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## **The dark side of subtle discrimination : how targets respond to different forms of discrimination**

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## Chapter 2

# The dark side of subtle discrimination

## The moderating role of self-esteem in responses to subtle and blatant discrimination

The question of how targets of prejudice and discrimination respond to the way they are treated is receiving increasing attention in social psychology. Much of this work focuses on the impact of perceiving that one is a victim of discrimination on psychological well-being, and in particular on individual self-esteem (for reviews see Major, McCoy, Kaiser, & Quinton, 2003; Schmitt & Branscombe, 2002). In this paper we take a different perspective by examining self-esteem as a predictor rather than as an outcome in this process. Specifically, we examine how self-esteem moderates the impact of discrimination on the emotions and behavior of its targets. We also examine how self-esteem interacts with the type of discrimination encountered, and propose that self-esteem can function as a source of vulnerability to discrimination, but only when discrimination is subtle, and not when discrimination is blatant.

### *Moderators of the impact of discrimination on its targets*

Prior research has demonstrated that discrimination constitutes an important stressor that undermines the well-being of its targets (see Miller & Kaiser, 2001; Miller & Major, 2001; Schmitt & Branscombe, 2002 for reviews). However, results from prior studies have not painted an entirely consistent picture regarding the impact of discrimination on well-being. For example, while discrimination is often associated with negative scores on indices of well-being, at other times it does not appear to have such harmful effects (for reviews see Major et al., 2003; Schmitt & Branscombe, 2002). More recently, research in this area has moved from trying to establish whether or not discrimination has a negative impact on well-being, to specifying the factors that moderate the effects of discrimination.

Several individual differences have been proposed to moderate the effects of discrimination on its targets. For example, individual differences in group identification (Major, Quinton, & Schmader, 2003; Operario & Fiske, 2001), rejection sensitivity (Mendoza-Denton, Purdie, Downey, Davis, & Pietrzac, 2002), optimism (Kaiser, Major, & McCoy, 2004), and in the endorsement of legitimizing ideologies (Major, Gramzow, McCoy, Levin, Schmader, & Sidanius, 2002) have all been shown to modify how targets perceive and respond to prejudice or discrimination.

One important way through which individual difference variables can affect how targets deal with the prejudice they encounter is by providing psychological resources that reduce the negative emotional impact of discrimination and lead to appropriate choice of behaviors that allow them to better cope with this negative event (Major, Quinton, & McCoy, 2002; Miller & Kaiser, 2001). For example, an optimistic outlook on life leads targets to appraise discrimination as less stressful and to feel more confident that they can cope with it (Kaiser et al., 2004). For this reason, Kaiser et al. (2004) describe an optimistic outlook as a source of resilience to discrimination, and conversely a pessimistic outlook as a source of vulnerability to discrimination.

In the studies reported in this paper we examine the possibility that personal self-esteem might also determine individual vulnerability to the effects of social discrimination. Personal self-esteem has long been regarded as a central variable in this field, but it has so far been approached solely as an outcome of discrimination (see e.g., Crocker & Major, 1989 for a review). As a consequence, although we know that exposure to discrimination affects self-esteem, we do not yet know how this will determine how targets approach a subsequent situation involving discrimination. Yet it is clear that exposure to discrimination can constitute a repeated event (e.g., Sue, Capodilupo, Torino, Bucceri, Holder, Nadal, & Esquilin, 2007). As a consequence, although self-esteem can be seen as an outcome of discrimination, it can constitute an input factor at a subsequent occasion and determine how targets deal with subsequent discriminatory events. Of course, self-esteem is affected by a whole range of other situations (see e.g., Baumeister, 1998), not only by discrimination. Thus the concrete question we pose is whether or not prior level of self-esteem determines how targets experience a new encounter with discrimination.

### *Self-esteem and responses to negative feedback*

Personal self-esteem can be defined as a person's evaluation of the self (Baumeister, 1998). It is possible to speak about global feelings of personal self-esteem (Rosenberg, 1986), as well as of more specific self-esteem connected to particular domains (e.g., Heatherton & Polivy, 1991). Importantly, both global and specific self-esteem have been shown to shape reactions after negative feedback (Dutton & Brown, 1997). For example, people with high self-esteem expect to succeed, while people with low self-esteem have lower expectations of success (Bandura, 1982; Taylor & Brown, 1988). These future expectations, whether with a general focus (Kaiser et al., 2004), or more specifically with regard to social interactions (Mendoza-Denton et al., 2002), are closely related to self-esteem, but these constructs are theoretically and empirically distinct (Scheier, Carver, & Bridges, 1994). Perhaps partly because of these different expectations, when they receive negative feedback, the attributions that people with low self-esteem make tend to be more internal and more global than the attributions that people with high self-esteem make in a similar situation (Brewin & Furnham, 1986; Campbell, 1990; Feather & Simon, 1971). In turn, this pattern of attributions means that negative feedback has more implications for the self-concept of people with low self-esteem than for the self-view of people with high self-esteem. Importantly, even when they make similar attributions for a negative outcome, the emotions experienced and the behavior displayed by people with low and high self-esteem are still likely to differ. Compared to people with low self-esteem, people with high self-esteem tend to hold a wide range of positive beliefs about themselves, which make them less vulnerable and more resourceful when they encounter a particular drawback (Baumeister, 1993; Greenberg, Solomon, Pyszczynski, Rosenblatt, Burling, Lyon, Simon, & Pinel, 1992; Steele, Spencer, & Lynch, 1993; Taylor & Brown, 1988). As a consequence, prior research found that high self-esteem seems to serve as an emotional buffer. For example, people with low self-esteem report more negative emotional reactions to failure than people with high self-esteem (Baumeister & Tice, 1985; Kernis, Brockner, & Frankel, 1989). Importantly, however, self-esteem does not moderate all types of emotional reactions. Indeed, self-esteem only appears to moderate emotional

reactions that implicate the self, such as shame or disappointment with the self, while it does not moderate emotions that are directed at others (Brown & Dutton, 1995).

With regard to the behavioral strategies that people with low or high self-esteem use to deal with negative feedback, prior research has shown that people with high self-esteem are more action-oriented after failure, focusing for example on improving themselves and their performance (Perez, 19993; Shrauger & Sorman, 1977). By contrast, people with low self-esteem tend to deal with their negative emotions by focusing on themselves and on how they are feeling (Kuhl, 1994).

### *The interplay between personal self-esteem and type of discrimination*

This brief review of prior findings indicates that self-esteem generally moderates responses to negative feedback. The question we address in this research is whether or not this is also likely to be the case when negative feedback is associated with social discrimination. We argue that this is likely to depend on the type of discrimination encountered. Specifically, we propose that self-esteem is likely to moderate responses to discrimination but only when it is subtle, and not when it is blatant.

As has been demonstrated before, in addition to blatant discrimination, in modern societies prejudice is also expressed in more subtle or ambiguous ways (e.g., Gaertner & Dovidio, 1986; McConahay, 1986; Swim, Aikin, Hall, & Hunter, 1995). Although the distinction between these two types of discrimination is well-documented in the literature, research on the targets' perspective has rarely taken this difference into account (see Barreto & Ellemers, 2005 and Major et al., 2003 for two examples of research where this difference has been examined). However, the experience of discrimination when it is subtle is likely to differ in important ways from when it is blatant. For example, while blatant discrimination is likely to be easily identified as such, targets of subtle discrimination are likely to be less certain that they have encountered discrimination (e.g., Barreto & Ellemers, 2005; Major et al., 2003). In addition, the fact that subtle discrimination is more pervasive in modern societies than blatant discrimination also means that

it is likely to have more negative consequences for psychological well-being (Schmitt, Branscombe, & Postmes, 2003). Given that subtle and blatant discrimination have quite different characteristics, the factors that moderate the effects of these two types of discrimination are also likely to differ.

As argued by Major, Quinton, and Schmader (2003), individual difference variables are unlikely to moderate effects of discrimination when it is blatant, but more likely to determine individual responses when discrimination is ambiguous. When the cues in the social context are very clear, such as when discrimination is blatant, the appropriate emotional and behavioral response is also clear and this should over-rule any possible effect of individual difference variables (see also Hansen & Sassenberg, 2006; Snyder & Ickes, 1985). Furthermore, given that blatant discrimination is relatively rare in modern societies, blatant discrimination is likely to direct attention away from the self and towards the source. Due to this other-focus, individual responses are likely to depend less on variables that are rooted in self-views - such as personal self-esteem.

By contrast, subtle or ambiguous discrimination provides the fertile ground for individual difference variables to operate. As demonstrated by Major et al. (2003) with regard to the moderating role of individual differences in group identification, in these 'weak' social contexts, cues for how to behave are unclear and individual difference variables are likely to guide people's responses (see also Snyder & Ickes, 1985). In addition, in contexts where the individual self is highly salient (as happens in many discriminatory contexts, such as job interviews or dating situations), subtle discrimination is likely to promote self-focused responses. This is because in these contexts attention is focused on the individual and his or her qualities, and the inability to identify that discrimination is the cause of a negative outcome (as in the case of subtle discrimination) is unlikely to draw attention away from the self. The self-focused responses that follow are likely to be moderated by affect towards the self, such as personal self-esteem. We therefore argue that individual differences in self-esteem are likely to moderate responses when discrimination is subtle, but not when it is blatant.

*The current research: How self-esteem moderates the effect of subtle discrimination on emotions and behavior*

The research we report in this paper extends past research in two ways: 1) by providing a direct examination of how self-esteem interacts with type of discrimination to determine emotional responses to discrimination and 2) by extending this analysis to the examination of some of the behavioral strategies that targets of discrimination may engage in to deal with this situation.

With regard to emotional responses to discrimination, and in line with our argument outlined above, we predict that self-esteem will moderate *self-directed* emotional responses to subtle discrimination, but that it will not moderate emotional responses to blatant discrimination (Hypothesis 1). Indirect evidence for this process stems from prior work showing that blatant discrimination is accompanied by other-directed emotions such as anger and hostility, whereas – compared to blatant discrimination - subtle discrimination elicits more self-directed emotions such as self-anger and insecurity (Barreto & Ellemers, 2005; Hansen & Sassenberg, 2006). As demonstrated by Brown and Dutton (1995), while other-directed emotions (such as those elicited by blatant discrimination) are unlikely to be moderated by personal self-esteem, self-esteem is expected to moderate self-directed emotions (as those that accompany subtle discrimination). This is consistent with our argument that self-esteem should moderate emotional responses to subtle discrimination, but not to blatant discrimination. However, it is clear that more direct evidence for this process is needed and this is what we aim to provide in this paper (Studies 1-3).

When we turn our attention to behavioral responses to discrimination, it is important to note that research in this area has so far not dedicated much attention to examining the actual behavior that people may display when they encounter discrimination. Prior research has examined behavior in other related contexts, such as during intergroup interaction (see Shelton, Richeson, & Vorauer, 2006 for a review), or when stereotypes are salient (see Steele, Spencer, & Aronson, 2002 for a review). Prior research has also examined behavioral intentions to protest when group disadvantage is made clear (van Zomeren, Spears, Fischer, & Leach, 2004), and self-reports of coping behavior (e.g., Foster, 2000; Noh & Kaspar, 2003), or coping ability (Kaiser et al., 2004) as

a response to personal discrimination. However, actual behavioral responses to discriminatory treatment have to date been neglected.

A range of behaviors can seem relevant in this context. Our focus, however, is on a particular class of behaviors that targets of discrimination can engage in when, after receiving discriminatory treatment, they are granted a new opportunity to demonstrate their individual qualities. In this context, we are particularly interested in individual performance (Studies 2 and 3) and stereotypical self-presentation (Study 3), as both of these behaviors offer the individual an opportunity to disconfirm the appropriateness of the stereotypical treatment to which it has been subjected.

As indicated above, past research has already demonstrated that self-esteem affects individual performance after negative feedback (Perez, 1993; Shrauger & Sorman, 1977). Past research has also demonstrated that the salience of negative stereotypes about one's group can negatively affect individual performance (Steele & Aronson, 1995), and that this happens mainly when the stereotype is implicit, but not when it is explicit (Kray, Thomson, & Galinsky, 2001), or when past discrimination against the ingroup is unclear, but not when it is clear (see also Barreto, Ellemers, & Palacios, 2004). Finally, prior research has also demonstrated that individuals can react against negative stereotypes about the ingroup by decreasing the extent to which they indicate that the stereotype applies to the self (Spears, Doosje, & Ellemers, 1997), or by trying to compensate for a negative stereotype by behaving extra friendly (Miller, Rothblum, Brand, & Felicio, 1995). However, researchers have not yet combined these insights to examine how self-esteem interacts with type of discrimination to determine the extent to which individuals can successfully profit from new opportunities to demonstrate their individual qualities after they have personally been targets of discrimination. In line with our argument, we expect that people with low self-esteem are less likely to behave in ways that would disconfirm the negative stereotype (i.e., to perform well and to present themselves in non-stereotypical ways) than people with high self-esteem. Moreover, in line with the idea that blatant discrimination induces an other-focus that renders individual differences in self-esteem less relevant, we propose that self-esteem should only moderate stereotype disconfirmation behavior when discrimination is subtle, but not when discrimination is blatant (Hypothesis 2). In sum, we predict that

individuals with low self-esteem who are confronted with subtle discrimination are likely to engage in a pattern of self-defeating behaviors that impair their ability to profit from new opportunities after discriminatory treatment.

### *Overview of the studies*

To meet our goals, we first developed a paradigm to manipulate type of discrimination and carried out a pilot study to test this paradigm and compare perceptions of subtle and blatant discrimination with perceptions of negative feedback under control conditions. We subsequently used this paradigm to conduct 3 studies focusing on responses to subtle and blatant discrimination. In Study 1 we examined how self-esteem interacts with type of discrimination to determine self-directed and other-directed emotional reactions to discrimination. In Study 2 we address self-directed negative emotions as well as performance. In Study 3 we focus on how self-directed emotions, performance, and self-stereotyping are adapted as a function of self-esteem and type of discrimination.

### Pilot Study

The main goal of this Pilot Study is to examine whether the procedure we developed to induce blatant vs. subtle discrimination works as intended. Specifically, we examine how participants perceive and evaluate the procedures involving blatant and subtle discrimination, and compare this to how they evaluate the procedure used in a control condition. Our intention is to demonstrate that participants who are confronted with subtle discrimination perceive their rejection as more due to discriminatory treatment than in the control condition, but as less the result of discriminatory treatment than in the blatant condition.

#### *Method*

*Participants:* Participants were 37 female students at Leiden University with a mean age of 22. Each session of the experiment lasted approximately 10 minutes, after which all participants were fully debriefed and received 1 Euro (approximately 1.25 USD) for their participation.

*Design and procedure* The study consisted of a 3 (type of discrimination: blatant vs. subtle vs. control) between-participants factorial design. All participants sat in separate cubicles, equipped with personal computers. The study was introduced as a part of a training program at the department of social and organizational psychology, to train people in conducting job-interviews through the internet. To motivate participants to do their best and to increase their commitment to the task, they were told that participants who performed best would have a higher chance of winning a lottery prize of 20 euros. After the cover story was introduced, participants completed a short CV-form to be delivered to the interviewer. This CV-form included the information that would be crucial for considering gender discrimination as a possible attribution for the negative feedback: gender category membership. After the computer made a (simulated) connection with the interviewer and prior to the interview, some personal information about the interviewer was provided to the participant (name: Paul; 30 years old). During the interview, participants in the subtle and blatant conditions were asked a set of 10 interview questions which indirectly referred to stereotypes about women (e.g., “do you ever dress attractively in order to influence other people?”, “are you often emotional at work because of something you did not manage to do?”, “do you think it will be hard to combine your family life with your career?”). Participants indicated their answer to each question on a scale of 1 (“rarely”) to 7 (“very often”). In the control condition, participants were asked a set of 10 questions which were parallel to those used in the experimental conditions in terms of domain, but which were not loaded by references to gender stereotypes (e.g., “are you willing to dress in ways that represent your profession?”, “do you think you deal well with emotionally loaded situations?”, “do you find it important to make a career?”). Once the interview was finished, the interviewer indicated that he needed some time to decide whether or not he would select the participant in question, and the connection with the interviewer was terminated. After waiting for 90 seconds, participants read that the interviewer had come to a decision, the alleged connection with the interviewer was renewed and the participants saw the feedback of the interviewer, containing the manipulation of type of discrimination. In the *blatant* discrimination condition, participants received the following feedback: “You are not selected, because you were not able to answer the crucial questions properly. By the way, women are generally

not suitable candidates for these kinds of jobs. Since you are a woman, it would be very unlikely that you would be found to be a suitable candidate". In the subtle discrimination condition and in the control condition, the interviewer told participants: "I am sorry to inform you that you are not selected. You did not answer the crucial questions properly". The association of this ambiguous rejection with the gender-based interview questions in the subtle discrimination condition was meant to cause ambiguity about whether gender discrimination was the cause of the rejection. This should not be the case in the control condition where the same feedback was provided as in the subtle discrimination condition, but unbiased questions were asked during the interview. After this feedback was provided, connection with the interviewer was terminated and participants were asked to answer set of questions about the selection procedure (some filler questions and manipulation checks). Participants were urged to respond earnestly to these questions, which were alleged to serve to improve the selection procedure.

*Manipulation checks:* All responses were made on 7 point rating scales ranging from (1) "not at all" to (7) "very much". First, we checked how people evaluated the interview by asking participants to indicate how appropriate they found each of the 10 interview questions for such a job interview procedure ( $\alpha = .80$ ). To check the effectiveness of the type of discrimination manipulation, we assessed perception of gender discrimination with 2 items ("the selection that was made was due to gender discrimination", "the selection that was made was due to prejudice from the interviewer") which formed a reliable scale ( $r = .63, p < .001$ ).

#### *Results and Discussion:*

*Evaluation of interview questions:* A one-way ANOVA revealed a reliable main effect for Type of Discrimination  $F(2, 34) = 6.16, p < .005, \eta^2 = .27$ . Inspection of means with planned comparisons revealed that, as intended, in the control condition, the interview questions were evaluated as reliably more appropriate for a job interview ( $M_{control} = 4.95, SD = 0.70$ ) than in the subtle,  $F(2, 34) = 10.11, p < .005$ , and blatant discrimination  $F(2, 34) = 8.40, p < .01$  conditions. Moreover, as intended, participants in the subtle and blatant discrimination conditions evaluated the interview questions in the same way ( $M_{subtle} = 3.90, SD = 1.15$ , and  $M_{blatant} = 3.78, SD = 0.88$ ),  $F < 1, ns$ .

*Perceived discrimination:* We subjected perceptions of discrimination to a one-way ANOVA. This analysis revealed a reliable main effect of Type of Discrimination,  $F(2, 34) = 23.51, p < .001, \eta^2 = .58$ . As intended, planned comparisons showed that participants perceived more discrimination in the blatant discrimination condition ( $M = 6.00, SD = 1.11$ ) than in the subtle discrimination condition ( $M = 4.62, SD = 1.51$ ),  $F(1, 34) = 7.00, p = < .05$ . Importantly, and consistent with our intentions, participants in the control condition ( $M = 2.37, SD = 1.25$ ) perceived reliably less discrimination, compared both with participants in the subtle discrimination condition,  $F(1, 34) = 18.32, p = < .001$ , and with participants in the blatant discrimination condition,  $F(1, 34) = 46.11, p = < .001$ .

In sum, in line with our intentions, these results show that the procedure we selected to manipulate type of discrimination works as intended. In particular, these results show that subtle discrimination was perceived differently both from blatant discrimination and from a non-discriminatory rejection: participants in the subtle discrimination condition judged the interview questions as less appropriate than controls, and the interview procedure as more discriminatory than participants in the blatant condition. With these results in mind, we are confident that this procedure induces the perceptions that we focus on in this paper and proceed to examining how self-esteem moderates the impact of subtle discrimination.

### Study 1

To examine the role of self-esteem in responses to subtle versus blatant discrimination, in this study we orthogonally manipulate type of discrimination and level of self-esteem. Because our focus in this paper is on the impact of discrimination as a function of type of discrimination, we control for exposure to discrimination but vary whether or not it is subtle, resulting in a two level factor of type of discrimination: subtle vs. blatant. Self-esteem was also manipulated with two levels: low vs. high self-esteem.

Our main focus in this first study is to examine emotional reactions to subtle vs. blatant discrimination as a function of self-esteem. We examine two

types of emotional reactions: *other-directed* and *self-directed emotions*. We expect that, when prejudice is subtle differences in self-esteem will determine the extent to which self-directed negative emotions emerge, such that people with high self-esteem are less likely to report negative self-directed emotions when exposed to subtle prejudice than people with low self-esteem. We do not expect self-esteem to moderate other-directed emotions. We also do not expect self-esteem, to moderate emotions in the blatant condition.

### *Method*

*Participants:* Participants were 108 female students at Leiden University with a mean age of 20. Each session of the experiment lasted approximately 45 minutes, after which all participants were fully debriefed and received 4.75 Euros (approximately 6 USD) for their participation.

*Design and procedure:* The study consisted of a 2 (type of discrimination: blatant vs. subtle) X 2 (self-esteem: low vs. high) between-participants factorial design. The general procedure of this study and the manipulation of type of discrimination were identical to the procedure used in the Pilot Study. However, in this study we also manipulated self-esteem. Self-esteem was manipulated after the interview, but before negative feedback was provided. This was done because manipulating self-esteem before the interview could have influenced participants' performance in the interview, and this was not the focus of our research. By manipulating self-esteem after the interview we control for any effects that self-esteem may have on interview performance and examine only how self-esteem moderates reactions to negative feedback. However, we also found it important to manipulate self-esteem before negative feedback was provided. Our idea was that self-esteem should be seen as a resource to deal with negative feedback, and thus something that exists prior to that feedback. Manipulating self-esteem after the negative feedback would have addressed a slightly different question, i.e., how self-esteem modifies initial reactions to rejection. Although this is also an interesting question worthy of attention, this was not the focus of our research.

Our manipulation of self-esteem was inspired in prior work by Bem (1972) demonstrating that people's attitudes (e.g., towards themselves) are often inferred from their observation of their own behavior (e.g., how successful they are). We

thus created a situation in which half of our participants would perform poorly and therefore feel bad about themselves, while another half would perform well, and therefore feel good about themselves (see also McFarlin & Blascovich, 1984). Although we used performance feedback to manipulate self-esteem, it is important to note that performance feedback has been shown to affect self-esteem across a variety of domains (Heatherton & Polivy, 1991). So this procedure should affect both more global and more specific aspects of self-esteem. In turn, both global as well as specific self-esteem affect reactions to failure (Dutton & Brown, 1997).

After the interview, we asked participants to participate in an ostensibly different study while waiting for the interviewer to make a decision. This separate study was introduced as a short IQ-test and in reality consisted of questions selected from existing IQ tests, covering various domains. Participants were given 9 minutes to complete the test. In the low self-esteem condition, the questions included in this test were very difficult and the test was virtually impossible to complete within the specified time. In the high self-esteem condition, the questions were easy and the test could be completed within the specified time. After the 9 minutes had elapsed, the alleged connection with the interviewer was renewed and the manipulation of type of discrimination was introduced, in the same way as in the Pilot Study. After the manipulation of type of discrimination, the connection with the interviewer was again terminated, and participants were asked to answer a set of questions about the selection procedure (dependent measures). To provide a rationale for asking these questions, they were again introduced as a means to allegedly improve the selection procedure. Participants were urged to respond earnestly.

*Dependent measures:* All responses were indicated on 7 point rating scales ranging from (1) "not at all" to (7) "very much". The effectiveness of the self-esteem manipulation was checked immediately after the manipulation of self-esteem and before the manipulation of type of discrimination with 2 items ("I think I did well on the test" and "I am confident about the correctness of my answers,  $r = .79, p < .001$ "). The effectiveness of the type of discrimination manipulation was assessed with the same 2 items as in Pilot Study ( $r = .68, p < .001$ ). Other-directed emotions were assessed by asking participants to what extent they were angry, upset, irritated, hostile and experienced feelings of revenge toward the

interviewer ( $\alpha = .87$ ). Self-directed negative emotions were assessed by asking participants to indicate to what extent they felt angry with themselves, were annoyed with themselves, and were disappointed with themselves ( $\alpha = .78$ ). A principal components analysis confirmed that other-directed and self-directed emotions loaded on two separate factors which together explained 68 % of the variance.

### *Results*

All variables were analyzed with 2 (type of discrimination: blatant vs. subtle) X 2 (self-esteem: low vs. high) between participants analyses of variance.

*Manipulation checks:* The ANOVA performed on the self-esteem manipulation check revealed that participants in the low self-esteem condition expressed less confidence in their own abilities ( $M = 3.07$ ,  $SD = 0.62$ ) than participants in the high self-esteem condition ( $M = 4.91$ ,  $SD = 0.71$ ),  $F(1, 104) = 201.33$ ;  $p < 0.001$ ,  $\eta^2 = .66$ . No other effects on this measure were reliable. The manipulation of self-esteem can thus be considered successful. To check for the effectiveness of the manipulation of type of discrimination, we performed an ANOVA on the scale assessing perception of discrimination. As intended, the analysis only revealed a reliable main effect for Type of discrimination. Participants in the subtle discrimination condition perceived the situation as less discriminatory ( $M = 3.77$ ,  $SD = 1.54$ ) than participants in the blatant discrimination condition ( $M = 5.72$ ,  $SD = 0.99$ ),  $F(1, 104) = 62.19$ ,  $p < .001$ ,  $\eta^2 = .37$ .

*Other-directed emotions:* An ANOVA on other-directed emotions only revealed the predicted main effect of Type of discrimination. Overall, participants in the blatant discrimination condition ( $M = 3.94$ ,  $SD = 1.73$ ) reported more negative emotions directed at the interviewer than participants in the subtle discrimination condition ( $M = 2.48$ ,  $SD = 1.47$ )  $F(1, 104) = 22.54$ ,  $p < .001$ ,  $\eta^2 = .18$ .

*Self-directed emotions:* To test our hypothesis that when faced with subtle discrimination individuals with low self-esteem show more self-directed negative emotions than those with high self-esteem, we submitted the self-directed emotions measure to a between participants ANOVA. This analysis revealed a reliable main effect for Type of discrimination,  $F(1, 104) = 4.15$ ,  $p < .05$ ,  $\eta^2 = .04$ , which was qualified by a reliable interaction between the two factors,  $F(1, 104) =$

3.87,  $p = .05$ ,  $\eta^2 = .05$ . Inspection of means revealed (see Table 1) that the level of self-esteem did not have effect on self-directed negative emotions in the blatant discrimination condition,  $F(1, 105) < 1$ , *ns*. However, as predicted, in the subtle discrimination condition participants low in self-esteem reported reliably more self-directed negative emotions than participants high in self-esteem,  $F(1, 105) = 6.23$ ,  $p < .05$ . As a result of this effect, the Type of discrimination manipulation had a differential effect on participants with low self-esteem. Participants with low self-esteem reported more self-directed negative emotions in response to subtle discrimination than in response to blatant discrimination,  $F(1, 105) = 7.90$ ,  $p < .01$ .

Table 1. Self-directed negative emotions in Study 1.

	Blatant		Subtle	
	SE low	SE high	SE low	SE high
Self-directed negative emotions	1.73 <sup>b</sup> (0.77)	1.79 <sup>b</sup> (0.73)	2.43 <sup>a</sup> (1.18)	1.80 <sup>b</sup> 0.89

Note 1: Standard deviations are reported between parentheses below each mean.

Note 2: Means with different superscripts differ reliably from each other.

### Discussion

The findings of this first study support our proposition that self-esteem moderates the impact of subtle discrimination on self-directed negative emotions. As predicted, we found that subtle discrimination resulted in higher levels of self-directed negative emotions among participants with low self-esteem than among those high in self-esteem. This result suggests that people with low self-esteem are most vulnerable to the harmful emotional effects of subtle discrimination. This extends prior research by demonstrating that personal self-esteem can function as a source of vulnerability (low self-esteem) or resilience (high self-esteem) to the effects of social discrimination.

Another important finding of this research is that self-esteem did not moderate other-directed negative emotions or emotional reactions to blatant discrimination. Specifically, participants reported anger towards the source of blatant discrimination (see also Barreto & Ellemers, 2005; Hansen & Sassenberg, 2006) and this was not moderated by personal self-esteem. This is in line with the

idea that blatant discrimination offers clear cues that guide targets' responses and over-ride any possible effect of individual difference variables (Major et al., 2003). In particular, blatant discrimination creates an other-focus that precludes self-focused individual difference variables such as personal self-esteem from moderating targets' responses. By contrast, subtle discrimination in a context where the focus is on individual qualities (i.e., a job interview) promotes self-directed attention and the result of this self-directed attention is moderated by the individual's level of self-esteem.

It is important to note that the manipulation checks included in this study again attest to the success of our manipulation of type of discrimination. Importantly, perception of discrimination was not affected by self-esteem, demonstrating that we succeeded in creating a context that was equally blatant vs. subtle irrespective of degree of self-esteem. We can thus state that our findings demonstrate that self-esteem moderates emotional responses to a situation that is perceived in a similar way by people with low and high self-esteem. With regard to the manipulation of self-esteem, we were also able to show that participants in the low self-esteem condition felt worse about their performance than participants in the high self-esteem condition (see also McFarlin & Blascovich, 1984). In hindsight, however, it would have been best to also show that this manipulation affected participants' self-esteem as measured more globally. This is a caveat that will be addressed in the second study. Study 2 will also expand on this first study by examining behavioral responses to subtle discrimination as a function of personal self-esteem.

## Study 2

In this second study we focus on investigating how self-esteem moderates the effects of subtle discrimination on the self. We again examine indicators of self-directed negative emotions and we expand this analysis by examining individual behavior in the form of task performance. In line with Study 1, we expect to replicate our findings that, when faced subtle discrimination individuals with low self-esteem will experience more self-directed negative emotions than individuals with high self-esteem. Additionally, we expect that when

subjected to subtle discrimination, people with low self-esteem will be more likely to show suboptimal task performance than people with high self-esteem. Because we predict parallel findings for emotions and behavior as an indicator of self-defeating response patterns, we will also explore whether emotional reactions relate to behavioral responses.

### *Method*

*Participants:* Participants were 74 female students at Leiden University with a mean age of 21. Each session of the experiment lasted approximately 45 minutes, after which all participants were fully debriefed, thanked for their participation and paid 4 Euros (approximately 5 USD) for their participation.

*Design, procedure, and dependent variables:* The design and the procedure of this study were identical to those of Study 1.

We extended the manipulation check of self-esteem by adding 3 items from Rosenberg's (1986) global self-esteem scale adapted to measure global *state* self-esteem. The added items were: "at the moment, I am satisfied with myself", "at the moment, I don't think I have much to be proud of" (recoded), and "at the moment, I think I have a number of good skills". These items formed a reliable scale ( $\alpha = .82$ ). Because the scale composed by these items was reliably correlated with the scale made by the items used in Study 1 ( $r = .36, p < .005$ ) and all items together formed a reliable scale ( $\alpha = .79$ ), we aggregated them into a composite measure of self-esteem. We used the same check of the manipulation of type of discrimination, which was again reliable ( $r = .88, p < .001$ ). Self-directed emotions were assessed in the same way as in Study 1 ( $\alpha = .90$ ). After these measures, we informed participants that we were interested in ascertaining to what extent the interviewer had made a correct decision. For that, participants would be asked to perform an additional task. Participants read that, if they were to perform well on this additional task, this would allegedly enable us to evaluate and potentially reverse the decision of the interviewer. In this way the task was framed as a new chance and an opportunity to improve the individual's position. This task consisted of a selection of items from existing IQ tests, covering the domains of verbal ability, math ability, and logical reasoning.

### Results

All analyses follow a 2 (type of discrimination: blatant vs. subtle) X 2 (self-esteem: low vs. high) between participants factorial design.

*Manipulation Checks:* Analysis of the self-esteem check revealed that, as intended, participants in the low self-esteem condition reported lower levels of self-esteem ( $M = 3.97$ ,  $SD = 0.87$ ) than participants in the high self-esteem condition ( $M = 5.15$ ,  $SD = 0.87$ ),  $F(1, 70) = 34.81$ ,  $p < .001$ ,  $\eta^2 = .33$ . A similar effect is obtained if we analyze the 3 items from the Rosenberg self-esteem separately. Also as intended, participants in the blatant discrimination condition reported perceiving more discrimination ( $M = 6.33$ ,  $SD = 0.74$ ) than participants in the subtle discrimination condition ( $M = 3.46$ ,  $SD = 1.22$ ),  $F(1, 70) = 155.14$ ,  $p < .001$ ,  $\eta^2 = .69$ . These results confirm the success of our manipulations.

*Self-directed emotions:* As predicted a 2 X 2 ANOVA only revealed a reliable interaction effect between the two factors,  $F(1, 70) = 5.42$ ,  $p < .05$ ,  $\eta^2 = .07$ . Inspection of means from Table 2 shows that, when faced with subtle discrimination, participants low in self-esteem show more self-directed negative emotions than participants high in self-esteem, although this is only marginally reliable  $F(1, 70) = 3.04$ ,  $p < .08$ . Self-esteem did not moderate self-directed negative emotions when discrimination was blatant  $F(1, 71) = 1.20$ ,  $p = .28$ . Unexpectedly, we also found that participants with high self-esteem reported more negative self-directed emotions when discrimination was blatant than when it was subtle  $F(1, 71) = 4.97$ ,  $p < .05$  (see Table 2 for relevant means). No other contrasts were reliable.

Table 2. Self-directed negative emotions and performance in Study 2

	Blatant		Subtle	
	SE low	SE high	SE low	SE high
Self-directed negative emotions	1.69 <sup>ab</sup> (0.67)	2.20 <sup>a</sup> (1.34)	2.06 <sup>a</sup> (1.22)	1.46 <sup>b</sup> (0.58)
Performance	10.22 <sup>ab</sup> (2.39)	10.05 <sup>ab</sup> (2.58)	9.22 <sup>b</sup> (3.19)	11.67 <sup>a</sup> (2.61)

Note 1: Standard deviations are reported between parentheses below each mean.

Note 2: Means with different superscripts within each row differ reliably from each other.

*Task performance:* An ANOVA using the number of correct answers on the performance task as the dependent variable only revealed the predicted two-way interaction,  $F(1, 70) = 4.31, p < .05, \eta^2 = .06$ . As we can see from Table 2, and consistent with our predictions, participants performed more poorly when confronted with subtle discrimination when they had low self-esteem than when they had high self-esteem,  $F(1, 71) = 7.42, p < .01$ . No other contrasts were reliable.

To explore whether the self-directed negative emotions mediated the effect of the manipulations on performance, we conducted mediation analyses following the procedure outlined by Baron and Kenny (1986). We found no reliable relationship between self-directed emotions and performance ( $r = .05, ns$ ), and as a consequence self-directed emotions did not mediate the effect of the manipulations on performance (Sobel  $t = .05, ns$ ).

### *Discussion*

The results of this second study replicate and extend the finding of Study 1 that self-esteem moderates reactions to subtle discrimination. Although the contrasts between subtle and blatant discrimination conditions were not reliable, we did find – as predicted – that self-esteem moderated participants' emotions and behavior in the subtle discrimination condition and not in the blatant discrimination condition. Indeed, we again found that subtle discrimination led to more negative self-directed emotions among participants with low self-esteem than among participants with high self-esteem. In addition, we found that participants with low self-esteem performed more poorly than participants with high self-esteem when confronted with subtle discrimination. Importantly, we again demonstrated that our manipulation of type of discrimination was successful, and that self-esteem did not modify perception of discrimination. Finally, we provided further evidence for the success of our manipulation of self-esteem by demonstrating that it affected self-ratings of global personal self-esteem.

It is however important to acknowledge that, in contrast to our expectations, in this study we found that participants with high self-esteem reported more negative self-directed emotions in the blatant than in the subtle condition. Perhaps participants with high self-esteem were angry and

disappointed at themselves because they did not do anything about the blatant sexism they encountered. In fact, although we did not explicitly provide participants in this study a opportunity to complain, participants could have spontaneously chosen to address the experimenter to protest about the interviewers' blatantly discriminatory remarks. However, no participants chose this course of action. Since participants with high self-esteem tend to be quite action-oriented (Perez, 1973; Shrauger & Sorman, 1977), they may have felt disappointed and angry at themselves precisely in the condition where action was clearly appropriate – the blatant condition. This is however a post-hoc interpretation of an unexpected result that needs to be replicated and examined. Another finding of this first study that requires further examination is the link between emotions and behavior, which we did not find in this study. In fact, the mediation analysis we performed did not reveal any reliable relationship between self-directed negative emotions and task performance. Study 3 was conducted to replicate and extend the findings of this second study, and to provide further insights into this link between emotions and behavior.

### Study 3

The first goal of this study was to replicate the findings of Studies 1 and 2 with regard to negative self-directed emotions and task performance. A second goal was to expand our measurement of behavioral responses to include another type of behavior through which individuals may attempt to disconfirm negative stereotypes when confronted with discrimination: by describing themselves in ways that either reflect or instead deflect association with the negative stereotype of the devalued ingroup (self-stereotyping). Although targets of negative stereotypes may be unable to show through their task performance that they are worthy of positive outcomes, this may be easier to do when they are asked to describe themselves. However, in line with our predictions for emotions and task performance, we expected participants with low self-esteem to be less successful at using this strategy. This is because we expect that targets of subtle discrimination that have low self-esteem are more focused on their negative emotional state and individual inadequacies than on actually disproving the

appropriateness of the negative treatment they receive. Moreover, describing oneself in line with the ingroup's stereotype in a context where the ingroup is devalued appears to be consistent with the negative self-image that we expect to particularly characterize targets of subtle discrimination with low self-esteem. As a result, we expected that when confronted with subtle discrimination, participants with low self-esteem are more likely to describe themselves in stereotypical ways than participants with high self-esteem.

A third goal of this study was to offer further insights into the psychological mechanism that links emotional reactions to behavior after exposure to subtle discrimination. We investigate the link between emotions and behavior by examining one step in this process that we did not consider before. In particular, we examine the extent to which the negative self-directed emotions experienced by people with low self-esteem who are confronted with subtle discrimination create a state of self-concern and focus on individual inadequacies that impairs appropriate coping. That is, we propose that it is not the negative self-directed emotions that directly impair individual behavior, but that these emotions induce a psychological state that does not allow the individual to behave in ways that would improve his or her situation.

Our reasoning is consistent with that of Baumeister, Vohs, DeWall, and Zhang (2007) who recently argued that emotions do not necessarily lead directly to behavior, but that behavior often results from people's attempts at regulating their emotions. In the context we examine here, this would mean that behavioral responses to subtle discrimination would not be the direct result of negative emotions, but that they would instead emerge from the steps that people take to deal with these emotions. In fact, when we examine the literature on how people handle the negative emotions they experience as a result of failure, we again see important differences as a function of personal self-esteem. Indeed, when confronted with negative feedback, people with low self-esteem not only tend to feel worse than people with high self-esteem, but they also deal with these negative feelings by worrying more about themselves and by focusing on their inadequacies (e.g., Campbell, 1990; Kuhl, 1994). This is also consistent with research showing that depressed emotions, such as those often felt by people with low self-esteem after negative feedback, lead to an enhanced self-focus (Green & Sedikides, 1999). These emotions are less often experienced by people

with high self-esteem. In fact, people with high self-esteem are not only more emotionally resilient to failure, but when they do experience negative emotions they deal with them more productively, for example by actively trying to disprove the negative feedback, such as by improving their performance (e.g., Baumeister & Tice, 1985; DiPaula & Campbell, 2002; Perez, 1973; Shrauger & Sorman, 1977). For the reasons we have explained earlier, these emotions are also not expected in the blatant condition.

We thus propose that people with low self-esteem may display contextually inappropriate behavioral responses (i.e., poor task performance and stereotypical self-presentation) when confronted with subtle discrimination because the negative self-directed emotions they experience lead to an increased self-concern. Phrased in a different way, we expect that participants with high self-esteem, and participants in the blatant condition (irrespective of level of self-esteem) are less likely to experience these negative self-directed emotions, and thus also less likely to show this self-concern, and ultimately expected to display behavior that is more appropriate in this context. This is a possibility we examine in this third study.

### *Method*

*Participants:* Participants were 118 female students at Leiden University with a mean age of 20. Each session of the experiment lasted approximately one hour, after which all participants were fully debriefed, thanked for their participation and paid 6 Euros (approximately 7 USD) for their participation.

*Design, procedure, and dependent variables:* The design and the procedure of this study were identical to those of the previous two studies. The manipulation check of type of discrimination was the same as in Study 2 ( $r = .38$ ,  $p < .001$ ). To offer even stronger evidence for the success of our manipulations, the manipulation check of self-esteem was again expanded in this study and consisted of the items used in Study 1 and of 5 items (instead of 3, as in Study 2) from the Rosenberg global self-esteem scale, again adapted to measure state self-esteem. These 5 items were: “at the moment, I think I can do things as well as others”, “at the moment, I feel that I have a number of good qualities”, “at the moment, I do not think I have much to be proud of”, “at the moment I feel absolutely useless”, “at the moment, all in all, I have the feeling that I am a failure”

(the last 3 items were recoded). The aggregate measure of these items formed a reliable scale ( $\alpha = .80$ ).

To allow for a more thorough investigation of the relationship between self-directed negative emotions and behavior, we expanded our measure of negative self-directed negative emotions and added the following items to the three items used in studies 1 and 2: self-critical, ashamed of myself, helpless, hesitant, insecure ( $\alpha = .81$ ). Self-concern was assessed with 7 items (e.g., "I am concerned about the things that are going to come", "I am focused on myself",  $\alpha = .84$ ). A PCA on these items resulted in three separate factors, but one factor was made out of only one item that was intended as part of the self-concern scale. When included in the self concern scale, this item did not decrease the reliability of the measure, so it was kept.

*Behavioral measures:* Subsequently and as we did in Study 2, we informed participants that we were interested in ascertaining to what extent the interviewer had made a correct decision and asked participants to perform an additional task for that reason. Participants read that, if they were to perform well on this task, they stood a chance of being selected despite the interviewer's decision. This task had two parts: one was the performance task (the same as in Study 2) and the other was the self-stereotyping measure. For the self-stereotyping measure, participants were asked to indicate to what extent each of 15 traits appropriately described them. These traits consisted of 15 traits consistent with the stereotype of women and were adapted from the Dutch version of the Bem sex role inventory (Bem, 1974; Dutch adaptation by Willemsen & Fischer, 1997). The traits were: dependent, attentive, understanding, modest, indecisive, emotional, sensitive, warmhearted, over-sensitive, curious, romantic, sentimental, spontaneous, tactful, and care-giving ( $\alpha = .76$ ).

### *Results*

All analyses follow a 2 (type of discrimination: blatant vs. subtle) X 2 (self-esteem: low vs. high) between participants factorial design.

*Manipulation Checks:* Analysis of the check of the self-esteem manipulation revealed that participants in the low self-esteem condition reported lower self-esteem ( $M = 4.51$ ,  $SD = 0.69$ ) than participants in the high self-esteem condition ( $M = 5.31$ ,  $SD = 0.77$ ),  $F(1, 114) = 34.84$ ,  $p < .001$ ,  $\eta^2 = .23$ , as intended. The

same result is obtained if we examine the 5 items of the Rosenberg self-esteem scale separately. The analysis on perception of discrimination only revealed a reliable main effect of type of discrimination. As expected, participants in the blatant discrimination condition reported perceiving more discrimination ( $M = 5.52$ ,  $SD = 0.94$ ) than participants in the subtle discrimination condition ( $M = 4.02$ ,  $SD = 1.57$ ),  $F(1, 114) = 39.61$ ,  $p < .001$ ,  $\eta^2 = .26$ .

*Self-directed emotions:* A 2 X 2 ANOVA revealed only a reliable interaction effect between the two factors,  $F(1, 114) = 4.98$ ,  $p < .05$ ,  $\eta^2 = .04$ . Inspection of means (see Table 3) revealed that self-esteem did not have any effect on self-directed negative emotions in the blatant discrimination condition,  $F(1, 115) < 1.47$ ,  $p = .23$ , *ns*. However, as predicted, in the subtle discrimination condition participants low in self-esteem reported reliably more self-directed negative emotions than participants high in self-esteem,  $F(1, 115) = 3.84$ ,  $p = .05$ . No other contrasts were reliable.

Table 3. Self-directed negative emotions. self-concern, performance and self-stereotyping in Study 3.

	Blatant		Subtle	
	SE low	SE high	SE low	SE high
Self-directed negative emotions	2.51 <sup>ab</sup> (0.59)	2.77 <sup>ab</sup> (0.93)	2.80 <sup>a</sup> (0.92)	2.39 <sup>b</sup> 0.76
Self-concern	2.99 <sup>ab</sup> (1.05)	3.16 <sup>ab</sup> (3.16)	3.33 <sup>a</sup> (1.15)	2.72 <sup>b</sup> (0.98)
Performance	11.76 <sup>ab</sup> (2.28)	11.17 <sup>ab</sup> (3.02)	10.80 <sup>b</sup> (2.27)	12.14 <sup>a</sup> (2.61)
Self-stereotyping	4.64 <sup>ab</sup> (0.58)	4.83 <sup>ab</sup> (0.48)	4.94 <sup>a</sup> (0.60)	4.60 <sup>b</sup> (0.48)

Note 1: Standard deviations are reported between parentheses below each mean.

Note 2: Means with different superscripts within each row differ reliably from each other.

*Self-concern:* A 2 X 2 ANOVA revealed a two-way interaction on this measure  $F(1, 114) = 4.18$ ,  $p < .05$ ,  $\eta^2 = .04$ . As predicted (see Table 3), in the subtle discrimination condition, participants with low self-esteem reported more self-concern than participants with high self-esteem,  $F(1, 115) = 5.22$ ,  $p < .05$ . By

contrast, self-esteem did not affect self-concern in the blatant condition,  $F < 1$ , *ns*. No other contrasts were reliable.

*Task performance:* An ANOVA using the number of correct answers on the performance task as the dependent variable only revealed the predicted two-way interaction,  $F(1, 114) = 4.18$ ,  $p < .05$ ,  $\eta^2 = .04$ . As hypothesized, in the subtle discrimination condition participants with high self-esteem answered more questions correctly than participants with low self-esteem,  $F(1, 115) = 4.05$ ,  $p < .05$ . By contrast, the performance of participants within the blatant discrimination condition did not differ as a function of self-esteem,  $F < 1$ , *ns*. No other contrasts were reliable.

*Self-stereotyping:* As predicted an ANOVA on self-stereotyping only revealed a reliable two-way interaction,  $F(1, 114) = 7.27$ ,  $p < .01$ ,  $\eta^2 = .06$ . In the subtle discrimination condition (see Table 3), participants with low self-esteem defined themselves in more female stereotypical terms than participants with high self-esteem,  $F(1, 115) = 6.00$ ,  $p < .05$ . By contrast, in the blatant discrimination condition, self-esteem did not affect participants' self-descriptions,  $F(1, 115) = 1.90$ ,  $p = .17$ , *ns*. No other contrasts were reliable.

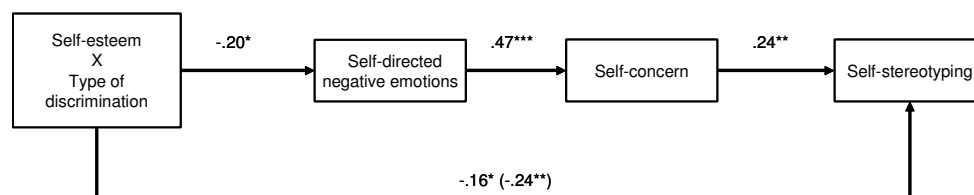
#### *Mediation analyses*

To further investigate the link between our manipulations, self-directed emotions and behavior (task performance and self-stereotyping), we started by computing correlations between these variables. Task performance was not found to correlate reliably with any of the remaining variables assessed in this study. It thus seems that negative self-directed emotions and self-concern did not mediate the effect of the manipulations on performance.

By contrast, self-stereotyping correlated reliably both with negative self-directed emotions ( $r = .29$ ,  $p = .001$ ) and with self-concern ( $r = .34$ ,  $p < .001$ ). We thus proceeded by testing the model proposed to predict self-stereotyping. In this model, the interplay between type of discrimination and self-esteem elicits negative self-directed emotions, which in turn produce an increased self-concern that ultimately leads to self-stereotyping. Since a regression approach does not allow us to test indirect effects that take into account more than one mediator, to test our model we performed path analyses with EQS. To do so, we estimated all paths in the model (i.e., all direct and indirect effects). A model so estimated

necessarily has a perfect fit and zero degrees of freedom. The test of the mediated paths is achieved by observing both the regression coefficients associated with each path and the reliability of the indirect effects (which is similar to the Sobel test performed with a regression approach; see also Raykov & Marcoulides, 2006). As can be seen in Figure 1, the interplay between type of discrimination and self-esteem was reliably and negatively associated with negative self-directed emotions, negative self-directed emotions were reliably and positively associated with self-concern, and self-concern was reliably and positively associated with self-stereotyping. Moreover, tests of indirect effects show that all mediations in this model are reliable (for the effect of Type of discrimination on self-concern  $\beta = -.09$ ,  $ns$ ,  $t = -2.06$ ,  $p < .05$ ; for the effect of Type of discrimination on self-stereotyping  $\beta = -.17$ ,  $p < .05$ ,  $t = -2.72$ ,  $p < .01$ ; for the effect of self-directed emotions on self-stereotyping,  $\beta = .14$ ,  $ns$ ,  $t = 2.86$ ,  $p < .01$ ). However, the effect of the manipulations is not fully mediated, as the effect of the manipulation on self-stereotyping is still reliable ( $\beta = -.17$ ,  $p < .05$ ). By contrast, the effect of negative self-directed emotions on self-stereotyping is fully mediated by self-concern ( $\beta = .14$ ,  $ns$ ).

Figure 1. The link between self-esteem, type of discrimination, negative self-directed emotions, self-concern, and self-stereotyping



Note 1. Only reliable paths are depicted.

Note 2. Coefficients are reliable at \*  $p < .05$ , \*\*  $p < .01$  and \*\*\*  $p < .001$ .

### Discussion

The results of this third study replicate the results of Studies 1 and 2 by demonstrating that self-esteem moderates responses to subtle discrimination. As in Studies 1 and 2, when confronted with subtle discrimination, participants with low self-esteem reported more negative self-directed emotions than participants with high self-esteem. As in Study 2, when given the opportunity to disconfirm the negative feedback, participants with low self-esteem also performed more poorly

when faced with subtle discrimination than participants with high self-esteem. In this study we examined an additional way through which individuals confronted with discrimination can try to contest the negative feedback, i.e., the degree to which participants described themselves in gender stereotypical terms or instead distanced themselves from the stereotype associated with their devalued ingroup. In line with our predictions, the effect we observed on this measure was the same as for the remaining measures: again, when confronted with subtle discrimination it was participants with low self-esteem who failed to distance themselves from the ingroup's stereotype.

The results of this third study also provide further insight into the psychological process responsible for this effect. First, the results show that, when confronted with subtle discrimination, participants with low self-esteem also report more self-concern than participants with high self-esteem. Second, our data demonstrates that this self-concern provides the link between negative self-directed emotions and one of the behavioral responses assessed. That is, our results show that the association of subtle discrimination and low self-esteem leads to negative self-directed emotions, which in turn increase self-concern and this results in more self-stereotyping. Viewed in another way, these results show that high self-esteem and blatant discrimination lead to less negative self-directed emotions when people are confronted with negative feedback associated with discrimination, and this in turn leads to less self-concern and less self-stereotyping.

Unfortunately, although we replicated the predicted effect of the manipulations on task performance, none of the variables assessed in this study was found to mediate this effect. Prior research has also found it difficult to uncover the mediators of task performance under conditions where people fear or anticipate group-based treatment (see Steele et al., 2002 for a review). More promising results are recently emerging with mediators that are assessed more covertly or implicitly (see e.g., Blascovich, Spencer, Quinn, & Steele, 2001; Bosson, Haymovitz, & Pinel, 2004). Future research can offer further insights into this process by examining similar processes in the context that was the focus of this research. That being said, our results did demonstrate that emotions and self-concern mediate the effect of the manipulations on one of our indicators of the

behavioral strategies people can engage in when trying to disconfirm the negative treatment they received, i.e., self-stereotyping.

It is important to acknowledge that, as in the previous studies, we did not find reliable simple effects of type of discrimination. However, also as in Study 1 and 2, the predicted interactions were all reliable and so were the hypothesized effects of self-esteem within the subtle discrimination condition for all of the dependent variables. In addition – also as expected - self-esteem did not moderate responses to blatant discrimination on any of the variables examined here. This pattern is very consistent and shown repeatedly across all of the 3 Studies reported here. The only result that emerged as reliable in Study 2, but had not emerged in Study 1, and was not replicated in this third study was the reliable effect of self-esteem on self-directed emotions in the blatant discrimination condition. However, this result was unexpected and not entirely clear, thus deserving attention in future research. We thus consider that this study replicates the findings of Study 1 and 2 and in this way provides robust evidence for the processes under examination.

## General discussion

The studies reported in this paper complement prior research by demonstrating the role of self-esteem as moderator of self-directed emotions and stereotype confirmatory behavior following exposure to subtle – but not to blatant – discrimination. We created a paradigm to manipulate subtle vs. blatant discrimination and demonstrated that participants who were exposed to subtle discrimination perceived the situation as more discriminatory than those who were subjected to blatant discrimination. As intended, this perception was not affected by level of self-esteem. In line with this perception, the results of Study 1 demonstrated that participants in the blatant condition expressed more negative other-directed emotions than participants in the subtle condition. This result was also not moderated by self-esteem. This is consistent with our argument that blatant discrimination involves a clear other-focus that guides emotional responses, irrespective of individual differences in self-esteem.

By contrast, in all 3 studies we found that self-esteem moderated self-directed responses to subtle discrimination. Specifically, participants who

encountered subtle discrimination expressed more negative self-directed emotions when they had low self-esteem than when they had high self-esteem. By contrast, self-esteem did not moderate negative self-directed emotions in the blatant condition. These results describe a self-fulfilling cycle in which those who started out with more negative self-directed affect (low self-esteem) ended up feeling the most negative self-directed emotions, but only when the cause of the negative feedback was unclear (the subtle condition). This pattern suggests that subtle cues to discrimination may offer scope for self-protection among individuals with high self-esteem, but not among individuals with low self-esteem. Although our data do not allow us to test this directly, this remains an intriguing possibility to be examined in future research.

These findings are consistent with those of prior research investigating how self-esteem affects people's emotional reactions to negative feedback, as described in the introduction, but they extend this knowledge by showing how self-esteem can moderate these processes when subtle discrimination is involved. These results also converge with findings from prior research examining the psychologically damaging effects of subtle discrimination, but extend these findings by showing that subtle discrimination is particularly damaging for people with low self-esteem. In sum, our findings regarding emotional reactions to discrimination add to existing research by demonstrating both how different emotions are affected by subtle and by blatant discrimination, and how self-esteem moderates the effect of subtle discrimination on self-directed emotions.

Our findings are also novel with regard to uncovering the behavior people display in response to discrimination. Prior research has dedicated little attention to examining people's actual behavioral displays when they are confronted with discriminatory treatment. In our research we predicted and found that self-esteem moderated behavioral responses when discrimination was subtle, but not when discrimination was blatant. Specifically, when discrimination was subtle, targets with low self-esteem performed less well than participants with high self-esteem on a task which was presented as a new opportunity for success, while self-esteem did not moderate performance in the blatant condition. This finding was obtained in Study 2 and replicated in Study 3. Study 3 also provided similar evidence on a second behavioral measure of stereotype confirmation: stereotypical self-presentation. In particular, participants confronted with subtle

discrimination described themselves more in line with the stereotype of the devalued group when they had low self-esteem than when they had high self-esteem. Again, self-esteem did not moderate self-stereotyping in the blatant condition. In sum, when confronted with subtle discrimination, individuals with low self-esteem actually were less successful at disproving the negative feedback they received (as revealed by weaker performance and greater tendency to self-stereotype) compared to those with high self-esteem. Note that we do not argue that self-stereotyping is necessarily something to avoid, even with regard to ingroups that are negatively evaluated by others. However, in a context where the group is devalued, it has formed a basis for negative treatment, and dissociation with the negative stereotype can secure a new chance of success for the individual target, this does appear to be inappropriate behavior.

Our results also offer some evidence for the psychological process that is responsible for the behavioral effects we observed. Specifically, we found that subtle discrimination led to more self-stereotyping among participants with low self-esteem partly because it elicited negative self-directed emotions that increased self-concern. Our argument is that this self-focus does not allow targets with low self-esteem to break the cycle of negative self-regard leading them to present themselves to others in ways that reflect this negative self-image. By contrast, targets with high self-esteem more easily escape this self-focus and thus also its self-fulfilling behavioral effects. This difference between targets with low and high self-esteem is less relevant when discrimination is blatant because blatant discrimination more clearly directs attention to the perpetrator and away from the self. We were however unable to demonstrate that a similar process is responsible for the effect of the manipulations on task performance. This is clearly a goal for the future.

These results extend prior knowledge by illuminating on the actual behavior that people display when they encounter discrimination, an issue that has been neglected in prior research. In addition, these results extend existing knowledge of the effects of salient stereotypes both by replicating the impairing effect of salient stereotypes on task performance in an entirely different context (i.e., when participants are given a new opportunity for success, after having been targets of discriminatory treatment), and by demonstrating that self-esteem can play a moderating role in this process.

It is worth stressing that the paradigm we used allowed us to examine the role of self-esteem in determining emotional and behavioral responses to discrimination, while controlling for any effects that self-esteem might have in the extent to which targets attribute the negative outcome to discrimination. In fact, although prior research has already demonstrated that self-esteem moderates the attributions people make for negative feedback, this has not been examined when the negative feedback is associated with discrimination. Although future research might concentrate on uncovering this process, this did not constitute our focus, which was on how self-esteem would moderate emotional and behavioral responses to a situation that is either clearly discriminatory, or characterized by subtle discrimination.

It is also important to acknowledge that self-esteem may moderate responses to blatant discrimination when other types of outcome measures are considered. For example, both group and personal self-efficacy have been found to determine the extent to which individuals take part in various forms of collective action (e.g., Klandermans, 1997). Given that self-efficacy is closely related to self-esteem, it is possible that self-esteem would also moderate the decision to engage in this type of responses as a reaction to blatant discrimination. Our argument is not that self-esteem would not have any effect at all in the blatant condition, but that this is less likely to be the case with regard to the more self-focused variables we examine in this paper, given the other-focused nature of blatant discrimination. It is also important to point out that we do not claim that the effects of blatant discrimination are never moderated. Indeed, prior research has already shown that factors such as perceived pervasiveness of discrimination are important moderators of the effects of discrimination that was relatively blatant (Schmitt et al., 2003). However, in line with our argument, self-esteem does not appear to be one of these factors, at least with regard to the outcomes we considered in this research.

In the present research we found consistent support for our prediction that people with high vs. low self-esteem deal differently with discrimination. These results are all the more significant in view of the research methodology that we used, that is, the experimental induction of different levels of self-esteem in our participants. In this important sense, our research differs from and extends previous studies which were unable to examine this causal relation, either

because pre-existing differences in global self-esteem were taken into account, instead of using experimental manipulations, or because self-esteem was examined as a *consequence* of people's experiences with discrimination (see Major et al., 2002 for a review). This experimental technique also has interesting practical implications. The very fact that we succeeded in manipulating self-esteem and thereby in modifying the effect of subtle discrimination on its targets, offers scope for intervention by suggesting that environments that promote people's self-esteem can shield them from the negative effects of a type of discrimination that is so difficult to sanction.

That being said, it is important to acknowledge a limitation of the present research, i.e., our sole focus on gender discrimination and its effects on (white) female participants in one national context with a specific history of gender relations. Future research should examine whether similar effects are obtained in other national contexts, or when focusing on other discriminated groups (e.g., ethnic minorities), or even as a result of other types of discrimination (e.g., benevolent vs. hostile sexism). Converging evidence for these processes obtained in other settings and contexts would increase the generalizability of these results.

Future research can also extend these findings by examining other types of responses that would further illuminate the effects of self-esteem. For example, physiological measures may identify threat and challenge reactions to negative feedback (Mendes, Blascovich, Lickel, & Hunter, 2002), in particular if associated with subtle discrimination. One possibility is that these reactions co-vary with different levels of self-esteem, so that negative feedback associated with subtle discrimination may be perceived as a threat by people with low self-esteem but as a challenge by those with high self-esteem. By contrast, blatant discrimination may be regarded as a challenge irrespective of self-esteem, given that it more clearly points to ways through which individuals may contest the negative outcome. This is however a possibility that requires further examination.

In sum, by combining insights from two separate research strands, on how self-esteem affects responses to negative and on how discrimination is experienced by its targets, our findings enable us to specify the conditions under which targets of discrimination are most vulnerable to its pernicious effects. An important challenge for the future would be to identify the strategies that targets

can use to break the self-fulfilling cycle identified in this research and reduce the negative impact of discrimination.

