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Older workers: stereotypes and occupational self-efficacy

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Running head: STEREOTYPES TOWARD OLDER WORKERS

Abstract

Purpose. The present study aims to explore the relationship between organizational age stereotypes

and occupational self-efficacy. First, we intend to test the measurement invariance of Henkens

(2005)'s age stereotypes scale across two age group, respectively under 50 years and 50 years and

older. Then, the moderator role of age groups in the relationship between age stereotypes and

occupational self-efficacy is investigated.

Methodology. The survey involved a large sample of 4667 Italian bank sector's employees.

Findings. The results shows the invariance of the three dimensional structure of organizational

stereotypes toward older workers scale: productivity, reliability and adaptability. Furthermore, the

moderation is confirmed: the relationship between organizational age stereotypes and occupational

self-efficacy is significant only for older respondents.

Research limitations/implications. Further research is necessary in order to verify the

generalization of the results to other sectors and countries.

Practical implications. The study suggests the importance to emphasize the positive characteristics

of older workers and to reduce the presence of negative age stereotypes in the workplace, especially

in order to foster the occupational self-efficacy of older workers.

Originality/value. Our findings are especially relevant in view of the lack of evidence about the

relationship between age stereotypes and occupational self-efficacy.

Keywords: age stereotypes; older worker; occupational self-efficacy; age groups; ageing

Older workers: stereotypes and occupational self-efficacy

The issue of ageing in the workplace has been defined as a 'new diversity' (Capowski, 1994) because it tests the capacity of organizations to manage changes in the composition of the workforce. Recent surveys revealed that Italy has one of the oldest populations in the world, and that the current ageing process of population in Italy is more pronounced than in most other European countries (OECD, 2004). Nevertheless, older workforce do not receive a special attention and adequate investments by Italian employers (Conen et al., 2012). Studying generations based on perspectives of stereotyping is important in the work context, above all because people's beliefs about generational differences are not based on real differences, but they are often socially constructed and based mainly on common age stereotypes (Rudolph and Zacher, 2015). Negative evaluations made by others may produce a negative spin-off in older workers' behaviours concerning their career activities, early retirement intentions and learning and development motivations (Gaillard and Desmette, 2010; Salthouse and Maurer, 1996). But which is the mechanism through which stereotypes can influence older workers' behaviours? We think that self-efficacy defined as "beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments" (Bandura, 1997, p. 3) may be a key construct for understanding age-related processes in the work environment because it is influenced by the social context and it may be considered as a trainable resource to prevent negative outcomes of ageing in the workplace. Self-efficacy has been shown to be affected by ageing (i.e., Dingemans and Henkens, 2015) and to be an antecedent of work-related task performance (Judge et al., 2007). However, surprisingly, very little attention has been dedicated to older workers' self-efficacy.

We intend to explore the relationship between organizational age stereotypes and occupational self-efficacy, the latter defined as the competence that a person feels concerning the ability to successfully fulfil his or her job tasks (Rigotti *et al.*, 2008). The present study fills an important gap in the literature because traditionally age-stereotype research has focused on the

employers rather than the employees (Maurer *et al.*, 2008), while we chose to analyse the point of view of the latter, comparing younger and older workers. Specifically, given that stereotypes can have a vicarious role in determining self-efficacy (Bandura, 1977), we investigated how age stereotypes may model occupational self-efficacy considering the moderating role of age group.

Age stereotypes in the workplace

As the workforce gets older, age stereotypes become more relevant in organizations (Finkelstein et al., 2015; Posthuma and Campion, 2009). Age stereotypes are defined as "a simplified, undifferentiated portrayal of an age group that is often erroneous, unrepresentative of reality, and resistant to modification" (Schulz et al., 2006, p. 43). Different studies have demonstrated a general consensus about the contents of stereotypes that affect older people in the workplace, independently from the age (Posthuma and Campion, 2009; Van Dalen et al., 2010) or the nationality (Chiu et al., 2001; Guglielmi et al., 2016) of the respondents. Older workers are not viewed entirely negatively or positively, however, they are stereotypically viewed more negatively compared to younger workers, and this stereotyping is at the heart of employment discrimination against them (Dordoni and Argentero, 2015; Van Dalen et al., 2009; 2010). The present study intends to involve both younger and older workers to explore which age stereotypes are perceived by a large sample of Italian banking sector employees in their workplaces. Conen et al. (2012) showed that Italy is an interesting context to study ageing at work. Italian employers differ from their European counterparts in the sense that that are very inactive toward older workers. They believe that the government is responsible for older workers' retention and lifelong training programs. Consequently, they think that age discrimination should be combated with laws and media campaigns.

Although the relevance of stereotyping of older workers has widely been reported in literature, only a few validated instruments exist, so our first purpose is to contribute to the validation of the scale developed by Henkens (2005) on the stereotypes toward older workers.

Henkens (2005) submitted a set of 15 items developed by Walker and Taylor (Institute of Personnel Management [IPM]) to 796 Dutch managers and found that older workers are considered as 1) less productive, 2) less adaptable, and 3) more reliable than younger workers. The present research is interested in understanding if younger and older workers have the same perception of the age stereotypes characterizing their work environment. We chose to use the cutoff of 50 years to distinguish older workers from younger workers. Even if there is little consensus on the chronological age (or ages) at which an "older worker" is defined, a number of previous studies have used 50 years old as cut-off (McCarthy *et al.*, 2014) and, furthermore, according to managers' opinion, the "limit of employment" seems to be 50 years (see, Karpinska et al., 2013). Based on previous findings, which showed that the same age stereotypes are shared by people of different ages, we expect that:

H1. The three-factor structure of the stereotypes toward older workers scale is equivalent in two age groups (older vs. younger workers).

Age stereotypes and occupational self-efficacy

Self-efficacy construct represents a core aspect of Bandura's Social Cognitive Theory and has been widely investigated as determinant of behaviour. It is conceived as "a dynamic set of self-beliefs that are linked to particular performance domains and activities" (Lent, 2005, p. 104), and in this sense, it can be conceptualized at different levels of specificity. General self-efficacy reflects a generalization across various domains of functioning in which people judge how efficacious they are, while domain-specific self-efficacy refers to the beliefs in one's ability to perform the specific tasks required to succeed within a given domain (Bandura, 1977). Many ageing studies have reported age-related declines both in general self-efficacy (Dingemans and Henkens, 2015) and domain-specific self-efficacy (Lang and Heckhausen, 2001), but when contextual resources are available it is possible to observe an improvement in some domain-specific self-efficacy beliefs among older adults (McAvay *et al.*, 1996).

As stated, little attention has been paid to the relationship between ageing and work-domain specific self-efficacy. An interesting recent study by Paggi and Jopp (2015) focused on the occupational self-efficacy of older workers; the authors found that negative self-perceptions of ageing predicted poorer occupational self-efficacy. As Paggi and Jopp (2015) suggested, "Older workers who espouse more negative attitudes toward their own ageing have less confidence in their abilities to perform their job functions" (p. 15). According to Bandura (1997), people process and integrate diverse sources of information concerning their capability: performance accomplishments, vicarious experience, verbal persuasion, and physiological and emotional states. That is, stereotypes may serve as a form of vicarious experience; indeed, they depict what people similar to oneself are able or unable to do, and, consequently, these depictions may influence the judgment of personal efficacy. This mechanism has been described, for instance, by Bussey and Bandura (1999) referring to the role of stereotypes in gender development: gender stereotypes which are generalized preconceptions about the attributes of males and females are learnt from observing models since childhood and influence the judgment of personal efficacy in performing stereotypically feminine or masculine tasks. It is demonstrated that gender and ethnic stereotypes influence women and minorities' occupational self-efficacy and consequently the career choices, academic success and job performance of these groups (Brown and Lent, 2012). The effect of the activation of a stereotype on behaviour via self-efficacy has been confirmed in an experimental study by Hansen and Wänke (2009). Concerning older people, empirical evidence has shown the effect of age stereotypes on self-perception; for instance, negative stereotypes of ageing decrease memory selfefficacy in older participants (Levy, 1996). Studying the older workers' self-efficacy for development and improvement of career-relevant skills, Maurer (2001) suggested that the stereotypical representation of older workers as less receptive to new ideas, less capable of learning and less adaptable than younger workers may affect the older employees' self-efficacy for development. This assumption was confirmed by Maurer et al. (2008), who found that stereotypical

beliefs about older workers' ability to develop were related to the senior employees' self-efficacy for development.

In light of these considerations, the present research is interested in investigating the relationship between age stereotypes at the workplace, measured in terms of dispositions that organizations have towards older workers, and employees' occupational self-efficacy. In particular, we expect that:

H2. Organizational stereotypes toward older workers is related to occupational self-efficacy.

Although groups exist only in relation to other groups, few studies have adopted an intergroup perspective to explore the condition of older people in the workplace (Desmette and Gaillard, 2008; Gaillard and Desmette, 2008). Being an 'older worker' often means being a member of a stigmatized group and, consequently, this membership may be a threat to an individual's positive self-image. Self-Categorization Theory (Turner, 1982) explains the social cognitive process that sustains the relationship between beliefs toward in-group and self-concept: under conditions of social category salience, individuals perceive themselves more as representative members of a social category than as unique personalities; thus, being target of stereotyping leads to feeling and behaving accordingly. Empirical studies have demonstrated that responsiveness to stereotype primes is triggered only if the primes has personal relevance to the participants (Levy, 2003; 2009). Indeed, the activation of age stereotypes influences the older participants' performance but it has no effect on the younger participants because age stereotypes do not describe the self-identity of younger people. In this sense, the experimental studies showed that older workers have a higher level of group identification than younger workers (Doosje et al., 1995; Spears et al., 1997). Consequently, given that the self-relevance of stereotypes is important in order to determine their effects (Levy, 2003; 2009), we hypothesized that the relationship between age stereotypes and occupational self-efficacy could be different in the older vs. younger workers' groups. In other words, we expect that:

H3. Age moderates the relationship between organizational stereotypes toward older workers and occupational self-efficacy such that the effect of stereotypes is significant for older people but not for younger people.

Method

Participants and procedures

Thanks to the cooperation of three Italian banking groups, a total of 7,816 employees received by email an invitation to participate in our online survey. The invitation included confidentiality assurance and a link to fill in the questionnaire anonymously. The final sample consisted of 4,667 employees (59.7% response rate), of which 64.9% were males. The average age was 45.66 years (SD = 9.90), and 23% of respondents were managers.

Measures

Stereotypes toward older workers scale. A research team translated the original 15 questions of the scale into Italian, then they were back-translated by a bilingual domain expert and the two versions were compared to verify continuity in meaning. There were no salient or major differences, except the exclusion of one original item, 'My organization thinks that ... older workers are less capable of doing physically taxing work than younger workers'. We replaced it with 'My organization thinks that ... older workers have more difficulties to cope with stress than younger workers'. Given that physical demands do not characterize the work environment of our sample of white collars, we preferred to measure belief about the older workers' general ability to cope with stress. Comprehensibility of the translated items was assessed by research colleagues. The respondents were asked to indicate to what extent they agreed with the statements presented, which refer to their bank group's negative vs. positive beliefs about workers 50 and older. The response scale ranged from 1 (strongly disagree) to 5 (strongly agree).

Occupational self-efficacy scale. The Italian version (Di Fabio and Taralla, 2006) of the Occupational Self-Efficacy Scale (short form) introduced by Schyns and von Collani (2002) was

used. It consists of 8 items. High values reflect high occupational self-efficacy. The original six-point response scale was adjusted into a five-point scale ranging from 1 (not at all true) to 5(completely true).

Age group. We classified the participants into two age groups: younger workers aged under 50 years (54.7%) and older workers aged 50 years and over (45.3%).

Results

Exploratory factor analysis

We conducted an exploratory factor analysis on a first randomly extracted subsample. It was composed of 2,321 cases; 65.5% were males, the mean age was 45.62 (SD = 9.86), 45.3% were over 50 and 23.4% were managers. The factor analysis yielded three factors with eigenvalues > 1, explaining 54.73% of the variance and confirming the factorial structure of the original English version of the questionnaire (Henkens, 2005).

- Table I about here -

As can be seen in Table I, overall items loaded where expected and cross-loading was minimal. Only two items behaved differently from the original English version. First, Item P_6 of the productivity dimension (*Older workers prefer not to be assigned tasks by younger workers*) loaded factor 2 (corresponding to the adaptability dimension) with a factor loading of .538. Secondly, Item P_3 of the productivity dimension (*Older workers keep up just as well as younger workers*) did not show any factor loading higher than .30.

The reliability test also confirmed the validity of the scales, with Cronbach's alpha being .80 for adaptability, .83 for reliability and .74 for the four-item version of productivity (i.e., without P_3 and P 6; Cronbach's alpha is .69 if all the six items are computed).

Overall, these analyses provide support for the psychometric properties of the Italian version of the questionnaire, even excluding two items of the productivity dimension. Thus, the 13-item version of the questionnaire was used for the following confirmatory factor analyses (CFA) and evaluation of measurement equivalence between groups of age (i.e., under 50 and 50 years and up).

Confirmatory factor analyses

Confirmatory factor analyses were conducted on a second randomly extracted subsample, composed of 2,346 cases (64.2% males, mean age 45.71 [SD = 9.94], 46% over 50, 22.6% managers). Two independent CFAs were conducted for each age sample, under 50 and 50 years and older.

- Table II about here -

The results (see Table II) showed that the single factor solution (Model 1a referred to younger workers and Model 1b referred to older workers) did not fit the data in an acceptable way. On the contrary, the 3-factors solution (Model 2) fitted the data quite well in both the age samples (Model 2a and 2b). Table II also presents detailed results from the series of increasingly restrictive tests of measurement equivalence across the two groups of age (Cheung, 2008). Model 3 confirmed the configural equivalence of the scale (i.e., an equal number of factors and pattern of factor loadings across groups) and Model 4 verified the metric equivalence of the scale (i.e., the strength of relationships between the latent factors and the corresponding items across groups). Finally, Model 5 tested the scalar equivalence of the scale (i.e., the degree and intensity of the construct across groups): in this case, the drastic deterioration in the χ^2 ($\Delta\chi^2_{\text{M5-M4}}(13) = 525.671$) and a $\Delta\text{CFI}_{\text{M4-M5}} = .047$ suggested that scalar equivalence was not supported. Therefore, the expected equivalence of the scale across groups was partly supported (HI).

Descriptive statistics

Table III presents descriptive statistics. In accordance with Henkens (2005), the means of productivity, reliability and adaptability were calculated so that respondents who believed their organization had a positive attitude towards older workers had a high score. The results showed that organizational stereotypes towards older workers were quite positive in terms of their productivity (M=3.29), but less in terms of their reliability (M=3.06) and adaptability (M=2.78). In addition, the perception of organizational stereotypes toward older workers tended to be less favourable in the group under 50 years old than in the group of 50 years and more.

- Table III about here -

Concerning correlations (Table IV), male and older respondents perceived more positive organizational attitudes toward older employees. In addition, correlations among productivity, reliability and adaptability ranged from r=.01 (p=.376) to .55 (p=.000), suggesting the multidimensionality of the age stereotypes.

Moderation effects of age

The results of regression analysis (Table V) showed that the control variable accounted for 2% of the variance in employees' occupational self-efficacy. Specifically, males had a higher occupational self-efficacy than females (β =-.101; p=.000) and managers had a higher occupational self-efficacy than subordinates (β =-.058; p=.000). The joint main effects of the three dimensions of the older workers' stereotypes and age accounted for an additional 3% of the variance. The results showed that productivity (β =.042; p=.016), reliability (β =.117; p=.000) and adaptability (β =.106; p=.000) had a significant positive association with occupational self-efficacy (H2 was supported). Furthermore, older workers had a higher occupational self-efficacy than younger colleagues (β =.098; p=.000). Finally, age moderated the relation between reliability and occupational self-efficacy (β =.118; β =.000), as well as the relation between adaptability and occupational self-

efficacy (β =.147; p=.000) (additional explained variance of 2%). In other words, the expected moderating role of age on the relationship between stereotypes toward older workers and occupational self-efficacy was confirmed, for two (reliability and adaptability) of the three dimensions of the age stereotypes (H3 partially supported).

- Table V about here –

The interaction effects were plotted in Figures 1 and 2. As we expected, a simple slope analysis revealed that the association between reliability and occupational self-efficacy was positively significant for older workers (B=.179; p<.001), but not significant for younger workers (B=.003; n.s.).

- Figures 1 about here -

An analogous result was found referring to the relation between adaptability and occupational self-efficacy, which was significant for older workers (B=.118; p<.001), but not significant for younger workers (B=-.019; n.s.). To conclude, the results support the hypothesis that positive organizational attitudes about reliability and adaptability of older workers enhance older employees' occupational self-efficacy, but they have no effect on the younger people.

- Figures 2 about here -

Discussion

The present study aimed to explore the relationship between organizational age stereotypes and occupational self-efficacy, focusing on a comparison between older and younger workers. We

were interested to test the point of view of employees on the beliefs that organizations hold towards older workers. Our results confirm that organizational age stereotypes may be described in terms of beliefs about productivity, reliability and adaptability of older workers. These stereotypes are related to occupational self-efficacy and this relationship is moderated by age. Indeed, the organization's positive beliefs toward older employees' adaptability and reliability improved the occupational self-efficacy of 50 years and over group, while it had no effect on the under 50s.

Theoretical implications

Our study provides important theoretical contributions to the literature on the relationship between age stereotypes and older workers' occupational self-efficacy. First, as reported by previous studies (Chiu *et al.*, 2001; Maurer *et al.*, 2008; Posthuma and Campion, 2009), our findings confirm that the stereotypes toward older workers are both positive and negative. According to our sample, older workers are productive, reliable but few adaptable to the changes. Although prior research showed that older age is usually perceived as a phase of lower productivity (Silverstein, 2008), we found that older workers' productivity was positively evaluated by our respondents. A possible explanation could be related to the specific work environment (bank sector) in which our data were collected. Indeed, older workers are generally more positively assessed in the services sector in contrast to industries (Turek and Perek-Bialas, 2013). The bank clerks deal with work tasks that need mainly soft skills (e.g., social abilities, loyalty to organization) and cognitive abilities (e.g., crystallized intelligence, experience, practical and tacit knowledge, expertise) that improve throughout life (Turek and Perek-Bialas, 2013; Van Dalen *et al.*, 2010).

Second, our results shows that older respondents attribute to their organizations more positive stereotypes toward older workers. This is in line with Henkens (2005) who found that older managers tend to hold more positive views of older employees than younger managers. According to in-group bias (Tajfel, 1978), older workers view older people more favourably than they do younger people in order to maintain a positive social identity (i.e., Bertolino *et al.*, 2013; Chiu et al.,

2001; Posthuma and Campion, 2009). Our results confirms that the same bias persists even when employees are asked to evaluate the attitudes of the organization towards the in-group.

Finally, consistent with Social Cognitive Theory's assumptions (Bandura, 1977) and in a similar way to previous findings about gender and ethnic stereotypes (Brown and Lent, 2012), we found that occupational self-efficacy may be influenced by age stereotypes. Especially, the organization's positive beliefs about the older workers' reliability and adaptability improve the older workers' occupational self-efficacy but they do not seem a threat to younger workers' self-evaluation, albeit our scale measured the age stereotypes by directly contrasting older to younger workers. As previous research demonstrated (Doosje *et al.*, 1995; Spears *et al.*, 1997), those who are higher identified with a social group are more inclined to self-stereotype as a group member than those who are lower identified. Our results suggest that over 50s identify themselves with the 'older workers' group and, consequently, age stereotypes become a salient source of information concerning their occupational capability (Bandura, 1977; Maurer, 2001). On the contrary, younger workers do not use the age as a self-defining category.

An additional consideration is that the relationship between productivity and occupational self-efficacy was not moderated by age. It means that more productive are considered the older workers by the organization, higher is the occupational self-efficacy of both younger and older workers. It is plausible that all employees perceive positively that the organization appreciate the specific contribution of older workers to the collective performance. In this sense, the acknowledgement of the older workers' value may foster the development of a supportive organizational climate, which is an antecedent of all employees' self-efficacy (Luthans *et al.*, 2008). *Practical implications*

From an applied perspective, our results suggest that in light of coming demographic changes organizations should be oriented to creating environments where both older and younger employees are valued. Contrasting negative age stereotypes may be a way to win the demographic challenge.

Kray and Shirako (2009) identified three categories of strategies that organizations can implement to reduce stereotype threats: 1) stereotype management, which includes acknowledging stereotypes, emphasizing positive stereotypes, and deemphasizing negative stereotypes; 2) equal opportunities for younger and older employees, which include increasing older employees' representation and job training; and 3) organizational culture, including both fostering identity safety and valuing effort. The present research showed that by emphasizing the positive characteristics of older workers organizations may foster the occupational self-efficacy of employees aged 50 and over without compromising the self-confidence of younger employees. As Zaniboni et al. (2013, 2014) argued, organizations can emphasize positive attribute of older workers creating opportunities for older workers to use their expertise, avoiding (or reducing) requirements to perform new tasks. Moreover, the organizations should promote age management policies oriented to create equal opportunities for younger and older employees to access to job training. We suggest for all training programs a smarter use of age groups aimed at stimulating professional partnerships and supporting both formal and informal learning between younger and older workers (i.e., mentoring or reverse mentoring). On the one hand, it may be the way to offer an experience of mastery to all employees, that is a source to increase individual occupational self-efficacy. On the other hand, it may be an opportunity to enhance cooperation between older and younger workers. Indeed, it has been demonstrated that frequent contact with older workers tends to hold more positive views of them and, therefore, to deemphasize negative age stereotypes.

Limitations and future research

This contribution offers a number of promising theoretical and practical implications for the study of the relationship between organizational age stereotypes and occupational self-efficacy, but a few limitations merit mentioning. Considering the generalization of our findings, we collected data only from the Italian bank sector. As previously discussed, Italy has one of the oldest populations in Europe, and the Italian workforce cannot be easily compared to foreign ones. In

addition, the bank sector showed to be a favourable environment for older workers, because it has shown as interested in investing in aging workforce and developing age management policies. For instance, the European Banking Federation (2014) mentioned older workers' training and career programs among its human resources best practices to foster the length and level of the staff's employability. Future studies should use the contextual features as control variables to yield further insight into the perception of age stereotypes in the workplace. Another limitation to our sample may be its response rate (59.7%), which is not very high, but is in line with the average of response rate of previous research (Barugh and Holtom, 2008).

Moreover, due to the cross-sectional design, the common method variance could be an issue; in fact, data in a single questionnaire may be closely related (Podsakoff *et al.*, 2003). That is, we have to be careful about drawing causal inferences. Therefore, future studies should aim to replicate our findings with longitudinal designs. However, our results supported the discriminant validity of our measure of age stereotypes and it is suggested that common method variance was not a major issue. In addition, since age is an objective variable and thus, it is less likely to be biased, hypotheses testing for interaction effects are also unlikely to be affected by common method variance (Evans, 1985).

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Table 1: Extracted factors and factor loadings

		Factor			
Items	1	2	3		
R_3. Older workers are more meticulous than younger workers.	.843				
R_2. Older workers are more reliable than younger workers.	.830				
R_5. Older workers are more careful than younger workers.	.809				
R_4. Older workers have greater social skills than younger workers.	.723				
R_1. Older workers are more loyal than younger workers.	.650				
P_3. Older workers keep up just as well as younger workers.					
A_2. Older workers are less able to adapt to technological change than		0.45			
younger workers.		.845			
A_1. Older workers are less interested in technological change than		024			
younger workers.		.834			
A_4. Older workers are less interested in participating in training		(72	2.42		
programs than younger workers.		.673	.342		
A_3. Older workers are less capable of coping with stress than		5.42	2.40		
younger workers.		.542	.340		
P_6. Older workers prefer not to be assigned tasks by younger workers.		.538			
P_1. Older workers are less productive than younger workers.			.828		
P_2. Older workers are less creative than younger workers.			.788		
P_4. Absenteeism is higher among older workers than among younger			610		
workers.			.610		
P_5. Older workers are just as enterprising as younger workers.			592		
Eigenvalue	3.99	3.10	1.11		
% explained variance (cum. 54,7)	26.6	20.7	7.4		

N= 2321. R = reliability; A = adaptability; P = productivity. Values lower than .30 are not reported

Table 2. Goodness of fit statistics for tests of measurement equivalence of the scale

	χ^2	df	RMSEA	CFI	ΔCFI
Model 1a (Single factor, Under 50)	3169.064	65	.194 (.188200)	.433	
Model 1b (Single factor, Over 50)	3189.737	65	.211 (.205217)	.432	
Model 2a (Three factor, Under 50)	524.442	62	.077 (.071083)	.916	
Model 2b (Three factor, Over 50)	437.139	62	.075 (.068082)	.932	
Model 3 (m.g. – configural equivalence)	961.580	124	.054	.924	
Model 4 (m.g. – metric equivalence)	969.797	134	.052	.924	.000
Model 5 (m.g. – scalar equivalence)	1495.468	147	.063	.877	.047
			(.000003)		

Table 3 : Descriptive statistics

	Tot	al	U5	0	05	50	
	(N=4	(N=4667)		(n=2537) (n=2130)		130)	
	M	SD	M	SD	M	SD	<i>F</i> ; <i>p</i>
1. Age	45.66	9.90	38.10	6.85	54.67	3.09	10632.683; .000
2. Productivity	3.29	.86	3.15	.80	3.46	.90	156.019; .000
3. Reliability	3.06	.87	2.81	.82	3.36	.84	524.130; .000
4. Adaptability	2.78	.91	2.59	.84	2.99	.94	232.651; .000
5. Occupational self-efficacy	3.95	.57	3.87	.55	4.06	.58	136.647; .000

Table 4 : Correlation between study variables

	1	2	3	4	5
1. Gender	-				
2. Age	25**	-			
3. Productivity	05**	.20**	-		
4. Reliability	12**	.36**	.09**	-	
5. Adaptability	08**	.22**	.55**	.01	-
6. Occupational self-efficacy	11**	.19**	.12**	.13**	.14**

Note: N=4667. Gender: 0=male; 1=female

Table 5: Hierarchical regression test for age as moderator between stereotype's dimensions and occupational self-efficacy

Model	Occupational self-efficacy					
	Step 1	Step 2	Step 3			
Gender	10**	06**	06**			
Work role	06**	06**	06**			
Productivity		.04*	.05*			
Reliability		.09**	.01			
Adaptability		.09**	02			
Age		.10**	.09**			
Productivity x age			03			
Reliability x age			.12**			
Adaptability x age			.15**			
R^2	.02**	.05**	.07**			
ΔR^2		.03**	.02**			

N= 4667. *p<.05; **p<.01. Beta weights provided are in standardized form. Gender: 0=male; 1=female. Work role: 0= manager; 1= subordinate. Age: 0=under50s; 1=50s and older.

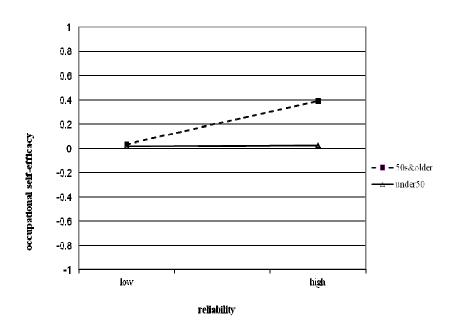
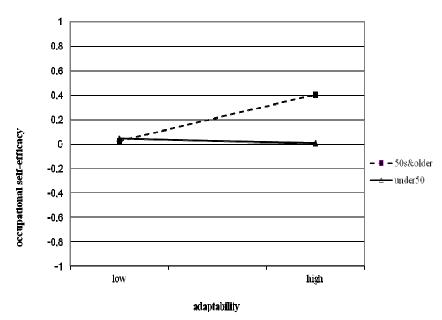


Figure 1 : The moderating effect of age on the relationship between reliability stereotype and occupational self-efficacy



 $Figure\ 2: The\ moderating\ effect\ of\ age\ on\ the\ relationship\ between\ adaptability\ stereotype\ and\ occupational\ self-efficacy$