### Chapter 2 **Ageism: The Relationship between Age Stereotypes and Age Discrimination**



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### 2.1 Introduction

[...] everything matched with my occupational profile. But nevertheless I received a rejection because of my age. Born 1943, not stout and fat, not lazy and sluggish but instead still energetic and fit. [...] On the one hand people talk about skilled worker shortage and on the other hand being 65+ years old one has no chance. (K. H. 2014)

Several explanations can be suggested for this rejection experience: From the person's perspective, which of course might reflect the truth, there is no doubt that he was discriminated against based on his age because it is generally assumed that people of his age are not fit anymore as workers. However, independently of whether or not the recruiter held negative stereotypes about older adults, it is also possible that there was simply someone who was better qualified for the job among the other applicants. In yet another version, the event that led to the rejection could be explained by his interview results that might have been worse compared to those of other applicants, which then again might have been for example caused by what is referred to as "stereotype threat" in the literature (Hess et al. 2003). This was defined as a situation-based fear that one's behaviour is going to be judged based on stereotypes or that one might act in way that confirms a stereotype (Steele et al. 2002) and it might especially occur during an interview with a younger interviewer. This example demonstrates at least two important things: On the one hand, it shows how

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University, Ramat Gan, Israel e-mail: ehud.bodner@biu.ac.il difficult it can be to determine whether a negative outcome or behaviour constitutes a case of age discrimination and if so whether it was caused by age stereotypes at all. Furthermore, even if this is taken for granted, it is important to know whose stereotypes were activated and led to a case of (perceived) discrimination. Taking on different perspectives on a seemingly age discriminatory event can lead to very different conclusions regarding the role that discrimination and age stereotypes played in the event. Age discrimination and the perception of age discrimination are complex phenomena which, at least on a micro-level, most likely emerge from social interactions (see Sect. 2.5). Accordingly, in order to make informed decisions about new research on age stereotypes and age discrimination, to conduct interventions targeting age discrimination, or to initiate policies directed at reducing age discrimination based on age stereotypes, it is of upmost importance to understand the complex relationship between age stereotypes and age discrimination.

Following the introductory quote, and in order to start the inquiry of the relations between age stereotypes and age discrimination, we first have to discuss one of the most widespread and persistent beliefs about the occurrence of age discrimination, that is the idea that age stereotypes and age discrimination are closely intertwined. This idea is already reflected in an early definition of ageism. According to Butler (1980) who first introduced the term, "ageism" is a complex phenomenon subsuming three different aspects: (1). Prejudice against older adults, old age and ageing (i.e., attitudes towards older adults), (2). Discrimination against older adults (i.e., behavioural acts targeting older adults), and (3). Institutional norms and strategies supporting stereotypes and reducing the opportunities of older adults. Thus, from the very beginning it was assumed that age discrimination and age stereotypes as well as prejudice against older adults represent related constructs that are "mutually reinforcing to one another" (Butler 1980, p. 1).

Although empirical evidence for the existence of age stereotypes and age discrimination related to various life domains is abundant (e.g., Brockmann 2002; Hummert et al. 1994; for more examples and reviews on age stereotypes and age discrimination, e.g., in the domains health care, mental health, and work, see Wyman and Shiovitz-Ezra; Bodner, Palgi and Wyman; De Tavernier, Naegele and Hess in this book), their assumed causal relations are difficult to prove and might be more complex than expected (Dovidio et al. 1996; Voss and Rothermund in press). In this chapter, we draw a differentiated picture of this relationship by (a) disentangling conceptual and empirical relations between age stereotypes and age discrimination and (b) focusing not only on the role of age stereotypes held by those who show ageist behaviours, but additionally considering the perspective of older adults themselves as they also hold stereotypes about (their own) age and ageing that are related to perceived age discrimination (Voss et al. 2017). Figure 2.1 gives an overview of the complex mutual relations between age stereotypes and age discrimination, simultaneously taking into account both the perspective of actor and perceiver whereby actor refers to people interacting with older adults (potentially behaving towards them in a discriminatory way) and perceiver refers to older adults (potentially perceiving age discrimination).

### 2.2 Ageist Behaviour and Perceived Age Discrimination: Different Sides of the Same Coin?

Over the last decades, laws that aim at protecting people from age discrimination have been established in legal systems of countries all over the world (e.g. Age Employment Act in the USA Discrimination in 1967; Allgemeines Gleichbehandlungsgesetz in Germany 2006; for a review of EU law and ageism see Doron, Numhauser-Henning, Spanier, Georgantzi, and Mantovani in this book). The incorporated definitions of age discrimination attempt to provide a clear and objective reference standard of what constitutes age discrimination in different areas of life (e.g., age-dependent selection and recruitment of employees). However, how people interpret behaviour and what they perceive as age discrimination does not necessarily meet these criteria (Rothermund and Mayer 2009). In everyday life, behaviour is often ambiguous and inconclusive with regard to its intentions and underlying causes (Major and Sawyer 2009), and the very same behaviour can have multiple meanings. Therefore, actual age discrimination might remain unnoticed (e.g., if it is widely accepted; Australian Human Rights Commission 2010), but older adults might also feel discriminated against although the way they were treated constitutes no instance of ageist behaviour (e.g., the behaviour was unrelated to their age or did not conflict with any rightful claims or prescriptions). In Fig. 2.1, this is captured by the dotted shape linking perceived age discrimination by the perceiver with non-discriminatory and with discriminatory behaviour produced by the actor as both can be interpreted as age discrimination. Accordingly, to acknowledge the subjective nature of an individual's perception of age discrimination, it is important to differentiate between perceived age discrimination and actual "objective" age

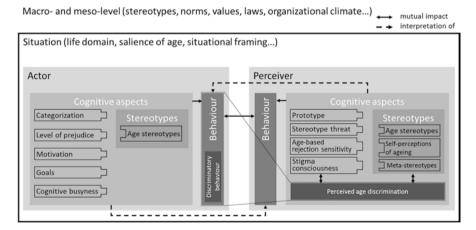


Fig. 2.1 Illustration of the relations between age stereotypes and (perceived) discriminatory behaviour considering the actor's and the perceiver's perspective as well as situational, macro-, and meso-level influences

discrimination. Considering the subjective nature of perceived age discrimination, we neither intend to deny that "objective" age discrimination exists nor do we consider (falsely) perceiving age discrimination to be less harmful than noticing actual age discrimination. This perspective can, however, help to identify individuals or situations for whom or which the probability of perceiving discrimination is particularly high (Voss et al. 2017), and it also elucidates possible relations between (perceived) age discrimination and an actor's (as well as a perceiver's) behaviour.

Although perceived and "objective" age discrimination are conceptually different, they are somehow empirically linked. For example, in the work domain, the prevalence pattern of perceived age discrimination across adulthood matches with known age preferences for workers (Gee et al. 2007). This points to the possibility that perceived age discrimination is a valid indicator or symptom of actual "objective" age discrimination, at least in some cases. Nevertheless, although perceived age discrimination shows a relation to objective indicators, age discrimination often remains under-reported, potentially due to the strong internalization of age stereotypes (European Commission 2011).

# 2.3 Age Stereotypes and Age Discrimination from the Actor's and the Perceiver's Perspective: Distinguishing Between Conceptual and Empirical Relations

Focusing on the mere definition of age discrimination, a conceptual dependency among age stereotypes and age discrimination becomes apparent. Discrimination can be defined as "inappropriate and potentially unfair treatment" (Dovidio et al. 2010, p. 8) that is based on people's group membership (e.g., belonging to a certain age group), with age being one of the three basic dimensions of automatic social categorization (besides ethnicity, social class, and sex; Fiske and Neuberg 1990). This process of categorization is assumed to be accompanied by the automatic activation of associated stereotypes (Allport 1958; Devine 1989), which in turn shapes the behaviour towards the target person. A closer look reveals that a reference to age alone is not sufficient for behaviours to be classified as age discrimination. What is needed for a categorization as ageist behaviour is a description of the behaviour in terms of a characteristic associated with age (e.g., based on age stereotypes or prejudice). Without such a reference to age stereotypes and age-related prejudice, the age categorization and the resulting behaviour would still be unconnected. Age stereotypes are thus inherent in the mere concept of age discrimination: Age-related stereotypes and prejudice represent a necessary condition for describing a behaviour as discriminatory, thereby providing a possible link between categorization and age discrimination.

Similarly, feeling discriminated against due to one's age also implies that behaviour in a situation that highlights the group membership as old is perceived or interpreted in a certain way (Major et al. 2002). Essentially, perceiving age discrimi-

nation requires that people have an idea of what it means to be treated in a discriminatory way that is "based on age". Such an idea is inherent in a prototype of a situation where discrimination is likely to occur (Baron et al. 1991; Major and Sawyer 2009; Rodin et al. 1990). This prototype is assumed to work like a template: It can be compared against actual situations and the closer they match the more likely it is that discrimination is perceived (Major and Sawyer 2009). Among other factors, this prototype is informed by the negativity of stereotypes ascribed to older people compared to younger people (i.e. *stereotype-asymmetry* which could for example be the case in situations that test cognitive abilities, as negative stereotypes about older adults are very prominent in that domain; Major and Sawyer 2009; O'Brien et al. 2008). Accordingly, individually held age stereotypes and perceived age discrimination are conceptually related, although stereotypes are assumed to be only one aspect of many possible contextual and individual characteristics influencing the attribution of behaviour to discrimination (for an overview see, Major et al. 2002; Major and Sawyer 2009).

In sum, age stereotypes are involved in actual as well as in perceived age discrimination for purely conceptual reasons. A reference to age-stereotypical attributes provides the specific link between the age of the target person and the respective discriminating behaviour by explaining or describing it in terms of age stereotypes or age-related prejudice. Importantly, however, reference to age is only a necessary, not a sufficient condition for the emergence (or interpretation) of age-discriminating behaviour. This leaves ample room for empirical analyses of the causal role of age stereotypes and of the sufficient conditions for their activation in explaining and predicting (perceived) age discrimination.

Processes of Age Stereotype Activation Early empirical research regarding processes and conditions of stereotype activation seemed to suggest that mere categorization is associated with the activation of stereotypes, even if these stereotypes were only known and not personally endorsed (Devine 1989). Although this study was later criticized for a number of methodological shortcomings (e.g., stereotype-related primes were used instead of mere category primes), it still makes an important point in showing that subtly increasing the accessibility of stereotype-related content has a marked influence on subsequent processes of perceiving, evaluating, and behaving towards others. Later research addressing this issue revealed that individual levels of prejudice of the actor had an impact on subsequent impression formation (Lepore and Brown 1997), which attests to the importance of considering individual differences in prejudice when explaining actual and perceived age discrimination.

Other variables affecting whether or not stereotypes are activated are, for example, the availability of cognitive resources (with a lack of resources preventing stereotype activation; Gilbert and Hixon 1991), mind set (priming creativity reduces stereotypic thinking; Sassenberg and Moskowitz 2005), and goals (chronic egalitarian goals are associated with stereotype inhibition; Moskowitz et al. 1999). Similarly, Rahhal et al. (2001) showed that the framing of a cognitive task as being unrelated to memory (e.g., by framing it as a learning task) can prevent the detrimental effect

on memory performance, which according to the authors might be explained by the lack of activation of corresponding negative age stereotypes. These results demonstrate that the mere categorization of someone as old does not automatically imply the activation of (negative) age stereotypes, indicating that the relation between categorization and an activation of old age stereotypes is more complex and indirect than is often assumed, and does not hold for everyone or in every situation.

Activation of Different Sub-Stereotypes of Aging Images of older people are heterogeneous and encompass a broad mixture of negative and positive stereotypes (e.g. Hummert et al. 1994) differing in their content and in the contexts to which they refer (e.g., Casper et al. 2011; Kornadt and Rothermund 2011). The valence and content of activated stereotypes should not be neglected in discussing their effects, especially as effects of (self- and other-) stereotypes on behaviour were shown to be mostly assimilation effects (i.e., behaviour and stereotypes are consistent, Wheeler and Petty 2001). Which of the multiple stereotypes is predominant in a situation depends for example on contextual information (Casper et al. 2011; Kornadt and Rothermund 2011) and the age of the target person (*young-old* vs. *old-old*; Hummert et al. 1997). Not every stereotype possibly activated in a certain situation would be associated with discrimination.

Furthermore, domain-specificity as well as the differential effects of positive and negative stereotypes were also shown with regard to the effects of age stereotype activation among older adults. Specific activated stereotypes unfold their impact most strongly in those domains to which they apply (Levy and Leifheit-Limson 2009). In particular, individually held views on ageing in a specific domain (e.g., physical losses) were only predictive of perceived age discrimination in a matching domain (e.g., medical care; Voss et al. 2017; inner black frame in Fig. 2.1). In line with the importance of stereotype valence it was shown that besides detrimental effects of negative stereotypes, the implicit activation of positive age stereotypes in older adults has positive effects (e.g., Levy 1996). Accordingly, stereotype activation depends on multiple influences and contextual information and is not necessarily detrimental for older adults.

Translation of Stereotypes into Behaviour Most importantly, although several studies show an association between stereotypes and judgements, perceptions, as well as stereotype-consistent behaviour towards older adults (e.g., Hummert et al. 1998; Krings et al. 2011) the mere stereotype activation does not imply that people inevitably act according to them (e.g. Gilbert and Hixon 1991; for a theoretical framework see Kunda and Spencer 2003), also not in an age discriminatory way. Whether or not stereotypes are applied depends for example on cognitive busyness (Gilbert and Hixon 1991) and time pressure (Gordon and Anderson 1995). Similarly, two meta-analyses on the effects of age stereotypes on different performance measures and behaviours in older adults revealed that their association depends on several variables (i.e. moderators; Lamont et al. 2015; Meisner 2012). Investigating stereotype threat Lamont and colleagues found that under certain conditions, for example, when performance in a cognitive domain was measured, the effects were

more pronounced. Meisner showed that stereotype priming effects were more pronounced when negative stereotypes are primed.

In sum, we have argued that age stereotypes and age discrimination are conceptually related, whereby age-related stereotypes and prejudice provide a possible link between categorization and age discrimination. Such a categorization may be particularly likely in situations where a conflict of interest between groups is salient (e.g., young and old persons competing for jobs, and when older adults are perceived as consuming shared resources; North and Fiske 2012). Going beyond these general conceptual connections, empirical research has contributed important insights regarding the processes underlying the activation of stereotypes and their translation into age discriminating behaviour, and has identified important moderators of this association (see "cognitive aspects" on the actor's side in Fig. 2.1; see above and Sect. 2.3.2). Age stereotypes are not inevitably negative, but differ strongly in content and valence between contexts and individuals (e.g., Kornadt and Rothermund 2011). Even holding negative stereotypes about older adults does not necessarily imply that these negative stereotypes are activated (see above "Processes of age stereotype activation"). Most importantly, however, it does not imply that they are applied and cause discriminatory behaviour (see above and Sect. 2.3). We will address these complexities in more detail in the subsequent paragraphs.

## 2.4 Ageism from the Actor's Perspective: Age Stereotypes as Predictors of Age Discrimination

The fact that age stereotypes are a reason for age discrimination is firmly established in research and in law. However, Allport pointed out as early as 1958 (p.14) that how people actually behave towards members of a group does not necessarily match what they think about these group members.

### 2.4.1 Review of Existing Evidence for Age Stereotypes as Predictors of Age Discriminatory Behaviours

A large body of research demonstrates that negative stereotypes about older adults are widespread in different areas of life whereby their content and valence depend on the specific life domain (e.g., lower performance in the domain work, Bal et al. 2011; perfect grandparent in the domain family, Hummert et al. 1994). Similarly, age discrimination takes on different forms depending on the life domain in which it occurs (e.g., fewer chances for job interviews, Bendick et al. 1999; less expensive treatments in the health care sector, Brockmann 2002). Nevertheless, most of the research conducted so far regarding age stereotypes as predictors of age discrimination focused on the work domain. Although it is assumed that age stereotypes

predict discriminatory behaviour, this is rarely tested. Often proxies of age discrimination are investigated as dependent variables like stereotype-consistent behaviour or intentions to act in a discriminatory way.

Age Stereotypes and Intentions for Age Discriminatory Behaviours A variety of studies demonstrated that negative age stereotypes predict intentions for discriminatory behaviour using experimental and correlative designs (e.g., Chiu et al. 2001; Krings et al. 2011; Rupp et al. 2006). In a vignette study with students, Rupp et al. (2006) showed that participants made more severe suggestions regarding consequences (e.g., demotion, transfer) in case that an older employee makes a mistake which was especially the case for participants with more negative age stereotypes. Additionally, the association between employee age and consequences was found to be based on the assumption that the cause of errors among older employees as compared to younger employees is more likely to be stable. Similarly, Krings et al. (2011) showed that competence- and warmth-related stereotypes mediate the association between the job applicant's age and interview intentions in a sample of business students. Most importantly, besides testing their mediation model using data from students, the authors also presented the same materials to people working in human resources departments of organizations and again found the same effect. In a study comparing age stereotypes and discriminatory attitudes across Hong Kong and the UK in a sample of part-time students some of which worked in personnel management, Chiu et al. (2001) found that negative stereotypes are related to ageist intentions regarding outcomes like training, promotion, and retention. To further test the role of stereotypes about older adults beyond information about the actual age Abrams et al. (2016) omitted age from their vignettes and instead presented two applicants which either were described using typical old skills (e.g. settling arguments, using a library) or typical young skills (e.g. learning new skills, using social media). The authors found that the participants would rather hire the candidate with the young profile. However, other studies failed to demonstrate an effect of stereotypes on discrimination within the domain of work (Leisink and Knies 2011).

Besides the inconsistency of the results within this area of research, the informative value of many studies regarding the question how age stereotypes are related to discriminatory behaviour is limited due to their design and participants relying mostly on student samples and artificial employment contexts. Regarding participants, it was shown that students and actual managers differ in their performance evaluations and hiring decision (Singer and Sewell 1989). In a meta-analytic review it was found that supervisors as compared to students evaluate older workers more positively (Gordon and Arvey 2004). Regarding the study design, Morgeson et al. (2008) found in their literature review on age discrimination in the work domain that there are fewer discrimination effects in field studies as compared to laboratory studies.

To complicate matters further, studies using a correlative design face an additional problem: The opposite direction of the causal relation between stereotypes and discrimination was proposed as well, whereby stereotypes are considered as an outcome of discrimination (Dovidio et al. 1996; Talaska et al. 2008). This hypoth-

esis is related to the justification function of stereotypes (Allport 1958) suggesting that if members of a group are rejected, cognitions are formed to justify this behaviour. A consensus might be reached in the idea that the interrelation among stereotypes and discrimination is reciprocal (Dovidio et al. 2010).

Age Stereotypes and Stereotype-Consistent Behaviour As proposed within the behaviours from intergroup affect and stereotypes framework (Cuddy et al. 2007) different behaviours towards members of groups (e.g., older adults) are based on different stereotypes about them, as well as corresponding emotions. As an example for stereotype-consistent behaviour, it was assumed that older adults are confronted with the communication predicament of ageing (e.g., Ryan et al. 1986) "as a consequence of lower expectations for performance". It was shown that people would adjust their communication with older adults for example by reducing their speaking rate depending on the context and characteristics of the older person (Hummert et al. 1998). In this study participants assumed that they would speak to an older adult described as "despondent" in a way that might reflect their age stereotypes like a lower memory performance. However, stereotype consistent or age-differentiated behaviours and judgements do not necessarily equal age discrimination.

In sum, evidence for a simple relation between explicit age stereotypes and age discrimination is sparse, especially considering how wide-spread the idea is. There are two main problems in this regard: The definitions of age discrimination are heterogeneous and in most cases indicators of actual discrimination are used as dependent variables. Accordingly, the relation of age stereotypes and age discrimination was hardly ever investigated. Additionally, studies in this field face a variety of methodological challenges which complicate the interpretation of the results. However, even without those limitations, a small association between age stereotypes and overt discriminatory behaviour against older adults would not be surprising, looking at research from a related area. As was already shown for attitude-behaviour relations in general, correlations between (stereotypical) general beliefs or attitudes and actual specific behaviour in a certain context are relatively small (Ajzen and Fishbein 2005; Schütz and Six 1996). Similarly, studies investigating age stereotypes as predictors of age discrimination show mixed results.

### 2.4.2 Moderators of the Relation Between Age Stereotypes and Ageist Behaviour

There is a variety of potential reasons for the mixed results with regard to the stereotype-discrimination relation. A wide-spread critique that was proposed comparatively early within this line of research is the neglect of situational and contextual influences on the relation between stereotypes and discrimination (e.g., Dovidio et al. 1996; inner black frame of Fig. 2.1). In a review on age stereotypes and their outcomes in the work domain, Posthuma and Campion (2009) identified the match

between perceived appropriate age in a job and actual age as a moderator of the effect of age stereotypes on age discrimination. It is assumed that besides information that can be derived from a person himself/herself (e.g., by making inferences based on someone's age) there is also information that can be inferred from the specific situation. In a selection context these different sources of information can be compared and the outcome (e.g., a hiring decision, promotion) depends on a match between target age and job age prototype (e.g., Perry et al. 1996). The authors found that young applicants are more positively evaluated for a prototypical "young-typed job" than older applicants. However, there is no difference for the typical "old-typed job". Similar propositions were made by role congruity theory that assumes that discrimination emerges from the interplay of contextual information and stereotypes about the target (Eagly and Diekman 2005). In line with role congruity theory it was shown that in contrast to younger applicants where no difference was found, the hireability of older applicants is higher for a stable company than for a dynamic company (Diekman and Hirnisey 2007). Most importantly the authors also found that this relation was further mediated by perceived adaptability.

In a meta-framework proposed by Posthuma et al. (2012) the authors acknowledge that moderators can exist on different levels whereby some of them are related to an individual level affecting mostly the association between age and stereotypes whereas others are related to the meso-level, and are more likely to affect the stereotype-discrimination association. As discussed in more detail by De Tavernier and colleagues in this book on a meso-level structural as well as softer characteristics of organizations are among the factors associated with age discrimination in the work context. Organizational climate as well as organizational structure like the average or typical age of job holders are related to targeting older applicants whereby the latter indicates that in an organization with an older workforce older applicants appear less non-traditional and less likely to violate expectations regarding typical job holders (Goldberg et al. 2013).

Although discrimination at an institutional level can be associated with stereotypes that are held by individuals and individual actions, it is part of its specific characteristics that it does not depend on them (Dovidio et al. 2010). However, an institution can reinforce the use of age stereotypes in decision making thereby strengthening the link between stereotypes and age discrimination. In the context of medical care, aspects of curricula used during the medical education can entail case studies with "typical "medical conditions of older adults (Higashi et al. 2012). In combination with institutional requirements (e.g. time pressure; Hinton et al. 2007) these circumstances create an environment that could reinforce stereotype-based decisions potentially to the disadvantage of older patients (outer black frame in Fig. 2.1). Going beyond organizational moderators, on a macro-level social norms and laws that prohibit ageist behaviour (Rothermund and Mayer 2009, p. 80) and the cultural background (Chiu et al. 2001) are also assumed to affect the stereotypebehaviour relation (outer black frame in Fig. 2.1). Accordingly, several factors on different levels have been proposed to modulate the relation between explicit age stereotypes and overt age discrimination, indicating that the relation is more complex than was initially presumed (Voss and Rothermund, in press).

## 2.5 Ageism from the Perceiver's Perspective: Individually Held Age Stereotypes as Predictors of Perceived Age Discrimination

A very interesting aspect of stereotypes about older adults which sets them apart from stereotypes based on other characteristics like gender and race is that eventually everyone gets older. At the same time, age stereotypes become internalized into perceptions older adults have about themselves and their own ageing (Kornadt et al. 2015a; Levy 2009; Rothermund and Brandtstädter 2003), so-called (future) selfviews or self-perceptions of ageing. Accordingly, age stereotypes do not only affect people's behaviour towards other people (i.e., older adults) but also older adults themselves.

## 2.5.1 Review of Existing Evidence for Age Stereotypes as Predictors of Perceived Age Discrimination

A major factor that explains who interprets others' behaviour in terms of discrimination are inter-individual differences (e.g., stigma consciousness, Pinel 1999; sensitivity to befallen injustice, Schmitt et al. 1995). Some of these concepts also relate stereotypes to perceived age discrimination. Within the framework of stigma, which manifests itself in stereotypes and prejudice (for a review see, Chasteen and Cary 2015), the so-called stigma consciousness describes the extent to which people expect that their behaviour is interpreted based on group membership and that they are stereotyped or discriminated against (Pinel 1999). Stigma consciousness was shown to be associated with perceived discrimination (Pinel 1999). Similarly, agebased rejection sensitivity describes older adults' expectation or perceptions of agebased rejection which was also shown to be related to awareness of ageism (Kang and Chasteen 2009; see "cognitive aspects" on the perceiver's side in Fig. 2.1).

Both concepts, stigma consciousness and age-based rejection sensitivity imply that older adults have an idea of which stereotypes members of an out-group hold about them (i.e. they hold meta-stereotypes, Vorauer et al. 1998) based on which they assume to be rejected or discriminated against just as in the introductory example. These meta-stereotypes were demonstrated to be related to perceived discrimination (Owuamalam and Zagefka 2013). Additionally, their own negative self-perceptions of ageing might provide a basis for the expectation of being stereotyped and discriminated as indicated by the fact that perceived stigma (e.g., being rejected, social isolation) is negatively related to different dimensions of self-perception (Fife and Wright 2000; see "cognitive aspects" on the perceiver's side in Fig. 2.1). However, the causal direction remains unclear. A process of mutual influence is conceivable whereby negative self-perceptions of ageing are related to more perceived age discrimination, which in turn reinforces negative self-perceptions of ageing. Therefore Voss et al. (2017) examined the association among self-perceptions of ageing and

perceived age discrimination across two measurement occasions that were separated by a three-year interval. Their results point to a stronger effect of self-perceptions of ageing on subsequent changes in perceived age discrimination.

Contrary to what was discussed so far, it was also shown that *positive* expectations can be related to perceived discrimination (Inman 2001) and can have negative effects on social interactions (Son and Shelton 2011). Inman concluded that people who were surprised by a negative evaluation because they had a more positive self-perception were more likely to perceive discrimination. This would indicate that those who have negative as well as those with positive views on ageing should both report higher levels of perceived age discrimination. These seemingly contradictory results might be reconciled by identifying moderators that highlight either positive or negative views on aging as a risk factor for perceiving age discrimination. A likely candidate is the reference object of views on aging, with positive *self*-views of aging and negative views on aging purportedly *held by others* pose risk factors for feeling undervalued due to one's age, rendering experiences of exclusion or rejection as examples of age discrimination.

Generally, it is assumed that whether discrimination is perceived or not does not only depend on characteristics of the individual but also on features of the situation and specific event (Major and Sawyer 2009; inner black frame in Fig. 2.1). According to *stereotype-asymmetry* assumption, people are more likely to perceive discrimination in a situation that is characterized by negative stereotypes about the perceiver than by positive stereotypes (O'Brien et al. 2008). Furthermore, macro-level aspects like societal norms and regulations are assumed to affect age stereotypes and self-perceptions of ageing (e.g., Kornadt and Rothermund 2015; outer black frame in Fig. 2.1). Processes like the internalization of stereotypes (e.g., Kornadt et al. 2015a; Levy 2009) point to the role of the macro- and meso-level influences that have an indirect impact on perceived age discrimination.

## 2.5.2 Mediators of the Relations Between Age Stereotypes and Perceived Age Discrimination

The studies and concepts discussed so far reveal that perceived age discrimination is related to age stereotypes and self-perceptions of ageing. In the current section, we address the question of how these relations can be explained, that is, we focus on the underlying mechanisms that link views on aging with perceived age discrimination. In a model from research on stigma it was assumed that stereotypes not only affect the behaviour of others, but also the way people with a stigma (e.g., old age) interpret the behaviour of others (Rüsch et al. 2005; lower dashed arrow in Fig. 2.1). In an ambiguous situation, members of stigmatized groups are more likely to

attribute negative feedback to prejudice, compared to those without a stigma (Crocker et al. 1991). Accordingly, the relations between self-perceptions of ageing as well as meta-stereotypes and perceived age discrimination could be based on an attributional bias. However, considering that perceived discrimination and "objective" discrimination are not always independent (see Sect. 2.1) it seems likely that other (additional) processes are at work.

Research on the developmental implications of views on aging has produced ample evidence that age stereotypes held by older adults are related to their own behaviour (e.g., Levy and Myers 2004; Kornadt et al. 2015b). This relation provides another potential pathway through which age stereotypes and perceived age discrimination may be linked (Voss et al. 2017). The basic idea behind this explanation is that by behaving in a stereotype-consistent manner themselves, older adults invite others to behave towards them in a stereotype-consistent fashion, which then gives rise to perceptions of age discrimination. Processes that potentially mediate the relations between age stereotypes and stereotype-consistent behaviour of older adults are internalization of age stereotypes, self-stereotyping, and stereotype threat, all of which were shown to have performance-related behavioural consequences for older adults (e.g., Hess et al. 2003; Levy 1996, 2009; Lamont et al. 2015; for more information on stereotype threat and internalization of age stereotypes see Swift, Abrams, Marques, Vauclair and Bratt in this book). A meta-analysis on the effects of priming with age stereotypes on behaviour of older adults showed the detrimental effects of the activation of negative age stereotypes on different behavioural and performance related outcomes (Meisner 2012). In a related vein, in their study on stereotype threat Hess et al. (2003) reported that older adults' memory performance decreased depending on the degree to which negative stereotypes of ageing were activated. The authors concluded that those mechanisms could also be at work in many situations in everyday life, because subtle characteristic of the environment can trigger the activation of negative age stereotypes, and thereby affect the everyday functioning and behaviour of older adults.

Interestingly, it is furthermore assumed that rejection sensitivity might act as a self-fulfilling prophecy creating a situation that confirms the expectation (Levy et al. 2001). In ambiguous situations expectations of rejection or discrimination (e.g., triggered by the assumed attitude someone has about in-group members) were shown to evoke maladaptive behaviours in terms of a reduced performance (Mendoza-Denton et al. 2009). This might increase the likelihood of a (perceived) rejection. Similarly, the effects of stereotypes on interpretation and behaviour might not represent two different mediating mechanisms but could also reinforce each other (e.g., if the interpretation of behaviour as discriminatory leads to reactance, or if an older adult's behaviour elicits behaviour in an interaction partner that is easily perceived as discriminatory).

## 2.6 Interrelations Between the Perceiver's and the Actor's Perspectives

Although so far we discussed the perspective of an older person feeling discriminated against separately from the perspective of another person behaving in a discriminatory way, it is important to note that they are most likely interrelated, as in everyday life situations behaviours and expectations of actors and perceivers reinforce each other (Snyder 2001). Consider for example that stereotypes held by older adults also affect their behaviour (see Sect. 2.4.2). The detrimental effects of stereotype threat (e.g., Hess et al. 2003) or self-stereotyping (Levy 1996) on performance could reinforce negative age stereotypes about older adults held by someone else and thus potentially evoke a corresponding reaction. These mutual effects are the central elements of Fig. 2.1: On the backdrop of social and situational constraints and cues the expectations and corresponding behaviours of interaction partners mutually reinforce each other. From studies regarding racial and gender discrimination we know that stereotypes and expectations about a target person can elicit anticipatory behaviour in the interaction partner, which again causes the target person to behave in a way that confirms the stereotype (for review see Snyder 2001; Word et al. 1974). Chen and Bargh (1997) labelled this the expectancy-driven model of behavioural confirmation effects. They demonstrated that this effect even applies to situations where stereotypes are activated unconsciously.

Based on findings demonstrating that stereotypes can elicit stereotype-confirming behaviour in the target person, one might assume that those processes can result in perceived discrimination. If for example, an older applicant in a job interview confirms negative stereotypes about older adults (e.g. because of stereotype threat or stereotype-consistent behaviour of the interviewer) this might entail a rejection. A similar effect was shown in the context of interracial bias. White interviewers created a more negative interview environment for black as compared to white participants which was, as shown in a second experiment, associated with a worse performance (Word et al. 1974). Within the context of employment, Maurer (2001) proposed a model of worker age and self-efficacy for development of career-relevant skills. According to the model, worker's age is related to the confrontation with negative age stereotypes, which results in a decrease in self-efficacy for development and career-relevant learning and eventually in a lesser degree of voluntary training activities. These behavioural outcomes would in turn confirm stereotypes about older workers being resistant to change (Weiss and Maurer 2004) and less interested in training (Ng and Feldman 2012), which then again might result in fewer training opportunities offered to older employees.

As proposed by Rüsch et al. (2005), stereotypes affect both the behaviour of actors as well as the behaviour and interpretation of stigmatized people. In interactions, this can result in a self-sustaining chain reaction whereby stereotypes not only shape expectations and interpretations but also elicit corresponding behaviours. Accordingly, in order to fully understand the interrelations among age stereotypes and discrimination from both, the perspective of older adults and potential actors,

they should be investigated in interactive situations, allowing to disentangle the mutually reinforcing contributions of both pathways.

### 2.7 Conclusion and Implications

A reference to age stereotypes and/or age-related prejudice is a constitutive element of both actual and perceived age discrimination. Importantly, this connection is necessary but not sufficient, allowing for situations in which age stereotypes are activated but do not result in age discrimination. Despite this close conceptual linkage, empirical evidence for a simple empirical association of age stereotypes and overt discriminatory behaviour is scarce. Partly, this can be traced back to the lack of studies actually examining stereotypes as predictors of overt discrimination, but also to difficulties in assessing overt "objective" discrimination and, relatedly, to the large variation of what is considered an instance of age discrimination. Considering the relatively small predictive value of stereotypes for discrimination some authors completely dismiss the idea of stereotypes as predictors of age discrimination and propose prejudice or emotions as a more promising predictor of intergroup behaviour and discrimination (e.g., Cuddy et al. 2007; Talaska et al. 2008). It was proposed that "stereotypes, beliefs, and emotional prejudices all closely relate to what people say they did or will do toward outgroup members, but emotional prejudices are more closely related to what people actually do" (Talaska et al. 2008, p. 284). Amodio and Devine (2006) showed that implicit stereotypes and prejudice distinctively predict different types of inter-group behaviours like judgements and social distance respectively. Accordingly, age stereotypes might be better predictors of perceived age discrimination than they are for "objective" discrimination. The current review of the scarce and limited literature on this important topic clearly suggests, however, that it is much too early for sweeping conclusions regarding the influence of age stereotypes on age discrimination. Additional evidence is needed, in particular, along the lines that have been suggested by recent promising studies that have extended the boundaries of the stereotype-discrimination relations by using, for example, implicit stereotype measures (Sekaquaptewa et al. 2003), by considering additional variables (e.g., Cuddy et al. 2007), or by focussing on moderators (see Sect. 2.3.2). Implicit attitude measures were shown to predict behaviours that could not be predicted by explicit measures or had predictive value above those (Dovidio et al. 2002; Vargas et al. 2004).

Future research on the relations between age stereotypes and age discrimination is urgently needed that (a) is based on an adequate definition and assessment of age discrimination, (b) combines field studies (typically using a correlative design) with more controlled experiments in the lab, and (c) takes into consideration moderating variables in order to investigate for whom and in which situations the relation holds or does not hold.

A second upshot of our review is that taking into account not only the actor, but also the perceiver's perspective provides us with a much broader and more comprehensive understanding of the stereotype-discrimination relations, and also implies a new starting point for interventions targeting age discrimination. Both perspectives can inform each other, and considering influences of age stereotypes on the behaviours and perceptions of both sides in interactive situations seems to be a promising avenue for further research. This conclusion is much in line with a suggestion that was put forward by King and Hebl (2013) who claimed that stereotyping is best investigated in real life contexts and interactions. This would also counteract the concerns regarding ecological validity (e.g., a meta-analysis on age bias in laboratory and field settings identified negative relations between generalizability and effect size, Gordon and Arvey 2004).

In sum, although conceptually an involvement of age stereotypes in age discrimination is inevitable, the mere activation of age stereotypes is by no means a sufficient condition for the occurrence of age discrimination. A full understanding of the complexities of these relations requires frameworks that incorporate additional personal and contextual constraints and also consider the domain-specificity of age stereotypes and age discrimination.

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