



Ageism and Intrinsic Motivation at the Workplace: The Mediating Role of Age Group Identification and Job Involvement.

Lucie Marie-Ann Pelikan

Master Thesis - Work, Organisational and Personnel Psychology

[s3821269]
[December] [2021]
Department of Psychology
University of Groningen
Examiner/Daily supervisor: dr.
Bibiana Armenta Gutierrez
Word count: 8543

A thesis is an aptitude test for students. The approval of the thesis is proof that the student has sufficient research and reporting skills to graduate, but does not guarantee the quality of the research and the results of the research as such, and the thesis is therefore not necessarily suitable to be used as an academic source to refer to. If you would like to know more about the research discussed in this thesis and any publications based on it, to which you could refer, please contact the supervisor mentioned.

Abstract

The increasing age diversity in the labour market is one of the greatest challenges for organisations (Griffin et al., 2016). Due to the age-diverse working population, age discrimination, also referred to as ageism is increasing (Kunze et al., 2011). Ageism is harmful to the individual and the organisation. However, age discrimination is largely neglected in previous research compared to other forms of discrimination, particularly the relationship between ageism and motivation. This present study examined the relationship between ageism and intrinsic motivation at the workplace to fill the literature gap on this topic. Based on the social identity theory and identity theory, this research studied the influence of age group identification and job involvement on the relationship between ageism and intrinsic motivation. The data was collected via an online questionnaire. The final sample consisted of 103 employees of all ages. The results confirm the hypothesis that ageism and intrinsic motivation are negatively linked to each other. The mediation analysis illustrates that the age group identification is not affecting the negative relationship. However, ageism is negatively influencing intrinsic motivation through job involvement. The results suggest that employees respond to ageism by reducing job involvement and, therefore, being less intrinsically motivated at work. The findings contribute to previous research by stressing the negative consequences of ageism at the workplace. Further, the results provide a foundation for future research and developing practical implications.

Keywords: Ageism, Intrinsic Motivation, Social Identity Theory, Identity Theory, Age Group Identification, Job Involvement

AGEISM AND INTRINSIC MOTIVATION AT THE WORKPLACE

Introduction

Currently, four generations (Baby Boomers, Generation X, Generation Y, and Generation Z) are working together in the labour market. Factors like increasing lifespans, decreasing birth rates and higher retirement age lead to a constantly ageing working population (Truxillo & Fraccaroli, 2013). The ageing workforce can be beneficial, for example, because the labour market benefits from older workers for being prominent leaders and providing resources in forms of knowledge and expertise (Levy & Macdonald, 2016). However, the ageing working population also has its dark sides and is one of the most pressing concerns for organisations (Griffin et al., 2016). Increasing age diversity consequently results in higher levels of age discrimination (Kunze et al., 2011). Thus, in today's age-diverse working population, ageism is common and one of the most accepted forms of discrimination in society (Tougas et al., 2004).

With the outbreak of SARS-CoV-2, the issue of ageism has become even more critical. Scholars expect that the pandemic potentially aggravates manifestations and experiences of age discrimination (Swift & Chasteen, 2021). Especially, the view on older adults being weak and vulnerable could be reinforced (Morrow-Howell et al., 2020; Swift & Chasteen, 2021). Older people are affected by decreasing retirement security, retirement savings, and reducing retirement age (Bui et al., 2020). The pandemic also endorses intergenerational conflict with the younger people sacrificing for older people and limited attention on fear of harming younger generations, health-care workers or front-line workers (Morrow-Howell et al., 2020). Due to the present circumstances, it is predicted that the intergenerational conflict will intensify (Morrow-Howell et al., 2020; Swift & Chasteen, 2021). Scholars suggest that research should further focus on age stereotypes and discrimination regarding the pandemic (Swift & Chasteen, 2021).

In an organisation, age is a factor that influences several decisions (Bal et al., 2011). However, people are often unaware that a situation is about prejudice or discrimination (Nelson, 2016). Younger and older workers are most likely to experience age discrimination at the workplace compared to middle-aged workers (Von Hippel et al., 2012). Higher age leads to negative outcomes regarding

AGEISM AND INTRINSIC MOTIVATION AT THE WORKPLACE

promotion, recruitment and evaluation (Ahmed et al., 2012; Bal et al., 2011; Bendick et al., 1997). Younger employees face negative attitudes and are often deprived of promotions (Duncan & Loretto, 2004). A reason for discriminating against older and younger workers is the common belief that job performance will diminish with increasing age (Faley et al., 1984). In contrast, young age is associated with being inexperienced and less reliable (Bal et al., 2011).

The current study examines how employees of all ages respond to ageism regarding intrinsic motivation. Therefore, we aim to answer the question, “How does ageism influence intrinsic motivation?”. Previous research has not yet addressed this relationship, and when comparing different forms of discrimination, ageism is largely overlooked in research. Ultimately this lack of research is crucial because age will eventually affect everyone and most people spend a significant amount of time working; therefore, it is critical to gain more knowledge on the factors that impact individuals in an age-diverse working population (Macdonald & Levy, 2016; North & Fiske, 2012). Previous research findings already demonstrate that ageism has several negative effects on organisational characteristics, such as increasing turnover intention, decreasing organisational commitment, work engagement, and company performance (Cadiz, 2010; Kunze et al., 2011). Based on these study findings, we suggest that ageism negatively affects employees’ intrinsic motivation at the workplace.

For employers and employees, motivation is an influential job characteristic. Work motivation is the extent to which a worker is motivated to perform well at the job to experience a reward or feeling (Ng & Feldman, 2012). For employees, motivation is the main reason to feel good about work and benefits well-being, job performance, productivity, and retention (Ganta, 2014). Thus, unmotivated workers can be highly detrimental for an organisation because they put less effort into doing their job, show a high likelihood of quitting, and deliver poor outcomes (Ganta, 2014).

Two approaches for responding to ageism are considered based on the *social identity theory* (Tajfel, 1978) and *identity theory* (Stryker, 1968), more specific age group identification and job involvement. Both variables refer to an individual’s identity: whereas group identification relates to

AGEISM AND INTRINSIC MOTIVATION AT THE WORKPLACE

the external identification with the discriminated group, and job involvement refers to the internal identification with one's job. Moreover, we assume that people disconnect from their age group and reduce their level of job involvement as a response to ageism because of negative identity-relevant information. Further, we expect a positive connection between age group identification, and job involvement with intrinsic motivation. Therefore, we predict that ageism is negatively influencing intrinsic motivation via age group identification and job involvement.

Theoretical Background

Ageism and Intrinsic Motivation

The term *ageism* was introduced by Robert N. Butler (1969). It stands for age discrimination, meaning prejudice by one age group towards another age group, leading to bias and unfair treatment (Butler, 1969; Kunze et al., 2011). Generally, ageism appears within cognitive, affective and behavioural aspects (Cadiz et al., 2017). Stereotypes are connected to cognitive aspects, meaning the expectations and beliefs about characteristics of a particular group distinct from one's own, whereas prejudice stands for affective factors and is defined as the emotional response (Cadiz et al., 2017; Denmark, 2010; Fiske, 1998). Discrimination refers to behavioural aspects and includes displaying specific behavioural patterns against others (Cadiz et al., 2017; Denmark, 2010; Fiske, 1998).

Age discrimination at the workplace includes selection decisions, evaluations, promotions, or rewards based on employees age (Guttek, 1996). Ageism does not only bring severe consequences for the organisation; as mentioned above, it also affects the individual. Ageism leads to poorness, financial uncertainty, decreasing life satisfaction, and physical and mental health issues (Garstka et al., 2004; Redman & Snape, 2006; WHO, 2021). Thus, previous research already demonstrates serious negative effects of ageism in different aspects of life. This is critical because ageism is a relevant problem because of the increasing age diversity in the labour market (Kunze et al., 2011). In this research, we study the relationship between ageism and motivation to contribute to previous research and address the research shortage on this subject.

Although research on age discrimination and motivation at the workplace is scarce, previous studies show that ageism negatively affects several individual and organisational factors. Furthermore,

AGEISM AND INTRINSIC MOTIVATION AT THE WORKPLACE

studies on gender discrimination show a negative influence on motivation and related factors, such as enthusiasm, organisational commitment, and work engagement (Channar et al., 2011; Cornejo, 2007). Besides, discrimination can be defined as a stressor at the workplace, perceived as a threat rather than a challenge (Griffin et al., 2016). Research illustrates that job stress is the main reason for fewer job motivation and the motivation to quit (Jamal, 1990).

Motivation is a complex construct and is defined as a psychological process that influences the shape, arousal, direction, intensity and persistence of (work-related) behaviour (Ilgen & Klein, 1988; Pinder, 1998). *Self-determination theory* (Deci & Ryan, 1985) divides motivation into three distinct parts; intrinsic motivation, extrinsic motivation and amotivation. This research particularly focuses on intrinsic motivation at the workplace. Intrinsic motivation relates to an employee doing their job because of the activity, inner stimuli and satisfaction. Additionally, intrinsically motivated employees find their work enjoyable and interesting (Fernet, 2010). Scholars suggest that intrinsic motivation is the most important and persistent form of motivation (Schulze & Steyn, 2003). This is because intrinsic motivation positively affects numerous factors, such as organisational commitment, job satisfaction, and job involvement (Gagné et al., 2008; Hayati & Caniago, 2012; Mohsan et al., 2011; Richter et al., 2015). Also, intrinsic motivation is positively linked to psychological health, employee performance, and work satisfaction (Baard et al., 2004; Blais et al., 1993). Furthermore, this form of motivation enhances learning abilities and creativity (Salleh et al., 2016). Based on the relevance of intrinsic motivation at the workplace, this study concentrates on this part of motivation.

In particular, we hypothesise that ageism affects intrinsic motivation negatively. Positive feedback enhances intrinsic motivation, whereas negative feedback decreases intrinsic motivation (Deci, 1972; Harackiewicz, 1979). Discriminating against an employee because of their age can be interpreted as negative feedback. For instance, when excluding an employee from a work project because of being too young and inexperienced. This shows the employee that they are not doing their job good enough and that the performance and experience are insufficient to participate. Besides, employees facing ageism will not experience their work as enjoyable or satisfying because they feel

AGEISM AND INTRINSIC MOTIVATION AT THE WORKPLACE

excluded and not accepted. Consequently, it seems adequate to propose that ageism harms intrinsic motivation.

H1: Ageism is negatively related to intrinsic motivation.

Ageism and Age Group Identification

Social identity theory explains how the membership of a specific group influences people's self-concept (Van Kippenberg, 2000). A social group includes individuals who have a joint social identification or see themselves as members of a social group (Stets & Burke, 2000). The theory proposes that individuals belong to different social groups simultaneously, for instance, an occupational group, a fan base of a sports team, or an age group (Ellemers et al., 2004; Trepte & Loy, 2017). The extent to which someone identifies with a particular group is affected by contextual factors (Van Kippenberg, 2000). Age group identification refers to the extent to which individuals identify with other individuals similar to their chronological age (Weiss & Lang, 2009; Weiss & Lang, 2012a). Individuals categorised as similar are part of the in-group, whereas distinct individuals are part of the out-group (Stets & Burke, 2000; Trepte & Loy, 2017).

A positive self-concept derives from a positive in-group evaluation, which compares the in-group advantageously to out-groups (Karasawa, 1991). A positive social identity motivates people to improve and sustain a positive self-evaluation, whereas negative social identity leads to a negative self-concept, decreasing group identification, avoidance of social identity, constant competition between in-and out-group, and constantly deliberating cognitive strategies to create a more positive self-concept (Karasawa, 1991; Trepte & Loy, 2017; Weiss & Freund, 2012).

Research, particularly on older adults, suggests that facing negative age stereotypes leads to lower age group identification levels (Weiss & Lang, 2012b). This is because the out-group evaluation is advantageous compared to the discriminated in-group, which leads to a negative social age identity and thus a negative self-concept (Weiss & Lang, 2009; Weiss & Lang, 2012b). In other words, individuals try to distance themselves from their age group to protect themselves from the negative

AGEISM AND INTRINSIC MOTIVATION AT THE WORKPLACE

views connected to that group; this process is also described as age group dissociation (Weiss & Freund, 2012; Weiss & Lang, 2009; Weiss & Lang, 2012b).

Next to the study findings demonstrating the negative influence of stereotypes and discrimination on age group identification, scholars also propose that discrimination increases group identification (Branscombe et al., 1999). Hence, experiencing discrimination leads to individuals identifying more with the discriminated group. This is considered as a coping strategy to feel accepted and a sense of belonging within that group. Study findings on African Americans, women and body piercers show that discrimination increases group identification among those individuals (Branscombe et al., 1999; Jetten et al., 2001; Redersdorff et al., 2004; Schmitt et al., 2002).

In sum, existing research shows inconsistent results on the relationship between discrimination and group identification. However, research, particularly on ageism and age group identification, demonstrates a negative relationship between both variables. Therefore, we suggest that ageism acts as a contextual factor and leads to a negative in-group evaluation and age group dissociation.

H2: Ageism is negatively related to age group identification.

Age Group Identification and Intrinsic Motivation

Group identification has several positive implications (Sani et al., 2012). Almost all psychological approaches support the proposition that social identity is linked to well-being and mental health (Sharma & Sharma, 2010; Branscombe et al., 1999). Further group identification affects individuals self-efficacy and life satisfaction (Guan & So, 2016; Wakefield et al., 2017). However, only a small number of studies have examined the relationship between social identity and motivation, until now. Scholars suggest that more research is needed to better understand how group identification influences organisational characteristics, such as motivation (Van Knippenberg, 2000).

The social identity theory gives an interesting viewpoint as a motivational source in the workplace (Ellemers et al., 2004). Overall, individuals are stimulated by different experiences or situations when identifying with a social group (Ellemers et al., 2002; Ellemers et al., 2004). Ellemers

AGEISM AND INTRINSIC MOTIVATION AT THE WORKPLACE

et al. (2004) suggest that work motivation can be explained further when considering that group identification influences behaviour and motivation at the workplace. They argue that group identification may support individuals recognise group objectives as intrinsically motivating (Ellemers et al., 2004). Meaning that an individual's group identification determines to what degree the identification is leading to intrinsic motivation. For instance, when an older employee who identifies with his age group is asked to mentor younger employees, we expect that the older employee is motivated to pass on their knowledge and experience.

We expect a positive relationship between age group identification and intrinsic motivation based on the social identity theory and previous research findings. Moreover, we suggest that when employees identify with their age group at the workplace, intrinsic motivation is enhanced because they feel accepted and that they belong. Thus, employees are more likely to enjoy their work and find their work interesting and satisfying.

H3: Age group identification is positively related to intrinsic motivation.

Ageism, Age Group Identification, and Intrinsic Motivation

The role of age group identification when experiencing ageism is controversial. There are two approaches regarding age group identification in the literature.

On the one hand, the *rejection-identification model* states that identifying with the discriminated group buffers the negative influence of the attributions to stereotypes (Branscombe et al., 1999). Branscombe et al. (1999) showed that discrimination against African Americans leads to increasing group identification which buffers the negative influence of discrimination on well-being, building the foundation for the rejection-identification model. A study on gender discrimination shows that women's group identification increased when facing gender-based disadvantages reducing the negative effects on their self-esteem, and thus, confirming the rejection-identification model (Redersdorff et al., 2004; Schmitt et al., 2002). The rejection-identification was also confirmed when investigating a stigmatised group of body piercers (Jetten et al., 2001). The model proposes that group identification supports individuals coping with discrimination because it protects the self-concept.

AGEISM AND INTRINSIC MOTIVATION AT THE WORKPLACE

Therefore, individuals respond to discrimination with higher levels of identification because they want to be accepted and desire the feeling of belonging.

On the other hand, research on social identity theory, specifically organisational identity, demonstrated that job insecurity negatively affects employees' performance through identifying the organisation (Piccoli et al., 2017). Therefore, job insecurity portrays negative information to employees' social identity and leads to having serious doubts regarding their group membership, resulting in lower levels of organisational identification.

In the present research, we suggest that ageism is negatively influencing intrinsic motivation via age group identification. The studies mentioned above do not focus on ageism and age group identification. As already thoroughly discussed, we predict ageism and age group identification to be negatively linked to each other. Therefore, we expect that in the context of age group identification, the rejection-identification model is not applicable. Further, we expect age group identification to enhance intrinsic motivation, as mentioned earlier. Because we expect ageism to lower the levels of age group identification, we assume that ageism is negatively related to intrinsic motivation through age group identification. Thus, we expect a similar mediation effect of group identification as the research of Piccoli et al. (2017).

In sum, the existing research has yielded mixed results on the mechanism of age group identification. Nevertheless, we suggest that the negative relationship between ageism and intrinsic motivation is mediated through age group identification.

H4: Age group identification mediates the relationship between ageism and intrinsic motivation.

Ageism and Job involvement

Stryker (1968) describes the self as a collection of identities. According to the identity theory, the self-concept is a multifaceted social construct formed by individuals roles in society (Hogg et al., 1995). Role identities, for instance, being a teacher, a friend, or a parent, differ in the relevance for one's self-concept, building a hierarchy of identities (Hogg et al., 1995; Stets & Serpe, 2013). The theory

AGEISM AND INTRINSIC MOTIVATION AT THE WORKPLACE

also connects role identities to behavioural and affective outcomes, meaning the relevancy of the role indicates the person's commitment to the role and shapes the foundation for behaviour (Hogg et al., 1995).

Job involvement refers to the extent to which the job is relevant to an individual's identity (Kanungo, 1982). A person with high job involvement is personally affected by their job situation, specifically their employer, colleagues, and work content (Lawler & Hall, 1970; Rabinowitz & Hall, 1977). Because work is a relevant factor in most peoples' lives, the quality of an individual's life experience can be heavily influenced by the degree of involvement in their job (Argyris, 1964; Brown, 1996; Levinson, 1976).

Literature on ageism and job involvement is limited. Only one study by Orpren (1995) showed that job involvement is negatively affected by age discrimination. Stress at the workplace also decreases job involvement (Hall & Mansfield, 1971; Lodahl & Kejner, 1965). As mentioned before, ageism is a form of stressor, so we predict that ageism reduces employees' job involvement.

Scholars suggest six factors leading to higher job involvement: "the opportunity to make more of the job decisions; the feeling that one is making an important contribution to company's success; success; achievement; self-determination; freedom to set one's own work pace" (Bass, 1965, cited in Rabinowitz & Hall, 1977, p. 268). Ageism can stand in the way of the six factors. For example, a young worker may not be promoted because of being stereotyped as unreliable and inexperienced. In this case, self-determination is constrained, and also, the factors of success and achievement are limited because the worker cannot develop professional skills further and gain new experiences. Another scenario may be an older worker being excluded from a team workshop designed to learn relevant work skills because of leaving for retirement soon. Here, the individual's self-determination is limited because the decision is made by someone else; simultaneously, the employee has little control, and therefore, the factor of making their own decisions is not fulfilled. Further, it can also be argued that this leads to low success and achievement factors because the employee's development is constrained when the older employee is limited to learning new skills or gaining knowledge. Because ageism can

AGEISM AND INTRINSIC MOTIVATION AT THE WORKPLACE

affect the six factors leading to higher job involvement, we suggest that facing age discrimination at the workplace reduces the levels of job involvement.

As already thoroughly described, ageism negatively impacts various work-related characteristics. Existing scientific research, the identity theory and the theory by Bass (1965) lead to the hypothesis of a negative relationship between age discrimination and job involvement.

H5: Ageism is negatively related to job involvement.

Job involvement and Intrinsic Motivation

Job involvement is a crucial factor for both individual and organisational outcomes (Lawler, 1986). Job involvement is associated with better organisational success, effectiveness and productivity (Amah & Ahiauzu, 2013; Mohsan et al., 2011; O'Driscoll & Randall, 1999). Besides the organisational point of view, job involvement is also a key factor for personal development and fulfilment (Hackman & Lawler, 1971; Kahn, 1990; Lawler & Hall, 1970). Job involvement is also a predictor of good job performance and organisational citizenship behaviour (Diefendorff et al., 2002). Furthermore, studies demonstrate that job involvement is positively related to organisational and team commitment (Singh & Gupta, 2015).

In the literature, job involvement and intrinsic motivation are frequently used as synonyms (Gorn & Kanungo, 1980). However, research revealed that job involvement and intrinsic motivation are distinct job characteristics (Lawler & Hall, 1970). The difference between both characteristics is that job involvement refers to the job being central to one's identity, while intrinsic motivation is about the extent to which the satisfaction of inherent needs relies on performance (Lawler & Hall, 1970). Satisfying intrinsic needs can enhance job involvement, but the constructs should generally be separated (Gorn & Kanungo, 1980; Kanungo, 1979).

Scholars suggest that role identities determine individuals' commitment to roles and shape the foundation for behaviour (Hogg et al., 1995). Research illustrates that job involvement is the main factor for enabling employees' motivation and creating a competitive advantage for the organisation

AGEISM AND INTRINSIC MOTIVATION AT THE WORKPLACE

(Lawler, 1986; Pfeffer, 1994). Mohsan et al. (2011) also demonstrate the positive relationship between job involvement and motivation.

All in all, the existing research already examined that job involvement is positively related to individual and organisational characteristics. Previous studies on job involvement and intrinsic motivation also show that both variables are positively linked. Hence, we expect to find a positive relationship in the present study.

H6: Job involvement is positively related to intrinsic motivation.

Ageism, Job involvement, and Intrinsic Motivation

Research on the mediating role of job involvement is scarce. Based on the identity theory and research findings discussed above, we suggest that ageism is negatively related to intrinsic motivation through job involvement. Aligned with several previous research findings showing the harmful effects of ageism on individual and work characteristics, we hypothesise that ageism at the workplace leads to lower levels of job involvement. Job involvement is not a stable job characteristic and is influenced by stress and ageism (Hall & Mansfield, 1971; Lodahl & Kejner, 1965; Orpen, 1995). Perceiving discrimination indicates negative information regarding the employee's identity, and therefore, we suggest that employees respond with decreasing job involvement. Henceforth, studies illustrate that job involvement is crucial for enhancing employees intrinsic motivation and determines an individual's commitment to the role (Hogg et al., 1995; Lawler, 1986; Pfeffer, 1994). Therefore, we assume a positive relationship between both variables. In sum, we suggest that employees facing ageism show lower job involvement levels and, thus, are less intrinsically motivated.

H7: Job Involvement mediates the relationship between ageism and intrinsic motivation.

The present research

This present research is a field study following a cross-sectional design. The sample consists of German-speaking employees of all ages. The underlying purpose of not restricting to specific age groups is not to limit research to particular age categories. Also, the definitions of younger, middle-

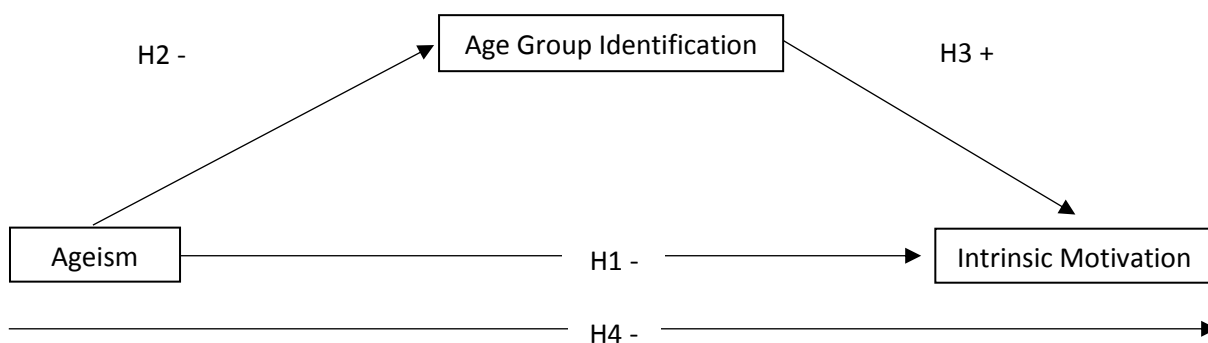
AGEISM AND INTRINSIC MOTIVATION AT THE WORKPLACE

aged, and older workers vary widely. Thus, we investigate employees of all ages regarding perceived ageism and its potential effects on individual and job characteristics.

The objectives of this research are threefold. This research aims to identify the effect of ageism on intrinsic motivation. Furthermore, we study the mediating effect of age group identification on the relationship between ageism and intrinsic motivation. The third objective is to study the mediating effect of job involvement on the relationship between ageism and intrinsic motivation. The two mediation models and the hypothesis are visualised in Figure 1 and Figure 2.

Figure 1

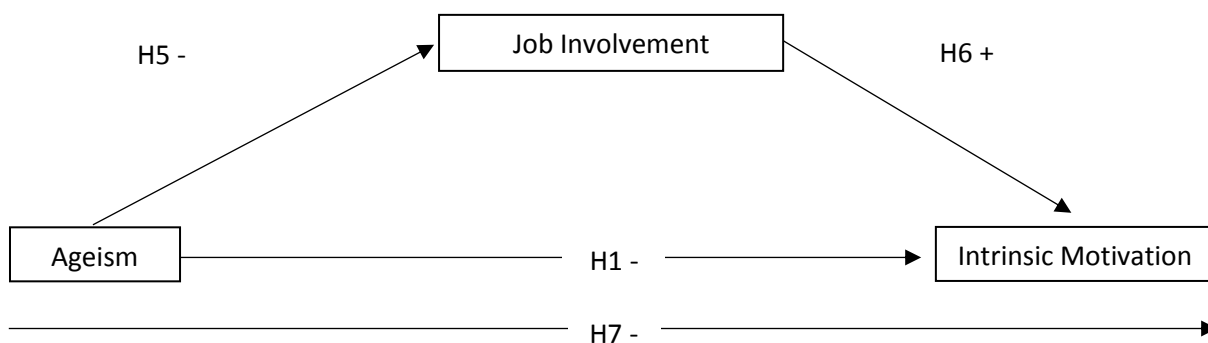
Visualisation of the Mediation Model of Age Group Identification.



Note. + = hypothesised positive relationship; - = hypothesised negative relationship.

Figure 2

Visualisation of the Mediation Model of Job Involvement.



Note. + = hypothesised positive relationship; - = hypothesised negative relationship.

Method

Participants

The online questionnaire was spread in Germany, and the link was shared through social networks, such as Facebook, WhatsApp and LinkedIn. The requirements for participating in the study were being (self-) employed, working with colleagues, accessing the Internet and German language skills. A further inclusion criterion was the minimum age of 18 years. Participants who did not meet the requirements were not able to continue the online survey. Prior to data collection, a power analysis on G*Power was conducted. The analysis revealed that a sample size of 85 participants was required to reach a statistical power of .80, an effect size of .15 and α .05. As no research studied this topic before, we chose effect size because it is conservative and moderate.

Out of a sample of 124 participants, 21 had to be excluded because they either did not fulfil the requirements or did not answer all items. Therefore, the sample consisted of 103 participants. Table 1 displays the demographic characteristics of the sample. The average age of the participants was 31.80 ($SD = 13.72$). The survey was completed by 71 (69.8%) participants between 18 and 30 years old. Further, 7 (6.8%) participants were between 31 and 50 years old, and 25 (24.3 %) participants were between 51 and 65 years old.

AGEISM AND INTRINSIC MOTIVATION AT THE WORKPLACE

Table 1*Demographic Characteristics of the Sample.*

Demographic Characteristics	n	%
Gender		
Female	72	69.9
Male	31	30.1
Educational Status		
School-leaving Qualification	1	1.0
Secondary School Certificate	2	1.9
High School Diploma	38	36.9
Vocational or Technical School	14	13.6
Foreman or Technical College	1	1.0
Bachelor's Degree	27	26.2
Master's Degree	19	18.4
PhD	1	1
Job Tenure		
Full-Time	53	51.5
Part-Time	18	17.5
Working Students, Internship or Apprenticeship	32	31.1

Note. N = 103.

Research Design and Procedure

Data was collected using *Qualtrics* (www.qualtrics.com). The survey was accessible for three weeks, during which participation was possible through the shared link. Within the informed consent (see English version in Appendix A), the participants were thoroughly informed about the requirements that needed to be fulfilled for participation, the purpose and duration of the study, and the privacy

AGEISM AND INTRINSIC MOTIVATION AT THE WORKPLACE

and the use of the collected data. Contact information for questions regarding the study was also provided. It was emphasized that participating in the survey was anonymous and voluntary at all times. Subsequently, the participants gave their consent or not for participation (see English version in Appendix B).

Additionally, the participants were instructed on how to answer the items and were asked to read and answer the survey thoroughly. In the beginning, participants answered demographic questions. Subsequently, they answered ageism items, work motivation items, job involvement items, and age group identification items. Afterwards, the participants proceeded to the debriefing. Here the background of the study was further explained, and contact information was provided (English version in Appendix C). Completing the survey took approximately five minutes.

The study was approved on 07.10.2021 by the Ethical Committee of Psychology (ECP) at the University of Groningen.

Measures

The online survey consisted of four scales measuring ageism, work motivation, job involvement and age group identification (see English version in Appendix D). All scales were translated and back-translated from English to German (see German version in Appendix E). In addition, the participants answered demographic questions on age, gender, educational status, and job tenure.

Perceived Age Discrimination

To measure perceived age discrimination, the scale by Bayl-Smith and Griffin (2014) was used. The scale consists of six items and initially measured the perceived ageism of older people. Because this study was not limited to a specific age group, the items were adapted from “younger than me” to “not my age”. Example items are: “I have sometimes been unfairly singled out because of my age” and “I feel socially isolated because of my age”. The items were rated on a 7 point scale from 1 strongly disagree to 7 strongly agree. For the statistical analysis, the scores of the six items were averaged. Cronbach's alpha was adequate .814.

AGEISM AND INTRINSIC MOTIVATION AT THE WORKPLACE

Work Motivation

The work motivation of the participants was assessed through the scale developed by Fernet (2010). The scale measures intrinsic motivation, extrinsic motivation and amotivation of employees regarding their work role. Extrinsic motivation refers to performing something because of an external reward, such as salary or promotion (Fernet, 2010). Amotivation refers to employees not associating their performance with a specific outcome and missing intent or drive regarding work (Fairchild et al., 2005; Fernet, 2010). The participants were asked, "Why do you perform your work role?" followed by ten different statements which needed to be rated from 1 do not agree at all and 7 completely agree. Example items are: "For the pleasure that I get from performing this role" and "Because the activities related to this role are interesting and stimulating". Although our main hypotheses only included intrinsic motivation as an outcome, the subscales of extrinsic motivation and amotivation were also computed and averaged as we found interesting to perform additional analyses on these constructs (see Exploratory Analysis in the Results Section). Cronbach's alpha on all motivation items was .728.

Job Involvement

The participants rated their job involvement using the scale from Kanungo (1982). The scale consists of four items, for example: "The most important things that happen to me involve my present job." and "Most of my interests are centred around my job.". Initially, the items are rated on a six-point scale, but the scale was adapted to a seven-point scale for uniformity reasons. Thus, participants answered the items on a scale from 1 do not agree at all and 7 absolutely agree. All item scores were averaged for the following analysis. Cronbach's alpha was .879.

Age Group Identification

The scale from Weiss and Lang (2009) was used to measure age group identification. This scale measures explicitly individuals' feelings of connecting with other people their age (Weiss & Lang, 2009). The age group identification measurement includes four items, for example: "I identify with people of my age" and "I feel strong ties with people of my age". The items were rated through a

AGEISM AND INTRINSIC MOTIVATION AT THE WORKPLACE

seven-point scale from 1 do not agree at all and 7 completely agree. For the statistical analysis, all items of this scale were averaged. Cronbach's alpha was .857.

Results

The statistical analysis was performed using the program *IBM SPSS Statistics 26*. For testing the relationship between ageism, intrinsic motivation, age group identification and job involvement, correlations and two independent mediation analyses were computed. The two mediation analyses were performed separately, applying the PROCESS macro-SPSS Model 4 with a 5000 bootstrapped sample (Hayes, 2018).

Descriptive Statistics

Table 2 illustrates the descriptive statistics as well as bivariate correlations of age, gender, education, tenure, ageism, intrinsic motivation, age group identification, and job involvement.

Table 2

Descriptive Statistics and Correlations of Study Variables.

Variable	<i>M</i>	<i>SD</i>	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1) Age	31.80	13.72							
(2) Gender	1.30	.46	.00						
(3) Education	4.69	1.72	.18	-.23*					
(4) Tenure	1.80	.89	-.35**	-.16	-.18				
(5) Ageism	2.67	1.18	-.10	.20*	.04	-.02			
(6) IM	5.22	1.27	.23*	-.09	-.00	-.29**	-.26**		
(7) AGI	4.63	1.17	-.22*	.08	-.01	.25*	.07	-.21*	
(8) JI	3.91	1.31	.21*	-.08	.11	-.28**	-.26**	.60**	-.25**

Note. $N = 103$; * $p < .05$; ** $p < .01$; IM = Intrinsic Motivation; AGI = Age Group Identification; JI = Job Involvement.

AGEISM AND INTRINSIC MOTIVATION AT THE WORKPLACE

Ageism and Intrinsic Motivation

The first hypothesis predicted a negative relationship between ageism and intrinsic motivation. Therefore, a multiple regression analysis that included ageism and intrinsic motivation was performed. The results show a negative significant relationship between both variables ($R^2 = .07$, $F(1, 101) = 7.5$, $p = .007$). The analysis indicates that ageism is negatively related to intrinsic motivation, and hence, the first hypothesis is supported.

The Role of Age Group Identification

The second hypothesis stated a negative relationship between ageism and age group identification. The analysis showed a non-significant relationship between both variables ($\beta = .07$; $p = .50$). Thus, the second hypothesis is not supported by the data. Ageism was not negatively linked to age group identification.

The third hypothesis predicted a positive relationship between age group identification and intrinsic motivation. The analysis indicates a significant negative relationship between age group identification and intrinsic motivation ($\beta = -.21$; $p = .04$). Therefore, the third hypothesis is not statistically supported by the data. Although the relationship between both variables is significant, the analysis shows that the relationship is negative and not positive, as we initially proposed.

Hypothesis 4 predicted that age group identification mediates the relationship between ageism and motivation. The bootstrapping analysis (Table 3) shows that the direct effect of ageism on intrinsic motivation is significant ($b = -.27$, $SE = .10$, 95 % CI [-.47, -.07]), when controlling for age group identification. The total effect of ageism on intrinsic motivation, when age group identification is included, is also significant ($b = -.28$, $SE = .10$, 95 % CI [-.49, -.08]). However, the indirect effect of age group identification was non-significant ($b = -.01$, $SE = .03$, 95 % CI [-.08, .03]). The findings indicate that the relationship between ageism and intrinsic motivation is not mediated by age group identification. Accordingly, the data is not supporting Hypothesis 4.

Table 3*Results of PROCESS Mediation on Age Group Identification.*

Effect	Estimate	SE	t	95% CI		p
				LL	UL	
Total Effect	-.28	.10	-2.75	-.49	-.08	.007
Direct Effect	-.27	.10	-2.65	-.47	-.07	.009
Indirect Effect	-.01	.03	-	-.08	.03	-

Note. $N = 103$; CI = confidence interval; LL = lower limit; UL = upper limit.

The Role of Job Involvement

The fifth hypothesis predicted a negative relationship between ageism and job involvement. The finding indicates a significant relationship between ageism and job involvement ($\beta = -.29$; $p = .007$). Thus, the data statistically confirms Hypothesis 5.

The sixth hypothesis predicted a positive relationship between job involvement and intrinsic motivation. The analysis indicates a significant relationship between both constructs ($\beta = .56$; $p = .000$). Accordingly, the data suggests that job involvement and intrinsic motivation are positively linked to one another. Hypothesis 6 is therefore confirmed by the data.

Hypothesis 7 predicted that job involvement mediates the relationship between ageism and motivation. The bootstrapping analysis (Table 4) revealed a non-significant direct effect of ageism on intrinsic motivation ($b = -.12$, $SE = .09$, 95 % CI [-.29, .05]), controlling for job involvement. The total effect of ageism on intrinsic motivation, including job involvement was significant ($b = -.28$, $SE = .10$, 95 % CI [-.49, -.08]). The indirect effect of job involvement on the relationship between ageism and intrinsic motivation was also significant ($b = -.16$, $SE = .06$, 95 % CI [-.30, -.04]). Thus, the data indicates that job involvement mediates the negative relationship between ageism and intrinsic motivation. Hence, Hypothesis 7 is statistically supported.

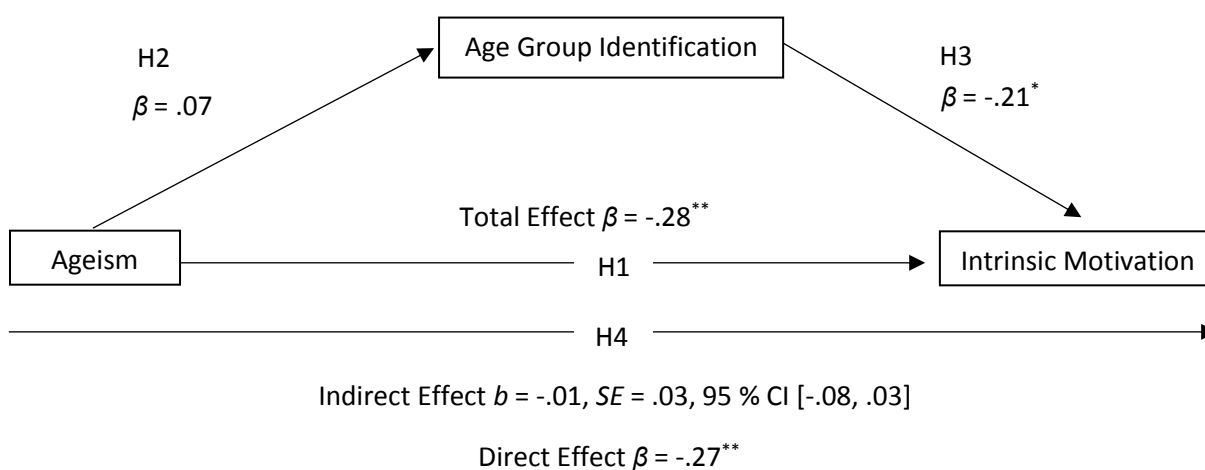
AGEISM AND INTRINSIC MOTIVATION AT THE WORKPLACE

Table 4*Results of PROCESS Mediation on Job Involvement.*

Effect	Estimate	SE	t	95% CI		p
				LL	UL	
Total Effect	-.28	.10	-2.75	-.49	-.08	.007
Direct Effect	-.12	.09	-1.4	-.29	.05	.18
Indirect Effect	-.16	.06	-	-.30	-.04	-

Note. $N = 103$; CI = confidence interval; LL = lower limit; UL = upper limit.

In Figures 3 and 4, this research's mediation models, hypotheses, and findings are visualized. The mediation beta-coefficients and the total, direct and indirect effect of two independent bootstrapping mediation analyses are summarized.

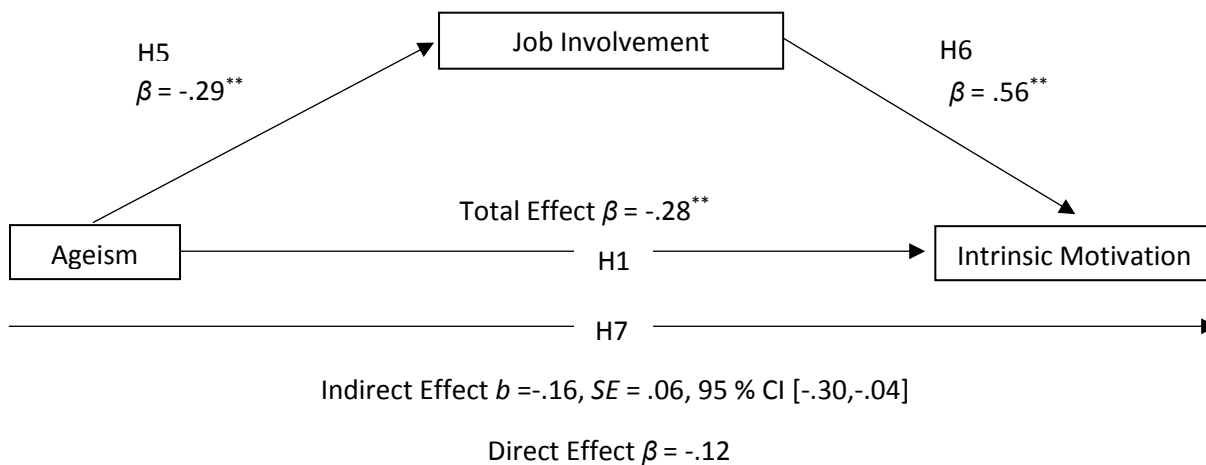
Figure 3*Visualisation of the PROCESS Mediation Results of Age Group Identification.*

Note. $N = 103$; * $p < .05$; ** $p < .01$.

AGEISM AND INTRINSIC MOTIVATION AT THE WORKPLACE

Figure 4

Visualisation of the PROCESS Mediation Results of Job Involvement.



Note. $N = 103$; * $p < .05$; ** $p < .01$.

Exploratory Analysis

Furthermore, as mentioned earlier, we additionally tested the relationship between ageism and extrinsic motivation and amotivation. Therefore, two separate multiple regression analyses were computed with respectively age discrimination and extrinsic motivation and age discrimination and amotivation. The relationship between ageism and extrinsic motivation was not significant ($R^2 = .00$, $F(1, 101) = .11$, $p = .744$). Nevertheless, ageism and amotivation are significantly positively related ($R^2 = .04$, $F(1, 101) = 4.42$, $p = .04$).

Discussion

Comparing the research on different forms of discrimination, age discrimination has been largely neglected and is, therefore, an under-researched topic (Griffin et al., 2016). Previous studies primarily focused on examining the discrimination of social groups (Armenta et al., 2017). Further, no study had yet addressed the effect of ageism on intrinsic motivation. Thus, the present research studied the relationship between both variables. We predicted a negative relationship between ageism and intrinsic motivation. Further, we expected to find that ageism negatively influences intrinsic motivation through age group identification and job involvement. Therefore, we assumed that ageism

AGEISM AND INTRINSIC MOTIVATION AT THE WORKPLACE

is negatively related to both age group identification and job involvement. Also, we expected age group identification and job involvement to be positively linked to intrinsic motivation.

Ageism and Motivation

The present research contributes to past research identifying that experiencing ageism at the workplace is negatively related to intrinsic motivation. Previous research has already highlighted various negative effects of ageism on organisational characteristics, such as increasing turnover intention, decreasing organisational commitment, work engagement, and company performance (Cadiz, 2010; Kunze et al., 2011). In line with our arguments, this confirms that ageism functions as negative feedback and employees facing ageism find their work less satisfying, enjoyable and lose interest. Therefore, the results of this study support our initial hypothesis that ageism has detrimental effects on employees intrinsic motivation at the workplace.

Furthermore, we did exploratory analyses to investigate the relationship between ageism and extrinsic motivation as well as amotivation. The findings imply that ageism is unrelated to extrinsic motivation, meaning regardless of perceiving ageism, employees do not change in motivation for external rewards, such as salary or promotion. Therefore, employees do not enjoy their work as much and find it less satisfying when confronted with ageism. However, their motivation to reach external rewards is not affected. Meaning, employees are doing their work only for the outcome and not because the activity brings them satisfaction or joy.

Notwithstanding, we found a positive relationship between ageism and amotivation. Moreover, our findings imply that age discrimination leads to missing intention and drive directed to work. Because age is a factor employees cannot control, they might feel powerless and stuck in their current situation. Further, they do not see the meaning of doing their work because they believe they are not contributing to a specific result or desired outcome.

The Role of Age Group Identification

The results suggest no relationship between ageism and group identification, contrary to previous studies. Scholars state that a negative in-group identification results from experiencing

AGEISM AND INTRINSIC MOTIVATION AT THE WORKPLACE

ageism, leading individuals to avoid and disconnect from their age group (Weiss & Freund, 2012; Weiss & Lang, 2009; Weiss & Lang, 2012b). Further, researchers suggest that an individual's identification depends on contextual factors (Van Kippenberg, 2000). Based on this knowledge, we constructed our hypothesis for this research; however, our results do not confirm this. Our findings propose that ageism is not associated with a change in age group identification. Armenta et al. (2017) also demonstrated a non-significant relationship between both variables and proposed that individuals respond to ageism through an individual route rather than through the collective route, such as age group identification.

Another reason for this finding could be that age group identification is not the prevalent part of an employee's social identity at the workplace. Individuals may respond to age discrimination by reducing organisational or team identification rather than disengaging from the age group. Feeling excluded or not accepted by leaders, colleagues or the organisation because of their age may affect organisational or team identification. This would be an interesting point future research could build on and establish knowledge on the social identity theory regarding the workplace.

Our results show that age group identification is negatively related to intrinsic motivation. This finding was somewhat surprising. Literature on social identity primarily demonstrates positive relationships of group identification and individual factors, such as well-being, mental health, life satisfaction and self-efficacy (Branscombe et al., 1999; Guan & So, 2016; Sharma & Sharma, 2010; Wakefield et al., 2017). There is no reasonable explanation for this negative relationship in previous research or social identity theory. To further understand this finding, research is needed to explain this relationship and investigate mechanisms that influence this.

The findings also show that age group identification is not mediating the relationship between ageism and intrinsic motivation. As discussed earlier, there are two main approaches to responding to discrimination: higher levels or lower levels of identification with the discriminated group. The research on the rejection-identification model focused on women, body piercers and African Americans and not on age group. Because research, particularly on age group identification, showed a

AGEISM AND INTRINSIC MOTIVATION AT THE WORKPLACE

negative relationship between ageism and age group identification, we expected to find a similar effect within the present study. However, the results do not confirm the previous studies on ageism and age group identification. Further, the findings also are not validating the rejection-identification model. Aligned with the research of Armenta et al. (2017), our findings suggest that individual's do not respond to ageism with changing levels of age group identification. As mentioned above, other forms of group identification could be more relevant than age group identification. Overall, our findings suggest that employees do not respond to ageism by reducing their external identification with their age group.

The Role of Job Involvement

Furthermore, the present study illustrates that ageism is negatively influencing job involvement. This finding supports our initial hypothesis. Thus, we confirm the study findings by Orpren (1995). Further, we reinforce past research that ageism at the workplace functions as a stressor and thus influences job involvement (Hall & Mansfield, 1971; Lodahl and Kejner, 1965). The results also illustrate that the sociology approach that focuses on workplace socialisation is relevant when studying job involvement (Lodahl & Kejnar, 1965). Ageism diminishes the relevance of the job for an employee's self-concept because ageism sends negative identity-relevant information to the employee. The results also endorse the approach of Bass (1965), which was discussed earlier. The six factors included in the theory supposed to increase job involvement are compromised by ageism, and therefore, ageism is reducing the levels of job involvement.

Further, job involvement is positively related to intrinsic motivation. According to previous studies, we also found a positive relationship between job involvement and intrinsic motivation (Mohsan et al.,2011; Lawler, 1986; Pfeffer, 1994). The findings also validate the approach of Hogg et al. (1995), which suggests that the commitment to a role determines the foundation of an individual's behaviour. Highly involved employees will show higher levels of intrinsic motivation at the workplace. The results imply that when the job is central to an employee's identity, they find their work more

AGEISM AND INTRINSIC MOTIVATION AT THE WORKPLACE

satisfying and stimulating. Further, employees are more interested in their work when the job is central to their identity.

The findings illustrate that job involvement fully mediates the negative relationship between ageism and intrinsic motivation. When controlling for job involvement, the relationship between ageism and intrinsic motivation is no longer significant. Therefore, we conclude that the identification with the job is an important factor when experiencing ageism. Ageism negatively influences job involvement because of involving negative identity-relevant information. Thus, job involvement decreases. Due to job involvement and intrinsic motivation being positively related, intrinsic motivation also decreases when employees show lower levels of job involvement. In sum, employees perceiving ageism are less intrinsically motivated because of lacking identification with their job. This also indicates that employees respond to ageism internally in reducing job involvement rather than externally by changing levels of age group identification. Hence, these findings support the study results of Armenta et al. (2017) by showing that individuals respond to age discrimination individually rather than collectively.

Ageism, Age and Gender

Further, the results suggest that ageism is not related to age. This stresses our argument not to restrict the research on ageism to a specific age group. However, it should also be noted that the age diversity in this sample is not particularly high. Especially middle-aged employees are underrepresented in this study. Therefore, we cannot generalise this finding on all age groups. The present research also shows that gender and perceived ageism are linked to each other. Female employees seem to be more affected by ageism than male employees. However, female participants in the study strongly outweigh the male participants. Therefore, it seems problematic to generalise this finding. Future research should examine this further and determine whether these results are consistent.

Practical Implications

This study illustrates the harmful effects of ageism on intrinsic motivation. Additionally, the findings propose that ageism is negatively connected to job involvement. Furthermore, the present research suggests that the negative relationship between ageism and intrinsic motivation is fully mediated by job involvement. This is fatal for organisations because job involvement and intrinsic motivation are linked to various work-related characteristics. Job involvement is connected to organisational success, effectiveness and productivity, personal development, fulfilment, job performance, organisational citizenship behaviour, organizational, team commitment and intrinsic motivation (Amah & Ahiauzu, 2013; Diefendorff et al., 2002; Hackman & Lawler, 1971; Kahn, 1990; Lawler & Hall, 1970; Mohsan et al., 2011; O'Driscoll & Randall, 1999; Singh & Gupta, 2015). Intrinsic motivation influences organisational commitment, job satisfaction, job performance, psychological health and job involvement (Baard et al., 2004; Blais et al., 1993; Gagné et al., 2008; Hayati & Caniago, 2012; Mohsan et al., 2011; Richter et al., 2015).

Based on the research findings, enhancing employees' job involvement seems reasonable to reduce or even prevent the negative consequences on intrinsic motivation. Based on the theory of Bass (1965) this can be achieved when focusing on the six factors which, according to theory, increase job involvement. Therefore, enhancing job involvement can be accomplished by giving employees freedom to be self-determined, make own decisions, and set their own work pace. Moreover, the levels of job involvement can be increased when telling employees that they make an important contribution to the organisation. Also, employees personal success and achievement is central for job involvement. By supporting employees in this regard, for instance by addressing employees success and achievement in giving them positive feedback job involvement can be increased. Organisations can inform and train leaders about these possibilities and highlight the importance of job involvement for the organisation but also for the employees.

Even more fundamental is the reduction of age discrimination at the workplace to prevent the negative consequences on job involvement and intrinsic motivation beforehand. For instance, by

AGEISM AND INTRINSIC MOTIVATION AT THE WORKPLACE

enhancing intergenerational exchange to decrease age-related stereotypes and beliefs and thus, creating a positive age diversity climate, which supports workers of all ages (Böhm et al., 2014; Truxillo et al., 2015). Moreover, the contact and exchange between younger, middle-aged, and older workers should be strengthened within team events, workshops or interventions (Truxillo et al., 2015). Additionally, supervisors should participate in specific training to enhance leadership and employee support to reduce age stereotypes and raise awareness of ageism's negative consequences (Truxillo et al., 2015). The suggestions mentioned aim to reduce age stereotypes and actively draw attention to the issue of ageism and the prevention of ageism.

Until now, governments worldwide have treated ageism at the workplace as a severe social issue and taken measurements to fight it (Macdonald & Levy, 2016). However, the measurements are outdated and need to be adjusted to the present time (Macdonald & Levy, 2016). For instance, in the United States, laws regarding age discrimination only protect employees over forty, whereas in Europe and Australia, employees of all ages are secured by government laws (Duncan & Loretto, 2004; Encel, 2001; Macdonald & Levy, 2016). Since passing the laws, various studies have demonstrated the negative impacts of ageism, showing that these measures are insufficient. In the future, stricter regulations at the workplace would be beneficial; this way, governments would also send out the importance and urgency of this topic.

Limitations and Future Directions

In retrospect, some limitations within this empirical research can be identified. First, the sample was not particularly diverse. The majority of the participants were female, and the balanced age distribution that was desired beforehand was not reached. The respondents were either younger or older workers, which on the one hand, is a strength considering that previous studies demonstrated that these age groups perceive ageism most (Von Hippel et al., 2012). On the other hand, this provides limited data on middle-aged workers. Future studies should therefore replicate these research findings with a more diverse sample. Second, it should also be noted that an online questionnaire can be less

AGEISM AND INTRINSIC MOTIVATION AT THE WORKPLACE

engaging for participants, affecting the response behavior. This could also be the reason for the 21 participants not finishing the survey, and thus, had to be excluded from the sample.

This study focuses on short term effects of ageism. Thus, it is particularly interesting to investigate the effects of ageism on job involvement and intrinsic motivation over a longer period to gain insights on potential changes or if the effects are constant. Especially because both job characteristics play an important role for the individual and the organisation, as explained before. This study does not confirm the link between ageism and age group identification. However, this may change over more extended period. As mentioned above, age group identification may not be prevalent in the workplace, and therefore, age discrimination might affect team or organisational identification. Nevertheless, it would also be interesting to know whether age group identification changes if age discrimination is persistent and employees therefore constantly receive identity-related information.

Additionally, comparing age groups with each other would also be highly interesting. The descriptive statistics show that age is significantly related to job involvement and age group identification. Though it seems reasonable to investigate this further and examine potential explanations for this.

Studying age discrimination and its consequences at the workplace further is useful for developing suitable interventions to reduce or prevent negative consequences. Further, more knowledge on the impact ageism has on individual and organizational characteristics and on the specific mechanisms connecting these would give guidance on how interventions need to be designed to actually be beneficial and effective. Additionally, based on this, future research should also examine the effect of the interventions and thus, give employers and leaders guidelines on what works best.

Conclusion

This research contributes to previous research demonstrating the negative effects of ageism on intrinsic motivation. Furthermore, we illustrate that ageism is negatively influencing intrinsic motivation by negatively affecting job involvement. These findings are in line with our predictions.

AGEISM AND INTRINSIC MOTIVATION AT THE WORKPLACE

Contradictory to our hypothesis, we did not find a mediation effect of age group identification. Overall, the research findings suggest that individuals respond to ageism rather on the internal level in decreasing job involvement than on the external level in decreasing age group identification. Ageism in the workplace is not likely to disappear anytime soon due to high age diversity and the outbreak of SARS-COV-2; age discrimination is expected to be a prolonged topic. Therefore, it seems relevant to know about the negative consequences, pay more attention to ageism, and reduce and prevent ageism.

References

- Ahmed, A. M., Andersson, L., & Hammarstedt, M. (2012). Does age matter for employability? A field experiment on ageism in the Swedish labour market. *Applied Economics Letters*, *19*(4), 403–406. <https://doi.org/10.1080/13504851.2011.581199>
- Amah, E., & Ahiauzu, A. (2013). Employee involvement and organizational effectiveness. *Journal of Management Development*, *32*(7), 661-674. <https://doi.org/10.1108/JMD-09-2010-0064>
- Argyris, C. (1964). *Integrating the individual and the organization*. Wiley.
- Armenta, B. M., Stroebe, K., Scheibe, S., Postmes, T., & Van Yperen, N. W. (2017). Feeling younger and identifying with older adults: Testing two routes to maintaining well-being in the face of age discrimination. *PLoS ONE*, *12*(11). <https://doi.org/10.1371/journal.pone.018780>
- Baard, P. P., Deci, E. L., & Ryan, R. M. (2004). Intrinsic Need Satisfaction: A Motivational Basis of Performance and Well-Being in Two Work Settings. *Journal of Applied Social Psychology*, *34*(10), 2045–2068. <https://doi.org/10.1111/j.1559-1816.2004.tb02690.x>
- Bal, A. C., Reiss, A. E. B., Rudolph, C. W., & Baltes, B. B. (2011). Examining Positive and Negative Perceptions of Older Workers: A Meta-Analysis. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, *66B*(6), 687–698. <https://doi.org/10.1093/geronb/gbr056>
- Bayl-Smith, P. H., & Griffin, B. (2014). Age discrimination in the workplace: identifying as a late-career worker and its relationship with engagement and intended retirement age. *Journal of Applied Social Psychology*, *44*(9), 588–599. <https://doi.org/10.1111/jasp.12251>
- Bendick, M., Jackson, C. W., & Romero, J. H. (1997). Employment Discrimination Against Older Workers. *Journal of Aging & Social Policy*, *8*(4), 25–46. https://doi.org/10.1300/j031v08n04_03
- Blais, M. R., Brière, N. M., Lachance, L., & Riddle, A. S. (1993). L'inventaire des motivations au travail de Blais [The Blais Inventory of Work Motivation]. *Revue Québécoise de Psychologie*, *14*(3), 185–215.

AGEISM AND INTRINSIC MOTIVATION AT THE WORKPLACE

- Boehm, S., Kunze, F., & Bruch, H. (2013). Spotlight on Age-Diversity Climate: The Impact of Age-Inclusive HR Practices on Firm-Level Outcomes. *Personnel Psychology*, *67*, 667–704. <https://doi.org/10.1111/peps.12047>
- Branscombe, N. R., Schmitt, M. T., & Harvey, R. D. (1999). Perceiving pervasive discrimination among African Americans: Implications for group identification and well-being. *Journal of Personality and Social Psychology*, *77*(1), 135–149. <https://doi.org/10.1037/0022-3514.77.1.135>
- Brown, S. P. (1996). A meta-analysis and review of organizational research on job involvement. *Psychological Bulletin*, *120*(2), 235–255. <https://doi.org/10.1037/0033-2909.120.2.235>
- Bui, T. T. M., Button, P., Picciotti, E. G., & Kaskie, B. (2020). Early Evidence on the Impact of Coronavirus Disease 2019 (COVID-19) and the Recession on Older Workers. *Public Policy & Aging Report*, *30*(4), 154–159. <https://doi.org/10.1093/ppar/praa029>
- Butler, R. N. (1969). Age-ism: Another Form of Bigotry. *The Gerontologist*, *9*(4), 243–246. https://doi.org/10.1093/geront/9.4_part_1.243
- Cadiz, D. M. (2010). *The Effects of Ageism Climates and Core Self-Evaluations on Nurses' Turnover Intentions, Organizational Commitment, and Work Engagement* [Doctoral dissertation, Portland State University]. PDXScholar - Portland State University Library. https://pdxscholar.library.pdx.edu/open_access_etds/50/
- Cadiz, D., Pytlovany, A., & Truxillo, D. (2017). Ageism in the Workplace. *Oxford Research Encyclopedia of Psychology*. <https://doi.org/10.1093/acrefore/9780190236557.013.2>
- Channar, Z.A., Abbassi, Z., & Ujan, I.A. (2011). Gender discrimination in workforce and its impact on the employees. *Pakistan Journal of Commerce and Social Sciences*, *5*(1), 177-191. <http://hdl.handle.net/10419/188023>
- Cornejo, J. M. (2007). *An Examination Of The Relationships Among Perceived Gender Discrimination, Work Motivation, And Performance* [Doctoral dissertation, University of Central Florida]. UCF Library. <http://purl.fcla.edu/fcla/etd/CFE0001906>

AGEISM AND INTRINSIC MOTIVATION AT THE WORKPLACE

- Deci, E. L. (1972). The effects of contingent and noncontingent rewards and controls on intrinsic motivation. *Organizational Behavior and Human Performance*, 8(2), 217–229.
[https://doi.org/10.1016/0030-5073\(72\)90047-5](https://doi.org/10.1016/0030-5073(72)90047-5)
- Deci, E. L. & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. Plenum Press.
- Denmark, F. L. (2010). Prejudice and Discrimination. In I. B Weiner, & W. E. Craighead (Eds.). *The Corsini Encyclopedia of Psychology* (Volume 3) (4th ed., p. 1277). Wiley.
- Diefendorff, J. M., Brown, D. J., Kamin, A. M., & Lord, R. G. (2002). Examining the roles of job involvement and work centrality in predicting organizational citizenship behaviors and job performance. *Journal of Organizational Behavior*, 23(1), 93–108.
<https://doi.org/10.1002/job.123>
- Duncan, C., & Loretto, W. (2004). Never the Right Age? Gender and Age-Based Discrimination in Employment. *Gender, Work & Organization*, 11(1), 95–115.
<https://doi.org/10.1111/j.14680432.2004.00222.x>
- Ellemers, N., De Gilder, D., & Haslam, S. A. (2004). Motivating Individuals and Groups at Work: A Social Identity Perspective on Leadership and Group Performance. *Academy of Management Review*, 29(3), 459–478. <https://doi.org/10.5465/amr.2004.13670967>
- Ellemers, N., Spears, R., & Doosje, B. (2002). Self and Social Identity*. *Annual Review of Psychology*, 53(1), 161–186. <https://doi.org/10.1146/annurev.psych.53.100901.135228>
- Encel, E. (2001). Working in later life. *Australasian Journal on Ageing*, 20(2), 69–73. doi:10.1111/j.1741-6612.2001.tb00402.x
- Faley, R. H., Kleiman, L. S., & Lengnick-Hall, M. L. (1984). Age discrimination and personnel psychology: A review and synthesis of the legal literature with implications for future research. *Personnel Psychology*, 37(2), 327–350. <https://doi.org/10.1111/j.1744-6570.1984.tb01454.x>

AGEISM AND INTRINSIC MOTIVATION AT THE WORKPLACE

- Fernet, C. (2010). Development and Validation of the Work Role Motivation Scale for School Principals (WRMS-SP). *Educational Administration Quarterly*, 47(2), 307–331.
<https://doi.org/10.1177/0013161x10385108>
- Fiske, S. T. (1998). Stereotyping, prejudice, and discrimination. In D. T. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), *The handbook of social psychology* (pp. 357–411). McGraw-Hill.
- Ganta, V. C. (2014). Motivation in the workplace to improve the employee performance. *International Journal of Engineering Technology, Management and Applied Sciences*, 2(6), 221-230.
- Garstka, T. A., Schmitt, M. T., Branscombe, N. R., & Hummert, M. L. (2004). How Young and Older Adults Differ in Their Responses to Perceived Age Discrimination. *Psychology and Aging*, 19(2), 326–335. <https://doi.org/10.1037/0882-7974.19.2.326>
- Gorn, G. J., & Kanungo, R. N. (1980). Job involvement and motivation: Are intrinsically motivated managers more job involved? *Organizational Behavior and Human Performance*, 26(2), 265–277. [https://doi.org/10.1016/0030-5073\(80\)90059-8](https://doi.org/10.1016/0030-5073(80)90059-8)
- Gagné, M., Chemolli, E., Forest, J. and Koestner, R., 2008. A Temporal Analysis of the Relation between Organisational Commitment and Work Motivation. *Psychologica Belgica*, 48(2,3), pp.219–241.
<http://doi.org/10.5334/pb-48-2-3-219>
- Griffin, B., Bayl-Smith, P., & Hesketh, B. (2016). The Longitudinal Effects of Perceived Age Discrimination on the Job Satisfaction and Work Withdrawal of Older Employees. *Work, Aging and Retirement*, 2(4), 415–427. <https://doi.org/10.1093/workar/waw014>
- Guan, M., & So, J. (2016). Influence of Social Identity on Self-Efficacy Beliefs Through Perceived Social Support: A Social Identity Theory Perspective. *Communication Studies*, 1–17.
<https://doi.org/10.1080/10510974.2016.1239645>
- Gutek, B. A. (1996). Reactions to Perceived Sex Discrimination. *Human Relations*, 49(6), 791–813.
<https://doi.org/10.1177/001872679604900604>
- Hackman, J. R., & Lawler, E. E. (1971). Employee reactions to job characteristics. *Journal of Applied Psychology*, 55(3), 259–286. <https://doi.org/10.1037/h0031152>

AGEISM AND INTRINSIC MOTIVATION AT THE WORKPLACE

- Hall, D. T., & Mansfield, R. (1971). Organizational and individual response to external stress. *Administrative Science Quarterly*, 16(4), 533–547. <https://doi.org/10.2307/2391771>
- Harackiewicz, J. M. (1979). The effects of reward contingency and performance feedback on intrinsic motivation. *Journal of Personality and Social Psychology*, 37(8), 1352–1363. <https://doi.org/10.1037/0022-3514.37.8.1352>
- Hayati, K., & Caniogo, I. (2012). Islamic Work Ethic: The Role of Intrinsic Motivation, Job Satisfaction, Organizational Commitment and Job Performance. *Procedia - Social and Behavioral Sciences*, 65, 272–277. <https://doi.org/10.1016/j.sbspro.2012.11.122>
- Hayes, A. F. (2018). *Introduction to Mediation, Moderation, and Conditional Process Analysis, Second Edition: A Regression-Based Approach*. Guilford Press.
- Hogg, M. A., Terry, D. J., & White, K. M. (1995). A Tale of Two Theories: A Critical Comparison of Identity Theory with Social Identity Theory. *Social Psychology Quarterly*, 58(4), 255. <https://doi.org/10.2307/2787127>
- Ilgen, D. R., & Klein, H. J. (1988). Individual Motivation and Performance: Cognitive Influences on Effort and Choice. In J. P. Campbell, R. J. Campbell, & Associates (Eds.), *Productivity in Organizations: New Perspectives for Industrial and Organizational Psychology* (pp. 76-143), Jossey-Bass Publishers.
- Jamal, M. (1990). Relationship of Job Stress and Type-A Behavior to Employees' Job Satisfaction, Organizational Commitment, Psychosomatic Health Problems, and Turnover Motivation. *Human Relations*, 43(8), 727–738. <https://doi.org/10.1177/001872679004300802>
- Jetten, J., Branscombe, N. R., Schmitt, M. T., & Spears, R. (2001). Rebels with a Cause: Group Identification as a Response to Perceived Discrimination from the Mainstream. *Personality and Social Psychology Bulletin*, 27(9), 1204–1213. <https://doi.org/10.1177/0146167201279012>
- Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 33(4), 692–724. <https://doi.org/10.2307/256287>

AGEISM AND INTRINSIC MOTIVATION AT THE WORKPLACE

- Kanungo, R. N. (1982). Measurement of job and work involvement. *Journal of Applied Psychology*, 67(3), 341–349. <https://doi.org/10.1037/0021-9010.67.3.341>
- Karasawa, M. (1991). Toward an assessment of social identity: The structure of group identification and its effects on in-group evaluations. *British Journal of Social Psychology*, 30(4), 293–307. <https://doi.org/10.1111/j.2044-8309.1991.tb00947.x>
- Kunze, F., Boehm, S. A., & Bruch, H. (2011). Age diversity, age discrimination climate and performance consequences - A cross organizational study. *Journal of Organizational Behavior*, 32(2), 264–290. <https://doi.org/10.1002/job.698>
- Lawler, E. E. (1986). *High-Involvement Management: Participative Strategies for Improving Organizational Performance*. Jossey-Bass. <https://doi.org/10.1002/hrm.3930260213>
- Lawler, E. E., & Hall, D. T. (1970). Relationship of job characteristics to job involvement, satisfaction, and intrinsic motivation. *Journal of Applied Psychology*, 54(4), 305–312. <https://doi.org/10.1037/h0029692>
- Levinson, H. (1976). *Psychological Man*. The Levinson Institute.
- Levy, S. R., & Macdonald, J. L. (2016). Progress on Understanding Ageism. *Journal of Social Issues*, 72(1), 5–25. <https://doi.org/10.1111/josi.12153>
- Lodahl, T. M., & Kejnar, M. (1965). The definition and measurement of job involvement. *Journal of Applied Psychology*, 49(1), 24–33. <https://doi.org/10.1037/h0021692>
- Macdonald, J. L., & Levy, S. R. (2016). Ageism in the workplace: the role of psychosocial factors in predicting job satisfaction, commitment, and engagement. *Journal of Social Issues*, 72(1), 169–190. <https://doi.org/10.1111/josi.12161>
- Mohsan, F., Nawaz, M., Khan, M., Shaukat, Z., & Aslam, N. (2011). Are Employee Motivation, Commitment and Job Involvement Interrelated: Evidence from Banking Sector of Pakistan. *International Journal of Business and Social Science*, 2(17), 226-232.

AGEISM AND INTRINSIC MOTIVATION AT THE WORKPLACE

- Morrow-Howell, N., Gonzales, E., & Kaskie, B. (2020). Recovering From Coronavirus Disease 2019 (COVID-19): Resisting Ageism and Recommitting to a Productive Aging Perspective. *Public Policy & Aging Report*, 30(4), 133-137. <https://doi.org/10.1093/ppar/praa021>
- Nelson, T. D. (2016). The Age of Ageism. *Journal of Social Issues*, 72(1), 191–198. <https://doi.org/10.1111/josi.12162>
- Ng, T. W. H., & Feldman, D. C. (2012). Evaluating Six Common Stereotypes About Older Workers with Meta-Analytical Data. *Personnel Psychology*, 65(4), 821–858. <https://doi.org/10.1111/peps.12003>
- North, M. S., & Fiske, S. T. (2012). An inconvenienced youth? Ageism and its potential intergenerational roots. *Psychological Bulletin*, 138(5), 982-997. <https://doi.org/10.1037/a0027843>
- O’Driscoll, M. P., & Randall, D. M. (1999). Perceived Organisational Support, Satisfaction with Rewards, and Employee Job Involvement and Organisational Commitment. *Applied Psychology*, 48(2), 197–209. <https://doi.org/10.1111/j.1464-0597.1999.tb00058.x>
- Orpen, C. (1995). The effect of organizational commitment on the relationship between communication quality and managerial attitudes. *Psychological Studies*, 40(1), 60–64.
- Pfeffer, J. (1994). *Competitive Advantage Through People Unleashing the power of the work force*. Harvard Business School Press.
- Piccoli, B., Callea, A., Urbini, F., Chirumbolo, A., Ingusci, E., & De Witte, H. (2017), "Job insecurity and performance: the mediating role of organizational identification", *Personnel Review*, 46(8), 1508-1522. <https://doi.org/10.1108/PR-05-2016-0120>
- Pinder C. C. (1998). *Work Motivation in Organizational Behavior*. Prentice Hall.
- Rabinowitz, S., & Hall, D. T. (1977). Organizational research on job involvement. *Psychological Bulletin*, 84(2), 265–288. <https://doi.org/10.1037/0033-2909.84.2.265>
- Redersdorff, S., Martinot, D., & Branscombe, N. (2004). The impact of thinking about group-based disadvantages or advantages on women's well-being: An experimental test of the rejection-

AGEISM AND INTRINSIC MOTIVATION AT THE WORKPLACE

- identification model. *Cahiers de Psychologie Cognitive/Current Psychology of Cognition*, 22(2), 203–222.
- Redman, T., & Snape, E. (2006). The Consequences of Perceived Age Discrimination Amongst Older Police Officers: Is Social Support a Buffer?. *British Journal of Management*, 17(2), 167–175. <https://doi.org/10.1111/j.1467-8551.2006.00492.x>
- Richter, A., Schraml, K., & Leineweber, C. (2015). Work–family conflict, emotional exhaustion and performance-based self-esteem: reciprocal relationships. *International Archives of Occupational and Environmental Health*, 88(1), 103–112. <https://doi.org/10.1007/s00420-014-0941-x>
- Salleh, S .M., Zahari, A. S., Said, N. S., & Ali, S. R. (2016). The Influence of Work Motivation on Organizational Commitment in the Workplace. *Journal of Applied Environmental and Biological Sciences*. 6(5). 139-143.
- Sani, F., Herrera, M., Wakefield, J. R. H., Borocho, O., & Gulyas, C. (2012). Comparing social contact and group identification as predictors of mental health. *British Journal of Social Psychology*, 51(4), 781-790. <https://doi.org/10.1111/j.2044-8309.2012.02101.x>
- Schmitt, M. T., Branscombe, N. R., Kobrynowicz, D., & Owen, S. (2002). Perceiving Discrimination Against One’s Gender Group has Different Implications for Well-Being in Women and Men. *Personality and Social Psychology Bulletin*, 28(2), 197–210. <https://doi.org/10.1177/0146167202282006>
- Schulze, S., & Steyn, T. (2003). Educator’s Motivation: Differences Related to Gender, Age and Experience. *Acta Academia*, 35(3), 138-160.
- Sharma, S. & Sharma, M. (2010). Self, social identity and psychological well-being. *Psychological Studies*, 55(2), 118–136. <https://doi.org/10.1007/s12646-010-0011-8>
- Singh, A., & Gupta, B. (2015). Job Involvement, Organizational Commitment, Professional Commitment, and Team Commitment: A Study of Generational Diversity. *Benchmarking: An International Journal*, 22, 1192-1211. <https://doi.org/10.1108/bij-01-2014-0007>

AGEISM AND INTRINSIC MOTIVATION AT THE WORKPLACE

- Stets, J. E., & Burke, P. J. (2000). Identity Theory and Social Identity Theory. *Social Psychology Quarterly*, 63(3), 224. <https://doi.org/10.2307/2695870>
- Stets, J. E., & Serpe, R. T. (2013). Identity Theory. In J. DeLamater, & A. Ward (Eds.), *Handbooks of Sociology and Social Research* (pp. 31–60). Springer. https://doi.org/10.1007/978-94-007-6772-0_2
- Stryker, S. (1968). Identity Salience and Role Performance: The Relevance of Symbolic Interaction Theory for Family Research. *Journal of Marriage and the Family*, 30(4), 558. <https://doi.org/10.2307/349494>
- Swift, H. J., & Chasteen, A. L. (2021). Ageism in the time of COVID-19. *Group Processes & Intergroup Relations*, 24(2), 246–252. <https://doi.org/10.1177/1368430220983452>
- Tajfel, H. (Ed.). (1978). *Differentiation between social groups: Studies in the social psychology of intergroup relations*. Academic Press.
- Tougas, F., Lagacé, M., Sablonnière, R. D. L., & Kocum, L. (2004). A New Approach to the Link between Identity and Relative Deprivation in the Perspective of Ageism and Retirement. *The International Journal of Aging and Human Development*, 59(1), 1–23. <https://doi.org/10.2190/3wtn-63qq-ejmg-bgya>
- Trepte, S., & Loy, L. S. (2017). Social identity theory and self-categorization theory. In P. Roessler, C. A. Hoffner, & van Zoonen, L. (Eds.), *The International Encyclopaedia of Media Effects* (pp. 1-13). <https://doi.org/10.1002/9781118783764.wbieme0088>
- Truxillo, D. M., Cadiz, D. M., Hammer, L. B. (2015). Supporting the Aging Workforce: A Review and Recommendations for Workplace Intervention Research. *Annual Review of Organizational Psychology and Organizational Behavior*, 2(1), 351–381. <https://doi.org/10.1146/annurevpsych-032414-111435>
- Truxillo, D. M., & Fraccaroli, F. (2013). Research themes on age and work: Introduction to the Special Issue. *European Journal of Work and Organizational Psychology*, 22(3), 249–252. <https://doi.org/10.1080/1359432X.2013.786604>

AGEISM AND INTRINSIC MOTIVATION AT THE WORKPLACE

- Van Knippenberg, D. (2000). Work Motivation and Performance: A Social Identity Perspective. *Applied Psychology, 49*(3), 357–371. <https://doi.org/10.1111/1464-0597.00020>
- Von Hippel, C., Kalokerinos, E. K., & Henry, J. D. (2013). Stereotype threat among older employees: Relationship with job attitudes and turnover intentions. *Psychology and Aging, 28*(1), 17–27. <https://doi.org/10.1037/a0029825>
- Wakefield, J. R. H., Sani, F., Madhok, V., Norbury, M., Dugard, P., Gabbanelli, C., Arnetoli, M., Beconcini, G., Botindari, L., Grifoni, F., Paoli, P., & Poggesi, F. (2017). The Relationship Between Group Identification and Satisfaction with Life in a Cross-Cultural Community Sample. *Journal of Happiness Studies, 18*(3), 785–807. <https://doi.org/10.1007/s10902-016-9735-z>
- Weiss, D., & Freund, A. M. (2012). Still young at heart: Negative age-related information motivates distancing from same-aged people. *Psychology and Aging, 27*(1), 173–180. <https://doi.org/10.1037/a0024819>
- Weiss, D., & Lang, F. R. (2012a). The two faces of age identity. *The Journal of Gerontopsychology and Geriatric Psychiatry, 25*(1), 5–14. <https://doi.org/10.1024/1662-9647/a000050>
- Weiss, D., & Lang, F. R. (2012b). “They” are old but “I” feel younger: Age-group dissociation as a self-protective strategy in old age. *Psychology and Aging, 27*(1), 153–163. <https://doi.org/10.1037/a0024887>
- Weiss, D., & Lang, F. R. (2009). Thinking about my generation: Adaptive effects of a dual age identity in later adulthood. *Psychology and Aging, 24*(3), 729–734. <https://doi.org/10.1037/a0016339>
- World Health Organization (WHO) (2021). Global report on ageism. Retrieved from <https://www.who.int/publications/i/item/9789240016866>

Appendix A**Informed Consent**

Purpose: We are conducting this study to examine people's perceptions about their working life.

More specifically, this study aims to investigate work experiences. Furthermore, we are interested in the outcome of these experiences regarding thinking processes and behaviour.

Procedures: Our study aims at investigating the effects of work-related experiences. Therefore we will be asking you a number of questions that relate to perceptions of yourself regarding work-related experiences and other psychological measures. The study consists of brief questionnaires and takes approximately 5 minutes to complete.

Disclaimer: We do not intend the following questionnaire to be offensive in any way. Should you feel any discomfort or distress during the answering of the questionnaire please feel free to stop at any time for any reason. If this is the case the questions you had answered will be erased and we will not use your data in the present study.

Eligibility: To participate in the study, you must be at least 18 years old, you must be currently (self-) employed and work with colleagues and be fluent in the German language.

Risks and Benefits: There are no anticipated risks associated with your participation in this study. We hope that our results lead to a better insight into organizational outcomes and psychological processes.

Confidentiality: All of your responses will be anonymous (we will not ask for or record your name or other information that could lead back to you). Only the researchers involved in this study and those responsible for research oversight will have access to the information you provide. The results of the study may be published in a scientific outlet.

Voluntary Participation: Participation in this study is completely voluntary. You are free to decline to participate and end participation at any time for any reason.

AGEISM AND INTRINSIC MOTIVATION AT THE WORKPLACE

Questions: You may always ask questions about the research: now, during the research, and after the end of the research. You can do so by emailing one of the researchers involved: Lucie Pelikan (l.m.pelikan@student.rug.nl), Supervisor: Dr Bibiana Armenta (b.m.armenta@rug.nl).

Do you have questions/concerns about your rights as a research participant or about the conduct of the research? You may also contact the Ethics Committee of the Faculty of Behavioural and Social Sciences of the University of Groningen: ec-bss@rug.nl.

Appendix B**Consent Form**

“Behavior in the Workplace” PSY-2021-S-0519

- I have read the information about the research. I have had enough opportunity to ask questions about it.
- I understand what the research is about, what is being asked of me, which consequences participation can have, how my data will be handled, and what my rights as a participant are.
- I understand that participation in the research is voluntary. I myself choose to participate. I can stop participating at any moment. If I stop, I do not need to explain why. Stopping will have no negative consequences for me.
- Below I indicate what I am consenting to.
- By accepting this form and completing the questionnaires, I acknowledge that I am at least 18 years old and I am currently (self-) employed, work with colleagues and I'm fluent in German, I have read and understood the information provided, and I voluntarily consent to participate in this research.

Consent to participate in the research:

Yes, I consent to participate.

No, I do not consent to participate.

Appendix C

Debriefing

Thank you very much for your participation in this study, we appreciate your effort and cooperation.

In the following summary, you will receive a brief explanation of what the study was about.

Explanation of the study: This research focuses on age discrimination, also known as ageism. In the workplace, ageism is common and is one of the most accepted forms of discrimination in society (Tougas et al., 2004). The purpose of this study is to focus on ageism and to identify how it affects the intrinsic motivation of employees. Intrinsic motivation is an important job characteristic because it affects organisational commitment, job satisfaction, job performance, psychological health and job involvement (Baard et al., 2004; Blais et al., 1993; Gagné et al., 2008; Hayati & Caniago, 2012; Mohsan et al., 2011; Richter et al., 2015). Previous research has shown that ageism has an influence on increasing turnover intention, decreasing organisational commitment, work engagement, and company performance (2016; Cadiz, 2010; Kunze et al., 2011). In this research, we want to further investigate whether the identification with other people in the same age category and the importance of the job for one's self-concept influence the relationship between ageism and intrinsic motivation.

In case you felt uncomfortable at some point during the completion of the questionnaire, we would like to point out that you should not generalize salient negative events in the study to neither other areas of your life nor your abilities.

Contact information about the experiment: The experiment is being conducted under the supervision of Dr Bibiana Armenta, at the Department of Behavioral and Social Science at Groningen University, with Lucie Pelikan as part of the research team. If you have further questions, comments or are interested in the results of the study you are welcome to write an e-mail to l.m.pelikan@student.rug.nl.

Thank you again for your participation in this study.

Appendix D

Demographic Questions

1. Please enter your age.
2. Please enter your gender.
 - male; female; diverse
3. Please specify your current level of employment.
 - full-time; part-time; working student, internship, temporary job.
4. Please state your currently highest level of education.
 - school-leaving qualification; secondary school certificate; high school diploma; vocational or technical school; bachelor, master, doctorate; other.

Questionnaire Scales

Ageism Items (Bayl-Smith & Griffin, 2014)

[1=strongly disagree; 7=strongly agree, midpoint 4 = neither agree nor disagree]

1. I have sometimes been unfairly singled out because of my age.
2. I feel socially isolated because of my age.
3. I have fewer training opportunities than those who are not my age.
4. I have fewer opportunities for promotion than those who are not my age.
5. I am scrutinized more heavily in my performance evaluation than those who are not my age.
6. Those who are not my age are provided with better job assignments.

Work Role Motivation Items (Fernet, 2010)

[1=do not agree at all; 7=completely agree, midpoint 4 = neither agree nor disagree]

“Why do you perform your work roles?”

1. For the pleasure that I get from performing this role.
2. Because the activities related to this role are interesting and stimulating.
3. Because this role enables me to achieve my own work objectives.
4. Because I feel this role is essential in performing my job.

AGEISM AND INTRINSIC MOTIVATION AT THE WORKPLACE

5. Because I would feel guilty if I did not perform this role properly.
6. To prove to myself that I can perform this role properly.
7. Because this role is part of my job. We are paid to do this.
8. Because my position requires it.
9. I don't know. Sometimes it seems pointless.
10. I don't know. Most of the time, I'm not really keen on performing this role.

Job Involvement Items (Kanungo, 1982)

[1=do not agree at all; 7=completely agree, midpoint 4 = neither agree nor disagree]

1. The most important things that happen to me involve my present job.
2. Most of my interests are centered around my job.
3. To me, my job is a very large part of who I am.
4. I am very much personally involved with my job.
5. My job is a very important part of my life

Age Group Identification Items (Weiss & Lang, 2009)

[1=do not agree at all; 7=completely agree, midpoint 4 = neither agree nor disagree]

1. I identify with people of my age.
2. I feel strong ties with people of my age.
3. I am different from people of my age.
4. I feel a sense of belonging to people of my age.

Appendix E

Demographic Questions - German Translation

1. Bitte geben Sie Ihr Alter an.
2. Bitte geben Sie Ihr Geschlecht an.
 - weiblich; männlich; diverse
3. Bitte geben Sie Ihren derzeitigen Beschäftigungsgrad an.
 - Vollzeit; Teilzeit; Werkstudententätigkeit; Praktikum; Aushilfsjob.
4. Bitte geben Sie Ihren aktuell höchsten Bildungsstand an.
 - Mittlere Reife/Realschulabschluss; Abitur; Berufs- oder Fachschule; Bachelor-Abschluss, Master-Abschluss; Dokortitel; andere.

Questionnaire Scales - German Translation

Ageism Items (Bayl-Smith & Griffin, 2014)

[1=stimme überhaupt nicht zu; 7=stimme voll und ganz zu, Mittelwert 4 = stimme weder zu noch stimme ich nicht zu]

1. Ich bin manchmal wegen meines Alters unfair ausgegrenzt worden.
2. Ich fühle mich aufgrund meines Alters sozial isoliert.
3. Ich habe weniger Weiterbildungsmöglichkeiten als andere, die nicht in meinem Alter sind.
4. Ich habe weniger Aufstiegschancen als andere, die nicht in meinem Alter sind.
5. Ich werde bei der Leistungsbeurteilung stärker hinterfragt als andere, die nicht in meinem Alter sind.
6. Diejenigen, die nicht in meinem Alter sind, erhalten bessere Arbeitsaufgaben.

Work Role Motivation Items (Fernet, 2010)

[1=stimme überhaupt nicht zu; 7=stimme voll und ganz zu, Mittelwert 4 = stimme weder zu noch stimme ich nicht zu]

"Warum üben Sie Ihre Arbeitsrollen aus?"

1. Wegen der Freude, die ich bei der Ausübung meiner Arbeit habe.

AGEISM AND INTRINSIC MOTIVATION AT THE WORKPLACE

2. Weil die Tätigkeiten, die mit meiner Arbeit verbunden sind, interessant und anregend sind.
3. Weil diese Arbeit mir ermöglicht, meine eigenen Arbeitsziele zu erreichen.
4. Weil ich das Gefühl habe, dass meine Arbeit für meine berufliche Position unerlässlich ist.
5. Weil ich mich schuldig fühlen würde, wenn ich meine Arbeit nicht richtig ausüben würde.
6. Um mir selbst zu beweisen, dass ich diese Arbeit richtig ausführen kann.
7. Weil diese Arbeit Teil meines Berufs ist. Ich werden dafür bezahlt, dies zu tun.
8. Weil meine Position es erfordert.
9. Ich weiß es nicht. Manchmal scheint es sinnlos zu sein.
10. Ich weiß es nicht. Die meiste Zeit habe ich keine große Lust, diese Arbeit auszuführen.

Job Involvement Items (Kanungo, 1982)

[1=stimme überhaupt nicht zu; 7=stimme voll und ganz zu, Mittelwert 4 = stimme weder zu noch stimme ich nicht zu]

1. Die wichtigsten Dinge, die mir passieren, betreffen meine derzeitige Arbeit.
2. Die meisten meiner Interessen drehen sich um meine Arbeit.
3. Für mich ist meine Arbeit ein sehr großer Teil von dem, was ich bin.
4. Ich bin persönlich sehr stark mit meiner Arbeit verbunden.
5. Mein Job ist ein sehr wichtiger Teil meines Lebens.

Age Group Identification items (Weiss & Lang, 2009)

[1=stimme überhaupt nicht zu; 7=stimme voll und ganz zu, Mittelwert 4 = stimme weder zu noch stimme ich nicht zu]

1. Ich identifiziere mich mit Menschen in meinem Alter.
2. Ich fühle mich stark mit Menschen in meinem Alter verbunden.
3. Ich bin anders als Menschen in meinem Alter.
4. Ich fühle mich den Menschen in meinem Alter zugehörig.