduct the study, all blue-collar older workers of each manufacturing company were invited to participate. Participants were informed of the aim of the study and guaranteed anonymity. Data were collected in two waves through paper-based surveys. In the first wave, the negative age-based metastereotypes, age-based stereotype threat, and HRM practices scales were administered and the participants' socio-demographic information was collected. Two months later, data regarding the organizational disidentification scale was collected. Out of the 606 surveys distributed at time 1, 469 were returned in both waves, amounting to a response rate of 77%. A temporal separation of predictors and outcome was adopted to reduce concerns about common method variance associated with single-source data and attitude–attitude relationships (Podsakoff, MacKenzie, Lee, & Podsakoff., 2003). The 2-month time lag was used following Podsakoff et al.'s (2003) recommendations emphasizing that the temporal separation of predictors and outcomes should not be too short nor too long.

Measures

Participants responded to all scales by indicating their level of agreement on a 5-point Likert scale ranging from 1 (totally disagree) to 5 (totally agree).

Negative age-based metastereotypes—Three items tapped negative age-based metaster-eotypes held by older workers regarding younger workers beliefs about older workers. A sample item is "My younger colleagues feel that I contribute less because of my age."

Group-reputation threat—Workers rated their experience of group-reputation threat at the workplace through a three-item scale designed by Shapiro (2011). For example, "I am concerned that my actions might poorly represent older workers."

Organizational disidentification—Organizational disidentification was measured with a six-item scale (Kreiner & Ashforth, 2004). A sample item is "I want people to know that I disagree with how this organization behaves."

HRM practices—Building on Hennekam and Herrbach (2013) measures, the perceived provision of HRM practices was assessed through two scales regarding training for older workers—four items (e.g., "My organization offers training/education for older employees to keep their work skills up-to-date"), and recognition and respect—three items (e.g., "My organization ensures that older employees are treated with respect in the organization").

As indicated in Table 1, the reliability coefficients—Cronbach's α—of the scales were .75 and .73 for negative age-based metastereotypes and for group-reputation threat; .78 and .75 for organizational disidentification and for training for older workers, and .84 for recognition and respect. All scales but the negative age-based metastereotypes yielded satisfactory internal consistency levels in previous studies: Cronbach's α were .79 and .89 for the group-reputation (Shapiro, 2011) and the recognition and respect scales (Hennekam & Herrbach, 2013), and .90 for both the organizational disidentification scale (Kreiner & Ashforth, 2004), and for the training for older workers scale (Hennekam & Herrbach, 2013).

As predicted by the multi-threat framework (Shapiro & Neuberg, 2007), group-reputation threat correlated positively with other forms of stereotype threat like self-concept threat (Shapiro, 2011) providing initial evidence of construct validity. CFA results from the expanded model of organizational identification (Kreiner & Ashforth, 2004) establish that four forms of identification (identification, disidentification, ambivalent identification, and neutral identification), although related are discrete constructs. Moreover, organizational disidentification was negatively associated with organizational reputation and positively associated with psychological contract breach (Kreiner & Ashforth, 2004). Taken together, findings about the expanded model's criterion-related validity contribute to establish the validity of the organizational disidentification construct. Finally, Hennekam and Herrbach (2013) reported a positive relationship between recognition and respect and affective

Table 1. Descriptive Statistics, Alpha Coefficients, and Bivariate Correlations.

Variable	n	M	SD	α	1	2	3	4	5	6	7	8	9
1. Negative age-based metastereotypes	449	2.07	1.08	.75	–								
2. Group-reputation threat	439	2.29	1.08	.73	.47**	–							
3. Organizational disidentification	416	2.03	.90	.78	.56**	.39**	–						
4. Training for older workers	439	3.02	.97	.75	.27**	.15**	.14**	–					
5. Recognition and respect	439	4.08	.82	.84	.01	−.06	−.03	−.03	–				
6. Age	436	53.91	3.37		.12*	.05	.09	.06	.01	–			
7. Objective organizational age diversity	377	9.57	.84		−.08	−.08	−.08	−.04	.05	.04	–		
8. Organizational tenure	435	23.87	10.23		.08	.04	.08	−.04	.03	.16**	−.02	–	
9. Seniority in the job	404	19.37	11.36		.03	.02	.08	.03	−.05	.16**	.04	.49**	–

Note. Because objective organizational age diversity was conceptualized as separation, this variable was statistically operation-alized through standard deviation. *$p < .05$. **$p < .01$.

organizational commitment supporting the convergent validity of this construct. Additionally, in accordance with social identity theory tenets, the relationship between training for older workers and affective organizational commitment was found to be nonsignificant (Hennekam & Herrbach, 2013).

Control variables—Chronological age, organizational age diversity (measured through standard deviation), organizational tenure, and seniority in the job were included as control variables since previous research showed that organizational age composition might influence ageist attitudes and behaviors (Kunze, Boehm, & Bruch, 2011), and since stereotypical information tends to lose relevance as primal criteria for social grouping as interpersonal relations develop over time.

Results

Descriptive Statistics and Correlations

Table 1 presents descriptive statistics, bivariate correlations, and Cronbach's alphas (where applicable). All scales have internal consistency alphas above .70. Among the control variables, objective organizational age diversity, organizational tenure, and seniority in the job were not correlated with any of the focal variables. Following recommendations from Carlson and Wu (2012), these control variables were excluded from further analyses. All predictor variables were standardized before analysis.

Given that age had a weak positive correlation (r = .12, $p < .05$) with negative age-based metastereotypes indicating that reported levels of negative age-based metastereotypes are higher as one ages, a t-test was conducted to determine whether there was a difference in the negative age-based metastereotypes levels between workers aged 50 to 54 (n = 333) and workers aged 55 to 63 (n = 120). Negative age-based metastereotypes levels were greater for workers aged 55 to 63 (*M = 2.25, SD = 1.10*) than for workers aged 50 to 54 (*M = 2.00, SD = 1.04*), $t(433) = -2.73, p < .001, d = -0.26$.

Bivariate correlations show that training for older workers was positively related to all ageism measures and to organizational disidentification.

Measurement Models

In order to confirm the factorial structure of the scales under study (negative age-based metastereotypes, group-reputation threat, and organizational disidentification), and whether the three constructs are discrete, a confirmatory factor analysis was conducted. All the items were loaded onto their respective factors. The correlation between negative age-based metastereotypes and other age-related constructs like group-reputation threat was statistically significant (.47) providing evidence of the convergent validity of the negative age-based metastereotypes scale. Also, the negative age-based metastereotypes scale alpha of .75 seems to indicate that this measure is reliable. Finally, measurement model tests provided evidence for the distinctiveness of the two ageism measures under analysis. The analysis showed that a three-factor model ($\chi^2(48, N = 469) = 161.15$, RMSEA = .07, CFI = .94) fits the data better than a two-factor model in which negative age-based metastereotypes and group-reputation threat items loaded onto the same factor ($\chi^2(50, N = 469) = 345.48$, RMSEA = .11, CFI = .84): χ^2 difference ($df = 2$) = 184.33, $p < .001$. Analysis also showed that the three-

factor model (χ^2(48, $N = 469$) = 161.15, RMSEA = .07, CFI = .94) fits the data better than a one factor-model (χ^2(51, $N = 469$) = 459.16, RMSEA = .13, CFI = .79): χ^2 difference ($df = 3$) = 298.01 , $p < .001$. This suggests that the three variables are distinct.

Hypotheses Testing

Hypotheses were tested through the Preacher and Hayes macro PROCESS v2.15 for SPSS Statistics (Hayes, 2013). Significance tests for the indirect effects were based on bias-corrected confidence intervals (99%) derived from 10,000 bootstrapped samples (Shrout & Bolger, 2002). Tests of hypotheses were conducted with and without the control variable age and the results remained unchanged.

Results from the mediation model indicate that negative age-based metastereotypes are positively associated with group-reputation threat ($\beta = .42$, $SE = .05$, $p < .001$). Hence, hypothesis 1 is supported. The second hypothesis stated that negative age-based metastereotypes are positively related to organizational disidentification. As predicted, these two constructs are positively associated ($\beta = .46$, $SE = .06$, $p < .001$), supporting hypothesis 2. According to expectations, group-reputation threat is positively associated with organizational disidentification ($\beta = .17$, $SE = .06$, $p < .01$), and there is a significant indirect effect of negative age-based metastereotypes on organizational disidentification through group-reputation threat, $\beta = .07$, BCa 99% CI [.01, .14]. This represents a significant small to medium indirect effect size (Preacher & Kelley, 2011) that supports hypothesis 3. Hypothesis 4a predicted that training for older workers would heighten the positive relationship between negative age-based metastereotypes and group-reputation threat. Table 2 shows that training for older workers indeed strengthens group-reputation threat.

The moderation effect of training for older workers is significant for group-reputation threat ($\beta = .32$, 99% CI [.22, .41], $p < .001$). Significant conditional indirect effects for group-reputation were found across high and average levels of training for older workers ($p < .001$), but the effect was not significant across low levels of training for older workers ($p = .46$). Taken together, the results support hypothesis 4a. Figure 2 depicts the significant moderation effects of training for older workers on group-reputation threat.

In addition, moderated mediation analyses indicated that recognition and respect buffer group-reputation threat ($\beta = -.14$, 99% CI [−.26, −.03], $p < .05$) as predicted by hypothesis 4b. For all levels of recognition and respect, the conditional indirect effect for group-

Table 2. Moderated regression analyses predicting group-reputation threat.

Variable	First-stage-dependent variable = group-reputation threat				
	β	SE	t	F	R^2
Negative age-based metastereotypes	.33	.05	7.26***	74.88***	.33
Training for older workers	−.00	.04	−.06		
Negative age-based metastereotypes X Training for older workers	**.32**	**.04**	**8.60*****		
Negative age-based metastereotypes	.43	.05	9.10***	37.43***	.24
Recognition and respect	−.10	.04	−2.25*		
Negative age-based metastereotypes X Recognition and respect	**−.14**	**.04**	**−3.30****		

Note. $N > 334$ for all variables. Values in bold are relevant to test hypotheses. *$p < .05$. **$p < .01$. ***$p < .001$.
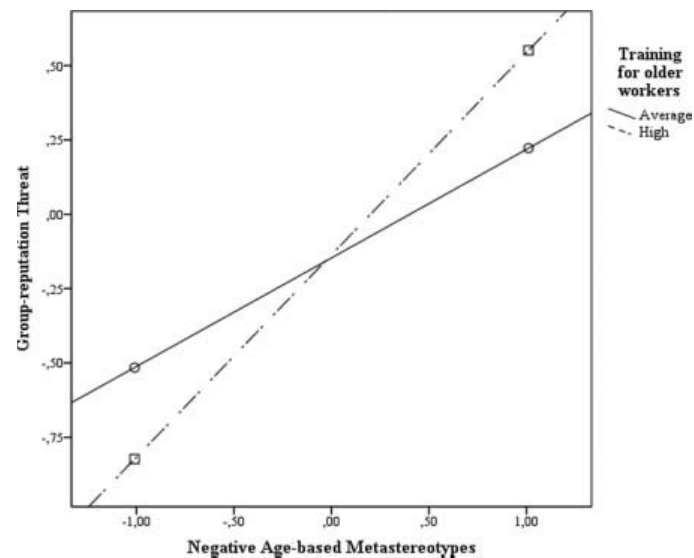
Figure 2. Interaction effect of negative age-based metastereotypes with training for older workers on group-reputation threat. *Note*: Average and high levels of training for older workers represent the mean and one standard deviation above the mean, respectively.

reputation was significant ($p < .001$). The significant negative interaction effect is illustrated graphically in Figure 3.

Discussion

This study was set out aiming to: (1) assess the importance of negative age-based metastereotypes in the age-based stereotype threat nomological network, and (2) examine the moderating role played by HRM practices on the relationships between negative age-based metastereotypes and age-based stereotype threat in the workplace.
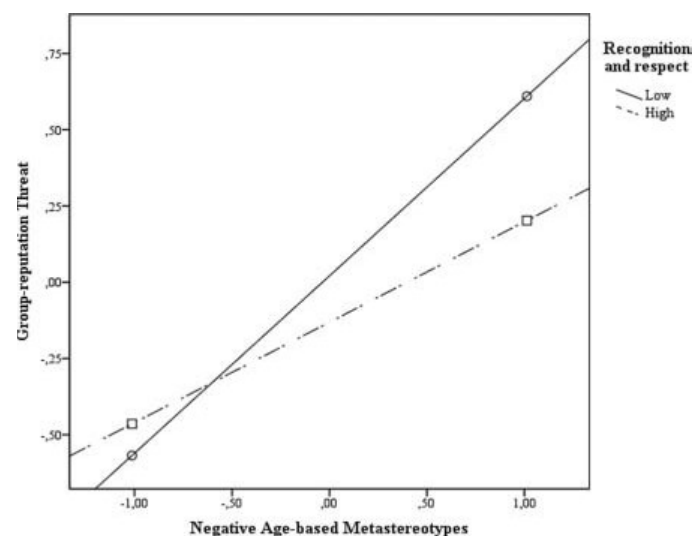

Figure 3. Interaction effect of negative age-based metastereotypes with recognition and respect on group-reputation threat. *Note*: High and low levels of recognition and respect represent one standard deviation above and below the mean, respectively.

Regarding the first aim, the findings showed that negative age-based metastereotypes were antecedents of stereotype threat, as suggested by Voyles et al. (2014). Although often left aside by stereotype threat scholarship, a positive significant relationship between negative age-based metastereotypes and age-based stereotype threat was evinced in this study supporting the idea that metastereotypes should be included in the stereotype threat nomological network. Furthermore, negative age-based metastereotypes were found to be positively related to organizational disidentification. This finding suggests that organizational disidentification should be included in the age-based metastereotype activation model (Finkelstein et al., 2015), extending age-based metastereotypes' effects above and beyond cross-age interactions and behaviors. Moreover, besides having a positive effect on organizational disidentification, group-reputation threat also mediated partially the relationship between negative age-based metastereotypes and organizational disidentification. In line with previous reports on stereotype threat measurement (Xavier et al., 2014), effect sizes were small. A possible explanation for this might be that organizational disidentification has numerous triggers other than group-reputation threat and that are likely to impact more proximally the outcome than this form of stereotype threat (Streets & Major, 2014). In a nutshell, organizational disidentification, a psychological withdrawal mechanism likely to impact individual (e.g., retirement intentions, desired retirement age) and organizational level outcomes (e.g., turnover rate) was elicited by group-reputation threat. Additionally, model results suggest that the effect on organizational disidentification is mainly due to negative age-based metastereotypes. This is in line with earlier observations, which suggested negative age-based metastereotypes as relevant drivers of the coping mechanisms stigmatized individuals put into play to deal with the negative consequences of stereotyping (Finkelstein et al., 2015). Taken together, these findings contribute to advance theory by showing that negative age-based metastereotypes are pivotal constructs for understanding ageism in the workplace.

The second aim of this study was to assess whether HRM practices such as training for older workers, and recognition and respect moderate the positive relationship between negative age-based metastereotypes and age-based stereotype threat in the workplace. Results confirmed that training for older workers, and recognition and respect play a role in the age-based metastereotype activation model suggesting that core-self evaluations and workplace interventions moderate workers' reactions to metastereotypes (Finkelstein et al., 2015). Specifically, workplace interventions like training for older workers heightened the threat reaction to negative age-based metastereotypes, while practices that contribute to a positive social identity and therefore to more positive core-self evaluations like recognition and respect impaired it. Findings about the negative effects of training for older workers are consistent with social identity theory and with previous research that identified "unintended byproducts of affirmative action" (Heilman, Block, & Stathatos, 1997, p. 623) and the backlash from age-awareness HRM practices (Hennekam & Herrbach, 2015). This suggests that older workers subjectively interpret these HRM practices as an organizational endorsement of negative stereotypes about older workers, that is, as threats (Finkelstein et al., 2015), thus increasing stereotype relevance (Heilman, 1996) and triggering stereotype threat (Roberson et al., 2003). In fact, the threat to older workers group reputation and image (group-reputation threat) was particularly exacerbated by training for older workers. Older workers may possibly interpret the provision of specific training for their age group as a signal that the organization sees them as a less skilled group (Heilman, 1996) and, for that reason, they become generally less willing to participate in training (Ng & Feldman, 2012). In this way,

training for older workers reinforces the stigma of incompetence associated with affirmative action recipients (Heilman, 1996; Heilman et al., 1997), rather than contributing to workplace equality and inclusion. Given that training is understood as a negative stamp that cues stigmatization of older workers (Hennekam & Herrbach, 2015), older workers do not reciprocate to the provision of age-awareness HRM practices with positive beliefs, attitudes, and behaviors, as predicted by the social exchange theory. Moreover, the perceived organizational endorsement of a negative view of older workers may spillover to all organizational members' beliefs, which in the long run could lead to increased levels of negative age metastereotyping, "workplace tensions and intergroup hostilities" (Heilman, 1996, p. 108). Against a background of negative consequences of training for older workers, the perceived low provision of this age-awareness HRM practice found in this study turns out to be positive for organizations, as well as older workers. Overall, age-awareness HRM practices like training for older workers end up as work stressors for older workers. These practices are likely to damage older workers' self-worth, impair their need to belong and be seen in a positive light (Heilman, 1996). As a result, older workers are required additional psychological efforts to deal with the job strain associated with age-awareness HRM practices.

On a more positive note, findings suggest that recognition and respect act as buffers of age-based stereotype threat. Unlike training for older workers, recognition and respect practices are not designed exclusively for older workers. While age-awareness HRM practices put older workers private and public collective self-esteem at stake, thus making their inclusive aim to fire back against the very targets they were intended to support (Heilman, 1996), general HRM practices like recognition and respect are based on the equal treatment of organizational members regardless of their age. In accordance with social identity theory, practices that explicitly show that older workers are valued and desirable organizational members (Armstrong-Stassen & Schlosser, 2011) lessen worry and concern of not being able to construct a positive social identity at work (Henenekam & Herrbach, 2015). This signal of organizational support would be even more effective if organizations reinforced intergenerational network groups (Friedman & Holtom, 2002), thus making clear to all their members the value placed on the organization's older workers (Kulik, 2014).

Although moderation effects of recognition and respect were in the expected direction, size effects were small. As pointed out above, interventions like training for older workers boosted age-based threat, and even the recognition and respect placed on older workers buffered age threat to a limited extent. In line with this reasoning, organizations are likely to hamper age-based threat more effectively by designing and implementing workplace social interventions such as team building (Finkelstein et al., 2015; Zabel & Baltes, 2015). Given that these interventions focus on memberships other than age groups like the team, the department, or the organization, relational sources of bias are eliminated and inclusion would be fostered, thus reducing the potential for age stereotyping.

Practical Implications

The findings of this study suggest several courses of action for practitioners. Given that negative age-based metastereotypes were found to be positively related to organizational disidentification, it is suggested that HRM efforts to reduce organizational disidentification should include reframing metastereotypical beliefs (Casad & Bryant, 2016), for instance through mentoring opportunities that allow direct transfer knowledge and the creation of cross-

cutting ties between older and younger workers. In addition, findings indicated that organizational disidentification is associated with age-based stereotype threat suggesting that in order to increase stereotype threat interventions' effectiveness, practitioners must be aware of the nature of the threat, namely, its sources and targets (Shapiro & Neuberg, 2007). Above all, findings about the HRM practices' upsides and flaws recommend the development of interventions that take into account all age groups (Casad & Bryant, 2016; Hennekam & Herrbach, 2015) thus supporting the usefulness of the social identity approach to the understanding of stigmatized workers' beliefs, feelings, and attitudes. In this regard, a promising approach to tackle stereotypes' pervasiveness, as well as the negative effects of training for older workers can be found in workgroup/organizational interventions that emphasize a sense of identity with the workgroup/organization (Haslam et al., 2003). In fact, the overriding role of meaning and salience of social categories in the social identity approach yields a key recommendation for successful group interventions in the workplace. Interventions that value positive social identities of stigmatized workers may reframe social threats as challenges to circumvent the age-awareness HRM practices' shortcomings mentioned above. Besides providing the context and opportunity for positive intergenerational contact, workplace interventions that follow social identity approach insights allow subgroup identities to be fully expressed. It has been argued that positive contact between age groups is linked to decreased stereotype threat vulnerability among older individuals (Abrams, Eller, & Bryant, 2006). High-quality relationships across age group boundaries may also influence age diversity effects since they are likely to reduce the social distance between age groups, which in turn sets the tone for more equal status intergroup contact. Yet, by itself intergroup contact does not automatically improve relations between groups (Pettigrew, 1998). Research findings support that intergroup contact reduces intergroup bias, which in turn moderates stereotype threat effects provided that some essential conditions are met (Abrams et al., 2006; Pettigrew, 1998). Building on Allport's contact hypothesis (1954) which set four optimal conditions for positive effects of intergroup contact, Pettigrew (1998, p. 80) pointed out that "equal group status within the situation, common goals, intergroup cooperation, and authority support" are quintessential conditions for intergroup contact positive effects. Pettigrew (1998) also argued that positive outcomes of intergroup contact are achieved through mediating processes of attitude change such as learning about the outgroup, behavior modification, generation of affective ties, and ingroup reappraisal. To this end, it is in any organization's best interest to provide opportunities for cross-group relationships to develop, especially because positive effects of intergroup contact occur more often in social settings where the underlying norms are more tolerant of intergroup contact (Christ et al., 2014). For instance, socialization tactics like mentorship or tutoring arrangements could be promoted between older and younger workers, alongside with other social events which ensure the conditions for positive intergroup contact on a permanent basis. Improving intergroup relations via intergroup contact may create the potential to generate more positive attitudes toward outgroup members, which in turn sets the tone for more inclusive organizational environments. Since mentoring sets the stage for the four interconnected processes suggested by Pettigrew (1998), this workplace intervention will likely contribute to reframe metastereotypical beliefs. And given that metastereotypes contribute to the construction of a relational knowledge structure that affects older workers' mind-set and, therefore, influences the way older workers interpret the workplace conditions (Shiu et al., 2015), mentoring has the potential to show consistently positive effects on prejudice reduction. Hence,

intergenerational contact rather than becoming a workplace stressor for members of stigmatized groups may very well be key to fostering their identity and psychological safety. In addition to intergenerational contact, role model interventions could contribute to alleviate the anxiety associated with stereotype-relevant situations (Shapiro et al., 2013), and with the potent stigma of incompetence ascribed to workers targeted by HRM practices that entail preferential treatment based on group membership (Heilman et al., 1997). Recent empirical work showed that concerns about confirming the negative stereotype about the ingroup may be reduced through the presentation of an ingroup role model who refutes the stereotype (Shapiro et al., 2013). Remarkably, the effectiveness of this approach does not necessarily involve the physical presence of a role model. Insofar as role models' salience and competence visibility is fostered, for instance by providing access to unequivocal information about effective ingroup members, stereotype threat could be attenuated (Roberson & Kulik, 2007). In practical terms, these findings support the notion that contexts in which stigmatized minority members could get easier access to role models such as work-related network groups are likely to increase social support, thereby hampering group-reputation threats, and helping organizations to manage minority employees (Friedman & Holtom, 2002). Briefly, age-based stereotype threat is a social identity threat at its very core. Admittedly, the "fight fire with fire" strategy may very well be the most promising to hinder social threats. Social identity interventions aimed at the inclusion of all age groups in the workplace are in the best place to provide identity safety for all organizational members. And given that it seems easier to craft HRM practices to accommodate older workers preferences, needs, and goals than to change beliefs, there is a definite reason for managers to appreciate the stereotype threat framework (Kulik, 2014). Above all, managers should preclude to be taken hostages by chronological or perceived age criteria in their decision-making process, in particular regarding age groups targeted by age-awareness HRM practices. Given that the stigma of incompetence associated with these groups was found to be quite resistant (Heilman et al., 1997) and that the provision of training for older workers seems to reinforce the threat posed by negative views about older workers, managers must raise their awareness of tackling mechanisms that might hamper harmful effects of negative age stereotypes in the workplace. For instance, the early identification of stereotypical beliefs may bring additional transparency and precision to personnel decisions (Posthuma & Campion, 2009). If managers are aware that performance assessment results may be biased by social identity threats and therefore each employee actual talent remains unknown, the effectiveness of performance assessment and interconnected HRM practices could be boosted. Also, given the multiplicity of age stereotypes in the workplace, personnel decisions effectiveness increases to the extent that age categories are far from being central to the decision-making process. The more individualized the analysis of employees' competences and traits proves to be, the more accurate and trustworthy information managers will get. At the same time, concerns about stereotype threats might have never been openly discussed between managers and stereotype targets. Possibly, the inclusion of all organizational members in age diversity programs could make room for a promising debate about age-based stereotype threats in the workplace. In sum, research findings about HRM practices provide several insights on how to reduce older workers vulnerability to age-based stereotype threat. As such, HR managers must be aware of the managing tools available to include, integrate, and develop these workers' full potential (Scott et al., 2011).

Limitations and Suggestions for Future Research

A number of caveats are acknowledged in this study, which bring about questions requiring further investigation. First, all constructs were assessed through self-reports and herewith there is the risk that findings could be due to the measurement method rather than the constructs measured. Nevertheless, given that data were not collected at a single point in time, the likelihood of common method variance was reduced. The study was also able to detect statistically significant interaction effects. Therefore, method bias should not be responsible for the observed effects (Podsakoff, MacKenzie, & Podsakoff, 2012). Additionally, the sample was exclusively comprised of older workers. While participation and contributions of older workers are key to the successful development of HRM practices (Pinto et al., 2014), HR managers are the ones who actually implement them and their perceptions were not taken into account in the study. Given that the moderation effects of HRM practices neither enlighten managers about what is being done right or wrong, nor what they should do to improve practices' effectiveness, HR managers' perspectives should be assessed in future research. Second, this study was carried out with a cross-sectional design. As interpersonal relations develop over time, overt characteristics in tandem with stereotypical information tend to lose relevance as primal criteria for social grouping. As such, age-related effects in workers over time could not be properly addressed in this study. Moreover, even though compelling theoretical arguments were attempted for the directions of influence predicted in the model, the cross-sectional design of the study precludes confident conclusions about causality. To explore plausible alternative explanations like reverse causality regarding more chronic experiences of stereotype threat (e.g., organizational disidentification causes age-based stereotype threat) and to shed more light on long-term responses to stereotype threats, future studies should consider a longitudinal research design (Bedyńska, & Żołnierczyk-Zreda, 2015). Longitudinal designs would also be useful to understand the process whereby "older-older workers" develop stronger negative age-based metastereotypes than their younger colleagues, and to clarify whether negative age-based metastereotypes are more likely to be perceived as a threat than a challenge, as older workers age. Third, the reasons and motives underpinning the observed distinct moderation effects of training for older workers, and recognition and respect on age threat are far from being fully addressed. In this regard, the interaction effect of recognition and respect practices found in this study might provide a useful insight. Since recognition and respect were found to alleviate age-based stereotype threats, it is likely that they foster identity safety and inclusion among stereotyped workers. Along the same vein, inclusion is likely to result from positive intergenerational contact as contact allows older workers to be socially interconnected and to establish personalized cross-cutting ties. In this way, the quality of intergenerational contact may well be playing a role in the relationship between age-awareness HRM practices and age metastereotyping. Specifically, it is anticipated that positive intergenerational contact would counterbalance the negative effects of age-awareness HRM practices on stigmatized workers. Further research might take advantage of qualitative techniques such as interviews, narrative approaches, or diary studies to disentangle the relationship between HRM practices and age threat, in particular regarding the interactive effects of HRM practices on individual beliefs, feelings, and behaviors. Lastly, the study only evaluated older workers negative age-based metastereotypes regarding the younger workers outgroup. It is possible that older workers experience of threat may be somewhat different according to the outgroup targeted by the

metastereotype (Finkelstein et al., 2015). In the same token, the current investigation was limited by its single focus on the target of stereotype threat. Further research regarding the role of other source threats (e.g., ingroup or outgroup team mates, supervisors, top managers) would be of great help to foster the debate on stereotype threat dimensionality.

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