

## **“What did You Say, and Who do You Think You Are?” How Power Differences Affect Emotional Reactions to Prejudice**

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*Three studies examine how power differences between targets and sources of prejudice affect targets' emotional reactions to prejudice. Study 1 first demonstrates that people do not expect powerful others to be prejudiced. Studies 2 and 3 then examine what happens when targets encounter prejudice, as a function of the source's power. Targets notice and recall prejudiced statements from powerful sources, irrespective of whether they are personally dependent on the source. However, results also demonstrate that personal dependency on the source determines how much targets attend to and are emotionally affected by prejudice. Emotional reactions to prejudice as a function of source power were mediated by negative expectations about future interactions.*

Recent years have seen a growing interest in factors that influence how targets perceive prejudice and discrimination as well as their emotional and behavioral responses to this treatment. Researchers examined the role of characteristics of the prejudiced event, of the target of prejudice, of the context in which prejudice is expressed, as well as of the perpetrator (see Major, Quinton, & McCoy, 2002; Barreto, Ellemers, Cihangir, & Stroebe, 2009 for reviews). An important factor that has not received much attention is the nature of the power relation between

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the target and the source of prejudice. Although research on responses to sexual harassment has dedicated some attention to how power relations might modify responses to sexual harassment (e.g., Huerta, Cortina, Pang, Torges, & Magley, 2006), there is a lack of research that examines under controlled conditions when and how power has its effects. This article reports three studies that aim to do precisely that, by offering an experimental examination of when and how the power of the source of prejudice affects targets' emotional reactions.

Prior research repeatedly found that the powerful are more likely than the powerless to form stereotypical impressions of others, and to allow these stereotypical impressions to guide their behavior (e.g., Fiske, 1993; Goodwin, Gubin, Fiske, & Yzerbyt, 2000). However, laypeople do not expect the powerful to be prejudiced. Indeed, work within the stereotype content model shows that power (or its common correlate, status) is associated with competence (e.g., Fiske, Cuddy, Glick, & Xu, 2002), which presumably involves unbiased decision making and the absence of preferential treatment. People also seem to hope others with power over them are competent and fair (Stevens & Fiske, 2000). Similarly, work examining power from an intergroup perspective shows that people in powerful social groups are expected to accept responsibility for those with less power and to behave toward them in ways that are protective and caring, precluding behavior that is guided by prejudice (e.g., Inman, Huerta, & Oh, 1998; Rodin, Price, Bryson, & Sanchez, 1990).

In sum, on the one hand, powerful people can be considerably biased, but at the same time other people apparently do not expect the powerful to be biased or unfair. This raises the question: What happens when this expectancy is violated, and people encounter powerful others who express prejudice or biased treatment? In answering this question we draw an important distinction between power over others and power over the self. We propose that prejudice from a powerful source is salient, and thus easily noticed and remembered, irrespective of whether this source has power over others or over the self. However, we also propose that how much targets attend to prejudice, and how much they are affected by it, is determined by personal dependence on the source. That is, the implications of prejudice matter more when power concerns oneself personally.

Work by Inman and colleagues (1998) examined reactions to prejudice as a function of power of the source of prejudice. However, those studies conceptualized power as a function of social category membership, instead of as a characteristic of the interpersonal relationship between the self (the target) and the source (see also Rodin et al., 1990). Huerta et al.'s (2006) study of sexual harassment in students also failed to differentiate between power over self and power over others when considering members of staff as powerful perpetrators and peers as powerless perpetrators—it is unclear to what extent participants in this study actually felt more personally dependent on the staff members than on the peers who were perpetrators in the experiences they reported (the same problem can

be observed in Mohipp & Senn, 2008). Although interpersonal power and social category membership can correlate, this is not necessarily the case, given that it is not always the case that members of powerful social groups hold interpersonal power over members of powerless groups. For example, women in an organization are likely to have men both as superiors and as subordinates, and students might be personally dependent on some staff members but not on others. This raises the question of how interpersonal power relationships affect targets' reactions to prejudice, when social group power relationships are kept constant.

Focusing on this sort of situation will also allow us to examine the separate effects, on the one hand, of perceptions and expectations associated with power positions, and on the other hand, of dependency on a particular powerful source. That is, approaching power as a characteristic of an interpersonal relationship enables us to separate the effects that derive from the powerful position of the other from the effects that stem from the dependent position of the self. This is important because these two forms of power are likely to have different effects.

People in powerful positions are often in the "spotlight." As a consequence, what powerful people say tends to be highly salient, and even more so if it is unexpected (Taylor & Fiske, 1978). Thus, statements by the powerful are often easily noticed and remembered, irrespective of whether they have power over the self, and compared to statements by the powerless (Taylor & Fiske, 1978). Applying this to the current context, we expect that targets of prejudice are likely to notice and remember prejudice from powerful sources, irrespective of whether they are personally dependent on them, and more so than when the source is powerless.

However, personal dependence on the powerful source is likely to matter in other ways. We concretely examine whether dependence on the source of prejudice determines how much attention people pay to what the source says, as well as the emotional effects this might have. Indeed, prior research has shown that people may notice unexpected characteristics of another person (such as prejudice from powerful sources), but they will only attend to these characteristics to the extent that they are dependent on this other person (Berscheid, Graziano, Monson, & Dermer, 1976; Erber & Fiske, 1984). This is argued to be the case because dependency raises a need to restore control, which can be achieved by attending closely to the person on whom one depends. We thus expect targets of prejudice to attend more to a prejudiced statement from a powerful source on whom they depend, than to prejudice from other powerful sources that have no direct power over the self.

We also expect personal dependence on the source of prejudice to determine targets' emotional reactions to prejudice. Prejudice from a source that has power over the self is likely to have a more negative impact on well-being than prejudice from a powerful source who has no direct power over the self. This is because perceiving prejudice is most damaging when people believe it might be reflected in biased behavior that repeatedly limits one's personal outcomes or interactions

(e.g., Schmitt, Branscombe, & Postmes, 2003; Stroebe, Ellemers, Barreto, & Mummendey, 2009) and those who have power over the self are by definition more able to determine one's outcomes. Thus, perceiving prejudice from a source who has power over the self is expected to be more damaging for individual well-being than perceiving prejudice from other generally powerful sources—and this is likely to be mediated by negative expectations about future interactions.

### *Overview of the Studies*

We examined these processes in the context of gender relations, where prejudice (or sexism) can be manifested by sources with different degrees of power over the particular female target(s). To control for the gender of the source of sexism, the source of sexism is male in all studies.

Study 1 provides a direct examination of the extent to which people expect prejudice from people who have or do not have power over them. Study 2 examines whether source power over the self affects the attention targets dedicate to prejudicial statements, and their emotional reactions to prejudice. Study 3 provides evidence that people experience negative emotions when they encounter prejudice from sources who have power over them because they expect negative consequences for upcoming interactions.

Because power allocated to the self can determine how people perceive and respond to threats (e.g., Anderson & Berdhal, 2002; Sechrist, Swim, & Stangor, 2004), all three studies control for the power allocated to the self—that is, in all studies, participants hold a powerless position, and procedures vary only whether prejudice is expressed by a powerful or a powerless source. Because the existence of power structures can alter affect (Langner & Keltner, 2008), similar power structures were present in Studies 2 and 3. This way, if participants express different emotions as a function of source power, we can be certain that this is due to the source's power rather than to the existence of a power hierarchy.

## **Study 1**

To establish that people do not expect those with power over them to be prejudiced, Study 1 examined people's expectations concerning someone who has power over them versus someone who does not have power over them.

### *Method*

*Design and participants.* Participants indicated their expectations either about their work supervisor (powerful target condition) or about a work colleague (powerless target condition). A total of 134 female university students,

equally distributed across conditions, and with a mean age of 20.65 years, took part. Participants had the chance to enter a lottery for four prizes of approximately 36 USD, by indicating their name and contact on a separate sheet of paper.

*Procedure.* Participants were asked to imagine that they had recently started a new job. They did not know their colleagues and supervisors, but they had some elementary expectations about what they would encounter. A brief description of Peter van Dijk followed, and this differed according to condition. Power was defined as task and outcome control. Participants in the powerful target condition read: "Peter van Dijk is your direct supervisor. You are dependent on him for much of what happens at work. For example, he indicates which tasks you must perform, and evaluates your performance. It is his task to provide you with both positive and negative feedback about what you do. He is the one who decides whether or not you are considered for a bonus or for a promotion." Participants in the powerless target condition read: "Peter van Dijk is one of your colleagues. You are not dependent on him for anything that happens at work. For example, he does not have an influence on which tasks you must perform, or on how your performance is evaluated. It is not his task to provide you with either positive or negative feedback about what you do. He also has no influence on the decision of whether or not you are considered for a bonus or for a promotion." Participants then read: "Now that you know this about Peter van Dijk, how do you expect him to be? We realize you do not yet have much information about Peter van Dijk, but please try to form an image of him based on the information that you have received thus far and indicate in the following scales how you expect him to be."

*Dependent measures.* Participants indicated their expectations on 7-point Likert-type scales, from (1) *not at all* to (7) *very much*, on four different sets of traits: competence (intelligent, competent, capable,  $\alpha = .82$ ), sociability (nice, friendly, warm,  $\alpha = .72$ ), morality (reliable, trustworthy, honest, sincere,  $\alpha = .85$ ), and prejudice/sexism (prejudiced, sexist,  $r = .46$ ).

### *Results and Discussion*

Compared to a person who did not have power over them, participants expected a person who had power over them to be more competent ( $M = 5.66$ ,  $SD = .74$  vs.  $M = 4.68$ ,  $SD = .90$ ),  $t(130,52) = 6.99$ ,  $p < .001$  (equal variances not assumed) and more moral ( $M = 5.36$ ,  $SD = .81$  vs.  $M = 4.83$ ,  $SD = .88$ ),  $t(135) = 3.69$ ,  $p < .001$ , but equally prejudiced ( $M = 3.53$ ,  $SD = 1.13$  vs.  $M = 3.74$ ,  $SD = .90$ ),  $t(133) = 1.17$ , *ns* and equally sociable ( $M = 4.61$ ,  $SD = .67$  vs.  $M = 4.78$ ,  $SD = .82$ ),  $t(128,98) = 1.37$ , *ns* (equal variances not assumed).

That is, what seems to differentiate people's expectations about a powerful and a powerless person is how competent and moral the person is expected to be, not how prejudiced or sociable the person is expected to be. Thus, despite the fact that people in power tend to be more prejudiced than powerless people, they are not expected to be particularly prejudiced. In fact, because those in power are expected to be even more moral and competent than powerless people, they may be expected to be both motivated and able to provide equal treatment to those depending on them. This is also suggested by the negative reliable correlations between, on the one hand, expected prejudice and, on the other, expectations about competence ( $r = -.19, p < .01$ ) and morality ( $r = -.50, p < .001$ ).

## Study 2

Study 2 examined how power affects people's reactions when they do encounter prejudice against their group. We controlled for the extent to which the source had power but varied whether the source had power over the self. All participants were powerless (deprived of control), and they all were led by a team leader who either expressed prejudice or not, according to the experimental manipulation.

We measured perceived prejudice from the source and expected that, because both sources in this study are powerful, prejudice from these sources would be equally salient—and thus equally noticed. We assessed the attention they dedicated to the prejudiced statement and negative emotions. We expected participants to pay more attention to prejudice from the powerful source on whom they personally depended, and to be more emotionally affected by this source, than by the powerful source on whom they did not depend.

### *Method*

*Design and participants.* This study had one factor with two levels: the source of prejudice either had power over the participant, or had power but not over the participant. A total of 42 female students, equally distributed across conditions, and with a mean age of 20.10, took part. The study was conducted together with other studies, lasting about 1 hour in total, after which all participants were fully debriefed and received approximately 9 USD.

*Procedure.* To preserve anonymity but allow identification of team leaders versus team members, the computer allocated a false name to each participant that corresponded to their gender. In reality, because all participants were female, all received the name Anouk. Allegedly for logistical reasons, participants were divided into teams A and B. For each team, one leader was selected randomly by the computer, and participants saw a list of all members of the two teams, where the leader was clearly indicated. All participants read the team leaders' tasks,

which ensured that power was defined as outcome and task control: Team leaders had the task of coordinating the team's work, making decisions about how the team members would perform the tasks, such as allocating team members to the different tasks, and rewarding team members.

Prior to engaging in a (bogus) team task, participants entered a chat session and exchanged greetings with each other. Seven introductory statements from the other team members were preprogrammed (e.g., "Hi, let's do this quickly, I have a class right after this." or "Hi, I am sure we will do a good job!"). All statements were associated with the false participant names and team letters, so participants could see whether they were reading a statement from a member of their team, and whether the statement was from a team leader. The last statement seen by the participants was an ambiguously sexist statement (i.e., "Hi, I hope there are only guys in my team, as I prefer to work with guys."). This implied preferential treatment of male team members, although it was not so blatantly sexist that it would not be credible to participants. The experimental manipulation consisted of varying whether the sexist statement originated from the team leader (source has power over the self), or from the leader of the other team (source has power over others). Thus, the sexist statement was always the last statement, but the source of this statement varied across conditions.

*Measures.* To check that the experimental setup had been correctly understood, participants indicated to which team they belonged, the leader of their team, and the leader of the other team. When participants indicated the incorrect response, a screen stated that the response was incorrect and indicated what the correct response was. All participants indicated how sexist and prejudiced they thought their own team leader, one team member, and the leader of the other team were from (1) = *not at all* to (7) = *very much*. These ratings were thus made three times by all participants. Because our interest was on the extent to which the source was seen as sexist/prejudiced, we recoded the data so as to be able to compare ratings of the source (which was the team leader in the first condition, the leader of the other team in the second condition, and the powerless team member in the third condition) across conditions ( $r = .71, p < .001$ ). Ratings of each person when this person was not the source of sexism were not of interest to us, they were only collected so as not to reveal our research goals to the participants. To examine attention devoted to these statements in the different conditions, the computer also recorded how much time (in seconds) each participant dedicated to reading each statement. Participants indicated to what extent they experienced each of the following emotions from (1) = *not at all* to (7) = *very much*: dejected, tense, disappointed, cheerful, optimistic, and hopeful (the last three were recoded), which were averaged to assess negative emotions ( $\alpha = .88$ ).

### *Results and Discussion*

*Manipulation checks.* One participant indicated the incorrect leader of her team, another indicated the incorrect leader of the other team, and another participant indicated incorrect team membership. Participants who entered the incorrect answer received the correct information, so we opted to keep these participants in the data set. (Analyses without these participants reveal the same results as reported here.) A repeated measures multivariate analysis of variance, with evaluation target (source vs. other team members) as a within-participants factor, condition as a between-participants factor, and perceived prejudice as dependent measure, revealed only a reliable effect of target,  $F(1, 40) = 79.86, p < .001$ , partial  $\eta^2 = .67$ . As intended, in all conditions, participants saw the sexist source as more prejudiced/sexist than the other team members (source with power over the self: source  $M = 5.71$   $SD = 1.67$  vs. other team members  $M = 2.12, SD = 1.13$ ; source with power over others: source  $M = 5.45$   $SD = 1.76$  vs. other team members  $M = 2.02, SD = 1.09$ ). Importantly, the fact that no reliable effect of condition was revealed also indicates that participants saw both sources of sexism as equally prejudiced (source with power over the self  $M = 5.71, SD = 1.67$ , source with power over others  $M = 5.45, SD = 1.76$ ),  $F(1, 40) = .72, ns$ , partial  $\eta^2 = .02$ . Thus, as intended, in all conditions the source of sexism was seen as sexist, and this was unaffected by the manipulation of dependency.

*Attention.* Although participants saw all sources as equally sexist, the amount of time they spent reading the sexist message indicates that they thought this was more worthy of attention when the source had power over the self ( $M = 7.41, SD = 4.49$ ) than when the source had power but not over the participant ( $M = 4.25, SD = 1.51$ ),  $t(24.48) = 3.05, p < .005$ , equal variances not assumed. Thus, although all participants noticed that the powerful source was sexist, they devoted more attention to this information when they were personally dependent on the source.

*Negative emotions.* Participants indicated more negative emotions ( $M = 2.76, SD = 1.08$ ) when they encountered prejudice from a source with power over them than when they encountered prejudice from someone who had no power over them ( $M = 1.86, SD = .78$ ),  $F(1, 40) = 9.66, p < .005$ . That is, prejudice from a source with power over the self elicits more negative emotions than prejudice from a source that has no power over the self.

### **Study 3**

Study 3 extends Study 2 in several ways. First, we added one condition to control for some weaknesses of Study 2 and rule out alternative explanations for

our findings. A weakness of Study 2 is that the two sources not only differed in the extent to which they had power over the self, but also in group membership (team A vs. team B). Compared to out-group members, one may identify more with in-group members and thus see their opinions as more self-relevant. One is also more likely to interact in the future with in-group than with out-group members. Thus, in Study 2 people may have been more affected by the source with power over the self, not due to their personal dependency on this source but because what this source said was more self-relevant, or because they expected future interaction with this source. In addition, prior research has shown that disagreement with similar others is particularly displeasing (Jones & Wein, 1972), which could be an alternative explanation for targets' more negative emotions when the source had power over the self—because this source is similar to the self by belonging to the same team. To provide stronger support for our argument that dependency drives these effects, Study 3 aimed to examine whether responses to in-group sources of prejudice who have power over the self differ from responses to in-group sources of prejudice who do not have power over the self. Study 3 thus includes an added condition where the source belongs to the target's team, but has no task or outcome control over the participant.

This study also aimed to improve and extend the dependent measures. First, we cannot exclude the possibility that the less attention devoted to the sexist statements by sources without power over the self in Study 2 may imply that people were less likely to remember the information provided by this source when answering the subsequent dependent measures. This could explain why sources without power over the self had less effect on targets' emotions than sources with power over the self and is quite different from our argument that dependency drives these effects because of the implications it has for future interactions. In Study 3, we checked whether people could correctly recall the source of the information provided. Because statements from the powerful are highly salient, particularly if they are unexpected (as prejudice is), we anticipated that participants would be equally able to remember that the powerful person had expressed a sexist statement, regardless of whether this person had power over the self or over others. Given that statements from powerless sources are less salient (even if unexpected), we also predicted that participants would be less able to recall who was the source of the prejudiced statement when the source was powerless. Furthermore, we also investigated participants' expectations about the upcoming team interaction, as a possible mediator of targets' emotional reactions. We propose that participants' negative emotional reactions to prejudice from a source on whom they depend are mediated by negative expectations about the upcoming team interaction when the source is the team leader: people are likely to expect the team leader to have the capacity to influence within-team interaction more negatively than other team members (and than the leader of another team), and this is likely to lead to negative emotions.

### *Method*

*Design and participants.* This study had one factor with three levels: the source of prejudice either had power over the participant, had power but not over the participant, or had no formal power at all. Participants in this study were 59 female university students, with a mean age of 21.05. The study was conducted together with other studies, lasting about 1 hour in total, after which all participants were fully debriefed and paid approximately 9 USD.

*Procedure.* The procedure of this study was similar to that of Study 2 with some exceptions. Instead of associating each participant with a false name as in Study 2, in this study we allocated letters to the teams (A vs. B) and numbers to the team members. Participants were informed that those who were allocated the number 1 (A-1 or B-1) would act as team leaders. Although this was allegedly random, participants themselves all received the code A-2, indicating they were member 2 of team A. We did this to examine the robustness of our findings, given that identifying the sources by name as in Study 2 is not only easier, but also makes it clear to participants that sources were male, and this may have helped participants notice that sources expressed prejudice against women. We expected however that participants would clearly notice that the powerful sources expressed prejudice because this is highly salient. We thus expected that identifying the sources with letters and numbers would not modify the earlier effect, that is, that both powerful sources would be clearly seen as prejudiced. The manipulation of power was the same as in Study 2, except with one added condition: the source of the sexist statement was either the leader of participant's team, or the leader of the other team, or a member of the participant's team on whom the participant did not depend.

*Measures.* To check understanding of the experimental setup, participants indicated to which team they belonged, the leader of their team, and the leader of the other team. As in Study 2, incorrect answers were automatically corrected. Perceived sexism was assessed the same way as in Study 2 ( $r = .75, p < .001$ ), and so were negative emotions ( $\alpha = .88$ ). We also assessed participant's recall of the source of the sexist statement. To avoid revealing our goals, we assessed participants' recall of who was the source of each statement exchanged during the chat session. Participants saw again each statement exchanged, in a different order than originally seen. For each statement, they had to indicate which participant had voiced it by clicking on the appropriate number. No corrections were provided for incorrect answers. The measure of recall was the proportion of participants that recalled the source of the sexist statement correctly in each condition (for each participant, correct recall was coded as 1 and incorrect recall was coded as 0). This time we also included four items to assess negative expectations regarding

the upcoming team interaction (During the upcoming team task: “I expect conflict within the team,” “I expect to have a good relationship with my team members,” “I expect that tasks will be distributed fairly among the team members,” “I expect everyone in the team will be equally treated,”  $\alpha = .81$ , the last three items were reverse coded).

### Results and Discussion

Given the specificity of our hypotheses, where possible we analyzed the results of this study through analysis of variances followed by contrast analysis to test the precise pattern of results (Rosenthal & Rosnow, 1985). The contrast weights reflected our hypothesis that slightly different patterns would emerge for perceived prejudice, negative emotions, and negative expectation about the interaction. Specifically, because we predicted that participants would perceive more sexism when the source had power over the self and when the source had power over others than when the source had no power, contrast weights for this measure were (+1 +1 -2). We also specified contrast weights that would reflect a difference between the two powerful source conditions (+1 -1 0), and expected that this contrast would not be reliable. Because we expected more negative emotions and more negative expectations about the interaction when the source had power over the self than in the other conditions, contrast weights for these measures were (+2 -1 -1). For emotions and expectations, we also specified contrast weights that would reflect a difference between the source with power over others and the powerless source, and we did not expect this contrast to be reliable (see Table 1 for all means and standard deviations for this study).

**Table 1.** Means and Standard Deviations of Correct Recall, Perceived Prejudice, Emotions, and Expectations (Study 3)

Measure	Power of Source		
	Power Over the Self	Power Over Others	Powerless Team Member
Correct recall	86%	76%	50%
Perceived prejudice	5.61 <sup>a</sup> (1.73)	5.31 <sup>a</sup> (1.51)	4.16 <sup>b</sup> (2.36)
Negative emotions	2.79 <sup>a</sup> (1.34)	1.91 <sup>b</sup> (0.80)	2.01 <sup>b</sup> (0.82)
Negative expectations	4.09 <sup>a</sup> (1.12)	2.75 <sup>b</sup> (1.09)	3.29 <sup>b</sup> (1.11)

*Note.* Higher means indicate more perceived prejudice, more negative emotions and more negative expectations. Different subscripts indicate means that differ at  $p < .05$ . Comparisons are made within rows. Following the condition order indicated in the table, the contrast weights for perceived prejudice were (+1 +1 -2) and for negative emotions and negative expectations were (+2 -1 -1).

*Manipulation checks.* All participants indicated correctly to which team they belonged, and who their team leader was. One participant indicated incorrectly the leader of the other team. Because corrections for incorrect answers were provided, we chose to retain this participant in the data file. (Results remain unchanged when data from this participant is excluded.)

*Recall.* The measure of recall had two purposes: (1) to check that participants remember what powerful sources say equally well, irrespective of whether these sources have power over the self and (2) to examine whether people are likely to recall better what powerful sources say than what powerless sources say. Analyses revealed a reliable  $\chi^2(2, N = 59) = 6.38, p < .05$  showing that the pattern of correct/incorrect responses was unequal across the three conditions. To examine the pattern further we conducted pairwise chi-square analyses. As intended, despite the fact that participants in Study 2 devoted more attention (reading time) to sexist statements expressed by their own team leader than by the leader of the other team, our results show that correct recall of the source of the sexist statement in the two powerful source conditions (own team leader: 86% correct answers; other team leader: 76% correct answers) did not reliably differ from each other,  $\chi^2(1, N = 43) = .73, ns$ . However, in line with our predictions based on the idea that prejudice from powerful sources is more salient and thus also better recalled than prejudice from powerless sources, participants were less likely to correctly recall the source of the sexist statement when the source was another member of their team (50% correct answers; vs. recall when source is own team leader:  $\chi^2(1, N = 38) = 5.96, p < .05$ , vs. recall when source is leader of the other team:  $\chi^2(1, N = 37) = 2.73, p = .09$ ). This effect counters the explanation that information about ingroup members is recalled better, as participants were better able to recall what the powerful outgroup member said than what the (powerless) ingroup member said.

*Perceived sexism.* Analyses revealed a reliable main effect of condition,  $F(2, 56) = 3.06, p = .05$ , partial  $\eta^2 = .09$ . The contrast showing that the two powerful sources differed from the powerless sources was reliable,  $t(20.53) = 2.04, p = .05$ , whereas the contrast testing the difference between the two powerful sources was not,  $t(40.69) = .61, p = .54$ , equal variances not assumed, indicating that participants perceived more sexism when the source had power over the self and when the source had power over others than when the source had no power.

*Negative emotions.* Analyses revealed a reliable effect of condition,  $F(2, 56) = 4.54, p < .05$ , partial  $\eta^2 = .14$ . The planned contrast that represents the difference between the condition where source had power over the self and the remaining conditions was significant,  $t(30.51) = 2.64, p < .01$ , whereas the contrast that tested the difference between the condition where the source had

power over others and where it was powerless was not,  $t(32) = .36, p = .72$ , equal variances not assumed, indicating more negative emotions when the source had power over the self than in the other conditions.

*Negative expectations about the upcoming team interaction.* Analyses revealed a reliable main effect of condition,  $F(2, 56) = 7.96, p < .001$ , partial  $\eta^2 = .22$ . Again, the planned contrast that represents the difference between the condition where source had power over the self and the remaining conditions was significant,  $t(42.96) = 3.54, p < .001$ , equal variances not assumed. The contrast that tested the difference between the condition where the source had power over others and where it was powerless was not reliable,  $t(32.16) = 1.49, p = .14$ , equal variances not assumed. This indicates more negative expectations about the interaction when the source had power over the self than in the other conditions.

*Mediation analysis.* We tested whether the negative emotions experienced when the source of sexist statements has power over the self is mediated by negative expectations about the upcoming interaction. To do so we recoded the conditions according to the contrast we proposed to test (+2 -1 -1), and subsequently entered this new variable as an independent variable in a series of regression analyses, as outlined by Baron and Kenny (1986). Experimental condition reliably predicted negative emotions,  $\beta = .37, p < .005$ , and negative interaction expectations,  $\beta = .44, p < .001$ . When experimental condition and negative interaction expectations were entered simultaneously in the equation, condition no longer reliably predicted negative emotions,  $\beta = .13, p = .26$ , whereas negative interaction expectations remained a reliable predictor of emotional responses,  $\beta = .55, p < .001$  (Sobel  $t = 3.09, p < .001$ ). We can thus say that expectations about the upcoming interaction fully mediate the effect of condition on reported emotions.

## General Discussion

This research aimed at examining how power differences between targets and sources of prejudice modify targets' emotional reactions to prejudice. The results show that targets notice and recall prejudice more easily if the source is powerful, irrespective of whether the source is powerful over the self or over others, and compared to when the source is powerless. This pattern was replicated across slightly different research paradigms that differed in the ease with which sources might be identified, attesting to the robustness of these findings.

Although targets noticed and recalled prejudice from powerful sources equally irrespective of their personal dependency on the source, this research also demonstrates that dependency on the source importantly determines targets' reactions to prejudice (see also Swim, Eyssell, Quinlivan, & Ferguson, this issue). In particular, targets attended more to and were more negatively affected by prejudice from

a source on whom they depended, than by prejudice from a powerful source on whom they did not depend, or from a powerless source. Besides reporting more negative emotions when they depended on the source of prejudice, targets also had more negative expectations about upcoming team interactions in this same situation, even in comparison to a situation where the source was also a team member, but a powerless one. Importantly, these negative expectations about future interactions fully mediated the negative emotions targets reported as a consequence of prejudice. This supports the idea that even though prejudice is likely to have a negative impact on emotional well-being across of range of situations (see also Ashburn-Nardo, this issue; Jahoda, Wilson, Stalker, & Cairney, this issue), this is likely to be accentuated when seen as having direct and repeated implications for the self (e.g., Schmitt et al., 2003; Stroebe et al., 2009).

It is important to note that our findings might not necessarily be replicated when prejudice is reflected in actual negative behavior toward the target. That is, our findings may be especially relevant when people expect to be negatively treated because they heard their team leader is prejudiced, but not when negative treatment has already taken place, such as when sexual harassment has occurred. This is because we argue that personal dependency affects negative emotions that result from encountering prejudice because power determines the likelihood that the prejudicial attitude might be reflected in negative outcomes. When these negative outcomes have already taken place, then we might not find an effect of power on emotions or other indicators of mental health. This might be why in their study Huerta et al. (2006) found that power relations did not moderate the effect of sexual harassment on mental health.

Our findings have important implications for the understanding of the conditions that affect the well-being of minority groups in hierarchical contexts, such as schools and work organizations. Prejudice observed from a powerful source, such as a teacher or a leader, is likely to lead not only to more negative affect, as shown in these studies, but also to more stress, burnout, loss of motivation, and poor productivity. This implies that particular care should be taken not to place people with high levels of prejudice in powerful positions. In addition, given that dependency might limit target's ability to complain about prejudice from powerful sources, there is a danger that prejudice and discrimination by the powerful will remain unchanged. This is likely to have negative consequences for the individual target, who perceives the prejudiced treatment but is unable to address it, as well as for other members of the minority group who are likely to continue receiving biased treatment from this source. This underlines the need to develop procedures that allow prejudice from powerful sources to be addressed.

Importantly, our findings should not be seen to imply that prejudice from powerless sources is unproblematic. Indeed, prejudice from school peers or colleagues at work might have severe consequences which can, however, be different and less immediate than when the source has power over the self. If prejudice

from peers remains unnoticed it might also remain unaddressed, and escalate into ostracism. Future research might wish to examine these processes over a longer period of time, where different types of effects might be observed, and examine whether prejudice from powerless sources is more or less likely to be addressed than prejudice from powerful sources. Future research should also examine whether these findings can be replicated in intergroup contexts other than gender relations. Although we approached gender relations as one example of a context where prejudice exists and is often expressed in the context of power hierarchies, other intergroup relations fulfill these conditions and there might be aspects of this process that are specific to each of these groups.

Taken together, these findings illustrate that to understand the impact of prejudice on well-being and expectations about future interactions, we need to attend to what sources of prejudice say, but we also need to examine precisely who they are in relation to their targets.

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