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Virtually old: Embodied perspective taking and the reduction of ageism under threat

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ABSTRACT

Intergroup threat harms attitudes toward the outgroup, leading to greater levels of prejudice and out-group derogation (Rothgerber, 1997). Two experiments were conducted to examine (1) if perspective taking mitigates the negative influence of threat on explicit and implicit intergenerational attitudes and, if so, (2) whether this buffering effect would be stronger for participants who embodied an elderly person in an immersive virtual environment (IVE) compared to those who engaged in a traditional perspective taking exercise via mental simulation (MS). When intergroup threat was presented without intergroup contact (Study 1), the negative effect of threat on ageism dissipated when participants engaged in a perspective taking exercise. Differential effects were found depending on the perspective taking medium. However, when participants were exposed to a concrete and experiential intergroup threat (Study 2), neither modality of perspective taking (IVE and MS) buffered negative intergenerational attitudes.

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1. Introduction

In the wake of modern medical innovations, people are living longer than ever before. According to Pew Research Center (2014), one-in-five U.S. residents will be 65 or older by 2050. Despite this major demographic shift, the elderly still face implicit and explicit forms of age-based discrimination (i.e., ageism). Existing research suggests that ageism expresses itself in various forms, including prejudicial attitudes toward the elderly, perceived dissimilarity between younger and older people, and decreased willingness to communicate with the elderly (Butler, 1980; Galinsky, Ku, & Wang, 2005; Harwood et al., 2015). Notwithstanding the emotional distress caused by such discrimination, these prejudicial attitudes also have practical ramifications; in 2013, approximately two-thirds of current and prospective American employees between ages 45 and 74 reported witnessing or experiencing age discrimination at work (AARP, 2014). Despite the pressing nature of this issue, there is very little research on ageism compared to other forms of prejudice such as sexism and racism (Nelson, 2005; North & Fiske, 2012).

Ageism is a form of *intergroup bias*, the systematic tendency to favor the ingroup over an outgroup. Intergroup bias can be exacerbated by certain features of the intergroup dynamic, such as the perception of threat from an outgroup. There is persuasive evidence that hostile outgroup attitudes are not automatic, but highly contingent on the intergroup context, such as the presence of intergroup threat (Riek, Mania, & Gaertner, 2006). The seemingly objective depiction of the elderly as a 'looming burden to the younger generation' or a 'financial threat', can thus aggravate intergenerational tension. Inciting intergroup animosity is detrimental to efforts to combat prejudice; recent studies suggest that even interventions that typically encourage positive attitudes toward outgroup members (e.g., perspective taking) can backfire in hostile intergroup contexts, leading to antisocial behavior (Pierce, Kilduff, Galinsky, & Sivanathan, 2013).

Despite the growing literature that explores the negative effects of intergroup threat on prejudice-reducing interventions, there is still little work that examines how social identity-based intergroup contexts can influence efforts to reduce intergroup bias. While the elderly are typically stereotyped as "doddering but dear" (i.e., incompetent but warm; Cuddy & Fiske, 2002), the exponential increase in longevity is triggering concerns about the practical difficulties that can accompany an aging society. Japanese finance

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minister Taro Aso made headlines in 2013 when he argued that old people should be allowed to "hurry up and die" (Bennett-Smith, 2013). However, the ageism literature has yet to fully consider the impact of these shifting intergenerational dynamics (for a notable exception, see North & Fiske, 2012). Thus, the present study aims to (1) address how the portrayal of the elderly as a threat influences the younger generation's intergenerational attitudes and (2) explore the possibility of using an immersion-based perspective taking technique as a novel method of reducing age-based prejudice, especially in hostile intergroup contexts.

1.1. Prejudice in context: intergroup threat

A number of situational factors can lead to the avoidance of empathy with others (Zaki, 2014). While prejudice is often conceptualized as a fixed attitude one holds toward an outgroup, studies show that intergroup attitudes heavily depend on the intergroup context. Perception of intergroup threat is one of the primary drivers of prejudice toward certain minority groups and immigrants (Blumer, 1958; Florack, Piontkowski, Rohmann, Balzer, & Perzig, 2003), and increases the inferred influence of social categories among children (Rhodes & Brickman, 2011).

In their efforts to synthesize previous research that focused on the influence of threat and fear on prejudice, Stephan and Stephan (2000) developed Integrated Threat Theory (ITT). According to this theoretical framework, there are four types of threat (i.e., realistic, intergroup anxiety, symbolic, and negative stereotyping) that influence prejudice toward the outgroup, and these threats are triggered by factors including the quality or amount of contact with the outgroup. Since its introduction, ITT has been revised to offer more conceptual clarity (Stephan & Renfro, 2002). However, the core ideas that threat leads to prejudice and that different types of threat have different levels of impact on intergroup attitudes remains the same.

There is a wealth of empirical evidence that points to the negative effect of threat on intergroup relationships. For example, German participants who had read a newspaper article that portrayed Turkish immigrants as a threat to their society exhibited more explicit prejudice than those who read an irrelevant article or one that depicted Turkish immigrants in a positive light. Survey data also indicated that intergroup threat, and not group identification, predicted participant's attitudes toward immigrant acculturation (Florack et al., 2003; Studies 1 & 2). Rudman, Moss-Racusin, Phelan, and Nauts (2012) similarly found that participants sabotaged female leaders, a form of sexism, but *only* when they were perceived as a threat to the status quo (Experiment 5).

In a related study, outgroup threat influenced feelings of similarity toward ingroup members. University students were more likely to feel similar to their ingroup and different from their outgroup when they were told that students from their rival university were biased against them, but this tendency did not exist for participants in the control condition or those who were led to believe their outgroup held benevolent attitudes toward them. Removing threat eliminated group-based differences in perceptions of similarity (Rothgerber, 1997). Similarly, Diekmann, Samuels, Ross, and Bazerman (1997) showed that in the absence of threat to their ingroup, students leaned toward the equal allocation of scholarship funds between their university and another local university instead of automatically favoring their ingroup (Diekmann et al., 1997; Study 2).

Drawing from 95 studies that explored the relationship between intergroup threat and outgroup attitudes, Riek et al. (2006) identified five different types of threat (i.e., realistic threat, symbolic threat, intergroup anxiety, negative stereotypes, and group esteem threat) and found that they all predicted negative outgroup views.

Taken together, these studies offer cogent evidence that individuals attempt to derogate the value of an outgroup when their social identity is under threat (Rothgerber, 1997) in order to maintain a positive social identity (Tajfel & Turner, 1979).

1.2. Perspective taking & prejudice reduction

A number of interventions have been introduced to improve intergroup relationships. Perspective taking, or the process of imagining the world from another person's perspective, is a powerful intervention technique that has been used to reduce the accessibility of stereotypes and negative outgroup attitudes (Galinsky et al., 2005). There is still an ongoing debate regarding the mechanism of how perspective taking encourages prosocial behavior and empathy; some scholars theorize that perspective taking leads to a prosocial response due to the desire to alleviate the negative affect experienced by seeing someone in distress or the perceived 'oneness' with the perspective taking target (Maner et al., 2002), while others argue that perspective taking leads to prosocial tendencies by suppressing one's egocentric vantage point (Hodges, 2008). In a more recent review, Todd and Galinsky (2014) identified two affective and two cognitive mechanisms of perspective taking, arguing that each mechanism operated under different circumstances. Regardless of the exact mechanism, however, researchers have found an overall positive relationship between perspective taking and positive interpersonal attitudes.

Multiple studies that aimed to improve intergroup relationships demonstrate the effectiveness of perspective taking in reducing bias. For example, Batson, Chang, Orr, and Rowland (2002) found that participants who had been induced to feel empathy for a member of a stigmatized group (i.e., hard drug addicts) were more likely to have positive attitudes towards the group and allocate more funds to help the group. Similarly, Galinsky and Moskowitz (2000) showed that writing a narrative essay from the perspective of an outgroup member reduced stereotype accessibility and increased self-other overlap. In addition to explicit forms of bias, perspective taking can also reduce automatic expressions of bias (Todd, Bodenhausen, Richeson, & Galinsky, 2011).

Galinsky et al. (2005) argue that one of the strongest implications of perspective taking is increased *self-other overlap,* or greater overlap between mental representations of the self and other people. People were more likely to ascribe their traits to a target person when they had previously engaged in a perspective taking exercise (Davis, Conklin, Smith, & Luce, 1996) and taking the perspective of an elderly person led to an increased overlap between traits that undergraduate students associated with themselves and those they associated with the elderly (Galinsky & Moskowitz, 2000; Study 2).

1.3. Reconsidering perspective taking

While perspective taking is an effective measure against intergroup bias, it is also an effortful and highly controlled process. Davis et al. (1996, Study 2) found that participants who engaged in a perspective taking exercise while simultaneously performing a memory task (i.e., under high cognitive load) showed significantly less self-other overlap compared to perspective takers who were not given a distracting task. Similarly, participants were successful at tailoring their instructions on how to assemble a machine model to meet the needs of their addressees (i.e., take the perspective of their addressees) when they were not under cognitive load, but were unable to do so under high cognitive load (Roxβnagel, 2000).

Furthermore, an increasing body of research suggests that perspective taking is not a panacea to outgroup prejudice and, in some cases, can yield hostile outgroup attitudes and behaviors.