

Responding to Gender-Based Rejection:

Objecting against Negative and Disproving Positive Inter-group Differentiation

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## Abstract

We examined whether women ( $N = 87$ ) who are exposed to blatant discrimination show different responses depending on whether they are rejected with reference to positively (“this is something for men”) or negatively (“this is nothing for women”) phrased inter-group differentiation. Based on current insights on responses to discrimination, we predicted and found that those who are exposed to negative differentiation will tend to *object* to those who rejected them, while positive differentiation is more likely to induce efforts to *disprove* the validity of the rejection. Female participants facing negative differentiation objected against the discriminatory nature of their rejection, and showed cardiovascular (CV) reactivity more indicative of threat (and less of challenge) than participants in the positive differentiation condition. In addition, positive differentiation caused participants to disprove the validity of these group-based expectations by claiming the possession of relatively more masculine (and less feminine) traits.

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### **Responding to Gender-based Rejection:**

#### **Objecting against Negative and Disproving Positive Inter-group Differentiation**

In the past two decades, research has shown important affective and behavioral consequences of being a target of prejudice (Major, Quinton, & Schmader, 2003; Schmitt & Branscombe, 2002). This research has revealed that people may show quite different responses—from acceptance to protest—depending on situational and individual-difference factors, as well as on the way in which prejudice is expressed. In these past studies, blatant discrimination was conveyed by devaluing the characteristics of the target group (negative differentiation). However, blatant discrimination may just as well be based on the supposed superiority of the advantaged group (positive differentiation). For example, women might be prevented from entering the board of a company because “men are natural leaders” (positive differentiation) or because “women don’t have what it takes” (negative differentiation). Both justifications are blatantly discriminatory, but either differentiate women from men negatively (women are inferior) or men from women positively (men are superior).

Prior work addressing this distinction suggests that positively phrased inter-group differentiation may occur more frequently than negative inter-group differentiation (Brewer, 1999; Dovidio & Gaertner, 1996; Mummendey & Otten, 1998). Yet, we do not know whether or how *targets* of discrimination are differentially affected by such positive compared to negative inter-group differentiation. The current research aims to address this issue. We expose targets to blatant discrimination based on positive vs. negative inter-group differentiation, and assess whether they *object* against or *disprove* the treatment they receive using behavioral, self-report, and cardiovascular measures.

#### **Positive vs. Negative Inter-group Differentiation from the Targets’ Perspective**

Discriminatory experiences differ in the extent to which the discrimination is blatant or subtle. Independently of this distinction in terms of degree of clarity of group-based

rejection, inter-group differentiation can either take place with respect to the allocation of *positive* traits or outcomes, or by the assignment of *negative* traits and outcomes to members of particular groups. Members of advantaged groups who assign more negative traits to members of a disadvantaged group than to the in-group engage in negative differentiation. By contrast, those who assert in-group superiority by assigning relatively more positive traits to the in-group engage in positive differentiation.

Research has shown that group-based treatment involving negative differentiation, such as reference to supposedly deficient traits, skills, or abilities of the disadvantaged group (e.g., “women do not have what it takes to be a good leader”) raises threat, anger, and protest, as targets object against the negative treatment received (Barreto & Ellemers, 2005; Ellemers & Barreto, 2009). However, research on how targets respond to discrimination has so far not examined what happens when group-based treatment is rooted in positive differentiation, that is, in the association of superior traits and features with the advantaged group (positive differentiation; e.g., “men are natural leaders”). We argue that this will elicit fundamentally different responses in targets. Negative differentiation clearly communicates the inferiority of the discriminated group, implying also the stability of these differences (Schmitt & Branscombe, 2002), and even the impermeability of group boundaries (Ellemers, Van Knippenberg, De Vries, & Wilke, 1988). Women faced with negative beliefs about the ability of women compared to men are likely to find this highly threatening (Eliezer, Major, & Mendes, 2010; Schneider, Tomaka, & Palacios, 2001; Stroebe, Barreto, & Ellemers, 2010), and tend to display anger and protest (“I object to being treated this way”, Ellemers & Barreto, 2009). By contrast, positive differentiation primarily communicates that a standard is set by the advantaged group, but leaves open the possibility that members of the disadvantaged group reach this standard. This might direct members of the disadvantaged group towards efforts to challenge these beliefs (“I can do this too!”). In other words, positive

differentiation provides targets with more room to cope in a positive and constructive way, lowering threat and increasing efforts to *disprove* prejudicial beliefs (see also Kaiser & Miller, 2001; Singletary & Hebl, 2009).

Although the current rationale regarding different responses to positive and negative inter-group differentiation has not yet been empirically tested, it fits with prior research showing that group members are likely to display more negative reactions to social disadvantage when they feel they have nothing to lose (Scheepers, Spears, Doosje, Manstead, 2006; Wright, Taylor, & Moghaddam, 1990). When, however, people see ways to improve their position without disrupting the system, they are likely to prefer such responses (see Wright et al.'s 1990 distinction between normative and non-normative collective action). We think that a similar process takes place when inter-group differentiation is negative vs. positive: when it is positive, members of disadvantaged groups see a way to contest the negative treatment while “playing the rules”, that is, they can simply try to show that women also have what it takes. However, when differentiation is negative that possibility is less salient, and group members are more inclined to express anger and protest against the discriminatory nature of the situation. Indeed, these different responses are also reminiscent of the distinction between “fighting back” and “enhanced striving” in Allport’s (1954) taxonomy of responses to discrimination.

### **Overview of the Current Research and Hypotheses**

In the current study we focused on gender-based rejection. Women were either rejected by men for a certain task because “this is a task for men” (positive differentiation), because “this is not a task for women” (negative differentiation), or due to random selection (control condition). Participants then responded to the rejection, through self-reports and behavior, while we measured cardio-vascular (CV) responses indicative of threat vs. challenge motivational states.

Our measure of threat vs. challenge draws from the bio-psychosocial model (BPSM) of Blascovich and colleagues (Blascovich, 2008; Blascovich & Mendes, 2010; Blascovich & Tomaka, 1996). The BPSM describes specific CV markers of the motivational states of *threat* vs. *challenge* during so-called *motivated performance situations* (e.g., a job interview, giving a speech). Task engagement, a prerequisite for motivated performance, is marked by decreased *pre-ejection period* (PEP, a measure of ventricular contractility). Threat is indicated by relatively high vascular resistance (TPR; a measure of the resistance of the arterioles) and low cardiac output (CO; the amount of blood pumped by the heart in a single minute) leading to a less efficient mobilization and transportation of energy during motivated performance. Challenge, by contrast, is indicated by relatively high *cardiac output* (CO) and low vascular resistance (TPR) which enables the efficient mobilization and transportation of energy during motivated performance. Within the BPSM, challenge and threat are conceptualized as the endpoints of a continuum and are in this sense always relative to each other. In other words, relatively lower CO and higher TPR is indicative of more threat (and less challenge) while relatively higher CO and lower TPR is indicative of more challenge (and less threat).

Although we continuously measured CV-responses throughout the experiment, we focus on two moments in particular: 1. Immediately following exclusion; 2. When delivering a speech about the exclusion to the perpetrators. The latter moment is of primary importance for the current rationale as it indicates how people *respond* to different kinds of discrimination. More specifically, we predict relatively more threat (and less challenge) when responding to negative differentiation than to positive differentiation or “random” rejection (control condition) and also relatively less threat (and more challenge) when responding to positive differentiation than to “random” rejection (Hypothesis 1a; see also Mendes, Major, McCoy, & Blascovich, 2008). We also examine responses directly after the rejection in order to control for initial CV-reactions to the different types of rejection. Because initial responses

to social rejection are relatively undifferentiated and independent of its precise source (Williams, 2007), we expect no differences between conditions on CV-responses due to the experience of rejection (Hypothesis 1b).

We also predict that people are more likely to *object* against the decision by expressing anger and protest when facing negative differentiation than when facing positive differentiation or random rejection (Hypothesis 2a). By contrast, we expect participants to be particularly inclined to *disprove* the validity of the beliefs that underlie the rejection. They may do this by showing that they also possess the traits that are needed for the job despite being women. We argue this response should be more pronounced after exposure to positive differentiation than after exposure to negative differentiation or random rejection. To examine this we provided participants with an opportunity to describe themselves in terms of gender stereotypical traits, and expected women to describe themselves in relatively more masculine (and less feminine) terms after positive differentiation than after negative differentiation or random rejection (Hypothesis 2b). Finally, we included a measure of gender identification and predicted—in keeping with previous work—that gender identification would be higher in both inter-group differentiation conditions than in the control condition (Hypothesis 3; Ellemers & Barreto, 2009; Branscombe, Schmitt, & Harvey, 1999). Measuring identification is important to differentiate group-level responses from individual-level responses to discrimination (e.g., individual mobility). This is particularly important to interpret the gender self-stereotyping measure: If disproving classic gender-stereotypes as relevant for the task represents a group-level response (“women can do this too!”), as we propose, a change in the *content* of social identity (masculine vs. feminine self-stereotyping) should occur even while the *strength* of social identity (identification) remains relatively high.

## Method

### Participants and Design

Eighty-five female students (age:  $M=21.01$ ,  $SD=2.39$ ) at Leiden University participated in the experiment. They received €5 for their participation, and were randomly assigned to one of the three experimental conditions: Positive Inter-group Differentiation vs. Negative Inter-group Differentiation vs. Control Condition.

### **Procedure**

Upon arrival in the lab, participants were seated in a cubicle equipped with a computer and a webcam. After applying electrodes and sensors for CV-recording (see below), the door of the cubicle was closed and all further information, tasks, and questionnaires were delivered via the computer system. First, the participants were asked to sit quietly and relax for five minutes, while we took baseline recordings of the CV-responses.

After the baseline period, the experiment was presented to participants as a study on physiological responses when playing online poker games. The suggestion was made that five other participants were seated in adjacent cubicles. The participants were told, however, that the online game could only be played with four people, and that the participants themselves would select the persons with whom they would like to play. Before the selection procedure took place a picture of the participant was taken by means of the webcam. This picture, together with the pre-recorded pictures of (bogus) participants, was placed in the online game environment that was displayed on the participant's computer screen. The group of five other participants, who were in fact pre-recorded and the same in all conditions, consisted of four men and one woman.

The participant was then given the opportunity to select three persons she would prefer to play the game with. Participants were told that the other participants would do the same and that everyone would also have the opportunity to type-up a brief rationale for the selection (s)he had made. At this point it was also mentioned that the persons that would not be selected for the game would perform an alternative task, and would have the opportunity to



communicate their feelings about the procedure to the other participants through the video circuit.

After the participant made her selection of candidates and typed in her rationale for this selection, she was told that the votes were being counted. After a few seconds the pictures of the candidates that were selected to play the game were displayed on the computer screen. It appeared that all four men and none of the women had been selected. Below the picture of each of the selected men, this person's rationale for selecting the other candidates was displayed. In the negative differentiation condition, the men explained their own choice of candidates by referring to women's lack of suitability for the task (e.g., "This is not a game for women", "Women really can't do this very well"). In the positive differentiation condition all comments communicated the belief that men were better suited for this task ("This is a game for men", "Men are really better at this", "It's more fun to play this game with men"). In the control condition, no reference to gender was made (e.g., "I like to play with anyone so my selection was pretty much random").

After the manipulation, the participants (who had all been excluded and therefore had to perform the alternative task) received instructions for a backward counting task, which is a standard motivated performance situation for examining CV-patterns of challenge and threat motivational states (Tomaka, Blascovich, Kelsey, & Leitten, 1993). This task was included to examine participant's immediate response to the group-based rejection in terms of challenge and threat. After completion of this task the participants received instructions for a second task: Delivering a speech to the four male candidates that ostensibly had just played a first round of online poker. The participant was specifically instructed to talk about the prior selection procedure, and was then given one minute to prepare the speech and one minute to deliver the speech in front of the webcam. The participants were told that the four male candidates were watching the speech through the video circuit. To strengthen this suggestion,

videos of the male participants were displayed on the participant's screen as they (ostensibly) watched the participant's speech. In this case we used the speech to examine the CV-markers of challenge and threat motivational states when responding to the group-based rejection. After the speech, participants completed measures of gender identification, and self-stereotyping and were then debriefed, thanked and paid for their participation.

### **Dependent Measures**

**Threat and challenge.** To assess cardiovascular markers of challenge and threat motivational states, impedance-cardiographic signals (ICG), electrocardiographic signals (EKG), and blood pressure were continuously measured during the experiment using a Biopac MP150 system (Biopac Systems Inc., Goleta, CA) using the same laboratory and apparatus, and following the same procedures, as described by Scheepers (2009). Physiological data were stored using Acqknowledge software (Biopac Systems, Goleta, CA) and scored using AMS-IMP software (Free University, Amsterdam, the Netherlands). On the basis of a combination of these measurements (following Sherwood et al., 1990) we calculated PEP, CO, and TPR.

**Object.** The extent to which participants objected against the selection made was assessed by rating the degree to which participants expressed anger about or protested against the unfairness of the selection made while delivering their speech. This was rated by two independent raters, on the basis of observation of the video recordings, on a scale running from 1 ("not at all") to 5 ("very clearly"; interclass correlation=.74). The mean rating of the two raters was calculated as measure of objection.

**Gender self-stereotyping.** Participants were given the chance to disprove the validity of the selection made by describing themselves in terms of female and male stereotypical traits. We used gender stereotypical traits selected from Willemsen and Fischer's (1997) Dutch translation of the Bem sex role inventory (Bem, 1974). The female stereotypical traits

were: attentive, modest, indecisive, emotional, sensitive, warmhearted, over-sensitive, and sentimental ( $\alpha=.62$ ). The male stereotypical traits were: adventure seeking, dominant, handy, action-oriented, technical, forceful, and self-confident ( $\alpha=.67$ ). Participants indicated the extent to which each trait was descriptive of them in a 7 point scale from (1) “not at all” to (7) “very much”. We created a gender self-stereotyping index by subtracting scores on the female traits from the male traits, as in the case of gender stereotypes people who are seen as more masculine also tend to be seen as less feminine and vice versa (because there are only two relevant categories, that are characterized with opposing traits). Thus the difference-score between the masculine and feminine items indicates a stronger relative tendency to self-stereotype on male, rather than female, traits (see also Bem, 1974).<sup>1</sup>

**Gender identification.** Gender identification was measured using three items (e.g., “I feel strong ties with women as a group”;  $\alpha=.83$ ; responses from (1) “not at all” to (7) “very much”).

## Results

Due to technical problems, no video data was recorded for eight participants, and no complete CV-data was recorded for six participants. Although these participants were excluded from the physiological and behavioral analyses, their available data were included to the self-report analyses..

### **Cardiovascular Responses**

In line with standard practice (e.g., Blascovich, Seery, Mugridge, Norris, & Weisbuch, 2004; Mendes et al., 2008), mean values for PEP, CO, and TPR were calculated for the last minute of the baseline and the first minute of the counting task, and the speech-task. We first confirmed that there were no differences between the conditions on baseline levels of CV-responses, which was indeed the case ( $F_s < 1$ ). We then calculated reactivity scores for the three measures by subtracting mean baseline values from the mean values for the first minute

of the counting task and the speech task, respectively. Univariate outliers (defined as values higher than 3.3 SD from the average, or  $p=.001$  in a normal distribution) were assigned a value of 1% higher/lower than adjacent non-extreme values (Seery, Blascovich, Weisbuch, & Vick, 2004). Finally, we calculated a single threat–challenge index by converting CO and TPR reactivity scores into z-scores. After multiplying the z-score for TPR with -1 it was added to the z-score of CO; higher values on the resulting index indicate a stronger challenge motivational state whereas lower values indicate a stronger threat motivational state (Blascovich et al., 2004; Kassam, Koslov, & Mendes, 2009; Seery, Weisbuch, & Blascovich, 2009).

We first established that the two tasks were sufficiently engaging by testing for significant decreases in PEP from baseline levels in the different conditions. Across conditions and tasks participants displayed decreased PEP ( $M_s < -14.86$ ),  $t_s < -7.34$ ,  $p_s < .001$ , which indicates task engagement (a prerequisite for motivated performance), which enables a further interpretation of the CV-responses in terms of challenge and threat motivational states (Blascovich et al., 2004; Mendes et al., 2008).

We analyzed the threat-challenge index using a 3(Condition: Negative Inter-group Differentiation vs. Positive Inter-group Differentiation vs. Control Condition) X 2(Task: Counting vs. Speech) ANCOVA with repeated measures on the last factor. PEP and baseline levels of the threat-challenge index were added as covariates in order to control for individual differences in task engagement and error variance in difference scores (Blascovich et al., 2004; Seery et al., 2004). The only effect emerging from this analysis was a significant interaction between condition and task,  $F(2,73)=3.78$ ,  $p=.027$  (see Figure 1). In line with Hypothesis 1a, participants in the negative differentiation condition showed a stronger tendency towards threat ( $M=-0.55$ ,  $SEM=0.33$ ) than participants in the positive differentiation condition ( $M=0.35$ ,  $SEM=0.31$ ),  $F(1,73)=4.42$ ,  $p=.039$ . Put differently, participants in the

positive differentiation condition were relatively more challenged than participants in the negative differentiation condition. Moreover, participants in the negative differentiation condition were marginally-significantly more threatened than participants in the control condition ( $M=0.20$ ,  $SEM=0.32$ ),  $F(1,73)=2.46$ ,  $p=.10$ . The control condition did not differ from the positive differentiation condition,  $F(1,73)=0.13$ ,  $p=.719$ . In line with Hypothesis 1b, there were no differences between conditions during the counting task. That is, participants in the positive differentiation condition ( $M=-0.07$ ,  $SEM=0.31$ ) did not differ significantly from participants in the control condition ( $M=0.14$ ,  $SEM=0.30$ ),  $F(1,73)=0.14$ ,  $p=.709$ , or participants in the negative differentiation condition ( $M=-0.14$ ,  $SEM=0.29$ ),  $F(1,73)=0.04$ ,  $p=.842$ . In addition, the difference between the negative differentiation condition and the control condition was also not significant,  $F(1,73)=0.40$ ,  $p=.529$ .

### **Objecting.**

A ONEWAY ANOVA with Condition (Positive Inter-group Differentiation vs. Negative Inter-group Differentiation vs. Control Condition) as factor on the objecting scale showed a significant effect of condition,  $F(2,74)=16.62$ ,  $p<.001$ . Consistent with Hypothesis 2a, participants in the negative differentiation condition expressed more anger and protest ( $M=3.62$ ,  $SD=1.06$ ) than did participants in the positive differentiation condition ( $M=2.81$ ,  $SD=1.65$ ),  $F(1,74)=4.14$ ,  $p=.039$ , and participants in the control condition ( $M=1.40$ ,  $SD=1.38$ ),  $F(1,74)=32.55$ ,  $p<.001$ . The difference between participants in the positive differentiation condition and participants in the control condition was also significant,  $F(1,74)=13.14$ ,  $p=.001$ .

### **Gender self-stereotyping.**

A ONEWAY ANOVA with Condition (Positive Inter-group Differentiation vs. Negative Inter-group Differentiation vs. Control Condition) as factor on the gender self-stereotyping index revealed a significant effect of condition,  $F(2,81)=3.92$ ,  $p=.024$ . Consistent

with Hypothesis 2b, participants in the positive differentiation condition described themselves relatively more in masculine (and less feminine) terms ( $M= 0.08$ ,  $SD=1.01$ ) than did participants in the negative differentiation condition ( $M=-0.65$ ,  $SD=1.07$ ),  $F(1,81)=6.36$ ,  $p=.014$ , and participants in the control condition ( $M=-0.59$ ,  $SD=1.22$ ),  $F(1,81)=5.25$ ,  $p=.025$ . The difference between participants in the negative differentiation condition and participants in the control condition was not significant,  $F(1,81)=0.04$ ,  $p=.839$ .

### **Gender Identification.**

A ONEWAY ANOVA with Condition (Positive Inter-group Differentiation vs. Negative Inter-group Differentiation vs. Control Condition) as factor on gender-identification revealed a reliable main effect of condition,  $F(2,81)=5.79$ ,  $p=.004$ . In line with Hypothesis 3, identification was higher in the negative differentiation condition ( $M=5.05$ ,  $SD=1.11$ ) than in the control condition ( $M=4.43$ ,  $SD=1.33$ ),  $F(1,81)=3.96$ ,  $p=.05$ , and higher in the positive differentiation condition ( $M=5.47$ ,  $SD=0.99$ ) than in the control condition,  $F(1,81)=11.49$ ,  $p=.005$ . Importantly, however, identification did not differ between the positive and negative differentiation conditions,  $F(1,81)=1.95$ ,  $p=.167$ .

There were no significant relationships between the threat-challenge index during the speech on the one hand, and the objection ( $r=-.040$ ,  $p=.736$ ), gender self-stereotyping ( $r=.005$ ,  $p=.968$ ), and identification ( $r=.085$ ,  $p=.455$ ) measures on the other hand.

### **Discussion**

The current research investigated reactions to two different forms of gender discrimination: gender-based discrimination where men were described as more fit for a task (positive inter-group differentiation) versus where women were described as less fit for the same task (negative inter-group differentiation). In line with Hypothesis 1, we found that when having the possibility to confront the perpetrators with their discriminatory behavior, participants in the negative differentiation condition were relatively more threatened (and less

challenged ) than participants in the positive differentiation condition. Past work in this area showed how threatening and anxiety-provoking confrontation is, which is an important reason why targets so rarely confront perpetrators of prejudice (Schneider et al., 2001; Shelton & Stewart, 2004; Swim & Hyers, 1999). Our research shows that confrontation elicits stronger threat under some circumstances than under others. More in particular we showed less threat (and more challenge) when targets focused not on what valued characteristics they are portrayed as not having (negative differentiation), but on what is portrayed as unique to the advantaged group (positive differentiation)—and which targets might feel challenged to demonstrate they too possess. Future research might investigate whether targets that differentially interpret a similar discrimination situation either as indicating advantage for the advantaged group or as disadvantage for the disadvantaged group reveal responses similar to those displayed by our participants.

In line with Hypothesis 2, we also found that participants exposed to negative differentiation tended to *object* against the negative treatment by expressing anger and protest, while participants exposed to positive differentiation tended to *disprove* the validity of the negative treatment through their self-descriptions. Indeed, the pattern of results for the self-stereotyping measure was in line with our theoretical argument, that positive differentiation should invite female participants to claim relatively more masculine (and less feminine) traits compared to participants in the negative differentiation- and control condition. These findings confirm that disagreement with a social system can be expressed both by objecting against the treatment suffered (through anger and protest), or more subtly, by disproving the validity of the rationale underlying this treatment (by demonstrating the inappropriateness of gender stereotypes). Participants who had the chance to meet the standard set by men, without entering the struggle to question this standard, used their self-descriptions to express

disagreement with the gender differentiation made (see also Barreto, Spears, Ellemers, & Shahinper, 2003). Those that did not have this opportunity were more likely to protest.

Importantly, and in line with Hypothesis 3, participants in both discrimination conditions showed equally increased gender identification compared to the control condition. This result is important as it supports the idea that both type of responses observed (objecting and disproving) can be group-based. Participants who objected against their treatment did so while identifying with their gender group, and not because they wanted to distance themselves from other women. Likewise, participants who disproved the validity of gender stereotypical thinking changed the *content* of their social identity by claiming relatively more masculine traits, while at the same time retaining the *strength* of their social identity, as if they were trying to convey: “as a woman I am perfectly capable of being warm as well as competent”.

These findings are also consistent with a stress and coping perspective on dealing with prejudice (Major & O’Brien, 2005; Miller & Kaiser, 2001). People assess potentially stressful situations in terms of the demands that need to be met, and the resources they possess to meet these demands (Lazarus & Folkman, 1984). If people think situational demands outweigh their coping abilities, they are likely to find the situation threatening and experience stress. The conviction that they have the necessary resources to be able to cope with situational demands decreases threat and increases challenge to effectively cope with the situation. We think that whether inter-group differentiation is negatively or positively phrased shifts the target’s focus between situational demands and coping resources. Negative differentiation (“this is not a job for women”) focuses targets on situational demands as they are confronted with the difficulties of the situation they face (“as a woman I am disadvantaged”). This is likely to perpetuate the experience of threat, and raise anger and protest, as documented in previous research on blatant discrimination that was conveyed through negative differentiation (e.g., Barreto & Ellemers, 2005; Ellemers & Barreto, 2009). By contrast,



positive differentiation (“men are better at this”) focuses targets on their resources, as they consider the skills, traits or abilities they may have to effectively deal with the situation (“let’s see whether I can do that too”), and induces them to demonstrate that they have what it takes.

Although there was a significant difference between the two differentiation conditions on the threat-challenge index during the speech, we did not find significant differences with the control condition. While there was a tendency for participants in the control condition to be less threatened than participants in the negative differentiation condition, this tendency was actually about as strong to that for the participants in the positive differentiation condition. This may be explained by noting that the control condition, where the two women were “randomly” rejected by the four men, might actually represent a situation of attributional ambiguity, where the women wonder whether gender may have played a role in the rejection. Previous research has demonstrated that members of stigmatized groups respond with challenge to (attributionally ambiguous) negative feedback from out-group members (Mendes et al., 2008). Indeed, this ambiguity may also explain the greater variance in cardiovascular responses we observed in the control condition (4.24), compared to the positive and negative differentiation condition (2.82, and 2.85, respectively), which may have it also made it more difficult to show significant differences with the negative differentiation condition.

A final issue that merits discussion concerns the absence of relations between the physiological measures on the one hand, and the other dependent variables on the other hand. An explanation may be found in the error related to the different measurement methods used to measure CV-, cognitive, and behavioral responses, making it more difficult to find relationships between them. However, at a more conceptual level it is also important to note that the CV-responses are *markers* of challenge and threat motivational states (but do not represent these states themselves). Indeed, the further consequences of these more general motivational states are determined by a complex interplay between cognitive and affective

factors (Blascovich, Mendes, Hunter, & Salomon, 1999). Therefore, we maintain that the CV-measures of challenge and threat yield important insights regarding the phenomenology of being the target of discrimination as framed in terms of positive or negative differentiation, even when the measures we used to assess this do not directly relate to further responses.

To conclude, this research suggests that not all discriminatory events are experienced in the same way. Indeed, what might appear unimportant semantic differences in how discrimination is conveyed can fundamentally alter targets' experiences, and influence whether they direct their dissatisfaction towards objecting against or disproving discrimination. Prior research has primarily addressed negative differentiation and suggests that people need to be aware of their disadvantage and protest against their treatment in order for things to change. At the same time, there are clear emotional and social costs associated with this route, as awareness of discrimination induces a state of threat, while anger and protest tend to elicit resistance. The present research points towards an alternative way, which is perhaps more conducive to change. If those who question the abilities of members of disadvantaged groups focus on defining the criteria that should be met, instead of making assumptions about group-based deficiencies, this is more likely to elicit relatively stronger challenge, and invites attempts to disprove the validity of discriminatory practices. In this way then, the present data offer hope and provide scope for developing constructive ways to combat group-based inequality in society, even if we cannot prevent people from differentiating between groups.

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**Footnotes**

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<sup>1</sup>Although the responses to the self-stereotyping measure were not said to be communicated to the perpetrators, they can still be interpreted as indicating disproving the stereotypes about women as less suitable poker players in a more general sense. In addition, the most proximal audience (the experimenters) is especially relevant in this regard as the topic of the investigation was said to be poker strategies.



Figure 1. Threat-challenge index as a function of condition and task.

