DEBUNKING NEGATIVE STEREOTYPES ABOUT OLDER EMPLOYEES

The influence of negative aging meta- and self-stereotypes on older employees' perceived employability

UNIVERSITEIT TWENTE.

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Author:
Carina Halbesma
carina-halbesma@live.nl
Student number: s1213113

Date:

University:
Master Business administration
Faculty of Behavioural, Management and Social Sciences (BMS)
Department Human Resource Management (HRM)
University of Twente, Enschede

Supervisors:
Dr. Jeroen Meijerink
Department Human Resource Management (HRM)

Dr. Anna Bos-Nehles
Department Human Resource Management (HRM)

Preface

The master thesis lying in front of you is the end product of the master Business Administration within the specialization Human Resource Management at the University of Twente.

This graduation project is the most interesting part of this program that I could wish for. Partly through the literature and partly through my own research, I was able to discover that many of the negative perceptions about aging are not true. Besides, I was able to discover that these negative perceptions themselves have a negative impact on someone his/her performance. Who does not want to hear that aging is actually not that bad as people think?!

It is no secret that writing a master thesis is a challenging task. The realization of this final report has not been without a struggle. Therefore, I would like to thank some people who have guided me during this process.

First of all, I would like to thank my supervisor Dr. Jeroen Meijerink for his guidance during this project. He gave me constructive and critical comments that benefited my master thesis. Moreover, he guarded the development of the research, but also gave me the opportunity to let me make my own decisions. Thanks to Jeroen, I was able to find the pleasure back in doing research! In addition, I would like to thank Dr. Anna Bos-Nehles for her constructive and critical comments that benefited my master thesis. Besides, I would like to thank her for her flexibility in the scheduling of my colloquium. Besides my two supervisors, I would like to thank Charlotte Röring for her support during my master thesis.

Moreover, I would like to thank the different contact persons in the two different participating organizations. In particular, I would like to thank Anita Harperink and Menso van Bruchem. Because of them, I was able to find the needed respondents for this study. Moreover, I would like to express my gratitude to all the respondents who took the time to complete the survey. Without their participation, I was not able to complete my master thesis at all!

Last but not least, I would also like to express my gratitude to the most important people in my life. I would like to thank my family, friends and boyfriend for their listening ears to all my complaining, for their advice and for their faith in my ability. Without the constant support of my family, friends and boyfriend, I would not have been where I am standing now. However, I would like to thank my boyfriend in particular. Besides the mentioned favors above, I would like to thank you for investing so much time in my project. By reviewing parts of my thesis ;), but also through your understanding and patience. Thank you!

Carina Halbesma
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Management Summary

Background. Population ageing, i.e., the share of older employees increases, creates pressure on social support systems. In order to maintain these social support systems, individuals have to work longer. In this respect, employability of older individuals is important for (a) the society to maintain the social support systems and (b) older individuals to stay employable until the increased retirement age. But also for organizations, since organizations rely increasing on older employees' employability in order to deal with the constant changes with which they are confronted.

Research Purpose. Since employees are likely to act on the basis of their own perceptions and concerning the importance of employability for the older individuals themselves, organizations and the society, the aim of the present study is to understand the influence of negative aging meta- and self-stereotypes on older employees' perceived employability (OEpE) directly and indirectly through older employees' perceived ability, motivation and support to learn.

Method. In order to gather information, we made use of cross-sectional (offline and online) survey data. Depending if the employees were in the possession of a computer or not, an invitation was sent by e-mail or letter to the target group of 315 employees of 50 years and older from two organizations located in the Netherlands. In total, 130 useful surveys were returned.

Findings. Various factors were examined in whether they influence the five dimensions of OEpE positively. Older employees' perceived ability to learn contributes positively to all the five dimensions. Older employees' perceived motivation to learn and organizational support regarding the development of their competences and skills improve both three of the five dimensions of OEpE. However, negative aging meta-stereotypes, i.e., older employees belief that they are negatively stereotyped by members of the 'out-group' (e.g., older employees belief that their colleagues think that they are less flexible), and negative aging self-stereotypes, i.e., the previously he negative aging stereotypes that people apply to themselves as they

become older (e.g., older employees belief that older employees are less flexible) influence in total four out the five dimensions of OEpE negatively. Furthermore, negative aging meta-stereotypes decreases older employees' perceived motivation to learn.

Practical Implications. Organizations could increase OEpE by reducing the use of negative aging stereotypes (e.g., people perceive older employees as less flexible). This could be decreased by creating awareness that the use of negative aging stereotypes has many negative consequences for older employees and by stimulating a positive view regarding aging. A positive view regarding aging might be developed by creating awareness that many negative stereotypes about older employees are not true. Organizations could also improve OEpE by creating awareness among older employees that the negative aging meta-stereotypes they perceive does not have to be true. Otherwise, organizations could create awareness among older employees that they could nullify these negative aging stereotypes. Furthermore, organizations could increase OEpE by enhancing older employees' perceived ability to learn, stimulating older employees to learn and supporting older employees in the development of their knowledge and skills. Older employees' perceived motivation to learn could also be improved by reducing the use of negative aging stereotypes, be creating awareness among older employees that the negative aging meta-stereotypes are the belief of older employees themselves and that older employees could nullify these negative aging stereotypes. Organizations might increase older employees' perceived support to learn by increasing the resources older employees need to develop their knowledge and skills. By giving older employees tasks that are challenging, regularly feedback etc.

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Abreviations

AMO	Ability, Motivation and Opportunity
AMS (to learn)	Ability, Motivation and Support
OEpE	Older Employees' perceived Employability
SCT	Self-categorization theory
SIT	Social Identity Theory

1. Introduction

1.1. Background

Due to increasing longevity and declining fertility, population ageing is taking place (e.g., United Nations, Department of Economic and Social Affairs, Population Division, 2013). In other words, the share of older people in the world population increases, while the share of younger people decreases (e.g., Bal, De Lange et al., 2015; Dordoni & Argentero, 2015; Gavrilov & Heuveline, 2003; Lamont, Swift & Abrams, 2014). In this respect, the old-age dependency ratio also increases. In the Netherlands, for example, the old-age dependency ratio (i.e., the ratio between the people of 65 years and older, and people aged between 20 and 64) is increased from 25.1% in 2010 to 29.9% in 2015 (CBS, 2015), and this will still increase in the upcoming years (Oevering, 2016).

This development creates pressure on social support systems such as, for example, the health care systems and the state pensions (Gavrilov & Heuveline, 2003). Fewer people will pay into social support systems for a bigger amount of dependents. Dependents are people who rely on social support systems. In this case, dependents are the people of 65 years and older. They rely, for example, on the health care systems and the state pensions. In order to maintain the social support systems, governments have been taking policy actions, such as raising retirement ages (Raemdonck, Beausaert, Fröhlich, Kochoian & Meurant, 2015). In the Netherlands, for example, the current retirement age is 65.5, and is going to be 67 in 2021 (Rijksoverheid, 2015).

Due to the population ageing and the increase in retirement ages, the workforce is ageing. The share of older people in the workforce increases, while the share of younger people in the workforce declines (e.g. Bal et al., 2015; Froehlich, Beausaert & Segers, 2015; Schalk, Van Veldhoven et al., 2010; Wognum, Breukers, Wittpoth, Van der Heijden, 2011). In the Netherlands, for example, there are more people in their fifties employed than in their thirties. Specifically, for every 100 active thirties in the labor market, there were 103 active fifties in 2013. In 1990, this was 100 and 48 respectively (CBS, 2014).

With these developments in mind, employability of older employees is important for (1) older employees themselves, (2) organizations and (3) the society (Froehlich,

Beausaert, Segers & Gerken, 2014; Froehlich et al., 2015). Employability is defined as “the continuous fulfilling, acquiring or creating of work through the optimal use of competences” (Van der Heijde & Van der Heijden, 2005, p. 143). Organizations’ ability to deal with the constant changes with which they are confronted, depends on the employability of their employees (Van der Heijde & Van der Heijden, 2005; Valverde, Tregaskis & Brewster, 2000; Wognum et al., 2011). Due to the ageing workforce, the continuity of *organizations* relies therefore increasingly on older employees’ employability. Moreover, employability is considered to be an alternative to job security (Forrier & Sels, 2003). Since employment ensures that older employees receive income (i.e., salary) till the retirement age, employability of older employees is important for *older employees themselves*. In this way, it is also of interest for *the society*. Being employed contributes to the maintenance of the social support systems in that taxes are paid.

Because of this and that prior research has shown that employees are likely to act on the basis of their own perceptions (e.g., Berntson & Marklund, 2007; De Cuyper, Bernard-Oettel, Berntson, Witte & Alarco, 2008; De Cuyper, Van der Heijden & De Witte, 2011; Silla, De Cuyper, Gracia, Peiró & De Witte, 2008), older employees’ perceived employability (OEpE) is especially important for the continuity of organizations, the wellbeing of older employees themselves and the society. Based on the Ability-Motivation-Opportunity (AMO) theory (Boxall & Purcell, 2011), which states that individual job performance could be improved by enhancing individuals’ ability (A), motivation (M) and the opportunity to perform (O), it is proposed that the factors ability (A), motivation (M) and support (i.e., opportunity) (S) (AMS) contribute to OEpE. Since AMS to learn determine individual’s participation in learning activities (Raemdonck et al., 2015), which subsequently improves one’s perceived employability (e.g., De Vos, De Hauw & Van der Heijden, 2011; Froehlich et al, 2014; Van der Heijden, Boon, Van der Klink & Meijs, 2009; Van der Heijden, Gorgievski & De Lange, 2016), it is proposed that older employees’ perceived AMS to learn contributes to OEpE.

People have, however, many negative aging stereotypes (i.e., negative stereotypes about older employees). People perceive older employees, for example, as less flexible, more resistant to change, less productive etc. (Ng & Feldman, 2012; Posthuma & Campion, 2009; Van Dalen, Henkens & Schippers, 2010). Research shows that negative aging stereotypes contribute negatively to variables as intention

to retire, interest for learning activities, self-views and memory and mathematical self-efficacy (e.g., Gaillard & Desmette, 2010; Kornadt & Rothermund, 2012; Levy, 1996; Levy, Hausdorff, Hencke & Wei, 2000a; Maurer, Barbeite, Weiss & Lippstreu, 2008). Based on these findings, negative aging stereotypes might also negatively influence OEpE directly and indirectly by means of negatively influencing older employees' perceived AMS to learn. If this is the case, organizations are less able to deal with the constant changes with which they are confronted, older employees have no job security, and, as a result of this, it is less likely that the social support systems could be maintained.

1.2. Research Goal and Research Question

This study strives to understand in which manner and to which extent negative aging meta- and self-stereotypes influence OEpE directly and indirectly. Specifically, the aim of the present study is to understand in which manner and to which extent negative aging meta-stereotypes, i.e., older employees' beliefs about how they are negative stereotyped by members of the 'out-group' (Bal et al., 2015), and negative aging self-stereotypes, i.e., previously held negative aging stereotypes that people apply to themselves as they become older (Bennet & Gaines, 2010), influence OEpE directly or indirectly through influencing older employees' perceived AMS to learn. Based on this, the following research question is formulated:

"In which manner and to which extent do negative aging meta- and self-stereotypes influence older employees' perceived employability directly and indirectly through older employees' perceived ability, motivation and support to learn?"

1.3. Relevance of the Study

1.3.1. Scientific Relevance

By investigating the influence of older employees' perceived AMS to learn on OEpE, this study contributes to the literature. It expands knowledge regarding the determinants of employability (as defined by Van der Heijde and Van der Heijden, 2005). While some studies already investigated the relationship between employees' perceived AMS to learn formally on some dimensions of employees' perceived

employability (e.g., Breukers, 2010; Cheung, 2014; De Vos et al., 2011), this study focuses on the influence of older employees' perceived AMS to learn formally and informally on all the dimensions of OEpE (i.e., occupational expertise, anticipation and optimization, personal flexibility, corporate sense and balance (Van der Heijde & Van der Heijden, 2005; 2006)). Moreover, this study combines AMS to learn in one study, while the previous studies focused on one or two of these factors. Hence, this study could measure the extent of influence of these factors at the same time on OEpE. Finally, it also adds knowledge to the literature regarding the AMO theory (Boxall & Purcell, 2011). In that, evidence could be found whether the AMO theory applies to OEpE.

In addition, this study contributes to the literature by investigating the negative influence of negative aging meta- and self-stereotypes on OEpE directly and indirectly through older employees' perceived AMS to learn. This study adds knowledge to the literature regarding the determinants of AMS to learn and employability. So far, there is no research done regarding the influence of negative aging meta- and self-stereotypes on older employees' perceived AMS to learn and OEpE. It also extends the literature in that negative aging meta-stereotypes and self-stereotypes might differently influence older employees' perceived AMS to learn and OEpE. Furthermore, negative aging meta- and self-stereotypes might explain the negative relationship between chronological age, i.e., the time being passed since birth (Sterns and Doverspike, 1989, cited in De Lange, Taris et al., 2006), on the one hand, and employees' perceived ability to learn (e.g., Maurer, 2001), motivation to learn (e.g., Ng & Feldman, 2012) and employability (e.g., Van Vuuren, Caniels & Semeijn, 2011; Wittekind, Raeder & Grote, 2010), on the other hand.

1.3.2. Practical Relevance

Older employees themselves, organizations and the society could take advantage of the findings of this study. When this study finds evidence that older employees' ability and motivation to learn improves OEpE, older employees might enhance their perceived employability by increasing their perceived ability and motivation to learn. There is, however, a negative relationship between chronological age, on the one hand, and older employees' perceived ability and motivation to learn and OEpE, on the other hand. Because of this, older employees might perceive themselves as not being able to improve their perceived employability by enhancing

OEpE directly or indirectly through increasing their perceived ability and motivation to learn. When evidence is found that negative aging meta- and self-stereotypes negatively influence older employees' perceived ability and motivation to learn and OEpE, older employees might perceive themselves probably as more able to improve their perceived employability directly or indirectly. As a result of this, it is more likely that they actual improve their perceived employability. This is important for *older employees* in that it contributes to the continuity of employment, which is necessary for them in order to receive earnings (i.e., salary) till the retirement age.

Improving OEpE is not only of interest for older employees themselves but also for *organizations*. The continuity of organizations depends increasingly on OEpE. When this study finds evidence that older employees' perceived AMS to learn positively influence OEpE, organizations might improve OEpE by enhancing their perceived AMS to learn. Organizations could, for example, provide more support regarding older employees' learning activities. Moreover, when this study finds evidence that negative aging meta- and self-stereotypes influence older employees' perceived AMS to learn and OEpE negatively, organizations could motivate older employees to enhance their perceived ability and motivation to learn and OEpE in order to break with negative aging stereotypes. In addition, organizations could raise more awareness of the negative consequences of negative aging stereotypes on older employees among the colleagues of older employees. Both activities might reduce the use of negative aging stereotypes, which might decrease the negative aging meta- and self-stereotypes perceived by older employees themselves. This, in turn, might enhance OEpE directly and indirectly.

When this study finds evidence that negative aging meta- and self-stereotypes influences OEpE directly and indirectly and both older employees and organizations make use of these findings as is explained above, this will be at interest for the *society*. Employability contributes to the continuity of employment. Being employed, in turn, is necessary for the maintenance of the social support systems in that taxes are paid by those who are employed.

2. Theoretical Framework

2.1. Defining Employability

2.1.1. History

The first publications about employability date back from the 1950s (e.g., Feintuch, 1955 cited in Forrier & Sels, 2003, p. 103; Thijssen, Van der Heijden & Rocco, 2008; p. 168). The early publications regarding employability focused on the problems of unemployed citizens and the difficulties that they experienced at entering the labor market (Thijssen et al., 2008). Until the 1970s, employability was therefore considered as a means of achieving full employment (Forrier & Sels, 2003; Thijssen, et al., 2008; Van der Heijde & Van der Heijden, 2006). Given the dominant culture of lifetime employment, once an citizen was employed by an organization, the chance that this citizen stayed employed in this organization till their retirement age was rather high (Forrier & Sels, 2003; Thijssen et al., 2008). Hence, the most important employability measures to foster full employment were forms of government intervention (Forrier & Sels, 2003; Van der Heijde & Van der Heijden, 2006; Thijssen et al., 2008).

In the 1980s and the early 1990s, the focus of employability shifted from society level to company level (Forrier & Sels, 2003). Scholars focused in their publications on the manner in which organizations could deal with the constant changes which they were facing (Forrier & Sels, 2003; Thijssen et al., 2008). Employability was thereby considered as a means of achieving more flexibility within organizations (Forrier & Sels, 2003). Employability was no longer perceived as a labor market instrument but as an Human Resource (HR) instrument (Forrier & Sels, 2003).

Since the 1990s, employability is again perceived as a labor market instrument (Forrier & Sels, 2003). However, the term employability is no longer important for the unemployed population alone, but also for the employed population (Forrier & Sels, 2003). It is not only of interest for fostering entry into the labor market for the unemployed citizens, but also to ensure employment for the employed citizens (Forrier & Sels, 2003). Given that the dominant culture of lifetime employment is replaced by lifelong employability, i.e., employability ensures employment (Forrier & Sels, 2003; Thijssen et al., 2008), employability research nowadays focuses mainly

on individuals' ability in maintaining a job in the labor market (Forrier & Sels, 2003). Hence, the focus of employability shifted from society level via company level to individual level.

2.1.2. Different Perspectives of Employability

Although the brief history shown above sets out the development of the term employability in a more sequential fashion than was actually the case (Forrier & Sels, 2003), it illustrates that the term employability has been conceptualized from three different perspectives: (1) the society, (2) the organization, and (3) the individual (Thijssen, 2000 cited in Forrier & Sels, 2003, p. 104; Van der Heijde & Van der Heijden, 2006; Versloot, Glaudé & Thijssen, 1998 cited in Thijssen et al., 2008, p. 168). The *societal perspective* implies full employment on a national level. For the society, employability is an indicator of the society's opportunity to gain full employment. The *organizational perspective* implies all the jobs in a certain organization done by paid employees. For an employer, employability is an indicator of the employer's opportunity to match supply and demand. Finally, the *individual perspective* implies an attractive job. For an individual, employability is an indicator of one's opportunity to acquire and retain an attractive job (Thijssen, 2000 cited in Forrier & Sels, 2003, p. 104; Versloot et al., 1998 cited in Thijssen et al., 2008, p. 168). These three perspectives are interconnected (Forrier & Sels, 2003). For example, Forrier and Sels (2003) state that "full employment is only possible if each member of the active population has the chance of a job" (p. 104).

2.1.3. Given Definitions of Employability

As employability is studied from three different perspectives, there are many different definitions of employability given. By categorizing these perspectives of employability, Thijssen (2000 cited in Forrier & Sels, 2003; p. 106) distinguished three types of employability definitions based on an ever-increasing variety of variables. Specifically, a core definition, a broader definition, and a comprehensive definition are distinguished. In the *core definition*, employability is described as all the individual capacities to be successful in a variety of jobs in the current labor market. Here, employability includes someone's actual capacities. In the *broader definition*, employability includes not only someone's actual capacities but also someone's future capacities (i.e., capacities to improve and use employability). Therefore, in the

broader definition, employability is described as all the individual capacities that determine their current and future position in the labor market situation. Finally, in the *comprehensive definition*, contextual conditions that facilitate or counterwork individual employability are also added. Here, employability includes all individual and contextual conditions that determine an individual's current and future position in the labor market (Thijssen, 2000 cited in Forrier & Sels, 2003; p. 106).

Forrier and Sels (2003) follow Thijssen's reasoning in that not only context-related conditions but also individual conditions play an important role in determining one's employability. However, they view Thijssen's classification as a list of possible influencing conditions of employability rather than a categorization of definitions. They therefore define employability as "an individual's chance of a job in the internal and/or external labor market" (Forrier & Sels, 2003; p. 106).

Based on the resource based view (RBV), Van der Heijde and Van der Heijden (2005) assume that employability can best be assessed with a competence-based approach (see also Van der Heijde & Van der Heijden, 2006). They define employability as "the continuous fulfilling, acquiring or creating of work through the optimal use of competences" (p. 143). The competence-based approach implies that becoming employable requires o*ccupational expertise*, this refers to the degree of knowledge and skills (i.e., expertise) about a particular professional domain, with four more generic competences (van der Heijde & Van der Heijden, 2006): (1) *anticipation and optimization*, which refers to the capacity to prepare "for future work changes in a personal and creative manner in order to strive for the best possible job and career outcomes" (p. 454); (2) *personal flexibility*, which refers to the capacity to adapt "easily to all kinds of changes in the internal and external labor market" (p. 455); (3) *corporate sense*, which refers to the capacity to participate and perform in different work groups (e.g., "sharing responsibilities, knowledge, experience, feelings, credits, failures, goals, and the like" (p. 455)); and (4) *balance*, which refers to the capacity to compromise "between opposing employers' interests as well as one's own opposing work, career, and private interests (employee) and between employers' and employees' interests" (p. 455-456). Anticipation and optimization, and personal flexibility are two different types of adaptation. Anticipation and optimization is more a self-initiating proactive type, while personal flexibility is more a passive, reactive type (Van der Heijde & Van der Heijden, 2006).

2.1.4. Employability Defined

Similar to Van der Heijde and Van der Heijden (2005), employability is defined as "the continuous fulfilling, acquiring or creating of work through the optimal use of competences" (p. 143). In this definition, Van der Heijde and Van der Heijden (2005) consider the development of competences (i.e., occupational expertise, anticipation and optimization, personal flexibility, corporate sense, and balance) as an important aspect of employability, as competences are developable. The definition implies that by maintaining and developing these competences, individuals' employability could be improved (Van der Heijde & Van der Heijden, 2006; Wognum et al., 2011). From this, in turn, it could be inferred that by maintaining and developing these competences, OEpE could be improved. Because the definition of Van der Heijde and Van der Heijden implies that individual's employability could be improved and this study proposes that OEpE could be improved by means of increasing their perceived AMS to learn, it is chosen to focus on this definition.

Moreover, Van Der Heijde and Van der Heijden (2005) follow Thijssen's and Forrier and Sel's reasoning in that both individual and contextual conditions play an important role in determining one's employability. Individual and contextual conditions play an important role in maintaining and developing one's competences, and therewith one's employability. Important contextual conditions according to Thijssen (2000, cited in Breukers, 2010, p. 14) are organizational conditions. This study focuses on both individual and organizational conditions in maintaining and developing one's competences, and therewith one's employability. Specifically, this study focuses on older employees' perceived ability and motivation to learn as individual conditions, and older employees' perceived support to learn as an organizational condition.

2.1.5. Older Employees' perceived Employability Defined

Similar to many other studies (e.g., De Vos et al., 2011; Froehlich et al., 2014; 2015; Van der Heijden et al., 2009; Van der Heijden et al., 2016; Van Emmerik, Schreurs, de Cuyper, Jawahar & Peters, 2012), this study focuses on how older employees perceive their employability rather than on how others perceive older employees' employability. Therefore, this study defines OEpE as the continuous fulfilling, acquiring or creating of work as perceived by older employees through the optimal use of their competences. It is chosen to focus on how older employees

perceive their employability, because empirical research has shown that employees are likely to act on the basis of their own perceptions (e.g., Berntson & Marklund, 2007; De Cuyper et al., 2008; 2011; Silla et al., 2008).

2.2. Older Employees' perceived Ability, Motivation and Support to Learn and their perceived Employability

2.2.1. Ability, Motivation and Support and Older Employees' perceived Employability

According to the AMO theory (Boxall & Purcell, 2011), individual job performance could be improved by enhancing individuals' (1) *ability to perform*, i.e., "they can do the job because they possess the necessary knowledge, skills and aptitudes", (2) *motivation to perform*, i.e., "they will do the job because they feel adequately interested and incentivized" and (3) *opportunity to learn*, i.e., "their work structure and its environment provides the necessary support and avenues for expression" (Boxall & Purcell, 2011, p. 5). Job performance is defined as "behavior associated with the accomplishment of expected, specified, or formal role requirements on the part of individual organizational members" (Campbell, 1990, cited in Bos-Nehles, Van Riemsdijk & Looise, 2013, p. 863). Based on this definition, it could be inferred that employability, as is defined by Van der Heijde and Van der Heijden, is a form of job performance. Hence, the factors AMS might contribute to OEpE. Support is another term for opportunity in this case. It is chosen to focus on this term instead of opportunity, since it is believed that this term capture the meaning of the term better.

2.2.2. Ability, Motivation and Support to Learn and Older Employees' perceived Employability

Based on the meta-analysis of Raemdonck et al. (2015) and empirical studies (e.g., De Vos et al., 2011; Froehlich et al, 2014; Van der Heijden et al., 2009; 2016), it is assumed that the factors AMS to learn improve OEpE. Raemdonck et al (2015) state that motivation to learn and ability to learn are two important individual factors underlying to the participation of employees in learning activities. Moreover, Raemdonck et al (2015) state that a supportive organizational learning climate (i.e., support to learn) is an organizational factor underlying to the participation of employees in learning activities. In turn, empirical evidence shows that individuals'

participation in both formal learning activities, i.e., all the planned learning activities that take place within an organized and structured context designed for learning (CEDEFOP, 2000, cited in Colardyn & Bjornavold, 2004, p. 71; CEDEFOP, 2008, cited in Raemdonck, et al., 2015, p. 166; Wognum et al., 2011) and informal learning activities, i.e., experiential learning from daily life activities (CEDEFOP, 2000, cited in Colardyn & Bjornavold, 2004, p. 71) enhances their perceived employability (e.g., De Vos et al., 2011; Froehlich et al, 2014; Van der Heijden et al., 2009; 2016).

Van der Heijden et al. (2009) studied the possible relationship between participation of Dutch non-academic university staff members in both formal and informal job-related learning activities (i.e. interaction with one supervisor, networking inside, networking outside and learning value of the job), on the one hand, and the five dimensions of employability, on the other hand. They found that employees' participation in formal job-related learning activities was positively related to occupational expertise, anticipation and optimization, and corporate sense. In addition, they found that employees' networking within their organization positively influences the employability dimensions occupational expertise, personal flexibility, corporate sense, and balance. In contrast, they found that employees' networking outside their organization was positively related to anticipation and optimization. Moreover, they found that employees' interaction with their supervisor positively influences the employability dimensions corporate sense and balance. Finally, they found that learning value of the job was negatively related to occupational expertise.

2.2.3. Older Employees' perceived Ability, Motivation and Support to Learn

Analogously to perceived employability, it is chosen to focus on how older employees perceive their AMS to learn rather than how others perceive older employees' AMS to learn. Empirical research has shown that employees are likely to act on the basis of their own perceptions (e.g., Berntson & Marklund, 2007; De Cuyper et al., 2008; 2011; Silla et al., 2008).

2.2.4. Older Employees' perceived Ability to Learn and Employability

Based on the definitions of Bandura (1977) and Maurer (2001), this study defines older employees' perceived ability to learn as the belief by older employees that they are capable of improving and developing their knowledge and skills. Bandura (1977, cited in Chuang, Liao & Tai, 2005) defines self-efficacy as "one's beliefs in one's

capability to perform a specific task" (p. 161), and Maurer (2001) defines self-efficacy for development as "the belief by a worker that he/she is capable of improving and developing his/her skills" (p. 124). Older employees' perceived ability to learn is different from OEpE. Whereas OEpE focuses on older employees' beliefs in that they make optimal use of their competences in order to continuously fulfill, acquire or create work, older employees' perceived ability to learn focuses on older employees' beliefs in that they are capable of improving and developing these competences.

Research shows that individuals' perceived ability to learn positively influences their participation in learning activities (e.g., Eraut, 2004; Maurer, 2001; Noe & Wilk, 1993). Specifically, Noe and Wilk (1993) found that employees' perceived self-efficacy was positively related to their participation in formal learning activities. In addition, based on a literature review, Maurer (2001) stated that "employees with higher self-efficacy for development will have more positive attitudes toward and more frequent voluntary participation in training and development activities" (p. 129). Furthermore, Eraut (2004) found evidence that employees' perceived self-efficacy was positively related to their participation in informal learning activities. Moreover, research shows that the learning performance itself is also positively influenced by individuals' perceived ability to learn (e.g., Chuang et al., 2005; Guerrero & Sire, 2001; Homklin, Takahashi & Techakanont, 2013). Specifically, Chuang et al. (2005), Guerrero and Sire (2001) and Homklin et al. (2013) found that trainees' perceived self-efficacy was positively related to their learning performance.

Because of these findings and that participation in learning activities might enhance OEpE by maintaining and developing their competences (e.g., De Vos et al., 2011; Froehlich et al, 2014; Van der Heijden et al., 2009; 2016), it could be inferred that older employees' perceived ability to learn contributes to OEpE. In line with this, empirical research shows that individuals' perceived ability to learn contributes to their perceived employability (e.g., Bossink, 2011; Cheung, 2014). Specifically, Bossink (2011) found that Dutch employees' perceived self-efficacy about learning was positively related to employability as defined by the comprehensive definition of Thijssen (2000 cited in Bossink, 2011). Moreover, Cheung (2014) found that employees' perceived self-efficacy about learning was positively related to occupational expertise.

Based on these findings, it is proposed that:

H1a. *Older employees' perceived ability to learn is positively related to their perceived employability.*

2.2.5. Older Employees' perceived Motivation to Learn and Employability

In many studies (e.g., Homklin et al., 2013; Noe & Wilk, 1993; Raemdonck et al., 2015; Sitzmann, Brown, Ely, Kraiger & Wisher, 2009), motivation to learn is defined as "a specific desire of the trainee to learn the content of the training program" (Noe, 1986, p. 743). This study focuses, however, not only on motivation to learn formally but also informally. Therefore, this study makes use of the definition given by Köroglu (2008), which focuses on motivation to learn both formally and informally. Specifically, Köroglu (2008) defines motivation to learn as "the desire to acquire new knowledge and skills" (p. 7). Based on this definition, this study defines older employees' perceived motivation to learn as the perceived desire of older employees to acquire new knowledge and skills.

Research shows that individuals' perceived motivation to learn positively influences their participation in learning activities (e.g., Beinborn, 2012, Noe & Wilk, 1993; Tharenou, 2001). Specifically, Noe and Wilk (1993) and Tharenou (2001) found that employees' perceived motivation to learn was positively related to employees participation in formal development activities. In addition, Beinborn (2012) found that employees' perceived intrinsic motivation to learn was positively related to their participation in informal learning activities. Moreover, research shows that the learning performance itself is also positively influenced by individuals' perceived motivation to learn (e.g., Chuang et al., 2005; Homklin et al., 2013; LePine, LePine & Jackson, 2004; Sitzmann et al., 2009). Specifically, Chuang et al. (2005), Homklin et al. (2013) LePine et al. (2004) and Sitzmann et al. (2009) found that trainees' perceived motivation to learn was positively related to their learning performance.

Because of these findings and that participation in learning activities might enhance OEpE by maintaining and developing their competences (e.g., De Vos et al., 2011; Froehlich et al, 2014; Van der Heijden et al., 2009; 2016), it could be inferred that older employees' perceived motivation to learn contributes to OEpE. In line with this, empirical research shows that individual's perceived motivation to learn contributes to one's perceived employability (e.g., Breukers, 2010; Cheung, 2014). Specifically, Breukers (2010) found a positive relationship between Dutch' employees perceived motivation to learn formally and four of the five dimensions of their

perceived employability, namely: occupational expertise, anticipation and optimization, personal flexibility and balance). Cheung (2014) studied the influence of Dutch' employees' perceived motivation to learn formally on their perceived occupational expertise (one dimension of employees' perceived employability). The found that employees' perceived motivation to learn formally was positively related to occupational expertise.

Based on these findings, it is proposed that:

H1b. *Older employees' perceived motivation to learn is positively related to their perceived employability.*

2.2.6. Older Employees' perceived Support to Learn and Employability

De Vos et al. (2011) defines perceived support for competency development as "employees' perceptions of the organizational support provided for the development of their competencies" (p. 439). Based on this definition, this study defines older employees' perceived support to learn as older employees' perceptions of the organizational support provided for the development of their knowledge and skills.

Research shows that individuals' perceived support to learn positively influences their participation in learning activities (e.g., Noe & Wilk, 1993; Tharenou, 2001). Specifically, Noe and Wilk (1993) found that "employees' perceptions of the work environment, specifically social support from managers and peers for development activity and the type of working conditions that employees believe they face in their work, influences development activity" (p. 301). In line with this, Tharenou (2001) found that employees' perceived supervisor support and employer support were positively related to employees' participation in formal development activities. Moreover, research shows that the learning performance itself is also positively influenced by individuals' perceived support to learn (e.g., Clarke, 2005). Specifically, Clarke (2005) found that employees' perceived opportunity for independent informal learning, support for reflection and job challenge, and empowerment and communication were positively related to workplace learning outcomes. In addition, Clarke (2005) found that employees' perceived training and development infrastructure were positively related to training outcomes.

Other research shows that individuals' employability orientation is also positively influenced by their perceived support to learn (Nauta, Van Vianen, Van der Heijden,

Van Dam & Willemsen, 2009; Van Dam, 2003). Employability orientation refers to "employees' openness to develop themselves and to adapt to changing work requirements" (Nauta et al., 2009, p. 234). Specifically, Van Dam (2003) found that employees' perceived career development support by supervisors was positively related to employability orientation. More recently, Nauta et al. (2009) found that the perceived employability culture that stimulates employees to develop themselves was also positively related to employability orientation.

Because of these findings and that participation in learning activities (e.g., De Vos et al., 2011; Froehlich et al, 2014; Van der Heijden et al., 2009; 2016) and employability orientation (Van Dam, 2003) might enhance OEpE by maintaining and developing their competences, it could be inferred that older employees' perceived support to learn contributes to OEpE. In line with this, empirical research shows that Belgian employees' perceived support to learn contributes to their perceived employability (e.g., De Vos et al., 2011). Specifically, De Vos et al. (2011) found that employees' perceived support for competency development was positively related to occupational expertise and personal flexibility.

Based on these findings, it is proposed that:

H1c. *Older employees' perceived support to learn is positively related to their perceived employability.*

2.3. Negative Aging Self- and Meta-Stereotypes, Older Employees' perceived Ability, Motivation and Support to Learn, and Employability

2.3.1. Defining Aging Stereotypes

In order to process and order information as effectively as possible, people make use of stereotypes (Henkens, 2005; Van Dalen et al., 2010). Stereotypes refer to "a cognitive structure that contains the perceiver's knowledge, beliefs, and expectations about a human group" (Hamilton & Trolier, 1986, p. 133 cited in Wyer & Srull, 2014; p. 2-3). In line with this definition, Cuddy and Fiske (2002) define stereotypes as "cognitive structures that store out beliefs and expectations about the characteristics of members of social groups" (p. 4). Aging stereotypes refer therefore to "cognitive structures that store beliefs and expectations about the characteristics of older people" (Bal et al., 2015, p. 37). These aging stereotypes could be both positive and

negative (e.g., Bal, Reiss, Rudolph & Baltes, 2011; Dordoni & Argentero, 2015; Henkens, 2005; Posthuma & Campion, 2009; Van Dalen et al, 2010). For example, Van Dalen et al. (2010) examined employers' and employees' stereotypical perceptions regarding the productivity of young and older employees in the Netherlands. They found that both employers and employees perceive older employees as less productive in comparison to younger employees. Underlying to these perceptions were stereotypes regarding hard qualities and soft qualities. "Hard qualities include flexibility, physical and mental capacity, and willingness to learn new technology skills. Soft qualities include commitment to the organization, reliability, and social skills" (p. 325). Hard qualities carry more weight in the evaluation of the productivity in comparison to the soft qualities. Older employees were considered to have better soft qualities, whereas younger employees were considered to have better hard qualities. Based on a literature review, Bal et al. (2011) also found that older employees were perceived as having more reliable and less general evaluative outcomes in comparison to younger employees. In contrast to Van Dalen et al. (2010), they found that older employees were rated lower on social skills.

2.3.2. Defining Negative Aging Stereotypes

This study focuses on negative aging stereotypes due to several reasons. Firstly, based on the social identity theory (SIT) (Tajfel & Turner, 1979), it is expected that older employees are more often negatively than positively stereotyped (Henkens, 2005). According to this theory, in-group members, i.e., members of a social group to which these members identify themselves, compare themselves with out-group members, i.e., members of other groups, in order to maintain a positive social identity. In line with this, people tend to favor their own group (in-group bias) over other groups (out-group bias) (Tajfel and Turner 1979, cited in Henkens, 2005). Hence, it could be inferred that older employees are more often negatively than positively stereotyped by out-group members. In line with this, research has shown that older employees are more often negatively than positively stereotyped by out-group members (e.g., Finkelstein, Burke & Raju, 1995; Henkens, 2005; McCann & Keaton, 2013; Posthuma & Campion, 2009). Secondly, negative aging stereotypes might affect OEpE more in comparison to positive aging stereotypes. As is mentioned above, Van Dalen et al. (2010) found that employers and employees perceive older employees to have better soft qualities whereas younger employees were perceived

to have better hard qualities. Since “hard qualities include flexibility, physical and mental capacity, and willingness to learn new technology skills (… and,) soft qualities include commitment to the organization, reliability, and social skills” (p. 325), it could be inferred that the hard qualities in comparison to the soft qualities carry more weight in the evaluation of employability as is the case with productivity (Van Dalen et al., 2010). Therefore, the negative aging stereotypes might have more impact on OEpE in comparison to the positive aging stereotypes.

2.3.3. Defining Negative Aging Meta-Stereotypes

According to Finkelstein, Ryan and King (2013) meta-stereotypes are an example of meta-perceptions. Meta-perceptions are “individuals’ beliefs about how they are perceived by others” (cited in Finkelstein et al., 2013, p. 635). In line with this, meta-stereotypes are defined as “the beliefs about the stereotypes held by the members of the ‘out-group’ as perceived by the in-group” (Bal et al., 2015, p. 36). Based on this definition of Bal et al. (2015), negative aging meta-stereotypes are defined as older employees’ beliefs about how they are negatively stereotyped by members of the ‘out-group’. For example, older employees might belief that younger employees perceive them as less flexible in comparison to their younger employees. This belief of the older employees, however, does not have to be true; it is the belief of the older employees themselves.

Negative Aging Meta-Stereotypes and Older Employees’ perceived Ability to Learn

Older employees might think that other people (e.g., younger employees) perceive them in terms of negative stereotypes. These perceptions, i.e., meta-stereotypes, could subsequently be adopted by older employees. If this is the case, older employees might perceive themselves as not being able to learn. In line with this, Klein, Pohl and Ndagijimana (2007) found that Sub-Saharan Africans living in Belgium who were told that Africans’ average performance on a culture-free test was generally worse to Belgian’s performance, had a significantly lower perception of themselves as efficient, than the Sub-Saharan Africans who were told that Africans’ average performance on a culture-free test was generally equal to Belgian’s performance or when no such information was given. Moreover, based on a literature review, Maurer (2001) stated that persuasion is an underlying antecedent of self-efficacy for development. In other words, persuasion by others will positively

influence individuals' self-efficacy for development. By means of perceiving negative aging meta-stereotypes, older employees might not perceive any form of persuasion. Hence, negative aging meta-stereotypes might influence individuals' self-efficacy for development negatively. Based on these findings it is proposed that:

H2a. *Negative aging meta-stereotypes are negatively related to older employees' perceived ability to learn.*

Negative Aging Meta-Stereotypes and Older Employees' perceived Motivation to Learn

Based on the SIT and stereotype threat, it is expected that older employees who are in the possession of many negative aging stereotypes are less motivated to learn than older employees who are not. As is mentioned above, older employees might perceive themselves as not being able to learn. It is therefore likely that, based on the SIT (Tajfel & Turner, 1979), older employees perceive participation in learning activities as a threat for their need to maintain a positive social identity. As a consequence, they might be less motivated to learn. In line with this, empirical research has found a positive relationship between one's perceived ability to learn and motivation to learn (e.g., Cheung et al., 2005; Noe & Wilk, 1993). Stereotype threat on the other hand refers to "the psychological threat of confirming or being reduced to a negative stereotype about a group to which one belongs" (Steele, Spencer & Arenson, 2002, cited in Von Hippel, Kalokerinos & Henry, 2013, p. 17). From this, it could be inferred that older employees who are in the possession of many negative aging meta-stereotypes, might be afraid to confirm or to be reduced to the negative aging stereotypes. As a result, older employees might also be less motivated to learn. In line with this, Gaillard and Desmette (2010) show that meta-stereotypes contribute to one's perceived motivation to learn. They examined in two studies the influence of stereotypic information about older employees' ability on Belgian employees' intention to retire and interest for learning activities at work. They found that their intention to retire were significantly higher and their interest for learning activities at work were significantly lower, when negative stereotypic information about older employees' ability was given than when positive stereotypic information about older employees' ability was given. This study therefore proposes that:

H2b. *Negative aging meta-stereotypes are negatively related to older employees' perceived motivation to learn.*

Negative Aging Meta-Stereotypes and Older Employees' perceived Support to Learn

When older employees believe that they are negatively stereotyped by members of the 'out-group', they might believe that the 'out-group' is not willing to invest in them because of the negative aging stereotypes that older employees belief they have. For example, older employees might believe that the 'out-group' perceive them as not being able to learn. As a consequence, they might expect that the 'out-group' is less willing to support them, because of this negative aging stereotype. This study therefore proposes that:

H2c. *Negative aging meta-stereotypes are negatively related to older employees' perceived support to learn.*

Negative Aging Meta-Stereotypes and Older Employees' perceived Employability

People hold a lot of negative stereotypes about older employees. People perceive older employees for example as less flexible, more resistant to change, less willing to learn new technologies, and less willing to participate in training and career development in comparison to their younger counterparts (Ng & Feldman, 2012; Posthuma & Campion, 2009; Van Dalen et al, 2010). In other words, it is a broadly held view that older employees are less able to deal with the changing demands of the current organization in comparison to younger ones (Van Selm & Van der Heijden, 2013). Therefore, people might perceive the employability of older employees as less in comparison to the employability of younger employees. Because of these negative aging stereotypes, older employees might perceive that others perceive their employability as less in comparison to younger employees. This belief could subsequently be adopted by older employees in that older employees perceive their employability also as less in comparison to the employability of younger employees. In line with this, Owuamalam & Zagefka (2014) showed that negative meta-stereotypes about women and ethnic minorities in Britain influenced the employability beliefs, i.e., "people's perceptions of their employment prospects"

(p. 521), of woman and ethnic minorities in Britain negatively. This study therefore proposes that:

H2d. *Negative aging meta-stereotypes are negatively related to older employees' perceived employability.*

H3. *Older employees' perceived (3a) ability to learn; (3b) motivation to learn; and (3c) support to learn mediates the relationship between negative aging self-stereotypes and older employees' perceived employability.*

2.3.4. Defining Negative Aging Self-Stereotypes

Negative aging stereotypes could turn into self-stereotypes. This process has been referred to as stereotype internalization (e.g., Bennet & Gaines, 2010; Levy, 2009; Levy, Slade, Kunkel & Kasl, 2002). According to Bennet and Gaines (2010), the previously held stereotypes will turn into self-stereotypes when people are becoming older. Through stereotype internalization at young ages, older people apply the stereotypes that they have carried throughout their lives to themselves. Based on these descriptions given by Bennet and Gaines (2010), negative aging self-stereotypes are defined as previously held negative aging stereotypes that people apply to themselves as they become older. In line with meta-stereotypes, these self-stereotypes do not have to be true; it is the belief of the older employees themselves.

Negative Aging Self-Stereotypes and Older Employees' perceived Ability to Learn

Older employees could apply previously held negative aging stereotypes to themselves. For example, when older employees were younger, they might have perceived older employees in terms of negative aging stereotypes (e.g., older employees are less able to learn). However, nowadays these younger employees has become older. They might therefore perceive themselves in terms of these negative aging stereotypes (e.g., they are less able to learn). Because of these negative aging self-stereotypes, older employees might perceive themselves as less able to learn in comparison to younger employees. In line with this, empirical research shows that self-stereotypes positively influence one's perceived ability (e.g., Levy, 1996; Levy et al., 2000a). Specifically, these studies found that respondents of

60 years and older who are in the possession of negative aging self-stereotypes, had a significant lower memory self-efficacy (Levy, 1996) and mathematical self-efficacy (Levy et al., 2000a) in comparison to the respondents who are in the possession of positive aging stereotypes. This study therefore proposes that:

H4a. *Negative aging self-stereotypes are negatively related to older employees' perceived ability to learn.*

Negative Aging Self-Stereotypes and Older Employees perceived Motivation to Learn

When older employees see themselves as less able to learn as a result of self-stereotypes, they might also be less motivated to learn. Based on the SIT (Tajfel & Turner, 1979), it is likely that older employees perceive participation in learning activities as a threat for their need to maintain a positive social identity. Because of this, it is more likely that they are less motivated to learn. In line with this, as is mentioned above, empirical research shows a positive relationship between one's perceived ability to learn and motivation to learn (e.g., Cheung et al., 2005; Noe & Wilk, 1993). Specifically, Cheung et al. (2005) and Noe and Wilk (1993) found that trainees' self-efficacy were positively related to trainees' motivation to learn.

Other research shows a negative relationship between negative aging self-stereotypes and one's motivation. For example, Levy, Ashman and Dror (2000b) found that negative aging self-stereotypes are negatively related to one's willingness to live. Maurer et al. (2008) found by means of a two-wave survey research design that the motivation to participate in learning and development activities were lower when older employees believed more that older employees are less able and willing to learn. Finally, Horton, Baker, Côté and Deakin (2008) interviewed 20 people aged from 60 to 75 in an effort to explore the link of stereotypes affecting beliefs and beliefs affecting behavior. They found that although a number of the participants mentioned a range of health problems, participants generally mentioned psychological reasons as barriers to exercise. For example, one woman mentioned: "I think probably lacking motivation really … or just kind of accepting the fact that they're getting older and slower and kind of cave into aging. I'm old, I can't do it, that sort thing" (p. 1011). From this it could be inferred that the perception that one is aging can lead to less motivation to exercise.

This study therefore proposes that:

H4b. *Negative aging self-stereotypes are negatively related to older employees' perceived motivation to learn.*

Negative Aging Self-Stereotypes and Older Employees perceived Employability

Older employees could apply previously held negative aging stereotypes to themselves. For example, older employees could apply the previously held negative aging stereotype that older employees are less flexible, more resistant to change, and less willing to participate in training and career development in comparison to their younger counterparts (Ng & Feldman, 2012; Posthuma & Campion, 2009; Van Dalen et al, 2010) to themselves. In other words, they could apply the previous view that older employees are less able to deal with the changing demands of the current organization in comparison to younger ones (Van Selm & Van der Heijden, 2013) to themselves. The employees who apply these stereotypes to themselves when they become older, might, therefore, perceive their employability as less in comparison to the employability of younger employees. In line with this, empirical research has shown that self-stereotypes contribute to the self-views of older employees (e.g., Kornadt & Rothermund, 2012; Rothermund & Brandtstädter, 2003). For example, Rothermund and Brandtstädter (2003) found that peoples' self-views became assimilated to their previously held aging stereotypes. In line with this, Kornadt and Rothermund (2012) found that the current self-views of older employees were positively related to their previously held aging stereotypes. This study therefore proposes that:

H4c. *Negative aging self-stereotypes are negatively related to older employees' perceived employability.*

H5. *Older employees' perceived (5a) ability to learn; and (5b) motivation to learn mediates the relationship between negative aging self-stereotypes and older employees' perceived employability.*

2.4. The Effect of Self-Perceived Age

2.4.1. The Concept of Age

According to Birren and Schroots (cited in Birren & Birren, 1990, p. 5) and Sterns and Miklos (1995) aging refers to a multidimensional process of individual's changes in biological, psychological, and social functioning that takes place over time. Sterns and Doverspike (1989, cited in De Lange et al., 2006) identified five different approaches to operationalize the aging of employees, see Figure 1. Specifically, Sterns and Doverspike made a distinction between the (1) *chronological approach*, which focuses on the calendar age (i.e., the time being passed since birth) of an employee; (2) *functional approach*, which focuses on the performance of an employee (e.g., health status, cognitive abilities, psychical capacity and objective performance), and recognizes that employees' functioning vary through different ages; (3) *psychosocial approach*, which focuses on the self and social perceptions of the employee; (4) *organizational approach*, which focuses on the ageing of employees in jobs and organizations (i.e., job tenure of employees); and (5) *life span approach*, which focuses on behavioral changes of employees at any point in their life cycle through (a) normative, age-graded biological, and/or environmental influences, (b) normative, history-graded influences, and (c) non-normative career and life influences (see also Dordoni & Argentero, 2015; Kooij, 2010; Kooij, De Lange, Jansen & Dikkers, 2007; Schalk et al., 2010; Sterns & Miklos, 1995).

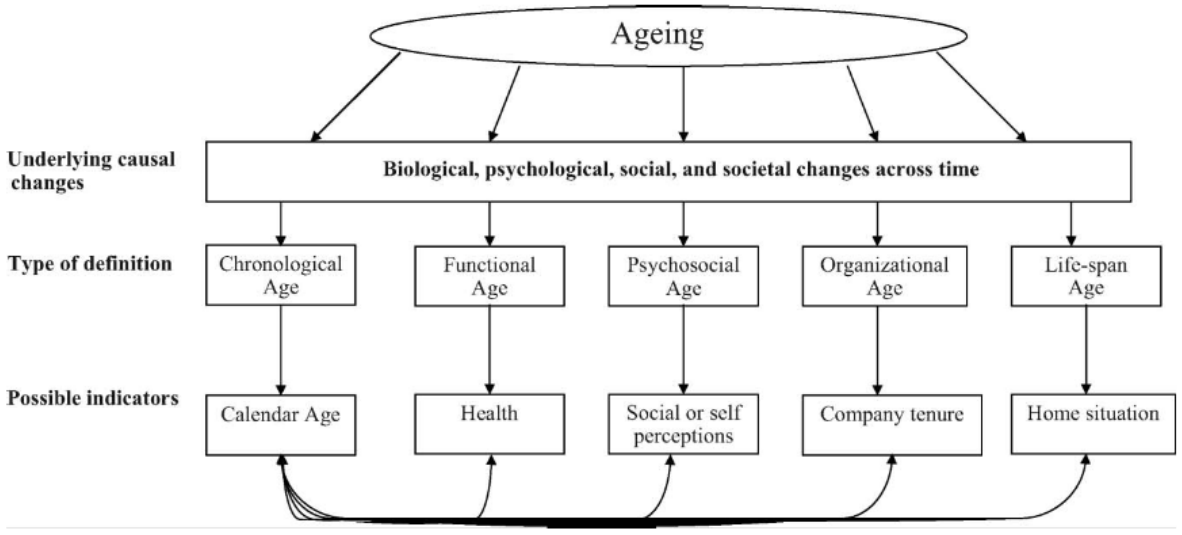

Figure 1| *"Representation of possible definitions of the concept "aging" and indicators" (adapted from De Lange et al., 2006, p. 31).*

2.4.2. Self-Perceived Age Defined

This study focuses on the self-perceived age of the psychosocial approach of age, since this study takes the perspective of the older employee as focus. As with AMS to learn and OEpE, it is chosen to focus on how older employees' perceive their age, because empirical research has shown that employees are likely to act on the basis of their own perceptions (e.g., Berntson & Marklund, 2007; De Cuyper et al., 2008; 2011; Silla et al., 2008). Generally accepted definitions of self-perceived age are "how old the person feels, looks, and acts; with which age cohort the person identifies, and how old the person desires to be" (Kaliterna, Larsen & Brkljacic, 2002; p. 40). Self-perceived age implies "the age group with which the individual feels closest, either directly (i.e., on the basis of chronological age) or indirectly (i.e., on the basis of shared characteristics)" (Cleveland & Shore, 1992; p. 470). According to Steitz and McClary self-perceived age refers to "how old or young individuals perceive themselves to be" (cited in Cleveland & Shore, 1992, p. 470). Based on this definition, this study defines older employees' self-perceived age as how old or young older employees perceive themselves to be.

2.4.3. Self-Perceived Age as Moderator

The relationship between negative aging meta- and self-stereotypes and older employees' perceived AMS to learn might be explained by the self-perceived age. This will be explained in more details below.

Self-Perceived Age as Moderator between Negative Aging Meta-Stereotypes and Older Employees' perceived Ability, Motivation and Support to Learn

Based on the person-environment fit literature, which refers to "the congruence, match or similarity between the person and environment" (Edwards, 2008, p. 168), it is expected that the extent to which older employees identify themselves with younger employees rather than with older employees might influence the negative relationship between negative aging meta-stereotypes and older employees' perceived AMS stronger. "When one does not identify as being part of the group of older employees, age meta-stereotypes impede one's self-categorization because they run counter to the beliefs one has about self-identity" (Bal et al., 2015, p. 41-42). In other words, there is a misfit between one's personal identity (e.g., an older employee who perceive him or herself as younger) and one's environment (e.g.,

others perceive the older employee as older or the same). A stronger negative relationship between negative aging meta-stereotypes and older employees' perceived AMS to learn is, therefore, expected for older employees who perceive themselves as younger in comparison for older employees who perceive themselves as older or the same. In line with this, Bal et al. (2015) found that as employees identified themselves as being part of the age group of younger employees, the aging meta-stereotypes had more impact on employees' perceived remaining time and opportunities before the retirement age (occupational FTP). They did however not find a significant effect when employees identified themselves with the age group of older employees. This study therefore proposes that:

H6. *Older employees' perceived age moderates the relationship between negative aging meta-stereotypes and older employees' perceived (6a) ability to learn; (6b) motivation to learn; and (6c) support to learn, with stronger negative relationships among older employees who perceive themselves as younger compared to older employees who perceive themselves as older or the same.*

Self-Perceived Age as Moderator between Negative Aging Self-Stereotypes and Older Employees' perceived Ability and Motivation to Learn

Based on the self-categorization theory (SCT) (Turner, Hogg, Oakes, Reicher & Wetherell, 1987), it is expected that the extent to which older employees identify themselves with older employees rather than with younger employees might influence the negative relationship between negative aging self-stereotypes, and older employees' perceived ability and motivation to learn stronger. According to the SCT, the more one identifies with a particular social identity, the more one will perceive him or herself as interchangeable and the less one will perceive him or herself as a unique individual (Hornsey, 2008; Turner, 1985, cited in Debbiche, 2015, p. 10). This "change from the personal to the social level of identity" is also known as the depersonalization process (Turner et al., 1987, p. 51, cited in Debbiche, 2015, p. 12). It means that the social identity to which one identifies him or herself, will largely describe the identity of that person. Because of this, the social identity will also prescribe what attitudes, emotions and behaviors that specific person should have in a given situation (Hornsey, 2008). In line with this, it is expected that when older employees identify themselves with older employees, their social identity as an older

employee will largely describe the identity of that older employee. As a result, the social identity will also prescribe what attitudes, emotions and behaviors the older employee should have in a given situation. A stronger negative relationship between negative aging self-stereotypes and older employees' perceived ability and motivation to learn is, therefore, expected for older employee who perceive themselves as older or the same in comparison to employees who perceive themselves as younger. This study therefore proposes that:

H7. *Older employees' perceived age moderates the relationship between negative aging self-stereotypes and older employees' perceived (7a) ability to learn and (7b) motivation to learn, with stronger negative relationships among older employees who perceive themselves as older or the same compared to older employees who perceive themselves as younger.*

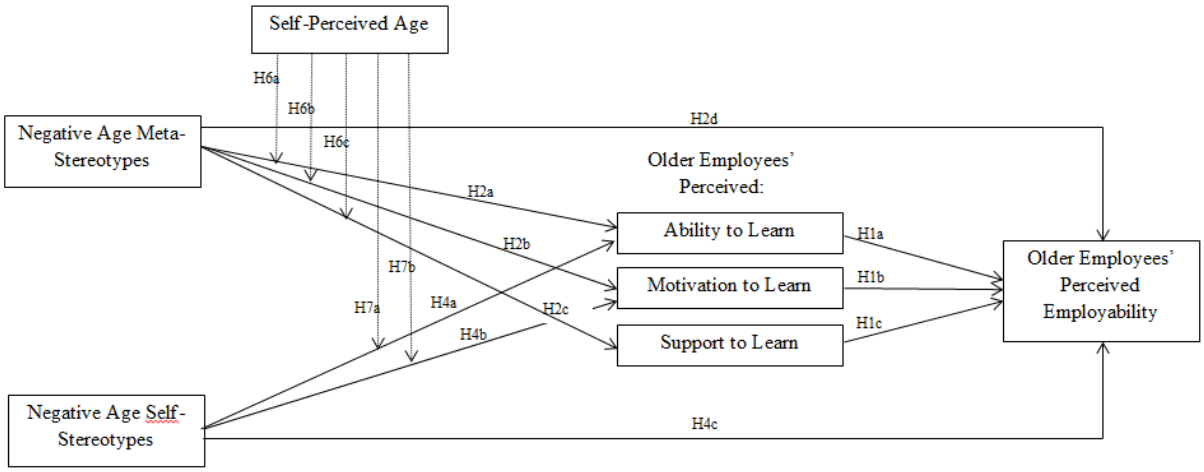

Figure 2| *Conceptual Research Model*

3. Method

3.1. Sample and Participants

In order to test the designed research model (Figure 2), 315 employees of 50 years or older divided over two Dutch' organizations are targeted. These two organizations are both production sites of a global company. Both organizations supply equipment and/or raw materials to other organizations. In addition, both organizations are known for having an ageing workforce. The mean age of the employees in Organization 1 was 46 years old and the mean age of the employees in Organization 2 was 54. Since, this study focuses on employees of 50 years and older, we decided to obtain data from these organizations.

In line with a number of scholars who suggested that chronological age may be a less useful operationalization of the concept age in the work setting (Dordoni & Argentero, 2015; Settersten & Mayer, 1997; Sterns & Miklos, 1995), we also believe that there is no worldwide cutoff point of chronological age to identify an older from a younger employee. According to Birren and Schroots (cited in Birren & Birren, 1990, p. 5) and Sterns and Miklos (1995) aging refers to a multidimensional process of individual's changes in biological, psychological and social functioning that takes place over time. Therefore, individuals with the same chronological age may differ in terms of biological, psychological and social functioning.

Although we believe in line with a number of scholars that there is no worldwide cutoff point of chronological age to identify older from younger employees, we identified older from younger employees based on a chronological cutoff point. This decision is made, because chronological age is an easy way and a proxy to measure the changes in biological, psychological and social functioning that takes place over time (Pitt-Catsouphes, Matz-Costa & Besen, 2009, cited in Froehlich et al., 2014, p. 6 and Froehlich et al., 2015, p. 2090). As a result, other studies made use of a chronological age as cutoff point to identify older from younger employees (e.g. Dordoni & Argentero, 2015; Kooij, 2010). For example, in studies about the labor market participation 50 or 55 years is often chosen as cutoff point (e.g., Brouwer, De Lange et al., 2012; Kooij, 2010; Kooij et al., 2007). These studies selected this cutoff point, since in many countries a decline in the participation rate in the labor market is

shown at the age of 50 or 55 (OECD, 2005 cited in Kooij, 2010, p. 29; Kooij et al., 2007, p. 365).

In this study, we chose to focus on employees of 50 years and older. The different contact persons (HR employees), within the two organizations were asked to choose a cutoff point to identify older from younger employees in their organization. In this way, the chosen chronological age as cutoff-point is also linked with functional, psychosocial and life span age. Since after consulting their HR colleagues, the contact persons of both organizations mentioned 50 as a cutoff point and the cutoff point of 50 or 55 years is often chosen in studies about the labor market participation (Kooij, 2010; Kooij et al., 2007), the target group of this study consisted out of 315 employees of 50 years or older divided over two organizations.

3.2. Research Design

According to Everaert and Van Peet (2006) the numerical data of a large number of respondents is needed in order to test hypotheses and to obtain generalizable results. Since by means of a quantitative research method the numerical data of a large number of respondents could be gathered (Babbie, 2015) and this study wants to test hypotheses and obtain generalizable results, this study focused on a quantitative research method: surveys. It is chosen to focus on online surveys as primary quantitative research method. “Online surveys have the ability to ‘force’ respondents to answer any closed-ended question the survey designer deems crucial to the analysis. This is impossible in a paper survey” (Macroy, Milucki & McDowell, 2002, p. 5). Another reason is that the time period of analyzing the data is faster for online surveys in comparison to offline surveys (Rooney, 2016). In order to analyze offline surveys, the researcher have to transcribe the given answers of these surveys in an online system, and this takes time. An additional advantage is that the risk of errors is dwarfed. In the process of transcribing, the researcher could make errors (Rooney, 2016). In line with this, Van der Heijden et al. (2009) state that “two advantages of online surveys comprise, on the one hand, the fact that no data entry failures can be made and, on the other hand, that one can build in so-called forced entry processes, implying that the respondent cannot skip certain questions (preventing missing values)” (p. 25).

3.3. Measures

The surveys were developed by means of translating the concepts of the research model into existing constructs with corresponding scales consisting of corresponding items and response categories. Since most of these existing scales consisted of English or Dutch items and the working language in one of the organizations is both English and Dutch, the used English items of the constructs were translated with the forward-backward translation method in Dutch items and vice versa. By means of the forward-backward translation, language problems could be avoided (Usunier, 1998). Moreover, the used scales that consisted of both negatively and positively formulated items were reformulated to scales that consisted of only negatively or only positively formulated items. In this way respondents could fill in a survey more easily and will probably make less incorrect answers through improper reading or misinterpretations (Shillito & De Marle, 1992). In addition, the survey consisted of items related to employee characteristics. Since different employee characteristics might play a role in answering the items, these influences have to be controlled.

3.3.1. Older Employees' Perceived Employability

OEpE was measured using the competence-based employability scale proposed by Van der Heijde and Van der Heijden (2005; 2006). This competence-based scale consists of 47 items divided over five underlying dimensions: (1) 15 items for occupational expertise, (2) 8 items for anticipation and optimization, (3) 8 items for personal flexibility, (4) 7 items for corporate sense, and (5) 9 items for balance. Based on descriptions of the dimensions of employability by Van der Heijde and Van der Heijden (2006) (see section 2.1.3), (1) *occupational expertise* is defined as older employees' perceived degree of knowledge and skills (i.e., expertise) about their professional domain; (2) *anticipation and optimization* is defined as older employees' perceived capacity of preparing for future work changes to aim for the best possible job and career outcomes; (3) *personal flexibilit*y is defined as older employees' perceived capacity of adapting easily to all kinds of changes in the labor market, (4) *corporate sense* is defined as older employees' perceived capacity of participating and performing in different work groups, and (5) *balance* is defined as older employees' capacity of compromising between opposing employers' interests as well as their own opposing interests and between employers' and employees' interests. Examples of items are: "I consider myself competent to engage in in-depth, specialist

discussions in my job domain" (occupational expertise); "I am focused on continuously developing myself" (anticipation and optimization); "I adapt to developments within my organization" (personal flexibility); "I share my experience and knowledge with others" (corporate sense); "The time I spend on my work and career development on the one hand and my personal development and relaxation on the other are evenly balanced" (balance). Like the traditional scale, all items were measured using 6-point rating scales. Examples of the used scale extremes are: not at all to a considerable degree and never till very often. Empirical evidence showed that these five-dimensional conceptualization of employability is a reliable and valid instrument for measuring employability. Van der Heijde and Van der Heijden (2005; 2006) found Cronbach's alphas varying from 0.78 to 0.90. In line with this, this study found Cronbach's alphas varying from 0.84 to 0.89 (see Table 1).

Table 1| Cronbach's alphas regarding Older Employees' perceived Employability

Variables	**n**	**α**
Occupational Expertise	15	0.89
Anticipation and Optimization	8	0.86
Personal Flexibility	8	0.84
Corporate Sense	7	0.86
Balance	9	0.89

3.3.2. Older Employees' Perceived Age

Based on the definition of Steitz and McClary (cited in Cleveland & Shore, 1992) older employees' self-perceived age is defined as how old or young older employees perceive themselves to be. It was measured by one-item: "Please indicate, if you feel younger, the same, or older than your real age". This item is based on the used item by Cleveland and Shore (1992) to measure self-perceived age. Cleveland and Shore (1992) asked respondents to describe if they felt the same, older or younger than their real age. Like the study of Cleveland and Shore (1992), this item was measured using a 3-point ordinal scale where respondents were asked to select one of the following concepts: younger, the same or older.

3.3.3. Older Employees' Perceived Ability to Learn

Based on the definitions given by Bandura (1977) and Maurer (2001), older employees' perceived ability to learn is defined as the belief by older employees that they are capable of improving and developing their knowledge and skills. It was

measured using four items of the six-item scale of Tews, Michel and Noe (2011). With this six-item scale, Tews et al. (2011) measured individual's perceived ability to learn and to solve problems (PALS). Since this study focuses on individual's perceived ability to learn and not on individual's perceived ability to solve problems, two items related to measuring individual's perceived ability to solve problems were deleted. An example of one of four remaining items is: "I retain information with little effort". Like the traditional scale, all items were measured using 5-point rating scale. By means of this scale, respondents could indicate their agreement with the items ranging from "strongly disagree" to "strongly agree". This study found a Cronbach's alpha of 0.88. Therefore, this four-item scale is reliable.

3.3.4. Older Employees' Perceived Motivation to Learn

Based on the definition of Köroglu (2008), older employees' perceived motivation to learn is defined as the perceived desire of older employees to acquire new knowledge and skills. It was measured using the five-items scale of Warr and Birdi (1998). An example of one of these items is: "I am keen to make use of the learning and development opportunities available to me". Like the traditional scale, all items were measured using 5-point rating scale. By means of this scale, respondents could indicate their agreement with the items ranging from "strongly disagree" to "strongly agree". In line with Warr and Birdi (1991) who found a Cronbach's alpha of 0.81, this study found a Cronbach's alpha of 0.86.

3.3.5. Older Employees' Perceived Support to Learn

Based on the definition of De Vos et al. (2011), older employees' perceived support to learn is defined as older employees' perceptions of the organizational support provided for the development of their competences. It was measured using the twelve-items scale of De Vos et al. (2011). An example of one of these items is "I get the necessary time and means to further develop my competencies". Like the traditional scale, all items were measured using 5-point rating scale. By means of this scale, respondents could indicate their agreement with the items ranging from "strongly disagree" to "strongly agree". In line with De Vos et al. (2011) who found a Cronbach's alpha of 0.82, this study found a Cronbach's alpha of 0.90.

3.3.6. Negative Aging Meta-Stereotypes

Based on the definition of Bal et al. (2015) negative aging meta-stereotypes are defined as older employees' beliefs about how they are negative stereotyped by members of the 'out-group'. It was measured using the six-item scale of Bal et al. (2015). An example of one of these items is "I think the majority of my colleagues believe that the performance decreases with increasing age". Like the traditional scale, all items were measured using 5-point rating scale. By means of this scale, respondents could indicate their agreement with the items ranging from "strongly disagree" to "strongly agree". In line with Bal et al. (2015) who found a Cronbach's alpha of 0.76, this study found a Cronbach's alpha of 0.80.

3.3.7. Negative Aging Self-Stereotypes

Based on the descriptions given by Bennet and Gaines (2010), negative aging self-stereotypes are defined as previously held negative aging stereotypes that people apply to themselves as they become older. Negative aging self-stereotypes were measured using the Attitudes Toward Own Aging subscale (Liang & Bollen, 1983). An example of one of these items is "I do not have as much pep as I did last year". Like the traditional scale, four items were measured using 5-point rating scale. By means of this scale, respondents could indicate their agreement with the items ranging from "strongly disagree" to "strongly agree". The item "As I get older, things are (better, worse, or the same) as I thought they would be" was however measured using a 3-point nominal scale. By means of this scale, respondents could select one of the following concepts: worse, the same or better. Kavirajan, Vahia et al. (2011) found a Cronbach's alpha of 0.79. This study found a Cronbach's alpha of 0.86 if the item "As I get older, both work as private related things are (better than, worse than, or the same as) I thought they would be" was deleted.

3.3.8. Control Variables

The following control variables were included in this study: (1) *gender* (1 = men and 2 = women), (2) *chronological age* (1 = 50 up to and including 54 years, 2 = 55 years and including 59 years, and 3 = 60 years and older), (3) *tenure of current function* (1 = 0 up to and including 9 years, 2 = 10 up to and including 19 years, 3 = 20 up to and including 29 years, and 4 = 30 years and longer), (4) *contract type* (1 = permanent contract and 2 = temporary contract), (5) *education* (1 = none, 2 = lower vocational

education (LBO/VBO/ULO), 3 = intermediate vocational education (MBO/VMBO/MULO), 4 = higher vocational education (HBO) and 5 = (post-) academic education), (6) *field of working* (1 = production, 2 = technique, 3 = logistic, and 4 = other (administration, lab etc.) and (7) *organization* (1 = Organization 1 and 2 = Organization 2). In order to increase the perceived anonymity of the respondents, the control variables were reduced to a minimum and ordinal and nominal scales were used.

Gender, education and contract type were included in the survey, since it might be the case that (1) female employees, (2) lower educated employees, and/or (3) employees with a temporary contract, in general, perceive more negative aging stereotypes (i.e., negative aging meta-stereotypes) or have more negative aging self-stereotypes in comparison to (1) male employees, (2) higher educated employees, and/or (3) employees with a permanent contract. In addition, field of working and organization, both comprising culture, might play a role in older employees' perceived meta-stereotypes. Therefore, field of working and organization were also included in the survey. Moreover, it might be the case that not self-perceived age but tenure of the current function moderates the relationship between negative aging meta- and self-stereotypes and older employees' perceived AMS to learn. Furthermore, older employees' perceived AMS to learn might not mediate the relationship between negative aging meta- and self-stereotypes and OEpE, but the relationship between chronological age and OEpE. In order to control for this, tenure of the current function and chronological age were also included in the survey.

3.4. Pilot study

Although most of the scales have been previously validated, a pilot study was conducted in order to ensure that the (translated and reformulated items in this) survey was appropriate for the sample in this study. Firstly, the different contact persons of the two participating organizations evaluated the Dutch survey concerning among others the answer options of the control questions, clearness and comprehensiveness of the questions and instructions, etc. Secondly, four employees of 50 years and older that varied in background were asked to complete the Dutch survey. Afterwards, they were asked to evaluate the survey concerning the following criteria: clearness and comprehensiveness of questions and instructions,

adequateness of answer options, order of questions, and scale length. All these four employees completed and evaluated the Dutch survey in among 15 minutes.

The pilot study led to some minor changes regarding the content of the items in order to make the items more clear and understandable. In some cases, words have been replaced by their synonyms. For example the item “I get the necessary time and means to further develop my competencies” is changed in “I get the necessary time and means to further develop my skills”. In other cases, there has been added some content to the existing item. For example, the item “Things keep getting worse as I get older” is changed in “Both work as private related things keep getting worse as I get older”. In order to ensure that the English items will measure the same as the Dutch items in the survey, the changed items were again translated with the forward-backward translation method.

3.5. Procedure

Prior to the data collection, supervisors of the participating departments in both organizations received more in-depth information about the research and more information about what was expected from them prior to and during the data collection. Afterwards, the target group received information about the research prior to the data collection. Because most people of the target group in Organization 1 were not in the possession of an e-mail account for their work, they were informed by a letter (see Appendix A). In contrast, the target group of Organization 2 were in the possession of an e-mail account for their work. Hence, they were informed by an e-mail (see Appendix B). In this letter and e-mail, general issues about the content of the research and survey, the execution of the research and the importance of the target group’s contribution to the research were mentioned. Moreover, the target group’s anonymity was guaranteed. If the target group still had any questions after receiving this announcement, they could contact the researcher by means of the mentioned contact data. In addition, they could contact the supervisors. Since, the supervisors were already extensively informed about the research.

Different activities were executed in order to increase the response rate. Since most people in the target group in Organization 1 had no access to a computer in their workplace, their supervisors arranged a public computer allowing the target group to fill in the survey online. In addition, the target group in Organization 1 received three weeks the time and the target group in Organization 2 two weeks the

time to complete the survey. The target employees in Organization 1 work in shiftwork. Therefore, they could only be targeted in three weeks. Because of this, it is chosen to shift the deadline from two weeks to three weeks for Organization 1. Moreover, the target group in Organization 1 received the opportunity to fill in the survey in English and Dutch, since the used working language in Organization 1 was both English and Dutch. Other activities to increase the response rate were giving reminders. Since most people of the target group in Organization 1 were not in the possession of an e-mail account for their work, they received reminders from their supervisors. In contrast, since all the employees in Organization 2 were in the possession of an e-mail account for their work, they received after one week a reminder by e-mail (see Appendix C).

Since after one week of data gathering the response rate in Organization 1 was rather low and the target group in Organization 1 had only access to a public computer, the target group in Organization 1 also received the opportunity to fill in the survey offline. Although the disadvantages of offline surveys above online surveys, offline surveys were used as a secondary quantitative research method in order to increase the response rate. Anonymity of the offline surveys was guaranteed by the opportunity to return the survey in the attached envelopes. This envelope could the respondent seal. Subsequently, the respondents could return the survey in a central collection point. In this way, the data could not be attributed to the individual employees.

The survey itself started with an introduction text. In this introduction instructions about the completion of the survey were given. The time needed and the available time to complete the surveys were also mentioned. Furthermore, anonymity of the respondents were again guaranteed. In turn, questions about personal background of the employee were asked. Subsequently, items with corresponding response categories regarding negative aging self- and meta-stereotypes were given. Items regarding negative aging self-stereotypes were given before the items regarding negative aging meta-stereotypes in order to rule out the possible influence of the mentioned items regarding negative aging meta-stereotypes on answering the items regarding the negative aging self-stereotypes. Furthermore, items with corresponding response categories regarding older employees' perceived AMS to learn were given. Finally, items with corresponding response categories regarding OEpE were given. It is chosen for this sequence of constructs, since Dilman (1978) recommends to start a

survey with insensitive items and to end with sensitive items. The survey could be found in Appendix D.

Of the target 315 employees of 50 years and older in both organizations (93 in Organization 1 and 222 in Organization 2), 139 employees filled in the survey (44.1%). Of these 139 surveys, one employee made use of straight lining. In this case, the respondent selected the same answer option for most of the items in the survey (Cole, McCormick & Gonyea, 2012). Moreover, eight employees did not fill in the survey completely. In this case, essential part for the data analysis were missing. Therefore, nine responses were excluded from the data analysis. This leave us with a remaining sample of 130 (41.3% of 315 employees), which could be used for the data analysis. Of these 130 surveys, 126 surveys were filled in online and 4 surveys offline.

3.6. Data-Analysis

The data from the 130 surveys are analyzed using the computer program: Statistical Package for the Social Sciences (SPSS) 22. However, before the data was analyzed, the Cronbach's alphas had been calculated in order to measure the internal consistency of the used scales (see section 3.3). Subsequently, a descriptive analysis was executed in order to get an impression of the respondents and a correlation analysis was executed in order to determine the strength and direction of linear relationships between different variables. Specifically, the Pearson's correlation is used to determine the strength and direction of the relationship. The value of the Pearson's correlation is within -1 and +1. A Pearson's correlation with a value between 0.1 and 0.3 is rated as moderate, between 0.3 and 0.5 as medium and between 0.5 and 1.0 as strong (Pallant, 2001). In turn, one-way ANOVA-tests were executed in order to analyze the differences among groups and their associated factors. Finally, regression analyses were executed in order to test the proposed hypotheses.

4. Results

4.1. Description of the respondents

All respondents of this study are active in the production industry. In total 19 respondents work for Organization 1 (14.6%) and 111 respondents work for Organization 2 (85.4%). Of the 130 respondents, 49 respondents (37.7%) work in the production, 48 respondents (36.9%) work in the technique, ten respondents (7.7%) work in the logistics and 23 respondents (17.7%) have a different type of word field like the lab, administration etcetera. Most of the respondents are man. Specifically, 123 respondents (94.6%) are man and six respondents (4.6%) are woman. One respondent did not mention if he/she was a man or woman (0.8%). Of the 130 respondents, 33 (25.4%) are between 50 and 54 years old, 49 (37.7%) are between 55 and 59 years, and 48 (36.9%) are 60 years and older.

Most of the respondents (92.3%) have either followed intermediate vocational education (MBO/VMBO/MULO) (74; 56.9%) or higher vocational education (HBO) (46; 35.4%). Two respondents (1.5%) did not follow any formal education. Four respondents (3.1%) have followed lower vocational education (LBO/VBO/ULO). Three respondents (2.3%) has followed (post-) academic education. One respondent did not mention what his highest level of completed education was (0.8%). Of the 130 respondents, 10 respondents (7.7%) are employed for 0 up to and including 9 years, 16 respondents (12.3%) are employed for 10 up to 19 years, 17 respondents (13.1%) are employed for 20 up to and including 29 years, and 86 respondents (66.2%) are employed for 30 years and longer. Most of the respondents are in the possession of a permanent contract. Specifically, 127 respondents (97.7%) are in the possession of a permanent contract in comparison to two respondents (1.5%), who are in the possession of a temporarily contract. One respondent did not mention that he was in the possession of a permanent or a temporary contract.

Table 2 summarizes mean scores and standard deviations regarding the five dimensions of employability, older employees' perceived AMS to learn and negative aging meta- and self-stereotypes. Regarding the five dimensions of employability, respondents scored high on 'occupational expertise' (M = 4.96, SD = .47). On the dimensions 'corporate sense' (M = 4.28, SD = .81), 'personal flexibility' (M = 4.25, SD = .67) and 'balance' (M = 4.09, SD = .85), the respondents scored considerable

lower. On the dimension ‘anticipation and optimization’ (*M* = 3.71, *SD* = .80), the respondents scored the lowest on a scale of one through six. The individual factors ‘ability to learn’ (*M* = 3.47, *SD* = .78) and ‘motivation to learn’ (*M* = 3.40, *SD* = .79) scored considerable high on a scale of one through five. ‘Support to learn’ scored relatively lower (*M* = 2.99, *SD* = .71) on a scale of one through five. Regarding the stereotypes, respondents scored low on negative aging self-stereotypes (*M* = 2.17, *SD* = .91). The average of negative aging meta-stereotypes is a little bit higher (*M* = 2.59, *SD* = .69). However, most respondents were not in the possession of negative aging meta- and self-stereotypes.

Table 2| Means and Standard Deviations

Variables	***M***	***SD***
Background		
1. Gender	1.05	0.21
2. Age	2.12	0.78
3. Perceived age	1.38	0.55
4. Education	3.34	0.66
5. Tenure	3.39	0.98
6. Contract Type	1.02	0.12
7. Field of Working	2.05	1.08
8. Organization	1.15	0.36
Variables		
9. Self-stereotypes	2.17	0.91
10. Meta-stereotypes	2.59	0.69
11. Ability to learn	3.47	0.78
12. Motivation to learn	3.40	0.79
13. Support to learn	2.99	0.71
Employability		
14. Occupational Expertise	4.96	0.47
15. Anticipation and Optimization	3.71	0.80
16. Personal Flexibility	4.25	0.67
17. Corporate Sense	4.28	0.81
18. Balance	4.09	0.85

4.2. Correlations

The means, standard deviations and correlations of the used variables are all summed up in Table 3 (for differences among groups see Appendix E). The correlation analysis found significant negative correlations for ‘self-stereotypes’, on the one hand, and ‘ability to learn’ (r = -.31, p <.01), ‘motivation to learn’ (r = -.29, p <.01) and ‘support to learn’ (r = -.24, p <.01), on the other hand. These correlations might indicate that with the increase of negative aging self-stereotypes, older employees’ perceived AMS to learn decreases. The correlation analysis also found significant negative correlations for ‘meta-stereotypes’, on the one hand, and ‘ability

to learn' (r = -.24, p <.01), 'motivation to learn' (r = -.29, p <.01) and 'support to learn' (r = -.15, p <.10), on the other hand. These correlations might indicate that with the increase of negative aging meta-stereotypes, older employees' perceived AMS to learn decreases.

Moreover, significant negative correlations were found for 'self-stereotypes' and all the five dimensions of employability ('occupational expertise' (r = -.33, p <.01), 'anticipation and optimization' (r = -.26, p <.01), 'personal flexibility' (r = -.51, p <.01), 'corporate sense' (r = -.31, p <.01) and 'balance' (r = -.36, p <.01)). These significant correlations might indicate that with the increase of negative aging self-stereotypes, OEpE decreases. In line with this, significant negative correlations were found for 'meta-stereotypes' and all the five dimensions of employability ('occupational expertise' (r = -.27, p <.01), 'anticipation and optimization' (r = -.27, p <.01), 'personal flexibility' (r = -.45, p <.01), 'corporate sense' (r = -.30, p <.01) and 'balance' (r = -.33, p <.01)). These significant correlations might indicate that with the increase of negative aging meta-stereotypes, OEpE decreases.

Significant positive correlations were also found for (1) 'ability to learn' and all the five dimensions of employability ('occupational expertise' (r = .55, p <.01), 'anticipation and optimization' (r = .59, p <.01), 'personal flexibility' (r = .62, p <.01), 'corporate sense' (r = .57, p <.01) and 'balance' (r = .55, p <.01)); (2) 'motivation to learn' and all the five dimensions of employability ('occupational expertise' (r = .38, p <.01), 'anticipation and optimization' (r = .71, p <.01), 'personal flexibility' (r = .62, p <.01), 'corporate sense' (r = .54, p <.01) and 'balance' (r = .49, p <.01)); and (3) 'support to learn' and all the five dimensions of employability ('occupational expertise' (r = .18, p <.05), 'anticipation and optimization' (r = .45, p <.01), 'personal flexibility' (r = .35, p <.01), 'corporate sense' (r = .34, p <.01) and 'balance' (r = .49, p <.01)). This might indicate that with the increase of older employees' perceived AMS to learn, OEpE also increases.

Further, significant positive correlations were found for all the five dimensions of employability. This means that 'occupational expertise', 'anticipation and optimization', 'personal flexibility', 'corporate sense' and 'balance' correlate positively with each other. This indicate that if one dimension of OEpE increases, the other dimensions of OEpE also increases. The strongest correlation was obtained for 'anticipation and optimization' and 'corporate sense' (r = .73, p <.01). The two weakest correlations were obtained for 'occupational expertise', on the one hand,

and ‘balance’ (r = .41, p <.01) and ‘anticipation and optimization’ (r = .42, p <.01), on the other hand.

Moreover, it should be noted that there were also significant positive correlations found for ‘ability to learn’, ‘motivation to learn’ and ‘support to learn’. This means that older employees’ perceived ability to learn, older employees’ perceived motivation to learn, and older employees’ perceived support to learn correlate positively with each other. This indicates that if one dimension increases, the other dimensions also increases. The strongest correlation was obtained for ‘ability to learn’ and ‘motivation to learn’ (r = .63, p <.01), and the weakest correlation was obtained for ‘ability to learn’ and ‘ support to learn’ (r = .30, p <.01). Furthermore, a positive correlation for ‘self-stereotypes’ and ‘meta-stereotypes’ was found (r = .44, p <.01). This indicates that if older one type of negative aging stereotypes increase, the other type also increases.

Table 3 shows that ‘perceived age’ was negatively related to ‘ability to learn’ (r = -.41, p <.01), ‘motivation to learn’ (r = -.49, p <.01), ‘support to learn’ (r = -.30, p <.01), and the five dimensions of employability (‘occupational expertise’ (r = -.31, p <.01), ‘anticipation and optimization’ (r = -.35, p <.01), ‘personal flexibility’ (r = -.34, p <.01), ‘corporate sense’ (r = -.27, p <.01) and ‘balance’ (r = -.31, p <.01)). This might indicate that if older employees’ perceived age increases, older employees’ perceived AMS to learn and OEpE decreases. In contrast, a positive significant correlation was found for ‘perceived age’ and ‘self-stereotypes’ (r = .25, p <.01). This might indicate that if older employees’ perceived age increases, older employees’ negative aging self-stereotypes also increases. Finally, a negative significant correlation was found for ‘perceived age’ and ‘education’ (r = -.19, p <.05). This might indicate that if older employees’ perceived age increases, older employees’ education decreases.

Table 3| Means, Standard Deviations and Correlations

Variables	***M***	***SD***	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**
Background																				
1. Gender	1.05	0.21	1																	
2. Age	2.12	0.78	-0.03	1																
3. Perceived age	1.38	0.55	-0.02	0.01	1															
4. Education	3.34	0.66	-0.01	0.01	-0.19*	1														
5. Tenure	3.39	0.98	0.10	0.32**	-0.06	0.06	1													
6. Contract Type	1.02	0.12	-0.03	-0.18*	-0.09	0.13	-0.31**	1												
7. Field of Working	2.05	1.08	0.40**	0.26**	0.06	0.20*	0.20*	-0.01	1											
8. Organization	1.15	0.36	-0.09	-0.17*	0.07	-0.22*	-0.70**	0.13	-0.28**	1										
Variables																				
9. Self-stereotypes	2.17	0.91	0.08	0.18*	0.25**	-0.31**	0.02	-0.09	0.06	0.05	1									
10. Meta-stereotypes	2.59	0.69	0.28**	0.12	0.10	0.01	0.08	0.09	0.26**	-0.13	0.44**	1								
11. Ability to learn	3.47	0.78	-0.16+	-0.22*	-0.41**	0.18*	-0.25**	-0.02	-0.19*	0.29**	-0.31**	-0.24**	1							
12. Motivation to learn	3.40	0.79	-0.03	-0.17+	-0.49**	0.16+	-0.29**	0.03	-0.12	0.30**	-0.29**	-0.29**	0.63**	1						
13. Support to learn	2.99	0.71	0.01	0.01	-0.30**	0.05	0.03	0.02	-0.03	-0.06	-0.24**	-0.15+	0.30**	0.45**	1					
Employability																				
14. Occupational Expertise	4.96	0.47	-0.01	-0.18*	-0.31**	0.27**	0.03	0.01	-0.10	0.02	-0.33**	-0.27**	0.55**	0.38**	0.18*	1				
15. Anticipation and Optimization	3.71	0.80	-0.13	-0.20*	-0.35**	0.12	-0.27**	0.04	-0.16+	0.25*	-0.26**	-0.27**	0.59**	0.71**	0.45**	0.42**	1			
16. Personal Flexibility	4.25	0.67	-0.21*	-0.22*	-0.34**	0.25**	-0.23**	0.10	-0.16+	0.15+	-0.51**	-0.45**	0.62**	0.62**	0.35**	0.54**	0.63**	1		
17. Corporate Sense	4.28	0.81	-0.06	-0.26**	-0.27**	0.18*	-0.28**	0.06	-0.05	0.18*	-0.31**	-0.30**	0.57**	0.54**	0.34**	0.53**	0.73**	0.60**	1	
18. Balance	4.09	0.85	-0.22*	-0.10	-0.31**	0.06	-0.26**	0.05	-0.08	0.27**	-0.36**	-0.33**	0.55**	0.49**	0.49**	0.41**	0.51**	0.60**	0.44**	1

+. Correlation is significant at the 0.10 level (2-tailed); *. Correlation is significant at the 0.05 level (2-tailed); **. Correlation is significant at the 0.01 level (2-tailed)

4.3. Testing hypotheses

4.3.1. Older Employees' perceived Ability, Motivation and Support to Learn, and Older Employees' perceived Employability

In order to test the hypothesis 1, which assumes that older employees' perceived (1a) ability to learn; (1b) motivation to learn; and (1c) support to learn are positively related to OEpE, multiple regression analyses were performed with in each analysis one dimension of employability as dependent variable (see Tables 4 till 8). Control variables were included from the first model. In the second model, the variables older employees' perceived AMS to learn were included as independent variables. Including these variables increased the total variance explained (r^2), as is shown in the Tables 4 till 8.

Hypothesis 1a assumes that older employees' perceived ability to learn is positively related to OEpE. A linear regression analysis showed that 'ability to learn' was positively related to 'occupational expertise' (β = .30, $t(110) = 4.84$, $p < .01$), 'anticipation and optimization' (β = .20, $t(112) = 2.26$, $p < .05$), 'personal flexibility' (β = .29, $t(110) = 3.75$, $p < .01$), 'corporate sense' (β = .35, $t(112) = 3.46$, $p < .01$) and 'balance' (β = .35, $t(112) = 3.41$, $p < .01$). Older employees' perceived ability to learn is positively related to OEpE. Therefore, hypothesis 1a is supported.

Hypothesis 1b assumes that older employees' perceived motivation to learn is positively related to OEpE. A linear regression analysis showed that 'motivation to learn' was positively related to 'anticipation and optimization' (β = .49, $t(112) = 2.26$, $p < .05$), 'personal flexibility' (β = .29, $t(110) = 3.47$, $p < .01$), and 'corporate sense' (β = .22, $t(113) = 2.03$, $p < .05$). No significant results were found regarding 'motivation to learn', on the one hand, and 'occupational expertise' (β = .03, $t(110) = .39$, $p > .10$) and 'balance' (β = -.01, $t(112) = -.04$, $p > .10$), on the other hand. Older employees' perceived motivation to learn is positively related to older employees' perceived anticipation and optimization, personal flexibility, and corporate sense, and not to older employees' perceived occupational expertise and balance. Therefore, hypothesis 1b is partly confirmed.

Finally, hypothesis 1c assumes that older employees' perceived support to learn is positively related to OEpE. A linear regression analysis showed that 'support to learn' was positively related to 'anticipation and optimization' (β = .21, $t(112) = 2.60$, $p < .05$), 'corporate sense' (β = .17, $t(112) = 1.81$, $p < .10$), and 'balance' (β = .46,

t(112) = 4.94, *p* < .01). No significant results were found regarding 'support to learn', on the one hand, and 'occupational expertise' (*β* = -.02, *t*(110) = -.28, *p* > .10) and 'personal flexibility' (*β* = .09, *t*(110) = 1.21, *p* > .10), on the other hand. Older employees' perceived support to learn is positively related to older employees' perceived anticipation and optimization, corporate sense and balance, and not to older employees' perceived occupational expertise and personal flexibility. Therefore, hypothesis 1c is partly confirmed.

4.3.2. Negative Aging Self- and Meta-Stereotypes and Older Employees' perceived Employability

In order to test hypothesis 2d, which assumes that negative aging meta-stereotypes are negatively related to OEpE, and hypothesis 4c, which assumes that negative aging self-stereotypes are negatively related to OEpE, multiple regression analyses were performed with in each analysis one dimension of employability as dependent variable (see also Tables 4 till 8). Control variables were included from the first model. In the third model, the variables 'self-stereotypes', and 'meta-stereotypes' were included as independent variables. Including these variables increased the total variance explained (r^2), as is shown in the Tables 4 till 8.

Hypothesis 2d assumes that OEpE is negatively affected by negative aging meta-stereotypes. A linear regression analysis showed that 'meta-stereotypes' were negatively related to 'occupational expertise' (*β* = -.12 *t*(111) = -1.78, *p* < .10), 'personal flexibility' (*β* = -.23, *t*(111) = -2.78, *p* < .01) and 'corporate sense' (*β* = -.25, *t*(113) = -2.28, *p* < .05). No significant results were found regarding 'meta-stereotypes', on the one hand, and 'anticipation and optimization' (*β* = -.15, *t*(113) = -1.36, *p* > .10) and 'balance' (*β* = -.16, *t*(113) = -1.41, *p* > .10), on the other hand. Negative aging meta-stereotypes are negatively related to older employees' perceived occupational expertise, personal flexibility and corporate sense, and not to older employees' perceived anticipation and optimization, and balance. Therefore, hypothesis 2d is partly confirmed.

Hypothesis 4c assumes that OEpE is negatively affected by negative aging self-stereotypes. A linear regression analysis showed that 'self-stereotypes' are negatively related to 'personal flexibility' (*β* = -.21, *t*(111) = -3.26, *p* < .01) and 'balance' (*β* = -.22, *t*(113) = -2.56, *p* < .05). No significant results were found regarding 'self-stereotypes', on the one hand, and 'occupational expertise' (*β* = -.05,

t(111) = -.96, *p* > .10), 'anticipation and optimization' (*β* = -.08, *t*(113) = -.87, *p* > .10) and 'corporate sense' (*β* = -.07, *t*(112) = -.79, *p* > .10), on the other hand. Negative aging self-stereotypes are negatively related to older employees' perceived personal flexibility and balance, and not to older employees' perceived occupational expertise, anticipation and optimization, and corporate sense. Therefore, hypothesis 4c is partly confirmed.

Table 4| Results Regression Analysis with Occupational Expertise as Dependent variable

Variables	**Model 1**	**Model 2**	**Model 3**	**Model 4**
Intercept	4.51**	3.01**	4.77**	3.33**
Control variables				
Gender	0.03	0.18	0.13	0.26
Age	-.010+	-0.05	-0.09	-0.05
Perceived age	-0.24**	-0.04	-0.20**	-0.04
Education	0.20**	0.13*	0.18**	0.12*
Tenure	0.08	0.10+	0.08	0.09+
Contract Type	-0.21	0.12	-0.13	0.17
Field of Working	-0.03	-0.03	-0.02	-0.02
Organization	0.25	0.02	0.22	0.01
Main Effects				
Ability to Learn		0.30**		0.30**
Motivation to Learn		0.03		-0.00
Support to Learn		-0.02		-0.02
Self-stereotypes			-0.05	-0.02
Meta-stereotypes			-0.12+	-0.11+
r^2	0.21	0.38	0.26	0.41

+. Regression is significant at the 0.10 level (2-tailed); *. Regression is significant at the 0.05 level (2-tailed); **. Regression is significant at the 0.01 level (2-tailed)

Table 5| Results Regression Analysis with Anticipation and Optimization as Dependent variable

Variables	**Model 1**	**Model 2**	**Model 3**	**Model 4**
Intercept	5.35**	1.39	5.67**	1.43
Control variables				
Gender	-.39	-0.29	-0.26	-0.26
Age	-.13	-0.05	-0.11	-0.05
Perceived Age	-.52**	0.05	-0.47**	0.05
Education	.14	0.01	0.11	0.01
Tenure	-.13	-0.06	-0.13	-0.06
Contract Type	-.67	-0.07	-0.57	-0.04
Field of Working	-.01	-0.01	0.01	-0.01
Organization	.38	-0.04	0.35	-0.05
Main Effects				
Ability to Learn		0.20*		0.20*
Motivation to Learn		0.49**		0.48**
Support to Learn		0.21*		0.21*
Self-stereotypes			-0.08	0.01
Meta-stereotypes			-0.15	-0.04
r^2	0.26	0.57	0.29	0.57

+. Regression is significant at the 0.10 level (2-tailed); *. Regression is significant at the 0.05 level (2-tailed); **. Regression is significant at the 0.01 level (2-tailed)

Table 6| Results Regression Analysis with Personal Flexibility as Dependent variable

Variables	Model 1	Model 2	Model 3	Model 4
Intercept	5.40**	2.34**	6.17**	3.38**
Control variables				
Gender	-0.60*	-0.45+	-0.38	-0.30
Age	-0.13	-0.06	-0.09	-0.03
Perceived Age	-0.41**	0.03	-0.29**	0.05
Education	0.24**	0.12	0.15+	0.07
Tenure	-0.11	-0.06	-0.11	-0.07
Contract Type	-0.28	0.26	-0.15	0.29
Field of Working	-0.01	-0.01	0.02	0.02
Organization	0.15	-0.23	.010	-0.22
Main Effects				
Ability to Learn		0.29**		0.27**
Motivation to Learn		0.29**		0.24**
Support to Learn		0.09		0.06
Self-stereotypes			-0.21**	-0.15**
Meta-stereotypes			-0.23**	-0.17**
r^2	0.29	0.53	0.45	0.62

+. Regression is significant at the 0.10 level (2-tailed); *. Regression is significant at the 0.05 level (2-tailed); **. Regression is significant at the 0.01 level (2-tailed)

Table 7| Results Regression Analysis with Corporate Sense as Dependent variable

Variables	Model 1	Model 2	Model 3	Model 4
Intercept	6.01**	2.67*	6.42**	3.07**
Control variables				
Gender	-0.28	-0.11	-0.07	0.04
Age	-0.22*	-0.14+	-0.19=*	-0.14
Perceived Age	-0.43**	0.02	-0.37**	0.01
Education	0.21+	0.09	0.18	0.10
Tenure	-0.20+	-0.15+	-0.20*	-0.16+
Contract Type	-0.72	-0.17	-0.54	-0.06
Field of Working	0.06	0.06	0.08	0.08
Organization	0.15	-0.21	0.10	-0.23
Main Effects				
Ability to Learn		0.35**		0.35**
Motivation to Learn		0.22*		0.18
Support to Learn		0.17+		0.16+
Self-stereotypes			-0.07	0.01
Meta-stereotypes			-0.25*	-0.20+
r^2	0.24	0.44	0.30	0.46

+. Regression is significant at the 0.10 level (2-tailed); *. Regression is significant at the 0.05 level (2-tailed); **. Regression is significant at the 0.01 level (2-tailed)

Table 8| Results Regression Analysis with Balance as Dependent variable

Variables	Model 1	Model 2	Model 3	Model 4
Intercept	5.84**	2.46*	6.53**	3.30**
Control variables				
Gender	-0.94*	-0.81=**	-0.76*	-0.69*
Age	-0.05	-0.02	-0.00	0.01
Perceived Age	-0.56**	-0.16	-0.46**	-0.16
Education	0.04	-0.03	-0.06	-0.08
Tenure	-0.11	-0.08	-0.11	-0.09
Contract Type	-0.43	-0.07	-0.34	-0.05
Field of Working	0.09	0.11	0.11	0.13+
Organization	0.53+	0.36	0.51+	0.38
Main Effects				
Ability to Learn		0.35**		0.33**
Motivation to Learn		-0.01		-0.05
Support to Learn		0.46**		0.44**
Self-stereotypes			-0.22*	-0.13+
Meta-stereotypes			-0.16	-0.13
r^2	0.25	0.49	0.34	0.53

+. Regression is significant at the 0.10 level (2-tailed); *. Regression is significant at the 0.05 level (2-tailed); **. Regression is significant at the 0.01 level (2-tailed)

4.3.3. Negative Aging Meta- and Self-stereotypes and Older Employees' perceived Ability, Motivation and Support to Learn

In order to test the hypotheses 2a till 2c, which assumes that negative aging meta-stereotypes are negatively related to older employees' perceived (2a) ability to learn, (2b) motivation to learn, and (2c) support to learn, and the hypotheses 4a and 4b, which assumes that negative aging self-stereotypes are negatively related to older employees' perceived (4a) ability to learn, and (4b) motivation to learn, multiple regression analyses were performed with in each analysis different variables (older employees' perceived AMS to learn) as dependent variable (see Tables 9 till 11). Control variables were included from the first model. In the second model, the variables 'self-stereotypes' and 'meta-stereotypes' were included as independent variables. Including these variables increased the total variance explained (r^2), as is shown in the Tables 9 till 11.

Hypothesis 2a assumes that older employees' perceived ability to learn is negatively affected by negative aging meta-stereotypes. As shown in model 2 in Table 9 'meta-stereotypes' were not significantly related to 'ability to learn ' (β = -.03, $t(115)$ = .10, p > .10). Negative aging meta-stereotypes are not negatively related to older employees' perceived ability to learn. Therefore, hypothesis 2a is rejected. Hypothesis 2b assumes that older employees' perceived motivation to learn is negatively affected by negative aging meta-stereotypes. As shown in model 2 in

Table 10, ‘meta-stereotypes’ have a significant negative effect on ‘motivation to learn’ (β = -.19, t(115) = -2.00, p < .05). Negative aging meta-stereotypes affect older employees’ perceived motivation to learn negatively. Therefore, hypothesis 2b is confirmed. Finally, hypothesis 2c assumes that older employees’ perceived support to learn is negatively affected by negative aging meta-stereotypes. As shown in model 2 in Table 11, ‘meta-stereotypes’ are not significantly related to ‘motivation to learn ’ (β = -.07, t(115) = .67, p > .10). Negative aging meta-stereotypes are not negatively related to older employees’ perceived support to learn. Therefore, hypothesis 2c is rejected.

Table 9| Results Regression Analysis with Ability to Learn as Dependent variable

Variables	**Model 1**	**Model 2**
Intercept	4.79**	5.10**
Control variables		
Gender	-0.48	-0.43
Age	-0.16+	-0.13
Perceived age	-0.62**	-0.57**
Education	0.23*	0.18+
Tenure	-0.04	-0.04
Contract Type	-1.02*	-1.01*
Field of Working	-0.01	-0.01
Organization	0.69**	0.69**
Main Effects		
Self-stereotypes		-0.12
Meta-stereotypes		-0.03
r^2	0.38	0.40

+. Regression is significant at the 0.10 level (2-tailed); *. Regression is significant at the 0.05 level (2-tailed); **. Regression is significant at the 0.01 level (2-tailed)

Table 10| Results Regression Analysis with Motivation to Learn as Dependent variable

Variables	**Model 1**	**Model 2**
Intercept	4.57**	4.89**
Control variables		
Gender	-0.02	0.15
Age	-0.10	-0.07
Perceived age	-0.75**	-0.70**
Education	0.18+	0.14
Tenure	-0.12	-0.12
Contract Type	-0.81	-0.67
Field of Working	0.01	0.02
Organization	0.61*	0.57*
Main Effects		
Self-stereotypes		-0.06
Meta-stereotypes		-0.19*
r^2	0.41	0.45

+. Regression is significant at the 0.10 level (2-tailed); *. Regression is significant at the 0.05 level (2-tailed); **. Regression is significant at the 0.01 level (2-tailed)

Table 11| Results Regression Analysis with Support to Learn as Dependent variable

Variables	Model 1	Model 2
Intercept	3.79**	4.15**
Control variables		
Gender	0.08	0.18
Age	0.04	0.07
Perceived age	-0.40**	-0.35**
Education	-0.02	-0.07
Tenure	-0.03	-0.04
Contract Type	-0.03	0.01
Field of Working	-0.03	-0.02
Organization	-0.14	-0.15
Main Effects		
Self-stereotypes		-0.13
Meta-stereotypes		-0.07
r^2	0.10	0.13

+. Regression is significant at the 0.10 level (2-tailed); *. Regression is significant at the 0.05 level (2-tailed); **. Regression is significant at the 0.01 level (2-tailed)

Hypothesis 4a assumes that older employees' perceived ability to learn is negatively influenced by negative aging self-stereotypes. As shown in model 2 in Table 9, 'self-stereotypes' are not significantly related to 'ability to learn ' (β = -.12, t(115) = .08, p > .10). Negative aging self-stereotypes do not influence older employees' perceived ability to learn negatively. Therefore, hypothesis 4a is rejected. Hypothesis 4b assumes that older employees' perceived motivation to learn is negatively affected by negative aging self-stereotypes. As shown in model 2 in Table 10, 'self-stereotypes' have no significant negative effect on 'motivation to learn' (β = -.06, t(115) = -.84, p > .10). Negative aging self-stereotypes do not influence older employees' perceived motivation to learn negatively. Therefore, hypothesis 4b is rejected.

4.3.4. Older Employees' perceived Ability, Motivation and Support to Learn as Mediators

Hypothesis 3 assumes that older employees' perceived (3a) ability to learn, (3b) motivation to learn, and (3c) support to learn mediates the relationship between negative aging self-stereotypes and OEpE. In order to test this expected mediation, the four-step procedure for testing mediation in single-level models suggested by Krull and MacKinnon (2001) is used. In this procedure, there is controlled for the control variables. As a first step, negative aging meta-stereotypes have to affect OEpE. As shown above in section 4.3.2, 'meta-stereotypes' negatively affect

'occupational expertise' (β = -.12 t(111) = -1.78, p < .10), 'personal flexibility' (β = -.23, t(111) = -2.78, p < .01) and 'corporate sense' (β = -.25, t(113) = -2.28, p < .05). Therefore, the first condition for testing the mediation hypotheses is met regarding 'occupational expertise', 'personal flexibility' and 'corporate sense'. As a second step, there is examined whether negatively aging meta-stereotypes affected the mediators (i.e., older employees' perceived AMS to learn). Since, as is shown in section 4.3.3, 'meta-stereotypes' influence only 'motivation to learn' (β = -.19, t(115) = -2.00, p < .05) negatively, the second condition is only met regarding 'motivation to learn'. As a third step, it is examined whether 'motivation to learn' is related to 'occupational expertise', 'personal flexibility' and 'corporate sense', since 'meta-stereotypes' are only related to these dimensions of employability. As is shown in section 4.3.1, of these three variables 'motivation to learn' was only positively related to 'personal flexibility' (β = .29, t(110) = 3.47, p < .01), and 'corporate sense' (β = .22, t(113) = 2.03, p < .05). As the final step, the variables 'meta-stereotypes' and 'motivation to learn' were together included in the analysis in predicting 'personal flexibility' and 'corporate sense' (see Table 12). As is shown in Table 12, 'motivation to learn' is positively significant related to 'personal flexibility' (β = .38, t(110) = 5.24, p < .01) and 'meta-stereotypes' are negatively significant related to 'personal flexibility' (β = -.16, t(112) = -2.09, p < .05). In comparison to step 1 'meta-stereotypes' are less strongly related to 'personal flexibility', which shows that 'motivation to learn' partially mediates the relationship between 'meta-stereotypes' and 'personal flexibility'. In other words, older employees' perceived motivation to learn partially mediates the relationship between negative aging meta-stereotypes and older employees' perceived personal flexibility. Moreover, as is shown in Table 12, 'motivation to learn' is positively significant related to 'corporate sense' (β = .40, t(112) = 3.96, p < .01). 'Meta-stereotypes' are however no longer related to 'corporate sense' (β = -.17, t(112) = -1.65, p > .01). This indicates that 'motivation to learn' fully mediates the relationship between 'meta-stereotypes' and 'corporate sense'. In other words, older employees' perceived motivation to learn fully mediates the relationship between negative aging meta-stereotypes and older employees' perceived corporate sense. Therefore, only partial support is found for hypothesis 3b, while there is no support found for hypothesis 3a and 3c.

Hypothesis 5 assumes that older employees' perceived (5a) ability to learn, and (5b) motivation to learn mediates the relationship between negative aging self-

stereotypes and OEpE. In order to test hypothesis 5, the four-step procedure of Krull and MacKinnon (2001) is also used, while controlling for the effect of the control variables. As a first step, negative aging self-stereotypes have to influence OEpE. As shown above in section 4.3.2, 'self-stereotypes' influence 'personal flexibility' (β = -.21, $t(111) = -3.26$, $p < .01$) and 'balance' (β = -.22, $t(113) = -2.56$, $p < .05$) significant negatively. Therefore, the first condition for testing the mediation hypotheses is met regarding 'personal flexibility' and 'balance'. As a second step, it is examined whether negative aging self-stereotypes negatively affected the mediators (i.e., older employees' perceived ability and motivation to learn). Since, as is shown in section 4.3.3, 'self-stereotypes' are not significantly related to 'ability to learn' (β = -.12, $t(115) = .08$, $p > .10$) and 'motivation to learn' (β = -.06, $t(115) = -.84$, $p > .10$), the second condition is not met. 'Ability to learn' and 'motivation to learn' do not mediate the relationship between 'self-stereotypes' and 'employability'. In other words, older employees' perceived ability and motivation to learn does not mediate the relationship between negative aging self-stereotypes and OEpE. Therefore, hypothesis 5a and 5b are rejected.

Table 12| Results Regression Analysis with 'Motivation to Learn' as Mediator

Variables	Personal Flexibility	Corporate Sense
Intercept	4.32**	4.45**
Control variables		
Gender	-0.42+	-0.11
Age	-0.05	-0.15+
Perceived Age	-0.03	-0.09
Education	0.09	0.12
Tenure	-0.07	-0.16+
Contract Type	0.11	-0.26
Field of Working	0.01	0.07
Organization	-0.13	-0.14
Main Effects		
Self-stereotypes	-0.18**	-0.04
Meta-stereotypes	-0.16*	-0.17
Motivation to Learn	0.38**	0.40**
r^2	0.56	0.39

+. Regression is significant at the 0.10 level (2-tailed); *. Regression is significant at the 0.05 level (2-tailed); **. Regression is significant at the 0.01 level (2-tailed)

4.3.5. Older Employees' perceived Age as Moderator

In order to test the hypothesis 6, which assumes that older employees' perceived age moderates the relationship between negative aging meta-stereotypes and older employees' perceived (6a) ability to learn, (6b) motivation to learn and (6c) support to

learn with stronger negative relationships among older employees who perceive themselves as younger compared to older employees who perceive themselves as older or the same, and hypothesis 7, which assumes that older employees' perceived age moderates the relationship between negative aging self-stereotypes and older employees' perceived (7a) ability to learn, and (7b) motivation to learn with stronger negative relationships among older employees who perceive themselves as older or the same compared to older employees who perceive themselves as younger, multiple regression analyses were performed with in each analysis different variables (i.e., older employees' perceived AMS to learn) as dependent variable (see Tables 13 till 15). Control variables were included from the first model. In the second model, the variables 'self-stereotypes' 'meta-stereotypes' and 'perceived age' were included. Including these variables increased the total variance explained (r^2), as is shown in the Tables 13 till 15. Finally, in the third and fourth model the two way-interaction effects were included. Specifically, in the third model the two-way interaction between 'self-stereotypes' and 'perceived age' were included and in the fourth model the two-way interaction between 'meta-stereotypes' and 'perceived age'.

Hypothesis 6a assumes that older employees' perceived age moderates the relationship between negative aging meta-stereotypes and older employees' perceived ability to learn, with stronger negative relationships among older employees who perceive themselves as younger compared to older employees who perceive themselves as older or the same. Adding the two-way interaction between 'meta-stereotypes' and 'perceived age' to model 2 in Table 13, the total variance explained (r^2) for 'ability to learn' did not improve as is shown in model 4 in Table 12. Also, the interaction term is not significant (β = -.08, $t(114)$ = -.64, p > .10), meaning that the relationship between 'meta-stereotypes' and 'ability to learn' is not significantly different for employees who perceive themselves as younger, the same or older. In other words, older employees' perceived age does not moderate the relationship between negative aging meta-stereotypes and older employees' perceived ability to learn. Therefore, hypothesis 6a is rejected.

Moreover, hypothesis 6b assumes that older employees' perceived age moderates the relationship between negative aging meta-stereotypes and older employees' perceived motivation to learn, with stronger negative relationships among older employees who perceive themselves as younger compared to older employees who perceive themselves as older or the same. Adding the two-way interaction

between ‘meta-stereotypes’ and ‘perceived age’ to model 2 in Table 14, the total variance explained (r^2) for ‘motivation to learn’ decreased, as is shown in model 4 in Table 14. Also, the interaction term is not significant (β = -.11, t(114) = -.85, p > .10), meaning that the relationship between ‘meta-stereotypes’ and ‘motivation to learn’ is not significantly different for employees who perceive themselves as younger, the same or older. In other words, older employees’ perceived age does not moderate the relationship between negative aging meta-stereotypes and older employees’ perceived motivation to learn. Therefore, hypothesis 6b is rejected.

Hypothesis 6c assumes that older employees’ perceived age moderates the relationship between negative aging meta-stereotypes and older employees’ perceived support to learn, with stronger negative relationships among older employees who perceive themselves as younger compared to older employees who perceive themselves as older or the same. Adding the two-way interaction between ‘meta-stereotypes’ and ‘perceived age’ to model 2 in Table 15, the total variance explained (r^2) for ‘support to learn’ increased, as is shown in model 4 in Table 15. However, the interaction term is not significant (β = -.19, t(114) = -1.34, p > .10), meaning that the relationship between ‘meta-stereotypes’ and ‘support to learn’ is not significantly different for employees who perceive themselves as younger, the same or older. In other words, older employees’ perceived age does not moderate the relationship between negative aging meta-stereotypes and older employees’ perceived support to learn. Therefore, hypothesis 6c is rejected.

Hypothesis 7a assumes that older employees’ perceived age moderates the relationship between negative aging self-stereotypes and older employees’ perceived ability to learn. Adding the two-way interaction between ‘self-stereotypes’ and ‘perceived age’ to model 2 in Table 13, the total variance explained (r^2) for ‘ability to learn’ did not increase or decrease, as is shown in model 4 in Table 13. Also, the interaction term is not significant (β = -.11, t(114) = -1.09, p > .10), meaning that the relationship between ‘self-stereotypes’ and ‘ability to learn’ is not significantly different for employees who perceive themselves as younger, the same or older. In other words, older employees’ perceived age does not moderate the relationship between negative aging self-stereotypes and older employees’ perceived ability to learn. Therefore, hypothesis 7a is rejected.

Finally, hypothesis 7b assumes that older employees’ perceived age moderates the relationship between negative aging self-stereotypes and older employees’

perceived motivation to learn. Adding the two-way interaction between 'self-stereotypes' and 'perceived age' to model 2 in Table 14, the total variance explained (r^2) for 'motivation to learn' did not increase or decrease, as is shown in model 4 in Table 14. Also, the interaction term is not significant (β = -.14, t(114) = -1.37, p > .10), meaning that the relationship between 'self-stereotypes' and 'motivation to learn' is not significantly different for employees who perceive themselves as younger, the same or older. In other words, older employees' perceived age does not moderate the relationship between negative aging self-stereotypes and older employees' perceived motivation to learn. Therefore, hypothesis 7b is also rejected.

In explaining 'ability to learn', 'motivation to learn' and 'support to learn', 'perceived age' has, however, an important role. Specifically, 'perceived age' is negatively significant related 'ability to learn' (β = -.57, t(115) = -5.17, p < .01), 'motivation to learn' (β = -.70, t(115) = -6.48, p < .01) and 'support to learn' (β = -.35, t(115) = -2.87, p < .01). Older employees' perceived age is negatively related to older employees' perceived AMS to learn. In other words, if older employees' perceived age increases, older employees' perceived AMS to learn decreases.

Table 13| Results Regression Analysis with Ability to Learn as Dependent variable

Variables	**Model 1**	**Model 2**	**Model 3**	**Model 4**
Intercept	3.27**	3.97**	3.91**	3.96**
Control variables				
Gender	-0.38	-0.43	-0.42	-0.43
Age	-0.16+	-0.13	-0.13	-0.13
Education	0.33**	0.18+	0.19+	0.18+
Tenure	-0.01	-0.04	-0.04	-0.04
Contract Type	-0.77	-1.01*	-0.99=*	-1.01*
Field of Working	-0.06	-0.01	-0.01	-0.01
Organization	0.67*	0.69**	0.68**	0.69**
Main Effects				
Self-stereotypes		-0.12	-0.12	-0.12
Meta-stereotypes		-0.03	-0.01	-0.02
Perceived Age		-0.57**	-0.52**	-0.56**
Interaction Effects				
Perceived Age * Self-Stereotypes			-0.11	
Perceived Age * Meta-Stereotypes				-0.08
r^2	0.21	0.40	0.40	0.40

+. Regression is significant at the 0.10 level (2-tailed); *. Regression is significant at the 0.05 level (2-tailed); **. Regression is significant at the 0.01 level (2-tailed)

Table 14| Results Regression Analysis with Motivation to Learn as Dependent variable

Variables	Model 1	Model 2	Model 3	Model 4
Intercept	2.73*	3.28**	3.22**	3.28**
Control variables				
Gender	0.10	0.15	0.16	0.14
Age	-0.09	-0.07	-0.06	-0.06
Education	0.30**	0.14	0.16+	0.14
Tenure	-0.08	-0.12	-0.13	-0.12
Contract Type	-0.51	-0.67	-0.64	-0.66
Field of Working	-0.05	0.02	0.02	0.02
Organization	0.58*	0.57*	0.55*	0.56*
Main Effects				
Self-stereotypes		-0.06	-0.05	-0.05
Meta-stereotypes		-0.19*	-0.17+	-0.18+
Perceived Age		-0.70**	-0.64**	-0.68**
Interaction Effects				
Perceived Age * Self-Stereotypes			-0.14	
Perceived Age * Meta-Stereotypes				-0.11
r^2	0.16	0.45	0.45	0.40

+. Regression is significant at the 0.10 level (2-tailed); *. Regression is significant at the 0.05 level (2-tailed); **. Regression is significant at the 0.01 level (2-tailed)

Table 15| Results Regression Moderator Analysis with Support to Learn as Dependent variable

Variables	Model 1	Model 2	Model 3
Intercept	2.81**	3.21**	3.20**
Control variables			
Gender	0.15	0.18	0.16
Age	0.04	0.07	0.08
Education	0.05	-0.07	-0.07
Tenure	-0.01	-0.04	-0.03
Contract Type	0.13	0.01	0.02
Field of Working	-0.06	-0.02	-0.02
Organization	-0.16	-0.15	-0.16
Main Effects			
Self-stereotypes		-0.13	-0.11
Meta-stereotypes		-0.07	-0.05
Perceived Age		-0.35**	-0.31*
Interaction Effects			
Perceived Age * Meta-Stereotypes			-0.19
r^2	0.01	0.13	0.15

+. Regression is significant at the 0.10 level (2-tailed); *. Regression is significant at the 0.05 level (2-tailed); **. Regression is significant at the 0.01 level (2-tailed)

4.4. Final Model

Based on these results, the research model (see Figure 2) can be adjusted. The final model (see Figure 3) gives an overview of the significant expected relationships (the bold arrow) and the significant unexpected relations (the dotted arrow) found in this study. It is indicated if the relationship is positive (+) or negative (-) significant. Furthermore, when the independent variable (e.g., 'motivation to learn') is not related to all the dimensions of OEpE, the model indicates the number of dimensions to

which the independent variable is related. The specific dimensions of OepE to which the independent variables are related, are mapped in Table 16.

Table 16| Summary of the Significant Relations with the Dimensions of Older Employees' perceived Employability as Dependent variable

Independent Variable	**Mediator**	**Dependent Variable**
Abiltiy to Learn		Occupational Expertise, Anticipation and Optimization, Personal Flexibility, Corporate Sense & Balance
Motivation to Learn		Anticipation and Optimization, Personal Flexibility & Corporate Sense
Support to Learn		Anticipation and Optimization, Corporate Sense & Balance
Meta-Stereotypes		Occupational Expertise, Personal Flexibility & Corporate Sense
Self-Stereotypes		Personal Flexibility & Balance
Meta-stereotypes	Motivation to Learn	Personal Flexibility & Corporate sense

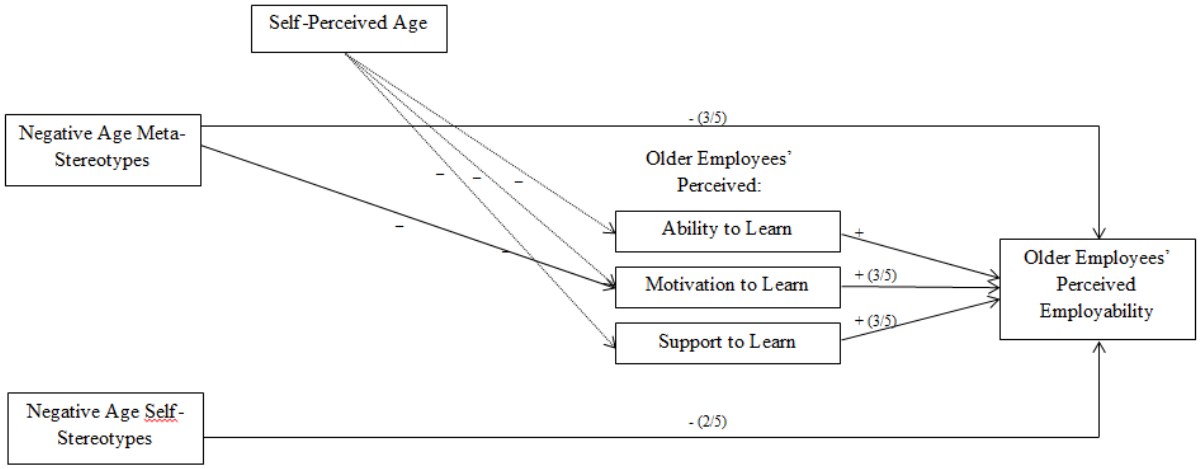

Figure 3| *Final Model*

5. Discussion and Conclusions

5.1. Theoretical Contribution and Implications

5.1.1. Older Employees' perceived Ability, Motivation and Support to Learn and Employability

One of the major research findings presented in this study, is that older employees' perceived AMS to learn contribute to OEpE. Older employees' perceived ability to learn contributes to all the five dimensions of OEpE (occupational expertise, anticipation and optimization, personal flexibility, corporate sense and balance) and older employees' perceived motivation and support to learn to some dimensions of OEpE. Therefore, these results show that older employees' perceived ability to learn is an important determinant of OEpE. Older employees' perceived motivation and support to learn are relatively less important determinants of OEpE in comparison to older employees' perceived ability to learn. Below, the relationships between older employees' perceived AMS to learn and OEpE will be discussed in more detail. Subsequently, the found results will be explained.

Older Employees' perceived Ability to Learn and Employability

In this study evidence was found that older employees' perceived ability to learn is positively related to OEpE (hypothesis 1a). All the five dimensions of OEpE were related to older employees' perceived ability to learn. This indicates that the more older employees perceive themselves as being able to learn, the better they perceive the knowledge and skills about their professional domain (*occupational expertise*). Moreover, older employees who perceive themselves as being able to learn, perceive themselves to be better in adaptation to changes and developments than older employees who perceive themselves as not being able to learn. They perceive themselves to be better in *anticipation and optimization*, and *personal flexibility*. Anticipation and optimization refers to the extent in which older employees perceive themselves as being capable of preparing future work changes. It is a more self-initiating proactive type in order to aim for the best possible job and career outcomes. In contrast, personal flexibility refers to the extent in which older employees perceive

themselves as being capable of adapting easily to all kinds of changes in their function, department or organization. Therefore, personal flexibility is more a passive, reactive type of anticipation. Moreover, the results of this study indicates that older employees who perceive themselves as being more able to learn, perceive themselves also as being better capable of participating and performing in different work groups (*corporate sense*) than older employees who perceive themselves as not being able to learn. They perceive themselves to be better able to share responsibilities, experiences, feelings etc. Finally, the more older employees perceive themselves as being able to learn, the better they perceive themselves as being capable of compromising between opposing employers' interests as well as their own opposing interests and between employers' and employees' interests (*balance*). Overall, this indicates that the more older employees belief that they are capable of improving and developing their knowledge and skills, the better they perceive their employability. In other words, older employees who perceive their ability to learn as high, perceive their ability to continuously fulfill, acquire or create work through the optimal use of their competences high as well. These results are in line with previous studies (Bossink, 2011; Cheung, 2014).

Older Employees' perceived Motivation to Learn and Employability

This study found partial support that older employees' perceived motivation to learn is positively related to OEpE (hypothesis 1b). Regarding the five dimensions of OEpE evidence is only found for anticipation and optimization, personal flexibility and corporate sense. This indicates that the more older employees desire to acquire new knowledge and skills, the better they perceive the following employability dimensions: anticipation and optimization, personal flexibility and corporate sense. Older employees who are highly motivated to learn, perceive themselves as being better in adapting to changes and developments than others who are not highly motivated. They perceive themselves to be better in preparing future work changes in order to aim for the best possible job and career outcomes (*anticipation and optimization*). Moreover, they perceive themselves to be better in easily adapting to all kinds of changes in their function, department or organization (*personal flexibility*). Finally, the results of this study indicates that the more older employees perceive themselves as being able to learn, the better they perceive themselves as being capable of participating and performing in different work groups (*corporate sense*).

In line with this, Breukers (2010) investigated the relationship between (both younger and older) Dutch employees' perceived motivation to learn formally and all the five dimensions of employees' perceived employability. Breukers (2010) showed that the higher employees perceive their motivation to learn formally, the better they perceive their occupational expertise, anticipation and optimization, personal flexibility and balance. Moreover, Cheung (2014) studied the influence of (both younger and older) Dutch' employees' perceived motivation to learn formally on their perceived occupational expertise (one dimension of employees' perceived employability). The study of Cheung (2014) showed that the employees who are highly motivated to learn formally perceive their occupational expertise as better.

Some of the results of the current study differ from the results of related studies. For example, Breukers (2010) found evidence that employees' perceived motivation to learn formally was positively related to their perceived occupational expertise and balance, and Cheung (2014) found evidence that employees' perceived motivation to learn formally was positively related to their perceived occupational expertise, while the present study did not found evidence for the relationship between older employees' perceived motivation to learn and the OEpE dimensions occupational expertise and balance. Moreover, the current study found evidence for a positive relationship between older employees' perceived motivation to learn and the OEpE dimension balance, while the study of Breukers (2010) did not. Both studies found, however, evidence that motivation to learn positively influences the employability dimensions anticipation and optimization, and personal flexibility.

It could be that there is an interaction effect between chronological age and individuals' perceived motivation to learn on their perceived employability. Breukers (2010) and Cheung (2014) focused in their studies on both younger and older employees, while the current study focused on older employees only. Therefore, younger employees who perceive themselves as being highly motivated, might perceive their perceived employability dimensions 'occupational expertise' and 'balance' as better than younger employees who perceive themselves not as being highly motivated. In addition, it could be inferred that the higher older employees perceive their motivation to learn, the better they perceive their corporate sense. Finally, it might be the case that the higher both younger and older employees perceive their motivation to learn, the better they perceive their anticipation and optimization and personal flexibility. However, the study of Breukers (2010) did not

found an interaction effect between chronological age and individuals' perceived motivation to learn on their perceived occupational expertise, corporate sense and balance. Therefore, it is less likely that the results of these studies could be interpreted in this way.

It is more likely that individuals' perceived motivation to learn formally and individuals' perceived motivation to learn both formally and informally differ in their influence on the dimensions of their perceived employability. Breukers (2010) and Cheung (2014) focused in their studies on motivation to learn formally, while the current study focused on motivation to learn in a formal and informal way. Specifically, Breukers (2010) and Cheung (2014) define motivation to learn as "the desire to engage in training and development activities, to learn training content, and to embrace development activities" (Breukers, 2010, p. 17; Cheung, 2014, p. 11), while motivation to learn in this study is defined as the desire of an older employee to acquire new knowledge and skills. Since evidence is found that both formal and informal learning activities attribute to different dimensions of employability (e.g., De Vos et al., 2011; Froehlich et al, 2014; Van der Heijden et al., 2009; 2016), it might be the case that individuals' motivation to learn formally and motivation to learn informally are differently related to their perceived employability. However, future research should prove this.

Older Employees' perceived Support to Learn and Employability

Partial support was found that older employees' perceived support to learn is positively related to OEpE (hypothesis 1c). Regarding the five dimensions of OEpE evidence is only found for anticipation and optimization, corporate sense and balance. This indicates that the more older employees perceive support of the organization in the development of their knowledge and skills, the better they perceive the following employability dimensions: anticipation and optimization, corporate sense and balance. In other words, the more older employees perceive organizational support regarding learning, the better they perceive themselves as being capable of preparing future work changes in order to aim for the best possible job and career outcomes (*anticipation and optimization*). Moreover, the results of this study imply that older employees who perceive that they receive support regarding learning, perceive themselves also as being better capable of participating and performing in different work groups (*corporate sense*) than older employees who do

not perceive that they receive support regarding learning. They perceive themselves to be better able to share responsibilities, experiences, feelings etc. Finally, the more older employees perceive organizational support regarding learning, the better they perceive themselves as being capable of compromising between opposing employers' interests as well as their own opposing interests and between employers' and employees' interests (*balance*).

In contrast, the study of De Vos et al. (2011) who studied the influence of older employees' perceived support to learn on the OEpE dimensions occupational expertise and personal flexibility, found a positive relationship between employees' perceived support to learn and these OEpE dimensions. This might be explained in that the study of De Vos et al. (2011) focused only on eight items of the 'occupational expertise' scale of Van der Heijde and Van der Heijden (2006), while this study focused on all fifteen items of this scale. Another explanation might be that these differences are explained by composition of the sample. The study of De Vos et al. (2011) focused on both younger and older Belgian employees, while this study focused on Dutch' employees of 50 years and older. However, future research should prove this.

Older Employees' perceived Ability, Motivation and Support to Learn and the Dimensions of Older Employees' perceived Employability Explained

Research shows that individuals' ability to learn contributes positively to their participation in formal learning activities (Noe & Wilk, 1993), informal learning activities (Eraut, 2004) and to their learning performance (Chuang et al., 2005; Guerrero & Sirre, 2001; Homklin et al., 2013). Moreover, motivation to learn also positively influences one's participation in formal learning activities (Noe & Wilk, 1993; Tharenou, 2001), informal learning activities (Beinborn, 2012) and to the learning performance itself (e.g., Chuang et al., 2005; Homklin et al., 2013; LePine et al., 2004; Sitzmann et al., 2009). Furthermore, research shows that support to learn contributes positively to participation in formal learning activities (Noe & Wilk, 1993; Tharenou, 2001), informal learning outcomes (Clarke, 2005) and to employability orientation (Nauta et al., 2009; Van Dam, 2003). Participation in learning activities, learning outcomes and employability orientation enhances, in turn, one's perceived employability by maintaining and developing these competences (e.g., De Vos et al., 2011; Froehlich et al., 2014; Van Dam, 2003; Van der Heijden, et al., 2009; 2016).

Based on these findings an explanation could be given that this study found support for the relationships between older employees' AMS to learn and the OEpE dimensions anticipation and optimization and corporate sense.

The found evidence that older employees' perceived ability to learn contributes to the OEpE dimension occupational expertise, might be explained by a halo effect. A halo effect is a cognitive bias that affect our judgments. Positive or negative feelings in one area cause other traits to be also viewed positively or negatively (Kardes, Cline & Cronley, 2011). As older employees perceive themselves as being more able to learn than less able, they could also perceive the competences of their employability as better. That no support is found for the relationship between older employees' perceived motivation and support to learn could therefore be explained in that the respondents of this study perceive the dimensions as something independent from learning. They might for example perceive that their occupational expertise is the result of years of work experience. In line with this, a significant positive correlation of tenure on occupational expertise is found in this study.

That this study found a positive relationship between older employees' perceived ability to learn and the OEpE dimension balance, might also be explained by a halo effect. However, this study also found a positive relationship between older employees' perceived support to learn and balance. No relationship was found between older employees' perceived motivation to learn and balance. Therefore, it might be the case that not only organizational support to learn but organizational support in general explains the relationship between older employees' perceived support to learn and balance. Finally, a positive relationship between older employees' perceived ability and motivation to learn, on the one hand, and the OEpE dimension personal flexibility is found. These results might be explained in that the respondents perceive the personal flexibility to be different per individual but not per organization. The individual conditions motivation and support to learn might therefore have positively influenced personal flexibility not the organization condition support to learn.

From above, it could be inferred that the AMO theory fully applies to the OEpE dimensions anticipation and optimization, and corporate sense. The AMO theory does not apply to the OEpE dimensions occupational expertise, personal flexibility and balance, as (1) only older employees' perceived ability to learn is positively related to the occupational expertise; (2) both older employees' perceived ability and

motivation to learn contribute positively to personal flexibility; and (3) older employees' perceived ability and support to learn are positively related to balance. Therewith, partial evidence is found that the AMO theory applies to OEpE.

5.1.2. Negative Aging Meta- and Self-Stereotypes and Older Employees' perceived Employability

Another important research finding presented in this study, is that negative aging meta- and self-stereotypes contribute differently to the dimensions of OEpE. Based on this result, it could be stated that negative aging meta- and self-stereotypes differently influence OEpE and that negative aging meta- and self-stereotypes are determinants of OEpE. Since they only influence some of the dimensions of OEpE, they are relatively less important determinants of OEpE than older employees' perceived ability to learn. Negative aging meta- and self-stereotypes influence respectively three and two dimensions of OEpE. Therefore, negative aging meta-stereotypes, motivation and support to learn contribute to the same extent to OEpE and negative aging self-stereotypes to a lesser extent. Below, the found relationships between negative aging meta- and self-stereotypes, on the one hand, and OEpE, on the other hand, are explained in more detail. Subsequently, explanations of these findings are given.

Negative Aging Meta-Stereotypes and Older Employees' Perceived Employability

This study found partial support that negative aging meta-stereotypes are negatively related to OEpE (hypothesis 2d). Regarding the five dimensions of OEpE evidence is only found for occupational expertise, personal flexibility and corporate sense. This indicates that the more older employees belief that they are negatively stereotyped by members of the 'out-group' (e.g., colleagues), the worse they perceive their occupational expertise, personal flexibility and corporate sense. In other words, when older employees perceive more negative aging meta-stereotypes, they perceive to have less knowledge and skills about their professional domain (*occupational expertise*). Moreover, the more older employees perceive negative aging meta-stereotypes, the less they perceive themselves to be capable of easily adapting to all kinds of changes in their function, department or organization (*personal flexibility*). Finally, the results of this study imply that older employees who

perceive more negative aging meta-stereotypes, perceive themselves also as being less capable of participating and performing in different work groups (*corporate sense*).

Negative Aging Self-Stereotypes and Older Employees' Perceived Employability

Partial support is found that negative aging self-stereotypes are negatively related to OEpE (hypothesis 2d). Regarding the five dimensions of OEpE evidence is only found for personal flexibility and balance. This indicates that the more previously held negative aging stereotypes employees apply to themselves as they become older, the worse they perceive their personal flexibility and balance. In other words, when older employees perceive more negative aging self-stereotypes, the less they perceive themselves to be capable of easily adapting to all kinds of changes in their function, department or organization (*personal flexibility*). Finally, the results of this study imply that the more older employees perceive negative aging self-stereotypes, the less they perceive themselves to be capable of compromising between opposing employers' interests as well as their own opposing interest and between employers' and employees' interests.

Results regarding Negative Aging Meta- and Self-Stereotypes and Older Employees' Perceived Employability Explained

That negative aging meta-stereotypes negatively influence the OEpE dimensions occupational expertise and personal flexibility could be explained as follows. Prior research has shown that older employees are perceived as being less mental capable than younger employees (Van Dalen et al., 2010). In addition, research has shown that older employees are perceived as less flexible (Van Dalen et al., 2010) and more resistant and less willing to change (Ng & Feldman, 2012) than younger employees. From this, it could be inferred that older employees are respectively perceived as having less occupational expertise and personal flexibility in comparison to younger employees. In other words, older employees might be perceived as having less knowledge and skills about their professional domain (*occupational expertise*) and being less capable of easily adapting to all kinds of changes in the labor market (*personal flexibility*). When older employees belief that their colleagues perceive them in negative terms, it might be the case that they belief that their colleagues perceive them negatively regarding the employability

dimensions occupational expertise and personal flexibility. Since research has shown that employees apply negative meta-stereotypes to themselves (Klein et al., (2007), it is also expected that older employees might apply the negative beliefs about their occupational expertise and personal flexibility to themselves. This in turn might have caused the negative relationship between negative aging meta-stereotypes and the OEpE dimensions occupational expertise and personal flexibility.

That older employees are perceived as less flexible (Van Dalen et al., 2010) and more resistant and less willing to change (Ng & Feldman, 2012) and that evidence is found that older employees apply previously held negative aging stereotypes to themselves (e.g., Kornadt & Rothermund, 2012; Rothermund & Brandtstädter, 2003) could explain the negative relationship found between negative aging self-stereotypes and personal flexibility. However, based on this reasoning, it is also expected that negative aging self-stereotypes negatively influence occupational expertise. This study did however not found evidence that the more negative aging self-stereotypes people hold, the less they perceive the OEpE dimension occupational expertise. Older employees did not apply the previous negative stereotype that older employees are less mental capable in comparison to younger employees to themselves. This could be explained in that older employees do not belief that these beliefs apply to the employees employed in their professional domain. That negative aging meta-stereotypes influence the OEpE dimension occupational expertise negatively might, therefore, be explained in that older employees belief that the negative aging stereotype about occupational expertise held by their colleagues apply to them.

Van Dalen et al. (2010) found also evidence that older employees are perceived as having more social skills and as being more vulnerable to work-family balance in comparison to younger employees. From this, it could be inferred that older employees are perceived to be capable of participating and performing in different work groups (*corporate sense*) and to be less capable of compromising between opposing employers' interests as well as their own opposing interest and between employers' and employees' interests (*balance*). Based on the reasoning from above, it is expected that older employees also perceive themselves as having more corporate sense and less balance in comparison to younger employees. In line with this reasoning, support is found for a negative relationship between negative aging self-stereotypes and the OEpE dimension balance. However, no relationship

between negative aging meta-stereotypes and the OEpE dimension balance is found. Older employees might perceive the dimension no longer as something that others belief, but something that is really true.

In line with this reasoning, no support is found for the relationship between negative aging self-stereotypes and the OEpE dimension corporate sense. However, a negative relationship between negative aging meta-stereotypes and older employees' perceived corporate sense is found. A possible explanation may lie in that corporate sense differs not only per individual but also per organization. When older employees belief that colleagues perceive them in terms of negative beliefs, they could perceive themselves as being less capable to participate and perform in these work groups. While they might perceive themselves as being capable to participate and perform in other work groups in general. However, they might not have given answers in this way to the items of the OEpE dimension corporate sense. When this is the case, the relationship between older employees' perceived ability to learn and corporate sense might be explained by a halo effect. Moreover, the relationship between older employees' perceived motivation to learn and corporate sense might be explained in that older employees might perceive themselves to be more willing to invest in the organization due to their motivation to learn. In turn, that older employees' perceived support to learn positively influences the OEpE dimension corporate sense, could be explained in that because older employees perceive themselves to be supported by the organization, they think they are also able to participate and perform in their organization.

That no significant relationship is found between negative aging meta- and self-stereotypes and anticipation and optimization, could be explained in that prior research did not found any negative aging stereotypes about the OEpE dimension anticipation and optimization. Therefore, older employees might not perceive that others perceive them in these terms. In addition, they do not believe by themselves that when older employees become older that they also have less anticipation and optimization.

5.1.3. Negative Aging Meta- and Self- stereotypes and Older Employees' perceived Ability, Motivation and Support to Learn

Another important research finding presented in this study, is that negative aging meta- and self-stereotypes contribute differently to older employees' perceived AMS to learn. Specifically, negative aging meta-stereotypes influences of older employees' perceived AMS to learn only older employees' perceived motivation to learn, while negative aging self-stereotypes does not influence any of these factors. Negative aging meta-stereotypes are, therefore, a determinant of older employees' perceived motivation to learn. Below, the findings found regarding the influence of negative aging meta- and self-stereotypes, on the one hand, and older employees' AMS to learn, on the other hand, are explained in more detail.

Negative Aging Meta-stereotypes and Older Employees' perceived Ability to Learn

No support is found that that negative aging meta-stereotypes are negatively related to older employees' perceived ability to learn (hypothesis 2a). This indicates that there is no evidence found that the more older employees belief that they are negatively stereotyped by members of the 'out-group' (e.g., colleagues), the less they perceive themselves as being able to learn. In other words, this study found no support that older employees who perceive more negative aging meta-stereotypes, perceive their ability of improving and developing their knowledge and skills as less. This is in contrast with the findings of the study of Klein et al. (2007). Klein et al. (2007) found that Sub-Saharan Africans living in Belgium who were told that Africans' average performance on a culture-free test was generally worse to Belgian's performance (i.e., negative meta-stereotypes) had a significantly lower perception of themselves as efficient than Sub-Saharan Africans living in Belgium who were told that Africans' average performance on a culture-free test was generally equal to Belgian's performance or when no such information was given.

In the study of Klein et al. (2007) objective knowledge of respondents was measured using a culture-free intelligence test. In the current study, no form of objective knowledge is measured. Because of this, the chance that respondents might have given social desirable answers is higher in the current study than in the study of Klein et al. (2007) (King & Bruner, 2000). Social desirable answers are "answers which reflect an attempt to enhance some social desirable characteristics or minimize the presence of some social undesirable characteristics" (DeMaio, 1984, p. 257). Since a culture-free intelligence test (in which responses could not be faked) and self-efficacy (in which responses could be faked) are measured at the same

time, it might not be social desirable for the respondents to fake their answers regarding their self-efficacy. It is not social desirable to give answers that are not in line with the results of the tests. No form of objective knowledge is measured in the current study. Therefore, it might be social desirable for the respondents in the current study to give more positive answers about their negative aging meta-stereotypes and their perceived ability to learn. Moreover, because of the priming of the negative aging meta- and self-stereotypes before asking for the items about older employees' perceived AMS to learn, some older employees might felt inferior about these primed items. In order to reduce these feelings of inferiority, these older employees might have tried to overcompensate for it. According to Adler (1917), people might shadow their shortcomings by excelling in another area. That the chance that some older employees might have given social desirable answers is more likely in the current study and that some older employees might have given more positive answers in order to overcompensate for their felt inferiority, might explain that this study did not found evidence for a negative relationship between negative aging meta-stereotypes and older employees' perceived ability to learn.

Negative Aging Meta-stereotypes and Older Employees' perceived Motivation to Learn

Evidence is found that negative aging meta-stereotypes are negatively related to older employees' perceived motivation to learn (hypothesis 2b). This indicates that the more older employees belief that they are negatively stereotyped by members of the 'out-group' (e.g., colleagues), the less they perceive themselves as being motivated to learn. In other words, this study found evidence that the older employees who perceive more negative aging meta-stereotypes, perceive themselves also as less desired to acquire new knowledge and skills. Based on the literature review, it could be inferred that older employees might perceive participation in learning activities as a threat for their need for a positive social identity, and, therefore, it is more likely that they are less motivated to participate in learning activities. Based on the 'stereotype threat' (Steele et al., 2002), it is likely that older employees who belief that others perceive them in negative terms, might be less motivated to learn since they might be afraid to confirm or to be reduced to this negative aging stereotype. In line with this, the study of Gaillard and Desmette (2010) shows that older employees' interest for learning activities at work were

significantly lower when negative stereotypic information about older employees' ability was given than when positive stereotypic information about older employees' ability was given.

Negative Aging Meta-stereotypes and Older Employees' perceived Support to Learn

This study found no support that negative aging meta-stereotypes are negatively related to older employees' perceived support to learn (hypothesis 2c). This indicates that there is no evidence found that the more older employees belief that they are negatively stereotyped by members of the 'out-group' (e.g., colleagues), the less they perceive to receive support regarding learning. In other words, this study found no support that older employees who perceive more negative aging meta-stereotypes, perceive to receive less organizational support regarding learning. This might be explained in that this study focuses on how older employees belief that they are negatively stereotyped by their colleagues, while older employees' perceived support to learn refers to organizational support regarding learning. When this study had focused on the influence of how older employees belief that they are negatively stereotyped by the organization on older employees' perceived organizational support regarding learning, a significant relationship might been found. However, future research should prove this.

Negative Aging Self-stereotypes and Older Employees' perceived Ability to Learn

No support is found that negative aging self-stereotypes are negatively related to older employees' perceived ability to learn (hypothesis 4a). This indicates that there is no evidence found that the more older employees apply previously held negative age stereotypes to themselves as they become older, the less they perceive themselves as being able to learn. In other words, this study found no support that older employees who perceive more negative aging self-stereotypes, perceive their ability of improving and developing their knowledge and skills as less. This is in contrast with the findings of the studies of Levy (1996) and Levy et al. (2000a). These studies found evidence that negative aging self-stereotypes negatively influence older employees perceived memory self-efficacy (Levy, 1996) and mathematical self-efficacy (Levy et al., 2000a).

In the study of Levy (1996) and Levy et al. (2000a) objective knowledge of respondents were measured using respectively a memory task and two sets of

mathematical and verbal tasks. In the current study, no form of objective knowledge is measured. Because of this (as is mentioned in more detail above), the chance that respondents might have given social desirable answers is higher in the current study than in the studies of Levy (1996) and Levy et al. (2000a) (King & Bruner, 2000). In addition, as a result of the priming of the negative aging meta- and self-stereotypes, some older employees might have tried to overcompensate the feelings of inferiority. This might explain that this study did not found evidence for a negative relationship between negative aging meta-stereotypes and older employees' perceived ability to learn.

The findings of this study are however also in contrast to the study Maurer et al. (2008). By means of a two-wave survey, they found that the older employees' self-efficacy about development were lower, when these employees had higher beliefs that older employees are less able to learn. A possible explanation for these contradicting results might be that the study of Maurer et al. (2008) focuses especially on older employees' beliefs regarding the ability to learn of older employees, while this study focused more on the general view of older employees' beliefs about aging. However, future research should prove this.

Negative Aging Self-stereotypes and Older Employees' perceived Motivation to Learn

This study found no evidence that negative aging self-stereotypes are negatively related to older employees' perceived motivation to learn (hypothesis 4b). This indicates there is no evidence found that the more older employees apply previously held negative age stereotypes to themselves as they become older, the less they perceive themselves as being motivated to learn. In other words, this study found no support that the older employees who perceive more negative aging self-stereotypes, perceive themselves also as less desired to acquire new knowledge and skills. This is in contrast with the findings of the studies of Horton et al. (2008) and Levy et al. (2000b). Horton et al. (2008) found by means of an interview that the perception that one is aging can lead to less motivation to exercise. Moreover, Levy et al. (2000b) found by means of an experiment that negative aging self-stereotypes have an negative influence on one's willingness to live. A possible explanation for these contradicting results might be again social desirable bias. Because of the self-reported research design of the current study, more respondents might have given

social desirable answers in comparison to the studies of Horton et al. (2008) and Levy et al. (2000b) (King & Burner, 2000).

The finding of this study is however also in contrast with the findings of the study of Maurer et al. (2008). By means of a two-wave survey, they found that the motivation to participate in learning and development activities of employees were lower, when these employees had higher beliefs that older employees are less able and willing to learn. A possible explanation for these contradicting results might be that the study of Maurer et al. (2008) focuses especially on older employees' beliefs about the ability and willingness to learn of older employees, while this study focused more on the general view of older employees' beliefs about aging. However, future research should prove this.

5.1.4. Older Employees' perceived Ability, Motivation and/or Support to Learn as Mediators

Another important research finding presented in this study, is that older employees' perceived motivation to learn mediates the relationship between negative aging met-stereotypes and the OEpE dimensions personal flexibility and corporate sense. Specifically, this study found evidence that older employees' perceived motivation to learn partially mediates the relationship between negative aging meta-stereotypes and personal flexibility, and fully mediates the relationship between negative aging meta-stereotypes and corporate sense. In other words, the perceived desire of older employees to acquire new knowledge and skills partially intervene the relationship between negative aging meta-stereotypes and personal flexibility, and fully intervene the relationship between negative aging meta-stereotypes and corporate sense.

This indicates that older employees perceive themselves as less capable of easily adapting to all kinds of changes in the labor market (*personal flexibility*), since they belief that they are less motivated to learn and they belief that they are negatively stereotyped by members of the 'out-group' (e.g., colleagues). That older employees perceive themselves as less motivated to learn could also be explained in that older employees belief that they are negatively stereotyped by their colleagues. Moreover, the findings indicate that older employees perceive themselves as less capable of participating and performing in different work groups (*corporate sense)*, since they belief that they are less motivated to learn. That older employees perceive

themselves as less motivated to learn could be explained in that older employees belief that they are negatively stereotyped by their colleagues.

That older employees' perceived ability or motivation to learn did not mediate the relationship between negative aging self-stereotypes and OEpE, could be explained in that no evidence was found for a negative influence of aging self-stereotypes on older employees' perceived ability and motivation to learn. Moreover, that motivation to learn and not ability and support to learn mediates the relationship between negative aging meta-stereotypes and the OEpE dimensions personal flexibility and corporate sense, could be explained in that no relationship was found between negative aging meta-stereotypes and older employees' perceived ability and support to learn. Explanations for these findings are given in section 5.1.3.

Finally, that older employees' perceived motivation to learn only mediate the relationship between negative aging meta-stereotypes and the OEpE dimensions personal flexibility and corporate sense, could be explained in that only support was found for the negative influence of negative aging meta-stereotypes on occupational expertise, personal flexibility and corporate sense and that only evidence is found for the negative relationship between older employees' perceived motivation to learn on anticipation and optimization, personal flexibility and corporate sense. To be valid as mediator, negative aging meta-stereotypes do not have to be related to older employees' motivation to learn only, but negative aging meta-stereotypes and older employees' motivation to learn have also to be related to the same dimensions of OEpE. Explanations that negative aging meta-stereotypes and older employees' perceived motivation to learn contributed to these dimensions and not to the other dimensions of OEpE are given in respectively section 5.1.2 and 5.1.1.

5.1.5. Older Employees' perceived Age as Moderator

This finding extends the literature in that older employees' perceived age does not moderate the expected relationships between negative aging meta-stereotypes and older employees' perceived AMS to learn, and between negative aging self-stereotypes and older employees' perceived ability and motivation to learn. However, this study found evidence that older employees' perceived age is an important determinant of older employees' perceived AMS to learn and OEpE. Below, the found results are explained in more detail.

Older Employees' perceived Age as Moderator between Negative Aging Meta-Stereotypes and Older Employees' perceived Ability, Motivation and Support to learn

No support is found that older employees' perceived age moderates the relationship between negative aging meta-stereotypes and older employees' perceived AMS to learn (hypothesis 6). In other words, how old or young older employees perceive themselves to be does not intensify the relationship between negative aging meta-stereotypes and older employees' perceived AMS to learn. These results are in contrast with our literature review. Based on the person-environment fit literature, it was expected that the extent to which older employees identify themselves with younger employees rather than older employees might influence the negative relationship between negative age meta-stereotypes and older employees' perceived AMS to learn more strongly. Moreover, Bal et al. (2015) found that as employees identified themselves as being part of the age group of younger employees, the aging meta-stereotypes had more impact on employees' perceived remaining time and opportunities before their retirement age (i.e., occupational FTP), while they did not found a significant effect of employees who identified themselves with the age group of older employees.

That the older employees who identified themselves as younger did not intensify the relationship between negative aging meta-stereotypes and older employees' perceived ability and support to learn, could be explained in that no support is found for the negative relationship between negative aging meta-stereotypes and older employees' perceived ability and support to learn. Explanations for these findings are given in section 5.1.3. Without such a relationship it is not possible that older employees' perceived age moderates this relationship. However, there is evidence found that negative aging meta-stereotypes influences older employees' motivation to learn negatively, while older employees' perceived age does not moderate this relationship.

A possible explanation for these contrasting findings might be that the study of Bal et al. (2015) focused on occupational FTP and not on older employees' perceived motivation to learn. That perceived age moderates the relationship between negative aging meta-stereotypes and occupational FTP, does not have to indicate that it also moderates the relationship between negative aging meta-stereotypes and older employees' perceived motivation to learn. Moreover, Bal et al. (2015) made use of another item to measure self-perceived age. Specifically, Bal et al. (2015) measured

self-perceived age through using pictures of a line with two different circles as suggested by Schubert and Otten (2002). The smaller one represented the self and the lager one represented the group. Subsequently, respondents had to rate themselves using the pictures as how they perceived themselves in relation to older people. This study measured self-perceived age, in contrast, with one item in which respondents had to select if they feel younger, the same or older than their real age.

Another explanation might be the composition of the sample. This study focused on employees of 50 years and older employed in two production sites located in the Netherlands, while the study of Bal et al. (2015) focused on all employees employed as taxi drivers in the Netherlands. Differences regarding the sample, might, therefore, explain that the effect is found in the study of Bal et al. (2015), while the same effect is not found in this study.

Older Employees' perceived Age as Moderator between Negative Aging Self-Stereotypes and Older Employees' perceived Ability and Motivation to learn

This study did not found evidence that older employees' perceived age moderates the relationship between negative aging self-stereotypes and older employees' perceived ability and motivation to learn (hypothesis 7). In other words, how old or young older employees perceive themselves to be does not intensify the relationship between negative aging self-stereotypes and older employees' perceived ability and motivation to learn. These results are in contrast with our literature review. Based on the SCT (Turner et al., 1987), it was expected that the extent to which older employees identify themselves with older employees rather than with younger employees influence the negative relationship between negative aging self-stereotypes, on the one hand, and ability and motivation to learn, on the other hand, more strongly. That the older employees who identified themselves as older did not intensify the relationship between negative aging self-stereotypes and older employees' perceived ability and motivation to learn, could be explained in that no support is found for the negative relationship between negative aging self-stereotypes and older employees' perceived ability and motivation to learn. Explanations for these findings are given in section 5.1.3. Without such a relationship it is not possible that older employees' perceived age moderates this relationship.

Older Employees' perceived Age as Determinant of Older Employees' perceived Ability, Motivation and Support to Learn and Employability

This study found, however, evidence that older employees' perceived age is an important determinant of older employees' perceived AMS to learn. This indicates that the older the older employees perceive themselves to be, the less they perceive themselves as being able to learn; the less they belief that they are capable of improving and developing their knowledge. Moreover, older employees who perceive themselves as older, perceive themselves to be less motivated to learn. These older employees perceive themselves to have less desire to acquire new knowledge and skills. Finally, it is indicated that the older the older employees perceive themselves to be, the less they perceive organizational support for the development of their competences. These findings could be explained by the SCT of Turner et al. (1987).

In addition, this study found evidence that older employees' perceived age is an important determinant of OEpE. All the five dimensions of OEpE were related to older employees' perceived age. This indicates that the older the older employees perceive themselves to be, the worse they perceive their employability. In other words, older employees who perceive themselves as older, perceive their ability to continuously fulfill, acquire or create work through the optimal use of their competences as more worse. Since occupational expertise, anticipation and optimization, personal flexibility, corporate sense and balance are the five underlying dimensions of OEpE, it is indicated that the older the older employees perceive themselves to be, the worse they perceive their occupational expertise, anticipation and optimization, personal flexibility, corporate sense and balance. These findings could be explained by the SCT of Turner et al. (1987).

This study shows that older employees' perceived age is even a better predictor of older employees' perceived AMS to learn and OEpE than chronological age. Therefore, perceived age might better explain the negative relationship between chronological age, on the one hand, and employees' perceived ability to learn (e.g., Maurer, 2001), motivation to learn (e.g., Ng & Feldman, 2012) and employability (e.g., Van Vuuren et al., 2011; Wittekind et al., 2010), on the other hand.

5.2. Practical Contributions and Implications

An important practical implication of the findings of this research is that organizations could increase OEpE by reducing the use of negative aging

stereotypes among the colleagues of older employees. This could be decreased by creating awareness that the use of negative aging stereotypes has many negative consequences for older employees, especially regarding their perceived motivation to learn and their perceived employability. Moreover, the use of negative aging stereotypes among their colleagues could also be reduced by stimulating a positive view among these colleagues. A positive view regarding aging might be developed by creating awareness that many negative stereotypes about older employees are not true. For example, the negative aging stereotypes that older employees are poor performers, less trusting, more resistant and less willing to change are all unfounded in prior research (Ng & Feldman, 2012). Moreover, this study found evidence that not chronological age but negative aging meta-stereotypes negatively influence older employees' perceived motivation to learn. Since this study shows that the belief of older employees that they are negatively stereotyped by colleagues negatively influences some dimensions of their employability directly and indirectly through older employees' perceived motivation to learn, reducing the use of negative aging stereotypes might decrease the belief of older employees that they are negatively stereotyped by colleagues. Moreover, by reducing the use of negative stereotypes from young ages might also reduce the negative aging self-stereotypes held at older ages, since negative aging self-stereotypes are previously held negative aging stereotypes that people apply to themselves as they become older.

Organizations could also increase OEpE by creating awareness among older employees that the negative aging meta-stereotypes are the belief of older employees themselves. It might be the case that older employees belief that their colleagues perceive them in negative terms, while this does not have to be the case. However, it might be the case that older employees are negatively stereotyped by their colleagues. In this case, the organization should create awareness among older employees that older employees themselves might bring these negative views to an end. When older employees belief that others perceive them as less motivated to learn. They should not avoid learning activities in order to maintain a social identity (SIT; Tajfel & Turner, 1979). This avoidance of learning activities just decrease their social identity. Moreover, they should not be afraid to confirm or to be reduced to this negative aging stereotype when they participate in learning activities (Stereotype threat; Steele et al., 2002). By participating in learning activities, older employees

might break with the negative aging stereotypes. Therefore, they will not be reduced to these negative aging stereotypes.

Another important practical implication of the findings of this research is that organizations could increase OEpE by enhancing older employees´ perceived ability to learn, stimulating older employees to learn and supporting older employees in the development of their knowledge and skills. Organizations might enhance older employees´ perceived ability to learn through hiring a moderate amount of temporary employees in the workforce (Wiersma, 2007). Moreover, organizations might enhance older employees' perceived ability to learn by means of giving them tasks that are varied (Wiersma, 2007). Since previous research has shown that individual's perceived ability to learn positively influence one's perceived motivation to learn (e.g., Cheung et al., 2005; Noe & Wilk, 1993), organizations could by means of the activities to increase older employees' perceived ability to learn also increase older employees' perceived motivation to learn. Moreover, as is already mentioned above, organizations could increase older employees' perceived motivation to learn by stimulating a positive view regarding aging, by creating awareness among older employees that the negative aging meta-stereotypes are the belief of older employees themselves and that older employees themselves might bring the negative aging stereotypes to an end. Finally, older employees might increase their support among older employees in the development of their knowledge and skills by increasing the resources (e.g., information, opportunities) older employees need to develop their knowledge and skills. Moreover, organizations could enhance their support to learn by giving older employees tasks that are challenging. Giving regularly feedback by the supervisor and colleagues could also enhance older employees' perceived support to learn. Furthermore, older employees' perceived support to learn might also be enhanced through reducing the level of excess capacity and the degree of problems that consume employee attention (Wiersma, 2007).

5.3. Limitations

This study is not without limitations. Firstly, although previous research has shown that people are likely to act on the basis of their own perceptions, the use of only self-perceptions might have resulted in common-method bias. It might be the case that the found relations are attributable to the measurement method rather than

to the constructs themselves. Future research should therefore not only collect data regarding the used variables from older employees themselves but, for example, also from the perspective of the supervisor etc.

Secondly, the use of only self-perceptions in this study might have also increased the chance of social desirability bias. Social desirability bias happens when respondents give “answers which reflect an attempt to enhance some social desirable characteristics or minimize the presence of some social undesirable characteristics” (DeMaio, 1984, p. 257). As is shown in King and Bruner (2000), the chance that respondents give no social desirably answers is higher for respondents in a study where no form of objective knowledge is measured, than in a study where objective knowledge is also measured. It is not social desirable to give answers that are not in line with the results of objective performance tests. Future research might therefore include a form of objective performance in order to decrease the chance of social desirability bias.

Thirdly, while employees of Organization 1 do not get the opportunity to make use of a personal development plan, still 31.6% and 15.8% of these employees agreed or fully agreed with respectively the following statements: “I can make use of a personal development plan to know what skills I need to develop and how I can develop them best” and “I have been given a personal development plan to better understand my possibilities within the organization and the skills I need to fully exploit them”. These findings indicate that respondents might have given social desirable answers to these items. Based on this, we could expect that there are more items where respondents have given social desirable answers. However, it might also be the case that the survey was too long. In this case, respondents might have been less focused at giving answers, and therefore might have given wrong answers to those questions. Another reason of these false answers might be that the respondents did not understand these items. Future research should control for this.

Fourthly, it might be the case that there is a bias in the results. Since this study started with items regarding negative aging self-stereotypes and negative aging meta-stereotypes, it might be the case that the exposure to these items has influenced respondents’ answers about the other items (i.e., priming effect). While it might be possible that negative aging meta- and self-stereotypes did not have any influence on the other items, when these items were asked at the end of the survey. Future research should control this effect.

Fifthly, another limitation is that the current study is cross-sectional. The data is collected from employees of 50 years and older in two organizations in the Netherlands once. Results might therefore be vulnerable for circumstances at the time of measurement and no statements could be made about the causality of the relationships. Future research should be longitudinal in that data should be collected in multiple times.

Sixthly, although the results might be generalizable for Dutch' men of 50 years and older employed in a production site of a global company, future research is needed to assess the generalizability of these findings across Dutch' woman of 50 years and older employed in a production sit for a global company. Since this study focuses on employees of 50 years and older employed in a production site and there are less woman employed in comparison to man, most of the collected data came from man. These results might therefore not be generalizable for Dutch' woman of 50 years and older employed in a production site for a global company.

Finally, since older employees' perceived age is measured using one item, it was not possible to measure the Cronbach's Alpha and therewith the internal reliability of older employees' perceived age. The results regarding older employees' perceived age might therefore not be reliable. Future research should construct a scale regarding older employees' perceived age.

5.4. Suggestions for Future Research

Below, additional suggestions for future research will be mentioned. It might be the case that some of them are already mentioned in section 5.1. Future research could compare the influence of both negative and positive aging meta- and self-stereotypes on older employees' perceived AMS to learn and on OEpE. It might be the case that positive aging meta- and self-stereotypes influence older employees' perceived AMS to learn and OEpE positively. Future research could also focus on negative aging meta- and self-stereotypes regarding older employees' perceived ability and motivation to learn, and the different dimensions of OEpE. It might be the case that different forms of negative aging meta- or self-stereotypes contribute differently to older employees' perceived AMS to learn and OEpE.

Another suggestion might be that future research investigates the separated influence of older employees' perceived AMS to learn formally and informally on OEpE. Prior research regarding the influence of both formal and informal learning on

employability, found that different learning contents attributed to different dimensions of employability (Froehlich et al., 2014; Raemdonck et al., 2015). In line with this reasoning, older employees' perceived AMS to learn formally or informally might also influence different aspects regarding the dimensions of OEpE. Furthermore, the current study focused on negative aging meta-stereotypes that older employees perceive from their colleagues. Future research might focuses on negative aging meta-stereotypes that older employees perceive from other individuals of the 'out-group', for example, younger employees and employers.

5.5. Conclusion

Despite the limitations, it is believed that this study has provided insight in which manner and to which extent negative aging meta- and self-stereotypes influence OEpE directly and indirectly through influencing older employees' perceived AMS to learn. This study found evidence that the more older employees belief that they are negatively stereotyped by their colleagues, the worse they perceive they perceive three out the five dimensions of OEpE occupational expertise, personal flexibility and corporate sense. In addition, older employees who apply previously held negative aging stereotypes to themselves, perceive the OEpE dimensions personal flexibility and balance as more worse than older employees who do not. Therefore, negative aging meta- and self-stereotypes influences in total four out the five dimensions of OEpE. However, this study found also evidence that older employees' motivation to learn intervene the relationship between negative aging meta-stereotypes and the OEpE dimensions personal flexibility and corporate sense. Specifically, the relationship between negative aging meta-stereotypes and the dimensions of older employees' perceived employability personal flexibility and corporate sense, are respectively partially and fully intervened through older employees' motivation to learn.

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Appendix A – Letter Organization 1

Geachte medewerker van ….,

Hierbij wil ik u graag uitnodigen om mee te werken aan mijn afstudeeronderzoek voor de opleiding Bedrijfskunde aan de Universiteit Twente.

Wat is het doel van mijn afstudeeronderzoek?
Ik wil meer inzicht krijgen hoe 50-plussers hun werk (met plezier) kunnen blijven uitoefenen tot hun (verhoogde) pensioenleeftijd. Extra motivatie voor mij is de situatie van mijn ouders, beide 50-plussers en allebei werkzaam in zware fysieke beroepen.

Waar wordt het onderzoek uitgevoerd?
Dit onderzoek zal worden uitgevoerd bij *Organisatie 2* en bij *Organisatie 1*.

Waarom voer ik het onderzoek binnen uw organisatie uit?
Aangezien zowel *Organisatie 1* als *Organisatie 2* zolang mogelijk met u door willen, waren beide bedrijven bereid om mee te werken aan mijn onderzoek. *Organisatie 1* wil de verkregen inzichten dan ook gaan gebruiken om hun ouderenbeleid mee aan te vullen. Door middel van dit onderzoek krijgt u dan ook de kans om (geheel anoniem) input te geven over het ouderenbeleid binnen *Organisatie 1*.

Wat gebeurt er met uw gegevens?
U moet weten dat de door uw verstrekte informatie **strikt vertrouwelijk** behandeld zullen worden. Dit houdt in dat niemand binnen de organisatie inzicht krijgt in de door uw gegeven antwoorden. De gegevens worden anoniem verwerkt en zijn niet te herleiden naar personen.

Wat kunt u verwachten?
Vanaf 1 juni tot en met 21 juni zal uw leidinggevende een computer beschikbaar stellen. Op deze manier krijgt u de mogelijkheid om de vragenlijst, die zowel in het Engels als Nederlands beschikbaar zal zijn, tijdens uw werk in te vullen. Uiteraard kunt u ook thuis op uw gemak deze lijst invullen. Om de vragenlijst digitaal in te

vullen kunt u naar de volgende website gaan:
https://www.enquetesmaken.com/s/NederlandsCH (voor de Nederlandse vragenlijst) of https://www.enquetesmaken.com/s/EnglishCH (voor de Engelse vragenlijst).
Wachtwoord: AfstudeerCH

Zodra vervolgens de resultaten van het onderzoek bij mij bekend zijn, zal ik u aan de hand van de nieuwsbrief op de hoogte brengen van de uitkomsten van het onderzoek.

Heeft u nog vragen over het onderzoek, neem dan contact met mij of met uw leidinggevende op.

Alvast heel hartelijk bedankt!

Met vriendelijke groeten,
Carina Halbesma
Masterstudente University of Twente
Mail: c.halbesma@student.utwente.nl
Tel.: 0627512196

Appendix B – E-mail Organization 2

Geachte medewerker van …,

Hierbij wil ik u graag uitnodigen om mee te werken aan mijn afstudeeronderzoek voor de opleiding Bedrijfskunde aan de Universiteit Twente.

Wat is het doel van mijn afstudeeronderzoek?
Ik wil meer inzicht krijgen hoe 50-plussers hun werk (met plezier) kunnen blijven uitoefenen tot hun (verhoogde) pensioenleeftijd.

Waar wordt het onderzoek uitgevoerd?
Dit onderzoek zal worden uitgevoerd bij zowel Organisatie 2 als bij Organisatie 1.

Waarom voer ik het onderzoek binnen uw organisatie uit?
Organisatie 2 heeft aangegeven de verkregen inzichten te willen gebruiken om te zien of er aanpassingen nodig zijn in het ouderenbeleid. Door middel van dit onderzoek krijgt u dan ook de kans om (geheel anoniem) input te geven over het ouderenbeleid binnen Organisatie 2.

Wat gebeurt er met uw gegevens?
U moet weten dat de door u verstrekte informatie **strikt vertrouwelijk** behandeld zal worden. Dit houdt in dat niemand binnen de organisatie inzicht krijgt in de door u gegeven antwoorden. De gegevens worden anoniem verwerkt en zijn niet te herleiden naar personen.

Wat kunt u verwachten?
Volgende week maandag (6 juni) zult u worden uitgenodigd om de vragenlijst in te vullen. U krijgt vervolgens 2 weken de mogelijkheid om de vragenlijst in te vullen. Zodra vervolgens de resultaten van het onderzoek bij mij bekend zijn, zal ik u aan de hand van de nieuwsbrief op de hoogte brengen van de uitkomsten van het onderzoek.

Heeft u nog vragen over het onderzoek, neem dan gerust contact met mij of met uw leidinggevende op. Uw leidinggevende zijn voorafgaand aan het onderzoek geïnformeerd.

Alvast heel hartelijk bedankt!

Met vriendelijke groeten,
Carina Halbesma
Masterstudente University of Twente
Mail: c.halbesma@student.utwente.nl
Tel.: 0627512196

Geachte medewerker van …,

Aan de hand van deze e-mail zou ik u graag willen uitnodigen om mijn vragenlijst voor mijn afstudeeronderzoek voor de opleiding Bedrijfskunde aan de Universiteit Twente aan de hand van de volgende link in te willen invullen:

https://www.enquetesmaken.com/s/afstuderenCH
Wachtwoord: AfstudeerCH

De vragenlijst bestaat uit vier onderdelen. In het eerste deel worden meerkeuzevragen gesteld met betrekking tot uw achtergrond. De meerkeuzevragen kunt u invullen door één antwoord te kiezen die het meest van toepassing is voor u. In het tweede, derde en vierde deel worden voornamelijk stellingen weergegeven over bepaalde onderwerpen. In dit geval moet u op een bepaalde schaal aangeven in hoeverre u het met een bepaalde stelling eens of oneens bent. Let op! Bij het beantwoorden van de vragen gaat het om uw mening, er zijn dus **geen goede of foute antwoorden**!

Het invullen van de vragenlijst zelf zal ongeveer 15 minuten van uw tijd in beslag nemen. U kunt tot vrijdag 17 juni de vragenlijsten invullen.

U moet weten dat de door uw verstrekte informatie **strikt vertrouwelijk** behandeld zullen worden. Dit houdt in dat niemand binnen de organisatie inzicht krijgt in de door uw gegeven antwoorden. De gegevens worden anoniem verwerkt en zijn niet te herleiden naar personen.

Indien er tijdens het invullen van deze vragenlijst vragen zijn, dan kun u contact met mij opnemen.

In ieder geval alvast heel erg bedankt!

Met vriendelijke groeten,
Carina Halbesma
Masterstudente University of Twente
Mail: c.halbesma@student.utwente.nl
Tel.: 0627512196

Appendix C - Reminder

Geachte medewerker van …,

Enige tijd geleden is er naar alle 50-plussers binnen *Organisatie 2* een link naar een vragenlijst verzonden. Het doel van de vragenlijst is te achterhalen hoe 50-plussers hun werk (met plezier) kunnen blijven uitoefenen tot hun (verhoogde) pensioenleeftijd.

Wanneer u de vragenlijst nog niet heeft ingevuld, kunt u aan de hand van de volgende link nog steeds de vragenlijst invullen:

https://www.enquetesmaken.com/s/afstuderenCH
Wachtwoord: AfstudeerCH

Dit kan nog tot en met vrijdag 17 juni aanstaande.

Als u de vragenlijst al wel heeft ingevuld dan wil ik u bij deze hartelijk bedanken voor uw medewerking, en kunt u deze herinnering als niet verzonden beschouwen.

Met vriendelijke groeten,
Carina Halbesma
Masterstudente University of Twente
Mail: c.halbesma@student.utwente.nl
Tel.: 0627512196

Appendix D – Surveys

Appendix E – Differences between Groups

In order to analyze the differences among groups and their associated factors, one-way ANOVA tests were executed. Since not all the groups consisted of at least 30 respondents, the option 'bootstrapping' was selected.

1.1. Differences between Perceive Age

One-way ANOVA analysis found significant differences for all the variables regarding 'perceived age' (see Table 16). Specifically, significant differences were found between employees who perceived themselves as younger (N = 84), the same (N = 42) or older (N = 4) regarding the variables 'self-stereotypes' (F(2, 123) = 7.39, p < . 01), 'meta-stereotypes' (F(2, 123) = 3.54, p < . 05), 'ability to learn' (F(2, 123) = 12.38, p < . 01), 'motivation to learn' (F(2, 123) = 20.45, p < . 01) and 'support to learn' (F(2, 123) = 5.97, p < . 01). According to Bonferroni's post hoc tests employees who perceived themselves as older scored more positive on 'self-stereotypes' (M = 3.75, SD = .98) and 'meta-stereotypes' (M = 3.50, SD = 1.05) in comparison to employees who perceived themselves as younger (respectively (M = 2.06, SD = .84) and (M = 2.58, SD = .64)) or the same (respectively (M = 2.06, SD = .84) and (M = 2.58, SD = .64)). This might indicate that if employees perceive themselves as older perceive more negative age self- and meta-stereotypes in comparison to employees who perceive themselves as younger or the same. Moreover, Bonferroni's post hoc test showed that employees who perceive themselves as younger (M = 3.68, SD = .71) scored significantly higher on 'ability to learn' in comparison to employees who perceive themselves as older (M = 2.25, SD = .96) or the same (M = 3.17, SD = .70). This might indicate that if employees perceive themselves as younger perceive themselves as more able to learn in comparison to employees who perceive themselves as younger or the same. In addition, Bonferroni's post hoc test also showed that employees who perceive themselves as younger (M = 3.65, SD = .66) differ significantly from employees who perceive themselves as older (M = 1.95, SD = .93) or the same (M = 3.02, SD = .73) regarding 'motivation to learn'. Significant differences were also found between employees who perceive themselves as older (M = 1.95, SD = .93) in comparison to employees who perceive themselves as the same (M = 3.02, SD = .73) regarding 'motivation to learn'. This might indicate that

employees who perceive themselves as younger perceive their motivation to learn as higher in comparison to employees who perceive themselves as older or the same. Moreover, employees who perceive themselves as the same perceive their motivation to learn also higher in comparison to employees who perceive themselves as older. Regarding 'support to learn' significant differences were found between employees who perceive themselves as younger (M = 3.14, SD = .65) in comparison to employees who perceive themselves as the same (M = 2.77, SD = .73). This might indicate that employees who perceive themselves as younger perceive more support to learn in comparison to employees who perceive themselves as the same.

Moreover, one-way ANOVA found significant differences between employees who perceive themselves as younger (N = 83), older (N = 39) or the same (N = 4) regarding the variables 'occupational expertise' (F(2, 123) = 6.47, p < . 01) and 'personal flexibility' (F(2, 123) = 8.09, p < . 01). Bonferroni's post hoc test showed that employees who perceive themselves as younger (M = 5.05, SD = .44) differ significantly from employees who perceive themselves as the same (M = 4.78, SD = .44) regarding 'occupational expertise'. This might indicate that employees who perceive themselves as younger perceive themselves to have more occupational expertise in comparison to employees who perceive themselves to be the same age as they are. Regarding 'personal flexibility', significant differences were found between employees who perceive themselves as younger (M = 4.40, SD = .57) in comparison to employees who perceive themselves as older (M = 3.41, SD = 1.01) and the same (M = 4.03, SD = .73). This might indicate that employees who perceive themselves as younger perceive themselves to have more personal flexibility in comparison to employees who perceive themselves as older and the same.

Finally, one-way ANOVA analysis found significant differences between employees who perceive themselves as younger (N = 83), the same (N = 41) or older (N = 4) regarding the variables 'anticipation and optimization' (F(2, 123) = 8.59, p < . 01), 'corporate sense' (F(2, 123) = 4.79, p < . 05) and 'balance' (F(2, 123) = 7.64, p < . 01). Bonferroni's post hoc test showed that employees who perceive themselves as younger (M = 3.89, SD = .76) in comparison to employees who perceive themselves as older (M = 2.59, SD = .58) or the same (M = 3.47, SD = .47) regarding 'anticipation and optimization'. This might indicate that people who perceive themselves as younger perceive themselves to have more anticipation and optimization in comparison to employees who perceive themselves as older and the

same. Moreover, significantly differences were found between employees who perceive themselves as younger (*M* = 4.45, *SD* = .75) in comparison to employees who perceived themselves as the same (*M* = 3.98, *SD* = .80) regarding 'corporate sense'. This might indicate that employees who perceive themselves as younger perceive themselves to have more corporate sense in comparison to people who perceive themselves as the same. Finally, regarding 'balance', significant differences were found between employees who perceive themselves as younger (*M* = 4.26, *SD* = .81) in comparison to employees who perceive themselves as older (*M* = 2.86, *SD* = 1.36). This also might indicate that employees who perceive

Table 16| Means, Standard Deviations and Significance of Variables divided by Perceived Age

Variables		**Younger**			**The same**			**Older**		
	F	*N*	*Mean*	*SD*	*N*	*Mean*	*SD*	*N*	*Mean*	*SD*
Self-stereotypes	7.39**	84	2.06	0.84	42	2.26	0.92	4	3.75	0.98
Meta-stereotypes	3.54*	84	2.58	0.64	42	2.54	0.72	4	3.50	1.05
Ability to learn	12.38**	84	3.68	0.71	42	3.17	0.70	4	2.25	0.96
Motivation to learn	20.45**	84	3.65	0.66	42	3.02	0.73	4	1.95	0.93
Support to learn	5.97**	84	3.14	0.65	42	2.77	0.73	4	2.31	0.78
Occupational Expertise	6.47**	83	5.06	0.44	39	4.78	0.44	4	4.57	0.77
Anticipation and Optimization	8.59**	83	3.89	0.76	41	3.47	0.74	4	2.59	0.58
Personal Flexibility	8.09**	83	4.40	0.57	39	4.03	0.73	4	3.41	1.01
Corporate Sense	4.79*	83	4.45	0.75	41	3.98	0.80	4	3.89	1.35
Balance	7.64**	83	4.26	0.81	41	3.88	0.74	4	2.86	1.36

+. Significant at the 0.10 level (2-tailed); *. Significant at the 0.05 level (2-tailed); **. Significant at the 0.01 level (2-tailed)

1.2. Differences between Age

One-way ANOVA analysis for 'age' found significant differences for: 'self-stereotypes', 'ability to learn', 'personal flexibility' and 'corporate sense' (see Table 17). Specifically, significant differences were found between employees of 50 up to and including 54 years old (*N* = 33), employees of 55 up to and including 59 years old (*N* = 49) and employees of 60 years and older (*N* = 48) regarding 'self-stereotypes' ($F(2, 127) = 3.17$, $p < .05$) and 'ability to learn' ($F(2, 127) = 3.69$, $p < .05$). According to Bonferroni's post hoc test, employees of 50 up to and including 54 years old (*M* = 1.83, *SD* = .55) differ significantly from employees of 55 up to and including 59 years old (*M* = 2.30, *SD* = 1.02) and employees of 60 years and older (*M* = 2.28, *SD* = .95) regarding the variable 'self-stereotypes'. This might indicate that employees of 50 up to and including 54 years old are in the possession of less negative age meta-stereotypes in comparison to employees of 55 years of older. Moreover, Bonferroni's post hoc test showed that employees of 50 up to and

including 54 years old (*M* = 3.78, *SD* = .73) differ significantly from employees of 60 years and older (*M* = 3.32, *SD* = .55) regarding the variable 'ability to learn'. This might indicate that employees of 50 up to and including 54 years old perceive their ability to learn as higher in comparison to people of 60 years and older.

Regarding 'personal flexibility', an one-way ANOVA found significant differences between employees of 50 up to and including 54 years old (*N* = 30), employees of 55 up to and including 59 years old (*N* = 48) and employees of 60 years and older (*N* = 48) (*F*(2, 123) = 3.42, *p* < .05). Bonferroni's post hoc test showed that employees of 50 up to and including 54 years old (*M* = 4.52, *SD* = .53) differ significantly from employees of 60 years and older (*M* = 4.12, *SD* = .66). This might indicate that employees of 50 up to and including 54 years old were more positive in comparison to employees of 60 years and older regarding their perceived personal flexibility.

Finally, an one-way ANOVA analysis found significant differences between employees of 50 up to and including 54 years old (*N* = 31), employees of 55 up to and including 59 years old (*N* = 49) and employees of 60 years and older (*N* = 48) regarding 'corporate sense' (*F*(2, 125) = 6.05, *p* < .01). Bonferroni's post hoc test showed that employees of 60 years and older (*M* = 3.97, *SD* = .87) differ significantly from employees of 50 up to and including 54 years old (*M* = 4.47, *SD* = .66) and 55 up to and including 59 years old (*M* = 4.47, *SD* = .76) regarding 'corporate sense'. This might indicate that employees of 50 up to and including 59 years old are more positive regarding their perceived corporate sense in comparison to employees of 60 years and older.

Table 17| Means, Standard Deviations and Significance of Variables divided by Age

Variables		**50 up to and including 54 years**			**55 up to and including 59 years**			**60 years and older**		
	F	*N*	*Mean*	*SD*	*N*	*Mean*	*SD*	*N*	*Mean*	*SD*
Self-stereotypes	3.17*	33	1.83	0.55	49	2.30	1.02	48	2.28	0.95
Meta-stereotypes	1.14	33	2.52	0.57	49	2.52	0.74	48	2.71	0.71
Ability to learn	3.69*	33	3.78	0.73	49	3.41	0.80	48	3.32	0.75
Motivation to learn	2.06	33	3.62	0.65	49	3.38	0.77	48	3.27	0.88
Support to learn	0.17	33	2.95	0.55	49	3.04	0.87	48	2.97	0.63
Occupational Expertise	2.44+	30	5.12	0.42	48	4.93	0.49	48	4.89	0.46
Anticipation and Optimization	2.76+	31	3.91	0.74	49	3.79	0.77	48	3.51	0.83
Personal Flexibility	3.42*	30	4.52	0.53	48	4.22	0.72	48	4.12	0.66
Corporate Sense	6.05**	31	4.47	0.66	49	4.47	0.76	48	3.97	0.87
Balance	0.85	31	4.27	0.85	49	4.04	0.89	48	4.03	0.81

+. Significant at the 0.10 level (2-tailed); *. Significant at the 0.05 level (2-tailed); **. Significant at the 0.01 level (2-tailed)

1.3. Differences between Tenure

One-way ANOVA analysis for ‘tenure’ found significant differences for ‘ability to learn’, ‘motivation to learn’, ‘anticipation and optimization’, ‘corporate sense’ and ‘balance’ (see table 18). Specifically, significant differences were found between employees who are employed up to and including 9 years (*N* = 10), 10 up to and including 19 years (*N* = 16), 20 up to and including 29 years (*N* = 17) and 30 years and longer (*N* = 86) regarding the variables ‘ability to learn’ ($F(3, 121) = 3.52$, $p < .05$) and ‘motivation to learn’ ($F(3, 121) = 3.94$, $p < .05$). Bonferroni’s post hoc test showed that employees who are employed for 10 up to and including 19 years differ significantly regarding ‘ability to learn’ (*M* = 3.97, *SD* = .66) and ‘motivation to learn’ (*M* = 3.89, *SD* = .88) in comparison to employees who are employed for 30 years and longer (respectively (*M* = 3.35, *SD* = .75) and (*M* = 3.26, *SD* = .74)). This might indicate that employees who are employed for 10 up to and including 19 years are more positive regarding their perceived ability and motivation to learn in comparison of employees who are employed for 30 years and longer.

Moreover, one-way ANOVA analyses found significant differences between employees who are employed up to and including 9 years (*N* = 10), 10 up to and including 19 years (*N* = 16), 20 up to and including 29 years (*N* = 16) and 30 years and longer (*N* = 85) regarding the variables ‘anticipation and optimization’ ($F(3, 121) = 3.98$, $p < .05$), ‘corporate sense’ ($F(3, 121) = 4.04$, $p < .01$) and ‘balance’ ($F(3, 121) = 3.65$, $p < .05$). Bonferroni’s post hoc test showed that employees who are employed for 10 up to and including 19 years differ significantly regarding ‘anticipation and optimization’ (*M* = 4.19, *SD* = .93) and ‘balance’ (*M* = 4.59, *SD* = .82) from employees who are employed for 30 years and longer (respectively (*M* = 3.56, *SD* = .76) and (*M* = 3.95, *SD* = .86)). This might indicate that employees who are employed for 10 up to and including 19 years are more positive regarding their perceived anticipation and optimization, and balance in comparison to employees who are employed for 30 years and longer.

Table 18| Means, Standard Deviations and Significance of Variables divided by Tenure

Variables		0 up to and including 9 years			10 up to and including 19 years			20 up to and including 29 years			30 years and longer		
	F	*N*	*Mean*	*SD*	*N*	*Mean*	*SD*	*N*	*Mean*	*SD*	*N*	*Mean*	*SD*
Self-stereotypes	1.44	10	1.75	1.01	16	2.52	1.23	17	2.13	0.68	86	2.17	0.87
Meta-stereotypes	0.72	10	2.32	0.86	16	2.63	0.84	17	2.63	0.48	86	2.62	0.68
Ability to learn	3.52*	10	3.75	0.78	16	3.97	0.66	17	3.47	0.89	86	3.35	0.75
Motivation to learn	3.94*	10	3.82	0.96	16	3.89	0.88	17	3.40	0.68	86	3.26	0.74
Support to learn	0.06	10	2.99	0.69	16	2.92	1.22	17	2.98	0.41	86	3.01	0.65
Occupational Expertise	0.17	10	4.94	0.30	16	4.90	0.60	15	5.02	0.51	84	4.96	0.46
Anticipation and Optimization	3.98*	10	4.05	0.71	16	4.19	0.93	16	3.81	0.69	85	3.56	0.76
Personal Flexibility	2.41+	10	4.63	0.53	16	4.41	0.56	15	4.41	0.44	84	4.14	0.72
Corporate Sense	4.04**	10	4.74	0.74	16	4.61	0.72	16	4.55	0.82	85	4.12	0.80
Balance	3.65*	10	4.50	0.56	16	4.59	0.82	16	4.07	0.74	85	3.95	0.86

+. Significant at the 0.10 level (2-tailed); *. Significant at the 0.05 level (2-tailed); **. Significant at the 0.01 level (2-tailed)

1.4. Differences between Contract Types

One-way ANOVA analysis for 'contract types' found no significant differences for any of the variables (see Table 19).

Table 19| Means, Standard Deviations and Significance of Variables divided by Contract Type

Variables		Permanent contract			Temporary contract		
	F	*N*	*Mean*	*SD*	*N*	*Mean*	*SD*
Self-stereotypes	1.154	127	2.19	0.92	2	1.50	0.71
Meta-stereotypes	0.93	127	2.59	0.70	2	3.08	0.12
Ability to learn	0.03	127	3.47	0.78	2	3.38	1.24
Motivation to learn	0.11	127	3.40	0.80	2	3.60	0.57
Support to learn	0.03	127	2.99	0.72	2	3.08	0.24
Occupational Expertise	0.00	123	4.95	0.47	2	4.97	0.61
Anticipation and Optimization	0.14	125	3.72	0.79	2	3.94	1.33
Personal Flexibility	1.12	123	4.24	0.67	2	4.75	0.53
Corporate Sense	0.39	125	4.27	0.81	2	4.64	0.91
Balance	0.33	125	4.09	0.85	2	4.44	1.10

+. Significant at the 0.10 level (2-tailed); *. Significant at the 0.05 level (2-tailed); **. Significant at the 0.01 level (2-tailed)

1.5. Differences between Organization

One-way ANOVA analysis for 'organization' found significant differences for 'ability to learn', 'motivation to learn', 'anticipation and optimization', and 'balance' (see Table 20). Specifically, significant differences were found between employees who are employed for Organization 1 (N = 19) and Organization 2 (N = 111) regarding 'ability to learn' ($F(1, 124) = 11.69$, $p < .01$) and 'motivation to learn' ($F(1, 124) = 11.85$, $p < .01$). Bonferroni's post hoc tests showed that employees who are employed for Organization 1 differ significantly regarding 'ability to learn' (M = 4.03,

SD = .73) and 'motivation to learn' (*M* = 3.97, *SD* = 1.02) from employees who are employed for Organization 2 (respectively (*M* = 3.38, *SD* = .75) and (*M* = 3.30, *SD* = .70)). This might indicate that employees who are employed for Organization 1 are more positive regarding their perceived ability and motivation to learn in comparison to employees who are employed for Organization 2.

Moreover, one-way ANOVA analysis found significant differences between employees who are employed for Organization 1 (*N* = 19) and Organization 2 (*N* = 109) regarding 'anticipation and optimization' ($F(1, 124) = 7.99$, $p < .01$) and balance ($F(1, 124) = 9.49$, $p < .01$). Bonferroni's post hoc tests showed that employees who are employed for Organization 1 differ significantly regarding 'anticipation and optimization' (*M* = 4.19, *SD* = .90) and 'balance' (*M* = 4.63, *SD* = .69) from employees who are employed for Organization 2 (respectively (*M* = 3.63, *SD* = .75) and (*M* = 4.00, *SD* = .84)). This might indicate that employees who are employed for Organization 1 are more positive regarding their perceived anticipation and optimization, and balance in comparison to employees who are employed for Organization 2

Table 20| Means, Standard Deviations and Significance of Variables divided by Organization

Variables		**Organization 1**			**Organization 2**		
	F	*N*	*Mean*	*SD*	*N*	*Mean*	*SD*
Self-stereotypes	0.26	19	2.29	1.32	111	2.15	0.83
Meta-stereotypes	2.59	19	2.38	0.94	111	2.63	0.64
Ability to learn	11.69**	19	4.03	0.73	111	3.38	0.75
Motivation to learn	11.85**	19	3.97	1.02	111	3.30	0.70
Support to learn	0.43	19	2.90	1.10	111	3.01	0.63
Occupational Expertise	0.05	19	4.98	0.56	107	4.95	0.45
Anticipation and Optimization	7.99**	19	4.19	0.90	109	3.63	0.75
Personal Flexibility	2.78+	19	4.49	0.58	107	4.21	0.68
Corporate Sense	3.83+	19	4.62	0.78	109	4.22	0.81
Balance	9.49**	19	4.63	0.69	109	4.00	0.84

+. Significant at the 0.10 level (2-tailed); *. Significant at the 0.05 level (2-tailed); **. Significant at the 0.01 level (2-tailed)

1.6. Differences between Field of Work

One-way ANOVA analysis showed one significant difference for 'field of working' regarding 'meta-stereotypes' (see Table 21). Specifically, significant differences were found between employees who are employed for production (*N* = 49), technique (*N* = 48), logistics (*N* = 10) and other (administration, lab etc.) (*N* = 23) regarding 'meta-stereotypes' ($F(3, 122) = 4.18$, $p < . 01$). Bonferroni's post hoc test did, however not

show significant differences between the different field of working regarding 'meta-stereotypes'.

Table 21| Means, Standard Deviations and Significance of Variables divided by Organization

Variables		**Production**			**Technique**			**Logistics**			**Other (administration. lab etc.)**		
	F	*N*	*Mean*	*SD*	*N*	*Mean*	*SD*	*N*	*Mean*	*SD*	*N*	*Mean*	*SD*
Self-stereotypes	1.41	49	2.21	0.90	48	2.01	0.74	10	2.48	1.45	23	2.32	0.97
Meta-stereotypes	4.18**	49	2.48	0.68	48	2.46	0.61	10	2.97	0.73	23	2.93	0.73
Ability to learn	2.54+	49	3.71	0.80	48	3.33	0.57	10	3.30	1.12	23	3.33	0.88
Motivation to learn	0.80	49	3.52	0.79	48	3.38	0.64	10	3.10	1.29	23	3.31	0.81
Support to learn	0.56	49	3.02	0.75	48	3.01	0.58	10	2.73	0.84	23	3.01	0.82
Occupational Expertise	0.65	49	5.01	0.49	45	4.95	0.39	9	4.79	0.63	23	4.92	0.52
Anticipation and Optimization	1.34	49	3.89	0.77	47	3.63	0.64	9	3.54	1.38	23	3.56	0.83
Personal Flexibility	1.21	49	4.32	0.63	45	4.31	0.51	9	4.17	0.92	23	4.03	0.89
Corporate Sense	1.10	49	4.43	0.75	47	4.11	0.71	9	4.30	1.48	23	4.31	0.79
Balance	0.52	49	4.15	0.83	47	4.13	0.69	9	3.83	1.20	23	4.00	1.05

+. Significant at the 0.10 level (2-tailed); *. Significant at the 0.05 level (2-tailed); **. Significant at the 0.01 level (2-tailed)

1.7. Differences between Gender

One-way ANOVA analysis for 'gender' found significant differences for 'meta-stereotypes' 'personal flexibility' and 'balance' (see Table 22). Specifically, significant differences were found between man (N = 123) (M = 2.55, SD = .66) and woman (N = 6) (M = 3.47, SD = .74) regarding 'meta-stereotypes' ($F(1, 123) = 10.46$, $p < .01$). This might indicate that woman perceive more negative age meta-stereotypes in comparison to man. Moreover, significant differences were found between man (N = 119) (M = 4.29, SD = .60) and woman (N = 6) (M = 3.63, SD = 1.51) regarding 'personal flexibility' ($F(1, 123) = 5.72$, $p < .05$). Furthermore, significant differences were found between man (N = 121) (M = 4.14, SD = .81) and woman (N = 6) (M = 3.28, SD = 1.33) regarding 'balance' ($F(1, 123) = 6.16$, $p < .05$). This might indicate that man are more positive regarding their perceived personal flexibility and balance in comparison to woman.

Table 22| Means, Standard Deviations and Significance of Variables divided by Gender

Variables		**Man**			**Woman**		
	F	*N*	*Mean*	*SD*	*N*	*Mean*	*SD*
Self-stereotypes	0.74	123	2.15	0.90	6	2.50	1.12
Meta-stereotypes	10.46**	123	2.55	0.66	6	3.47	0.74
Ability to learn	3.31+	123	3.51	0.76	6	2.92	1.10
Motivation to learn	0.12	123	3.41	0.77	6	3.30	1.28
Support to learn	0.01	123	3.00	0.69	6	3.03	1.10
Occupational Expertise	0.01	119	4.96	0.45	6	4.94	0.84
Anticipation and Optimization	2.21	121	3.74	0.78	6	3.26	1.15
Personal Flexibility	5.72*	119	4.29	0.60	6	3.63	1.51
Corporate Sense	0.48	121	4.30	0.81	6	4.07	1.08
Balance	6.16*	121	4.14	0.81	6	3.28	1.33

+. Significant at the 0.10 level (2-tailed); *. Significant at the 0.05 level (2-tailed); **. Significant at the 0.01 level (2-tailed)

1.8. Differences between Education

One-way ANOVA analysis found significant differences for ‘education’ regarding ‘self-stereotypes’, ‘ability to learn’, ‘motivation to learn’, ‘support to learn’, ‘occupational expertise’, anticipation and optimization’, ‘personal flexibility’, ‘corporate sense’ and ‘balance’ (see table 23). Specifically, significant differences were found between employees who do not have any form of formal education (*N* = 2), employees who have a lower vocational education (*N* = 4), an intermediate vocational education (*N* = 74), a higher vocational education (*N* = 46) or a (post-) academic education (*N* = 3) regarding ‘self-stereotypes’ ($F(4, 120) = 6.31$, $p < .01$), ‘ability to learn’ ($F(4, 120) = 3.61$, $p < .01$), ‘motivation to learn’ ($F(4, 120) = 4.16$, $p < .01$) and ‘support to learn’ ($F(4, 120) = 3.22$, $p < .05$). Bonferroni’s post hoc test found that employees who have no formal education (*M* = 5.00, *SD* = .00) differ significantly from employees who have lower vocational education (*M* = 2.50, *SD* = 1.32), intermediate vocational education (*M* = 2.22, *SD* = .88), higher vocational education (*M* = 1.98, *SD* = .75) and (post-) academic education (*M* = 1.92, *SD* = .88) regarding ‘self-stereotypes’. This might indicate that employees who have no formal education perceive more negative age self-stereotypes in comparison to employees who have lower vocational, intermediate vocational, higher vocational and (post-) academic education. Regarding ‘ability to learn’, Bonferroni’s post hoc test did not found any significant differences between employees with different educational background. Moreover, Bonferroni’s post hoc test showed that employees who have no formal education (*M* = 4.60, *SD* = .00) differ significantly from employees who have lower vocational education (*M* = 2.70, *SD* = 1.16) regarding ‘motivation to learn’. This might indicate that employees who have no formal education perceive

their ‘motivation to learn’ as higher in comparison to employees who have lower vocational education. Finally, Bonferroni’s post hoc test found that employees who have no formal education (*M* = 4.33, *SD* = .70) differ significantly from employees who have intermediate vocational education (*M* = 2.89, *SD* = .67) regarding ‘support to learn’. This might indicate that people who have no formal education perceive more support to learn in comparison to people who are intermediate educated.

Moreover, one-way ANOVA found significant differences between employees who do not have any form of formal education (*N* = 2), employees who have a lower vocational education (*N* = 4), an intermediate vocational education (*N* = 71), a higher vocational education (*N* = 45) or a (post-) academic education (*N* = 3) regarding ‘occupational expertise’ ($F(4, 120) = 4.00$, $p < .01$) and ‘personal flexibility’ ($F(4, 120) = 3.95$, $p < .01$). Bonferroni’s post hoc test showed that employees who are lower vocational educated (*M* = 4.20, *SD* = .69) differ significantly from employees who are intermediate vocational educated (*M* = 4.92, *SD* = .48) and higher vocational educated (*M* = 5.08, *SD* = .35) regarding ‘occupational expertise’. This might indicate that employees who are lower vocational educated perceive themselves to have less occupational expertise in comparison to employees who are intermediate vocational and higher vocational educated. Furthermore, Bonferroni’s post hoc test showed that employees who have lower vocational education (*M* = 3.34, *SD* = 1.62) differ significantly from employees who have higher vocational education (*M* = 4.48, *SD* = .52) regarding ‘personal flexibility’. This might indicate that employees who are higher vocational educates perceive themselves as more personal flexible in comparison to employees who are lower vocational educated.

Finally, one-way ANOVA found significant differences between employees who do not have any form of formal education (*N* = 2), employees who have a lower vocational education (*N* = 4), an intermediate vocational education (*N* = 73), a higher vocational education (*N* = 45) or a (post-) academic education (*N* = 3) regarding ‘anticipation and optimization’ ($F(4, 120) = 3.36$, $p < .05$), ‘corporate sense’ ($F(4, 120) = 2.78$, $p < .05$) and ‘balance’ ($F(4, 120) = 2.79$, $p < .05$). Bonferroni’s post hoc test showed that employees who do not have any form of formal education (*M* = 4.83, *SD* = .64) differ significantly from employees who are lower vocational educated (*M* = 2.84, *SD* = 1.17) regarding ‘anticipation and optimization’. This might indicate that people who do not have any form of formal education perceive themselves to have more anticipation and optimization in comparison to people who are lower vocational

educated. Regarding ‘corporate sense’, Bonferroni’s post hoc test did not found significant differences between employees with different forms of education. Moreover, Bonferroni’s post hoc test showed that employees who do not have any form of formal education (*M* = 5.39, *SD* = .55) differ significantly from employees who have lower vocational education (*M* = 3.17, *SD* = 1.46) regarding ‘balance’. This might indicate that people who do not have any form of formal education perceive themselves as more balanced in comparison of people who are lower vocational educated.

Table 23| Means, Standard Deviations and Significance of Variables divided by Education

Variables		**None**			**Lower vocational education**			**Intermediate vocational education**			**Higher vocational education**			**(Post-) Education**		**Academic**
	F	*N*	*Mean*	*SD*	*N*	*Mean*	*SD*	*N*	*Mean*	*SD*	*N*	*Mean*	*SD*	*N*	*Mean*	*SD*
Self-stereotypes	6.31**	2	5.00	0.00	4	2.50	1.32	74	2.22	0.88	46	1.98	0.75	3	1.92	0.88
Meta-stereotypes	1.27	2	3.42	0.12	4	2.88	1.42	74	2.50	0.70	46	2.66	0.61	3	2.83	0.17
Ability to learn	3.61**	2	4.50	0.71	4	2.69	1.25	74	3.33	0.77	46	3.70	0.65	3	3.83	1.04
Motivation to learn	4.16**	2	4.60	0.00	4	2.70	1.16	74	3.24	0.76	46	3.64	0.68	3	3.60	1.31
Support to learn	3.22*	2	4.33	0.70	4	2.52	1.38	74	2.89	0.67	46	3.14	0.66	3	2.89	0.49
Occupational Expertise	4.00**	2	4.80	0.75	4	4.20	0.69	71	4.92	0.48	45	5.08	0.35	3	5.13	0.47
Anticipation and Optimization	3.36*	2	4.83	0.64	4	2.84	1.17	73	3.60	0.77	45	3.91	0.69	3	3.71	1.35
Personal Flexibility	3.96**	2	3.88	0.53	4	3.34	1.62	71	4.18	0.64	45	4.48	0.52	3	4.00	0.63
Corporate Sense	2.78*	2	5.00	0.20	4	3.50	1.17	73	4.14	0.79	45	4.49	0.74	3	4.62	1.072
Balance	2.79*	2	5.39	0.55	4	3.17	1.46	73	4.04	0.80	45	4.15	0.81	3	4.52	0.86

+. Significant at the 0.10 level (2-tailed); *. Significant at the 0.05 level (2-tailed); **. Significant at the 0.01 level (2-tailed)