

RUNNING HEAD: DO DOMINANT GROUP MEMBERS ALWAYS COME OUT ON TOP?

Empathy by dominant versus minority group members in intergroup interaction:

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Abstract

What power dynamics are instantiated when a minority group member empathizes with a dominant group member during social interaction? How do these dynamics compare to those instantiated when the dominant group member instead does the empathizing? According to a *general power script* account, because empathy is generally directed “down” toward disadvantaged targets needing support, the empathizer should come out “on top” with respect to power-relevant outcomes no matter who it is. According to a *meta-stereotype* account, because adopting an empathic stance in intergroup contexts leads individuals to think about how their own group is viewed (including with respect to power-relevant characteristics), the dominant group member might come out on top no matter which person empathizes. Two studies involving face-to-face intergroup exchanges yielded results that overall were consistent with the meta-stereotype account: Regardless of who does it, empathy in intergroup contexts seems more apt to exacerbate than mitigate group-based status differences.

KEYWORDS: Empathy; Intergroup Interaction; Power; Meta-Stereotypes

Empathy by dominant versus minority group members in intergroup interaction:

Do dominant group members always come out on top?

It is difficult to overstate the value that is currently attached to empathy in contemporary western society and virtually all around the world. Indeed, advice to try to connect and identify with others' feelings by placing oneself in their shoes seems to be a key component of most programs and interventions designed to improve interpersonal and intergroup relations.

This widespread enthusiasm is not surprising given that in common usage the term empathy is interpreted as essentially synonymous with warm, positive feelings and intentions toward someone else. Moreover, substantial empirical evidence – across a variety of different operationalizations of the construct – confirms that empathy is often associated with beneficial outcomes such as increased helping and more positive intergroup evaluations (see Epley, 2014; Vorauer, 2013, for reviews). In the present research we define empathy as an other-focused emotional response that involves trying to “feel for” another person.

Notably, although the research literature on empathy is extensive, it has focused almost exclusively on the positivity of the attitudes and behavior of the individuals trying to be empathic, with the reactions of the targets themselves going largely unexamined. Indeed, in experimental work, most often the target does not even really exist. For example, he or she might be represented by a photograph or transcript.

Recent investigations that have begun to examine the consequences of being the target of empathy have revealed that the experience can have an important, unintended, downside: Being on the receiving end of another person's efforts to empathize during a back-and-forth social exchange can be disempowering. Specifically, in a series of experiments in which one member (the “actor”) of interacting dyads either did or did not receive instructions to be empathic,

Vorauer, Quesnel, and St. Germain (2016) found that targets of empathy evidenced a reduction in several forms of goal-directed cognition that are associated with a psychological sense of power, at the same time as empathizing actors evidenced a boost in these same outcomes. In a sense, then, the “wrong” person benefitted.

Given that in Vorauer et al.’s (2016) research the actors were always dominant group members (i.e., they had a White ethnic background), and the targets were usually ethnic minority group members, the potential negative implications of empathy in intergroup contexts for reinforcing chronic group status differences are clear – at least when dominant group members are doing the empathizing. But what happens when empathy runs in the other direction, that is, when minority group members try to empathize with a dominant group member? Such efforts may be most likely at the individual level and where ethnicity is incidental to a social exchange. However, research suggests that at least in some intergroup contexts minority group members experience outgroup empathy at levels comparable to (Swart, Hewstone, Christ, & Voci, 2010) or greater than dominant group members (Vezzali, Giovannini, & Capozza, 2010) and that intergroup contact increases the likelihood of empathic responses to outgroup members for minority and dominant group members alike (see, e.g., Pettigrew & Tropp, 2008; Swart, Hewstone, Christ, & Voci, 2011). It is also the case that interventions designed to improve social relations promote empathy as a “two-way street,” that is, a mindset to be adopted by all parties to an exchange.

The question is, then, does the same power dynamic arise when minority group members try to empathize, whereby the actor (here the minority group member) enjoys a boost in power-relevant outcomes at the same time as the target experiences decrements? Or were the effects

exhibited by participants in Vorauer et al.'s experiments somehow contingent on the actors being dominant group members?

On a theoretical level, probing this question has the potential to better illuminate underlying process. In interpreting their results, Vorauer et al. (2016) emphasized the idea that because empathy is typically directed "down," toward targets who are perceived to be disadvantaged in some way and in need of help and support, this mindset activates social scripts in which actors occupy a powerful position relative to targets. Further, because power tends to be complementary, with higher levels of power experienced by one person translating into lower levels of power experienced by his or her interaction partner (Tiedens & Fragale, 2003), raising actors up should serve to push targets down. This *general power script* account suggests that the same effects might be evident regardless of who does the empathizing. Consistent with this account, Vorauer et al. found that empathizing actors experienced a boost in power outcomes and targets experienced a decrease even in intragroup exchanges in which a White person empathized with another White person.

However, it is possible that the particular power hierarchy instantiated by empathy in intergroup contexts is also influenced by the relative social status and power enjoyed by the empathizer's ethnic group (*meta-stereotype* account). Previous research has revealed that when dominant group members empathize with a minority group interaction partner, they activate meta-stereotypes about how their group is viewed by their minority partner's ethnic group (Vorauer & Sasaki, 2009). Their meta-stereotypes in such contexts are apt to include traits and characteristics that connote high power, such as *assertive*, *wealthy*, *privileged*, and *powerful* (Frantz, Cuddy, Burnett, Ray, & Hart, 2004; Vorauer, Main, & O'Connell, 1998). Moreover, previous work has documented that activation of such group-level meta-stereotypes can have

implications for individual-level thoughts and feelings in intergroup interaction contexts (e.g., Vorauer, Hunter, Main, & Roy, 2000). For dominant group members, then, the general power script activated in the situation and their meta-stereotype both point in the same direction and could each play a role in generating a power dynamic in which the dominant group member is “on top.”

For minority group members who empathize with a dominant group member, however, the general power script and their meta-stereotype point in opposite directions. Minority group members' knowledge structures regarding how dominant group members view their group are generally apt to include traits and characteristics that connote low status and marginalization, such as dependency and incompetence (Bergsieker, Shelton, & Richeson, 2010; Vorauer et al., 1998; Zhang, Kou, Zhao, & Fu, 2015). Thus, at the same time as empathizing might raise these individuals up by virtue of the general power script, it might also lead them to think about how they will be seen through the lens of a meta-stereotype that highlights the lower relative power of their group.

Probing the power dynamics that arise when minority group members empathize with a dominant group member allows us to pit these two possible processes against each other. Results indicating that empathizing puts minority group members on top in terms of power-relevant cognition outcomes would suggest that the general power script mechanism is strong enough to override any implications of meta-stereotypes. Results indicating that empathizing fails to put minority group members on top would suggest that meta-stereotypes connoting low power prevent empathizers from experiencing a power advantage. A further possibility (“strong” meta-stereotype account) is that a reversal could occur, whereby minority group members who empathize with a dominant group member experience reductions in power-relevant cognition

outcomes relative to the target of their empathy. Such a pattern would suggest that meta-stereotypes can be a potent force in guiding the effects of empathy in intergroup situations and highlight that in these contexts empathy might disadvantage minority group members no matter who does it.

On a practical level, probing the effects of empathy enacted by dominant versus minority group members in intergroup contexts will illuminate whether minority group members who try to empathize with a dominant group member are apt to ultimately be empowered or disempowered by the experience and, in connection with this, whether such efforts are likely to mitigate or potentially exacerbate power dynamics associated with chronic group-based status differences.

We conducted two studies involving face-to-face interaction to examine the power dynamics instantiated when minority versus dominant group members try to adopt an empathic stance in intergroup interaction. The study paradigms diverged in a number of ways. In particular, in Study 1 empathy was operationalized in terms of actors' chronic dispositional level of empathic concern, a variety of different ethnic groups participated, and intragroup pairs were included for comparison purposes; in Study 2 empathy was experimentally manipulated and the study focused on exchanges between individuals with a White or Black ethnic background.

In both studies a range of outcomes previously demonstrated to be associated with a psychological sense of power were assessed after the interaction. Guided by the fact that "power's cues and consequences do not have to be conscious for its profound influence on basic psychological and interpersonal processes to emerge" (Smith & Galinsky, 2010, p. 918), our dependent measures focused on three different types of cognitive outcomes that have been examined in isolation and shown to be tied to a psychological sense of power that is not

necessarily consciously experienced. These included enhanced ability to exert executive control to maintain goal focus (Smith, Jostmann, Galinsky, & van Dijk, 2008), more abstract information processing (Smith & Trope, 2006), and reduced vulnerability to cognitive resource depletion (Kim, Lee, & Rhee, 2015). Because our studies examined the effects of empathy enacted by individuals with a variety of different cultural backgrounds and the effects of power on social outcomes and decision-making can be moderated by interdependence and communal orientation (Chen, Lee-Chai, & Bargh, 2001; Chen & Welland, 2002; Gordon & Chen, 2013), we chose to focus on general executive functioning and cognitive processing outcomes in the current research.

Notably, our hypotheses pertain to power-relevant cognition as a category, as defined by previous research empirically documenting outcomes and correlates of power: We do not have theoretical grounds for making predictions regarding any specific outcome in and of itself. Yet previous research indicates that the various outcomes, although all related to power, do not correlate with each other, at least in interaction settings (Vorauer et al., 2016). Accordingly, our plan was to assess a variety of power-relevant cognition outcomes, analyze them separately, and consider the overall pattern across all of them in determining whether the weight of evidence suggested that the general power script or meta-stereotype process was playing a stronger role in accounting for the effects of empathy in intergroup interaction.

We had two additional reasons for adopting this approach. First, this line of research is ambitious in probing the downstream effects of one person's mindset on his or her interaction partner's cognitive processes and executive functioning. For such effects to arise, empathizers' mindset has to affect their behavior in a manner that signals power to the target, and on some level the target has to code the signal as such. Possibly because there are a variety of behaviors

through which such communication can occur (e.g., bodily openness, interruptions, loud voice; see Smith & Galinsky, 2010), which could vary according to individuals' cultural background or how empathy is operationalized, the particular outcomes on which empathy effects are evident have proven to be variable across studies (see Vorauer et al., 2016). Second, there seems to be a tendency for the strongest effects on actors versus targets to be evident on different outcomes, possibly because of mimicry processes that also arise in affiliative contexts, which would run against complementary patterns on the exact same outcome (again see Vorauer et al., 2016). In view of all of these factors – and the range of ethnic groups and empathy operationalizations involved in our studies – we expected to have to look at the full constellation of effects across a variety of measures to fully understand the power dynamics triggered by empathy enacted by dominant versus minority group members in intergroup contexts.

To probe the behavioral dynamics associated with empathy by dominant versus minority group members, in Study 1 we videotaped the exchanges so that we could assess which person appeared to be working harder to be friendly, respectful, and polite. In line with research indicating that ingratiation efforts are generally enacted by lower power individuals and directed toward higher power others (Jones & Pittman, 1982), we anticipated that the balance of positivity across the dyad would signify the balance of power, that is, that being on the receiving end of more positivity would reflect higher power.

To more directly assess the viability of the meta-stereotype account, in Study 2 (which focused on a specific intergroup relationship) we assessed individuals' perceptions of the power wielded by their own ethnic group relative to their outgroup interaction partner's ethnic group. We expected that if the results for power-relevant cognition were consistent with the meta-stereotype account, empathizing minority group members would experience a reduction in the

extent to which they viewed their ethnic group as powerful. Such a result would provide an interesting complement to recent work indicating that minority group members who are on the receiving end of a dominant group member's empathy perceive their group as less powerful (Vorauer & Quesnel, 2016).

Study 1

In Study 1 we conducted our first test of the power dynamics instantiated when a minority versus dominant group member adopts an empathic stance in intergroup interaction. We operationalized empathy in terms of one person's (i.e. the "actor's") chronic dispositional level of empathic concern, as assessed before a face-to-face discussion with another individual (the "target"). Recruitment was open to all ethnic backgrounds and assignment to the actor or target role was random, such that interacting dyads varied in terms of whether the actor was a dominant group member (White ethnic background) or ethnic minority group member and whether the target was a dominant or minority group member.

The focus of our analysis was on how the power dynamics evident in minority-dominant pairs (where empathic minority actors interacted with dominant targets) compared to those evident in dominant-minority pairs (where empathic dominant actors interacted with minority targets): Would the empathizer always come out "on top," or would this pattern be specific to dominant-minority pairs? Notably, because we had intragroup pairs (dominant-dominant and minority-minority) we had a control group of sorts with which each of the two types of intergroup pairs could be compared.

We also sought to demonstrate discriminant validity by showing that the effects of empathy are distinct from those of perspective-taking. Although these constructs are overlapping, perspective-taking is usually viewed as more cognitive in nature than empathy,

which is considered to be more affectively based (see, e.g., Galinsky, Maddux, Gilin, & White, 2008). Perhaps in connection with this, the power hierarchy implied by perspective-taking would seem to sometimes run in the opposite direction to that implied by empathy: Whereas individuals tend to empathize with the feelings of others who are disadvantaged relative to themselves, they may often try to anticipate the thoughts and perspective of those who have power over them so as to better predict and control their outcomes (see Vorauer & Quesnel, 2016). Accordingly, we expected that perspective-taking would be not associated with the same effects on the power outcomes as empathy.

Method

We report all measures, manipulations, and exclusions in these studies (see *Supplemental Measures and Results* for all measures not reported in the main text, as well as details regarding missing data on specific measures and results without the English language covariates).

Participants

Participants were 99 same-sex pairs of previously unacquainted introductory psychology students (50.5% female); this number does not include two pairs in which one person failed to provide demographic information. We determined this sample size according to our previous work with a similar paradigm where participant availability was also limited (Vorauer & Quesnel, 2016; Vorauer et al., 2016). Further, as in our previous work, we anticipated that statistical power would be enhanced by the fact that participants were run individually in a highly controlled experimental context that would reduce distraction and enhance motivation and attention, thereby minimizing measurement error (see Funder et al., 2014; McClelland, 2000).

The uncontrolled recruitment process resulted in 20 dominant-minority and 26 minority-dominant pairs. We combined the 10 dominant-dominant and 43 minority-minority pairs

together into a single "equal status" category. Ethnic minority groups represented included Aboriginal, Black, Chinese, Filipino, Korean, Latin American, South Asian, and Southeast Asian, along with a variety of other or mixed ethnic backgrounds.

Procedure

Pair members waited for the White female experimenter in different locations and were kept separate from one another at all times except for the discussion and debriefing. As a cover story, the experimenter told participants that the researchers were interested in "how reasoning and judgment vary across social versus non-social contexts." Accordingly, they and their partner would discuss their thoughts, experiences, and opinions on a number of different topics and would also do some judgment and decision-making tasks on their own. Actors began by completing the Interpersonal Reactivity Index (IRI; Davis, 1980); targets did not complete the IRI, but apart from this the procedures for targets were the same as for actors. Our hypotheses centered on the role of empathic concern subscale in particular (e.g., "I often have tender, concerned feelings for people less fortunate than me," "Other people's misfortunes do not usually disturb me a great deal" (reverse-scored); $\alpha = .72$ with standardized items). However, we administered the full scale so as to have a measure of perspective-taking for comparison purposes (e.g., "I sometimes try to understand my friends better by imagining how things look from their perspective," "I try to look at everybody's side of a disagreement before I make a decision"; $\alpha = .74$ with standardized items), as well as filler items.

The experimenter then brought the pair members together and gave them a list of discussion topics, which included positive and negative academic and social experiences, opinions about social issues (capital punishment and euthanasia), career goals, employment

experiences, and relationships with family members. Participants were left alone for the 12-minute discussion that was video-recorded with their knowledge.

Dependent Measures

Immediately after the discussion pair members were separated to complete the dependent measures, having been assured of the confidentiality of their responses. Unless otherwise noted all closed-ended measures used a 7-point response scale on which higher numbers reflected stronger endorsement.

Power Cognition. Ability to exert executive control to maintain goal focus was assessed with a majority-congruent Stroop task (Kane & Engle, 2003). This task required participants to indicate the color in which a letter string appeared; on the 24 incongruent trials a color name appeared in a color other than its semantic meaning, whereas on the 96 congruent trials a color name appeared in a color that matched its semantic meaning; 24 neutral trials (a string of *x*s) were included as well. Smith et al. (2008) used this task to index individuals' ability to remember, initiate, and act on the goal of reporting ink color even when most of the time they can arrive at the correct answer simply by reading the word. Accuracy on the incongruent trials reflects better ability to maintain goal focus. Accuracy across the control (i.e., all remaining) trials was entered as a covariate in all analyses involving this variable to control for general accuracy.¹

Reduced vulnerability to cognitive resource depletion (Kim et al., 2015) was assessed with identical procedures applied to the Stroop reaction times rather than accuracy, with higher reaction times reflecting more depletion; here reaction time on control trials was the covariate. Log transformations were applied to the accuracy and reaction time data to reduce negative and

positive skew respectively (Howell, 2007; Tabachnick & Fidell, 2007). For ease of presentation untransformed values are presented in any relevant figures.

Abstract information processing was assessed via Rosch's (1975) categorization task used by Smith and Trope (2006). This task involves rating on a 10-point scale the extent to which a series of items (e.g., pants, bracelet) belong to a higher order category (e.g., clothing); as in Smith and Trope (2006), ratings of 6 or higher indicated inclusion in the category. Participants completed this task for clothing, food, and vehicles. The average proportion of weak exemplars (i.e., those rated at or below the midpoint in terms of prototypicality in Rosch's (1975) research; approximately one third of the items) that participants included in the category was computed to index abstract information processing.

Individual-Level Perceptions of Power. Participants rated how *powerful*, *strong*, *influential*, and *effective* they currently felt ($\alpha = .79$) and also made parallel ratings of their interaction partner's power ($\alpha = .84$). An index of perceived relative power was computed by subtracting individuals' ratings of their interaction partner's power from their ratings of their own power.

Participants then completed a final questionnaire that assessed demographic characteristics (i.e., age, sex, ethnic background) as well as whether they had met their partner before and whether English was their first language. They were thanked and fully debriefed at the end of the study.

Results

Across both studies we report all significant effects apart from those involving the covariates.

Our analyses focused on weighing the extent to which the evidence supported the general power script versus meta-stereotype account, which diverge in the predictions that they make regarding empathy by minority group members (see Table 1). Specifically, the general power script account predicts that empathizing puts minority group members on top in terms of power-relevant cognition outcomes (by giving them a boost and/or by bringing their dominant partner down). In contrast, the meta-stereotype account predicts that empathizing fails to put minority group members on top. According to the strong meta-stereotype account it might even have the opposite effect of putting them at a disadvantage (by bringing them down and/or giving their dominant partner a boost). When combined with each account's common prediction that dominant group members' empathy will advantage them relative to a minority partner, the patterns they predict are distinct in that according to the general power script account, the act of empathizing should benefit anyone (dominant or minority) relative to their partner, whereas according to the meta-stereotype account an asymmetry should occur whereby empathizing only ever advantages dominant over minority group members. The strong meta-stereotype account predicts that dominant group members might even be advantaged by their minority partner's empathy.

So, does empathy generally advantage actors over targets (general power script account) or dominant over minority group members (meta-stereotype account)? In preliminary analyses we examined the correlation between actors' empathic concern scores and actors' and targets' power-relevant cognition outcomes in each of the three pair types. These correlations are presented in Table 3. Whereas there were no significant relations in equal status pairs, in dominant-minority pairs greater empathic concern by actors was positively associated with their own ability to maintain goal focus. In contrast, in minority-dominant pairs, greater empathic

concern by actors was positively associated with *their partner's* ability to maintain goal focus. In line with the (strong) meta-stereotype account, then, the dominant group member benefitted from their own *and* their minority partner's empathy.

We then proceeded to conduct more sophisticated hierarchical multiple regression analyses of actors' and targets' power-relevant cognition outcomes. To probe the effects of pair type we created two dummy-coded contrast vectors that compared dominant-minority and minority-dominant pairs with equal status pairs (i.e., for the dominant-minority contrast, dominant-minority = 1 and all other pair types = 0; for the minority-dominant contrast, minority-dominant = 1 and all pair other types = 0). The predictors were actors' empathic concern, these two contrast vectors, and the interaction of actors' empathy with each vector. Whether actors and targets had English as a first language (62.6% and 63.6% respectively) were included as covariates because of their relevance to the power cognition measures (most notably response times and accuracy on the Stroop task, which involves reading in English under time pressure).

Fully consistent with the correlational results, the analysis of actors' ability to maintain goal focus (accuracy on incongruent Stroop trials) yielded a significant Actors' Empathic Concern X Dominant-Minority contrast interaction, $b = 0.04$, $\beta = 0.22$, $t(87) = 2.06$, $p = .043$, $d = 0.44$ (see Figure 1). In dominant-minority pairs, actors' empathic concern positively predicted their own ability to maintain goal focus, $b = 0.04$, $t(87) = 2.05$, $p = .043$, $d = 0.44$; this was not the case in equal status pairs, $b = -0.01$, $t(87) = 0.527$, $p = .599$, $d = 0.11$. For the Actors' Empathic Concern X Minority-Dominant contrast interaction, $b = 0.01$, $\beta = 0.05$, $t(87) = 0.400$, $p = .690$, $d = 0.09$.

Further consistent with the correlational results, the analysis of targets' ability to maintain goal focus yielded an Actors' Empathic Concern X Minority-Dominant contrast interaction, $b =$

0.03, $\beta = 0.27$, $t(87) = 1.98$, $p = .051$, $d = 0.42$ (see Figure 2). In minority-dominant pairs, actors' empathic concern positively predicted *their partner's* ability to maintain goal focus, $b = 0.02$, $t(87) = 2.07$, $p = .041$, $d = 0.44$; this was not the case in equal status pairs, $b = -0.01$, $t(87) = 0.657$, $p = .513$, $d = 0.14$. For the Actors' Empathic Concern X Dominant-Minority contrast interaction, $b = 0.01$, $\beta = 0.05$, $t(87) = 0.444$, $p = .658$, $d = 0.10$.

Further corollary analyses confirmed that it was appropriate to analyze actors' and targets' scores here independently, as they were not correlated, $r(92) = 0.02$, $p = .851$. To explore whether, in line with previous research, the effects of perspective-taking would be distinct from those of empathy (Vorauer & Quesnel, 2016), we added a third step to the regression analyses that included actors' score on the perspective-taking subscale of the IRI, the two contrast vectors, and the interaction of perspective-taking with each of these vectors. There were no significant or marginal effects involving perspective-taking for either actors' or targets' ability to maintain goal focus (all $ps \geq .209$); the same was true when perspective-taking was entered on its own, without the empathy terms. The fact that the implications of empathic concern were distinct from those of perspective-taking, a conceptually and empirically related construct ($r = .30$ here), suggests that something unique about the empathy mindset in particular was driving the effects that were evident. It also renders alternative interpretations in terms of factors such as sociability or social desirability less plausible.

Parallel analyses of actors' and targets' reduced vulnerability to cognitive resource depletion and abstract information processing yielded no significant effects apart from those of the covariates. The same was true for actors' and targets' perceptions of their relative power, which were assessed at the individual level.

Two coders reviewed the videotaped exchanges (minutes 0-2, 5-7, 10-12) and rated on 7-point scales which person was more respectful, polite, and friendlier (scored so that 1 = *the target*; 7 = *the actor*). Coders' judgments were standardized and averaged together to form an index of positive behavior ($\alpha = .66$); prior to standardization, $M = 3.91$, $SD = 0.75$. The analysis of these scores yielded an Actors' Empathic Concern X Dominant-Minority interaction, $b = -1.18$, $\beta = -0.33$, $t(81) = 2.66$, $p = .009$, $d = 0.59$ (see Figure 3). In dominant-minority pairs, actors' empathic concern *negatively* predicted their positivity relative to their partner, $b = -0.74$, $t(81) = 1.96$, $p = .054$, $d = 0.44$; in equal status pairs there was a trend in the opposite direction, $b = 0.43$, $t(81) = 1.87$, $p = .065$, $d = 0.42$. The pattern here is in line with the meta-stereotype account because dominant but not minority actors benefitted from being empathic (in terms of being treated more positively by their partner, suggestive of higher power). However, because empathic minority actors were not actively disadvantaged relative to their dominant partner the strong version of the meta-stereotype account was not supported.

In sum, the results for ability to maintain goal focus and behavior dynamics were consistent with the meta-stereotype account, whereas the lack of effects on reduced vulnerability to cognitive resource depletion and abstract information processing was not consistent with either account (see Table 2 for a summary of the results across both studies).

Mediation

To test whether the behavioral dynamics we uncovered – whereby minority targets (ironically) seemed to work harder to be respectful and polite when dominant actors were higher in empathy – contributed to the effects that were evident on targets' ability to maintain goal focus, we conducted mediation analyses with PROCESS macro v2.13 (Hayes, 2013; model 8, with 10,000 bootstrap samples). We entered Actor Empathic Concern as the predictor (X), the

Dominant-Minority contrast as the moderating variable (W), actors' relative behavioral positivity as the mediator (M), and targets' ability to maintain goal focus as the outcome (Y); the Minority-Dominant contrast and the Actors' Empathic Concern X Minority-Dominant contrast were included as covariates. A conditional negative indirect effect of actor empathy on targets' ability to maintain goal focus via actors' relative behavioral positivity was evident in dominant-minority pairs, 95% CI [-0.0227; -0.0002]; in equal status pairs there was an indirect positive effect, 95% CI [0.0002; 0.0139]. Neither of the residual direct effects were significant, $ts < 1$. These results suggest that minority targets paired with empathic dominant partners showed reduced ability to maintain goal focus as a function of working harder themselves to be polite and respectful during the exchange. That is, there was an indirect path from dominant group members being empathic to their minority partner being relatively more polite and respectful and then to the minority partner having more trouble maintaining goal focus during the Stroop task. In contrast, targets in equal status pairs with empathic partners showed better ability to maintain goal focus as a function of their partner working harder to be respectful and polite. No indirect effects were evident for minority-dominant pairs or actors' ability to maintain goal focus.

Discussion

Overall the results of Study 1 supported the meta-stereotype account for the effects of empathy on power dynamics in intergroup interaction. Specifically, dominant group members enjoyed benefits in power-relevant cognition in intergroup exchanges both when they empathized with a minority group member *and* when a minority group member empathized with them; dominant group members who were empathic were also treated more positively by minority partners. In essence, dominant group members always came out “on top,” with respect to both power-relevant cognition and how they were treated. This pattern is suggestive of a

process whereby individuals who adopt an empathic stance during an intergroup exchange activate meta-stereotypes that highlight the relative power of their group, which then has concomitant downstream implications for interaction dynamics.

However, although the results of Study 1 are compelling inasmuch as they tap the implications of naturally occurring empathy, they are correlational in nature. Moreover, the effects were only evident on one of the power-relevant cognition outcomes that was assessed and no data were collected that directly probed the meta-stereotype account. Accordingly, Study 2 was designed to complement Study 1 by experimentally manipulating empathy and assessing individuals' perceptions of the relative power of their group as well as the power-relevant cognition outcomes. We expected that group-level power perceptions would be more sensitive to change than individual-level power perceptions, which did not show any effects in Study 1, because the comparison standard for group-level judgments is clearer. For individual-level judgments in intergroup contexts variability in the extent to which assessments are made in reference to within-group versus across-group comparison points can obscure effects that are there in an absolute sense and are detected on other measures such as the power cognition outcomes (see Biernat & Manis, 1994).

Study 2

Study 2 again tested the power dynamics instantiated when a minority versus dominant group member adopts an empathic stance in intergroup interaction, once more probing the question of whether the dominant group member or the empathizer always comes out on top. However, in this study actors' mindset (empathic versus objective) was manipulated prior to a face-to-face exchange with a target. In addition, so as to test the viability of the meta-stereotype account, after the exchange we assessed individuals' perceptions of the power wielded by their

own versus their interaction partner's ethnic group. Of particular interest here was whether empathizing minority group members would perceive their group as less powerful, and whether such perceptions would account for any effects on power-relevant cognition outcomes. Because we planned to examine individuals' perceptions of each other's groups, we constrained participants to have either a White or Black ethnic background to control overall variability in group-level power perceptions.

Method

Participants

Participants were 74 same-sex pairs of previously unacquainted introductory psychology students (64.9% female) comprised of one White individual and one Black individual. Participants were recruited for the study on the basis of having previously completed a "mass testing" survey containing demographic questions. White participants were selected to have been born in Canada and have English as a first language (for Black participants 67.6% had English as a first language). The number of participants does not include one pair in which the actor and target knew each other well or two pairs that (due to error in recruitment) were comprised of two White individuals. We ran pairs until no further Black participants were available for that academic year. Pair members were randomly assigned to the actor or target role and actors were randomly assigned to receive the Empathic or Objective instructions prior to the discussion with their partner (the target). Cell *Ns* ranged from 18 to 19.

Procedure

The procedure was the same as in Study 1 except that when the experimenter (here a White male) gave participants the study overview he also mentioned that the researchers were particularly interested in social contexts involving members of different ethnic groups and noted

their partner's ethnicity. As well, instead of completing the IRI, the actor received the mindset manipulation used by Vorauer et al. (2016), which was directly based on Batson et al.'s (1997) extensively used and well-validated procedure that has been shown to reliably induce empathic concern (see, e.g., Batson, Chang, Orr, & Rowland, 2002). The White male experimenter instructed actors in the empathy condition that they would be better able to answer questions they would be asked after the discussion if they tried to "imagine how the other participant feels about the events and experiences that he/she describes and to imagine how these events and experiences have affected his/her life"; actors in the objective condition were instructed that they should try to "take an objective perspective toward the other participant during the discussion." There was no reference to ethnicity in either of the mindset instructions. Targets received no such instructions and were unaware that actors had. The discussion was audio-recorded.

Dependent Measures

The dependent measures were the same as in Study 1, except that participants also rated how *powerful*, *strong*, *influential*, and *effective* they currently perceived their own ($\alpha = .88$) and their interaction partner's ethnic group ($\alpha = .85$) to be. An index of perceived relative group power was computed by subtracting individuals' ratings of their interaction partner's ethnic group from their ratings of their own ethnic group.

Results

As in Study 1 our analyses all focused on weighing support for the general power script versus meta-stereotype account. Specifically, we examined whether actor empathy generally benefitted actors over targets (general power script account) or dominant over minority group members (meta-stereotype account).

Power-Relevant Cognition Outcomes

We examined each of the power-relevant cognition outcomes in a 2 (Participant Ethnicity: White vs. Black) x 2 (Actor Ethnicity: White vs. Black) x 2 (Actor Mindset: Empathic vs. Objective) repeated-measures Analysis of Covariance (ANCOVA) with pairs as the unit of analysis; the first factor was within-pairs and the remainder were between-pairs; whether or not Black participants had English as a first language was included as a covariate.

The analysis of reduced vulnerability to cognitive resource depletion (reaction time on incongruent Stroop trials) yielded a three-way Participant Ethnicity X Actor Ethnicity X Actor Mindset interaction, $F(1, 62) = 4.95, p = .030, \eta_p^2 = 0.074$ (see Figure 4). White targets were less depleted following an exchange with a Black actor who tried to be empathic rather than objective, $F(1, 62) = 5.27, p = .025, \eta_p^2 = 0.078$; none of the other simple mindset effects were significant ($ps \geq .260$). As in Study 1, then, and consistent with the meta-stereotype account, empathy by minority group members benefitted not themselves but their dominant partner.

The analysis of abstract information processing also yielded a three-way Participant Ethnicity X Actor Ethnicity X Actor Mindset interaction, $F(1, 68) = 3.84, p = .054, \eta_p^2 = 0.054$ (see Figure 5). Black targets evidenced less abstract information processing following an exchange with a White actor who tried to be empathic rather than objective, $F(1, 68) = 5.35, p = .024, \eta_p^2 = 0.073$; none of the other simple mindset effects were significant ($ps \geq .371$). Thus, again broadly consistent with the meta-stereotype account, an asymmetry was apparent whereby dominant group members' empathy had a disempowering effect on their minority partner at the same time as minority group members' empathy failed to have such an effect on their dominant partner.

No significant effects were evident in the analysis of ability to maintain goal focus (accuracy on incongruent Stroop trials) apart from those involving the covariates.

In sum, the results for reduced vulnerability to cognitive resource depletion and abstract information processing were consistent with the meta-stereotype account. The lack of significant effects on ability to maintain goal focus was not consistent with either account (again see Table 2).

Power Perceptions

As was the case in Study 1, a parallel analysis of actors' and targets' perceptions of their relative power, assessed at the individual level, yielded no significant effects. However, the analysis of group-level power perceptions yielded a three-way Participant Ethnicity X Actor Ethnicity X Actor Mindset interaction, $F(1, 69) = 3.88, p = .053, \eta_p^2 = 0.053$ (see Figure 6). Black actors perceived their own group as relatively less powerful when they tried to empathize with their White interaction partner than when they remained objective, $F(1, 69) = 5.72, p = .020, \eta_p^2 = 0.077$, whereas none of the other simple mindset effects were significant ($ps \geq .519$). Note that although we analyzed difference scores representing how individuals viewed their own group relative to their interaction partner's group, we display ratings of own and other's group separately in the figure to enhance interpretability. This analysis also yielded a main effect whereby White participants generally perceived their group as having greater relative power than did Black participants $F(1, 69) = 25.92, p < .001, \eta_p^2 = 0.273$.

Mediation Analysis

Why did White individuals paired with empathizing Black actors evidence lower levels of resource depletion? To test whether reductions in empathizing Black actors' sense of their group's relative power played a role we followed the same general procedure as in Study 1; to be consistent with the original repeated-measures approach we analyzed the difference between pair members' reaction times. Specifically, using PROCESS macro v2.13 for SPSS (Hayes, 2013;

model 8, with 10,000 bootstrap samples), we entered Actor Mindset as the predictor (X), Actor Ethnicity as the moderating variable (W), Black participants' sense of their group's relative power as the mediator (M), and the difference between White and Black participants' reaction times on incongruent trials as the outcome (Y); the parallel difference on control trials was included as a covariate. The conditional negative indirect effect of actor mindset on targets' relative depletion via actors' sense of their group's relative power was marginally significant when the actor was Black [90% CI -0.0277; -0.0002] but not White [90% CI -0.0005; 0.0161]; neither of the residual direct effects were significant, $t(69) = 1.47, p = .147$ and $t(69) = 1.05, p = .297$ respectively. That is, there was an indirect path from minority group members being empathic to perceiving their group as less powerful and then to their dominant partner being less depleted. Although marginal by two-tailed significance standards, this effect was in the predicted direction. Thus this analysis provided some evidence that dominant group members benefitted from minority group members' empathy because empathizing led minority group members to view their own group as less powerful.

Discussion

As was the case with the results of Study 1, the results of Study 2 supported the meta-stereotype account for the effects of empathy on power dynamics in intergroup interaction. Specifically, once again, regardless of who empathized, dominant group members always came out on top, either because they benefitted from being the target of a minority interaction partner's empathy or because their minority interaction partner suffered (with respect to power-relevant cognition) from being the target of their empathy. Further in line with a meta-stereotype account, the results for group-level power perceptions and from the mediation analysis revealed that minority group members who tried to empathize with a dominant interaction partner perceived

their group as less powerful, which contributed to the boost in power-relevant cognition that their dominant interaction partner enjoyed.

Meta-Analysis

Given the inconsistency in the findings across measures and studies, we conducted a meta-analysis to establish the overall pattern of results. We conducted this analysis according to Rosenthal's (1991) procedures for combining results across independent studies, with the caveat that here results were combined both within and across studies (consistent with previous research, scores on the three power cognition outcomes were not reliably intercorrelated, average within-individual $r = 0.08$ with appropriate reverse-scoring, and average $r = -0.01$ across pair members on each outcome). For each of the three power cognition outcomes there were four simple effects in each study, the effect of empathy on actors versus targets when the dominant versus the minority group member was the actor. We tested the overall pattern of dominant group members coming out on top by scoring positively beneficial effects of empathy on dominant actors and targets and detrimental effects of empathy on minority actors and targets, reverse-scoring any effects that ran in the opposite direction, and weighting each of the 24 effects according to the degrees of freedom used in each test. The overall pattern was significant, $z = 2.02, p = .021$.

General Discussion

Taken together, the results across these two studies suggest that empathy in intergroup exchanges is more apt to benefit dominant than minority group members regardless of which person tries to do it. Indeed, every significant effect of empathy that was evident involved advantaging dominant over minority group members. Sometimes, consistent with previous research focusing on the effects of empathy enacted by dominant group members, it was

dominant group members' empathy that enhanced their own power-relevant cognition outcomes or reduced their minority interaction partner's outcomes. However, in other cases it was a minority group member's empathy that enhanced their dominant interaction partner's power outcomes and thereby granted their partner a power advantage: Because power is inherently relative in nature (see, e.g., Keltner, Gruenfeld, & Anderson, 2003), raising an interaction partner up renders an individual's own position comparatively lower.

Consistent with previous research, both the particular outcomes on which the effects were evident and the locus of those effects (e.g., actors or targets) were variable across the studies. At present the factors guiding this variability are unclear and thus pose a challenge for future research. However, at the same time the overall pattern whereby the effects of empathy always involved dominant group members coming out on top (and minority group members *never* benefitted) would seem to point to general hierarchy-maintaining effects of empathy. Across the three power cognition outcomes assessed in these two studies, hierarchy-maintaining effects of empathy – whereby there was an asymmetry in favor of dominant group members – were evident half of the time, whereas the opposite never occurred. The fact that the effects of empathy were contingent on the empathizer's relative group status provides support the meta-stereotype account. Nonetheless, the dynamics associated with general power scripts may have also been operating in the background, perhaps helping to explain why minority group members' own power outcomes were not dampened when they empathized. Indeed, although we have pitted the two processes against each other in our theoretical analysis, we suspect that they often operate in tandem.

The results for group-level power perceptions in Study 2 clarify the process by which meta-stereotypes exerted their influence: Black individuals who tried to be empathic toward their

White interaction partner perceived their own ethnic group to be relatively less powerful, and their reduced group-level power perceptions contributed to the boost that their White partner enjoyed with respect to reduced vulnerability to cognitive resource depletion. Thus it seems that trying to empathize enhanced these minority group members' sense of belonging to a lower power group, which then had concomitant downstream implications for the power dynamics of the interaction. The fact that no comparable complementary effects were evident for White empathizers here is consistent with previous research suggesting that perceptions of dominant groups' power tend to be less malleable than perceptions of minority groups' power (Vorauer & Quesnel, 2016). For dominant group members the effects may center more on the mere activation of the knowledge structure highlighting the high power of their group (see Vorauer & Sasaki, 2009), which was not assessed in the current research.

Limitations and Future Directions

The present research had a number of strengths, such as exploring the effects of dominant versus minority group members' empathy side by side in two studies to facilitate direct comparisons across these groups, operationalizing empathy in different ways, assessing behavior in real face-to-face intergroup interaction situations, examining the effects across a variety of ethnic minority groups, and testing mediation. Further, in line with previous research (see Vorauer et al., 2016) we obtained broadly consistent results across our two studies despite the fact that they varied with respect to whether the inter-ethnic nature of the interaction was made explicit: In Study 1 there was no mention of ethnicity in any of the instructions or measures, whereas in Study 2, although there was no explicit reference to ethnicity in the empathy manipulation, the inter-ethnic nature of the exchange was noted by the experimenter. Thus the current findings would seem applicable across contexts where ethnicity is perceived as either

incidental or somewhat more central to the interaction. Nonetheless, this research also has important limitations.

First, we invoke the concept of power on the basis of its previously documented connection to the various cognitive outcomes that we assessed rather than on the basis of the results from our studies. Indeed, the explicit individual-level power measure that we administered did not yield any effects. However, the results for group-level power perceptions in Study 2, which may have been more consciously accessible and easier to assess accurately by virtue of the more limited set of potential comparison points for judgment (see Biernat & Manis, 1994), did follow the expected pattern. Moreover, mediation analyses provided some evidence that the influence of empathy on group-level power perceptions helped account for the effects that we observed on the cognitive outcomes. Notably, Vorauer and Quesnel's (2016) recent research examining the implications of dominant group members' efforts to empathize with a minority interaction partner for power perceptions also found that the effects centered on minority group members' group-level power judgments, suggesting perhaps a particular readiness or sensitivity here.

Also notable is the variability in the outcomes on which effects were evident and in the locus of those effects. This variability is perhaps not surprising given the variety of behavior channels through which power signals can be communicated, which, at the same time as depending on individuals' cultural background or how empathy is instantiated, could also dictate the particular types of power outcomes on which effects are evident. Nonetheless, this variability calls out for theoretical developments that would allow for clearer predictions to be made. For example, whereas the effects for dominant group members' empathy variably centered on their own or their partner's outcomes, the effects of minority group members' empathy always

centered on their partner's outcomes. Possibly, then, the power dynamics instantiated by minority group members' efforts to empathize in intergroup contexts are generally more other-focused (i.e., centered on their partner's experience), perhaps by virtue of the chronic group-based status difference.

Conclusions

The current results suggest that regardless of who does it, empathy enacted in intergroup contexts is more apt to reinforce than mitigate chronic group-based status differences: Any of the effects that were evident for empathy in the present studies involved the dominant group member coming out on top. These findings add to a growing literature documenting possible pitfalls of empathy (see, e.g., Holoien, Libby, & Shelton, 2016; Zaki & Cikara, 2015) and point to the need to further probe related but distinct mindsets such as perspective-taking (Vorauer & Quesnel, 2016), perspective-giving (Bruneau & Saxe, 2012), or possibly compassion (Bloom, 2016) that might foster more positive intergroup attitudes and behavior without negative implications for minority group members' relative standing on power-relevant outcomes.

Footnotes

1. A difference score approach yields almost identical results across both studies. The covariate approach was selected to enhance interpretability.

References

- Batson, C. D., Chang, J., Orr, R., & Rowland, J. (2002). Empathy, attitudes and action: Can feeling for a member of a stigmatized group motivate one to help the group. *Personality and Social Psychology Bulletin*, 28(12), 1656-1666. Retrieved from <http://uml.idm.oclc.org/login?url=http://search.proquest.com.uml.idm.oclc.org/docview/619813608?accountid=14569>
- Batson, C. D., Polycarpou, M. P., Harmon-Jones, E., Imhoff, H. J., Mitchener, E. C., Bednar, L. L., Klein, T. R., & Highberger, L. (1997). Empathy and attitudes: Can feeling for a member of a stigmatized group improve feelings toward the group? *Journal of Personality and Social Psychology*, 72, 105-118. doi:<http://dx.doi.org.uml.idm.oclc.org/10.1037/0022-3514.72.1.105>
- Bergsieker, H., Shelton, J. N., & Richeson, J. A. (2010). To be liked versus respected: Divergent goals in interracial interactions. *Journal of Personality and Social Psychology*, 99, 248-264. doi:<http://dx.doi.org.uml.idm.oclc.org/10.1037/a0018474>
- Biernat, M., & Manis, M. (1994). Shifting standards and stereotype-based judgments. *Journal of Personality and Social Psychology*, 66, 5-20. doi:<http://dx.doi.org.uml.idm.oclc.org/10.1037/0022-3514.66.1.5>
- Bloom, P. (2016). Does empathy make us immoral? In J. Zaki and D. Cameron (Chairs), *The promise and limits of empathy*. Symposium at the annual meeting of the Society for Personality and Social Psychology, San Diego, California.
- Bruneau, E. G., & Saxe, R. (2012). The power of being heard: The benefits of ‘perspective-giving’ in the context of intergroup conflict. *Journal of Experimental Social Psychology*, 48(4), 855-866. doi:<http://dx.doi.org.uml.idm.oclc.org/10.1016/j.jesp.2012.02.017>

- Chen, S., Lee-Chai, A., & Bargh, J. A. (2001). Relationship orientation as a moderator of the effects of social power. *Journal of Personality and Social Psychology*, *80*(2), 173-187.
doi:<http://dx.doi.org.uuml.idm.oclc.org/10.1037/0022-3514.80.2.173>
- Chen, S., & Welland, J. (2002). Examining the effects of power as a function of self-construals and gender. *Self and Identity*, *1*(3), 251-269.
doi:<http://dx.doi.org.uuml.idm.oclc.org/10.1080/152988602760124874>
- Davis, M. H. (1980). A multidimensional approach to individual differences in empathy. *JSAS Catalog of Selected Documents in Psychology*, *10*, 85.
- Epley, N. (2014). *Mindwise: How we understand what others think, believe, feel, and want*. New York: Knopf.
- Frantz, C. M., Cuddy, A. J. C., Burnett, M., Ray, H., & Hart, A. (2004). A threat in the computer: The Race Implicit Association Test as a stereotype threat experience. *Personality and Social Psychology Bulletin*, *30*, 1611-1624.
doi:<http://dx.doi.org.uuml.idm.oclc.org/10.1177/0146167204266650>
- Funder, D. C., Levine, J. M., Mackie, D. M., Morf, C. C., Sansone, C., Vazire, S., & West, S. G. (2014). Improving the dependability of research in personality and social psychology: Recommendations for research and educational practice. *Personality and Social Psychology Review*, *18*(1), 3-12.
doi:<http://dx.doi.org.uuml.idm.oclc.org/10.1177/1088868313507536>
- Galinsky, A. D., Maddux, W. W., Gilin, D., & White, J. B. (2008). Why it pays to get inside the head of your opponent: The differential effects of perspective taking and empathy in negotiations. *Psychological Science*, *19*(4), 378-384. Retrieved from

<http://uml.idm.oclc.org/login?url=http://search.proquest.com.uml.idm.oclc.org/docview/622184728?accountid=14569>

Gordon, A. M., & Chen, S. (2013). Does power help or hurt? the moderating role of self–other focus on power and perspective-taking in romantic relationships. *Personality and Social Psychology Bulletin*, 39(8), 1097-1110. Retrieved from <http://uml.idm.oclc.org/login?url=http://search.proquest.com.uml.idm.oclc.org/docview/1461654124?accountid=14569>

Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis*. New York: The Guilford Press.

Holoien, D. S., Libby, L. K., & Shelton, J. N. (2016). Racial minorities' reactions to Whites' expressions of empathy and sympathy. In D. Holoien and C. Wilkins (Chairs), *Is that discrimination? Divergent perceptions of discrimination claims*. Symposium at the annual meeting of the Society for Personality and Social Psychology, San Diego, California.

Howell, D. C. (2007). *Statistical methods for psychology* (6th ed.). Belmont, CA: Thomson Wadsworth.

Kane, M. J., & Engle, R.W. (2003). Working-memory capacity and the control of attention: The contributions of goal neglect, response competition, and task set to Stroop interference. *Journal of Experimental Psychology: General*, 132, 47–70.
doi:<http://dx.doi.org.uml.idm.oclc.org/10.1037/0096-3445.132.1.47>

Kim, J., Lee, S., & Rua, T. (2015). Feeling depleted and powerless: The construal-level mechanism. *Personality and Social Psychology Bulletin*, 41(4), 599-609.
doi:<http://dx.doi.org.uml.idm.oclc.org/10.1177/0146167215574993>

- McClelland, G. (2000). Increasing statistical power without increasing sample size. *American Psychologist*, *55*, 963-964. doi:<http://dx.doi.org.uuml.idm.oclc.org/10.1037/0003-066X.55.8.963>
- Pettigrew, T. F., & Tropp, L. R. (2008). How does intergroup contact reduce prejudice? meta-analytic tests of three mediators. *European Journal of Social Psychology*, *38*(6), 922-934. Retrieved from <http://uuml.idm.oclc.org/login?url=http://search.proquest.com.uuml.idm.oclc.org/docview/621895723?accountid=14569>
- Rosch, E. (1975). Cognitive representations of semantic categories. *Journal of Experimental Psychology: General*, *104*, 192-233. doi:<http://dx.doi.org.uuml.idm.oclc.org/10.1037/0096-3445.104.3.192>
- Rosenthal, R. (1991). *Meta-analytic procedures for social research*. Newbury Park, CA: Sage Publications.
- Smith, P. K., & Galinsky, A. D. (2010). The nonconscious nature of power: Cues and consequences. *Social and Personality Psychology Compass*, *4*, 918-938. doi:<http://dx.doi.org.uuml.idm.oclc.org/10.1111/j.1751-9004.2010.00300.x>
- Smith, P. K., Jostmann, N. B., Galinsky, A. D., & van Dijk, W. (2008). Lacking power impairs executive functions. *Psychological Science*, *19*, 441-447. doi:<http://dx.doi.org.uuml.idm.oclc.org/10.1111/j.1467-9280.2008.02107.x>
- Smith, P. K., & Trope, Y. (2006). You focus on the forest when you're in charge of the trees: Power priming and abstract information processing. *Journal of Personality and Social Psychology*, *90*, 578-596. doi:<http://dx.doi.org.uuml.idm.oclc.org/10.1037/0022-3514.90.4.578>

- Swart, H., Hewstone, M., Christ, O., & Voci, A. (2010). The impact of crossgroup friendships in south africa: Affective mediators and multigroup comparisons. *Journal of Social Issues*, 66(2), 309-333. Retrieved from <http://uml.idm.oclc.org/login?url=http://search.proquest.com.uml.idm.oclc.org/docview/742994199?accountid=14569>
- Swart, H., Hewstone, M., Christ, O., & Voci, A. (2011). Affective mediators of intergroup contact: A three-wave longitudinal study in south africa. *Journal of Personality and Social Psychology*, 101(6), 1221-1238. Retrieved from <http://uml.idm.oclc.org/login?url=http://search.proquest.com.uml.idm.oclc.org/docview/874900343?accountid=14569>
- Vezzali, L., Giovannini, D., & Capozza, D. (2010). Longitudinal effects of contact on intergroup relations: The role of majority and minority group membership and intergroup emotions. *Journal of Community & Applied Social Psychology*, 20(6), 462-479. Retrieved from <http://uml.idm.oclc.org/login?url=http://search.proquest.com.uml.idm.oclc.org/docview/817613303?accountid=14569>
- Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics* (5th ed.). Boston: Allyn and Bacon.
- Tiedens, L. Z. & Fragale, A. R. (2003). Power moves: Complementarity in submissive and dominant nonverbal behavior. *Journal of Personality and Social Psychology*, 84, 558-568. doi:<http://dx.doi.org.uml.idm.oclc.org/10.1037/0022-3514.84.3.558>
- Vorauer, J. D. (2013). The case for and against perspective-taking. In M. P. Zanna & J. Olson (Eds.), *Advances in experimental social psychology*, vol 48, pp. 59-115. Burlington: Academic Press.

- Vorauer, J. D., Hunter, A. J., Main, K. J., & Roy, S. (2000). Meta-stereotype activation: Evidence from indirect measures for specific evaluative concerns experienced by members of dominant groups in intergroup interaction. *Journal of Personality and Social Psychology*, *78*, 690-707. doi:<http://dx.doi.org/10.1037/0022-3514.78.4.690>
- Vorauer, J. D., Main, K. J., & O'Connell, G. B. (1998). How do individuals expect to be viewed by members of lower status groups? Content and implications of meta-stereotypes. *Journal of Personality and Social Psychology*, *75*, 917-937. doi:<http://dx.doi.org/10.1037/0022-3514.75.4.917>
- Vorauer, J. D., & Quesnel, M. (2016). Don't bring me down: Divergent effects of being the target of empathy versus perspective-taking on minority group members' perceptions of their group's social standing. *Group Processes and Intergroup Relations*, *19*, 94-109. doi:<http://dx.doi.org/10.1177/1368430215586273>
- Vorauer, J. D., Quesnel, M., & Germain, S. L. (2016). Reductions in goal-directed cognition as a consequence of being the target of empathy. *Personality and Social Psychology Bulletin*, *42*, 130-141. doi:<http://dx.doi.org/10.1177/0146167215617704>
- Vorauer, J. D., & Sasaki, S. J. (2009). Helpful only in the abstract? Ironic effects of empathy in intergroup interaction. *Psychological Science*, *20*, 191-197. doi:<http://dx.doi.org/10.1111/j.1467-9280.2009.02265.x>
- Zaki, J., & Cikara, M. (2015). Addressing empathic failures. *Current Directions in Psychological Science*, *24*, 471-476. doi:<http://dx.doi.org/10.1177/0963721415599978>

Zhang, L., Kou, Y., Zhao, Y., & Fu, X. (2015). Group boundary permeability moderates the effect of a dependency meta-stereotype on help-seeking behaviour. *International Journal of Psychology*, doi:<http://dx.doi.org.uhl.idm.oclc.org/10.1002/ijop.12165>

Table 1

Summary of Predictions According to General Power Script Versus Meta-Stereotype Account

	Empathy by Dominant Group Member	Empathy by Minority Group Member	Asymmetry in Benefits to DGM over MGM?
General Power Script	Benefit DGM over MGM ↑ DGM and/or ↓ MGM	Benefit MGM over DGM ↑ MGM and/or ↓ DGM	NO
Meta-Stereotype	Benefit DGM over MGM ↑ DGM and/or ↓ MGM	No Effect	YES moderate
Strong Meta-Stereotype	Benefit DGM over MGM ↑ DGM and/or ↓ MGM	Benefit DGM over MGM ↑ DGM and/or ↓ MGM	YES strong

Note. DGM = Dominant Group Member; MGM = Minority Group Member

Table 2

Summary of Results in Connection to General Power Script Versus Meta-Stereotype Account

		Empathy by Dominant Group Member	Empathy by Minority Group Member	Supports
Study 1	Goal Focus	Benefitted: DGM over MGM	Benefitted: DGM over MGM	Strong Meta- Stereotype Account
	Depletion	<i>no effects</i>	<i>no effects</i>	<i>neither account</i>
	Abstract Processing	<i>no effects</i>	<i>no effects</i>	<i>neither account</i>
	Behavior Positivity	Benefitted: DGM over MGM	no effect	Meta-Stereotype Account
Study 2	Goal Focus	<i>no effects</i>	<i>no effects</i>	<i>neither account</i>
	Depletion	no effect	Benefitted: DGM over MGM	Meta-Stereotype Account
	Abstract Processing	Benefitted: DGM over MGM	no effect	Meta-Stereotype Account

Note. DGM = Dominant Group Member; MGM = Minority Group Member.

Table 3

*Intercorrelations Between Actor Empathic Concern and Power-Relevant Cognition Measures**(Study 1)***Equal Status Pairs**

	Actors' Outcomes			Targets' Outcomes		
	goal focus	cognitive depletion	abstract processing	goal focus	cognitive depletion	abstract processing
Actor empathic concern (<i>r</i>)	-.107	.025	.212	-.136	-.036	-.163
<i>p</i>	.453	.863	.127	.342	.800	.242

Dominant-Minority Pairs

	Actors' Outcomes			Targets' Outcomes		
	goal focus	cognitive depletion	abstract processing	goal focus	cognitive depletion	abstract processing
Actor empathic concern (<i>r</i>)	.531	-.150	.007	.053	.226	-.082
<i>p</i>	.019	.540	.977	.830	.353	.732

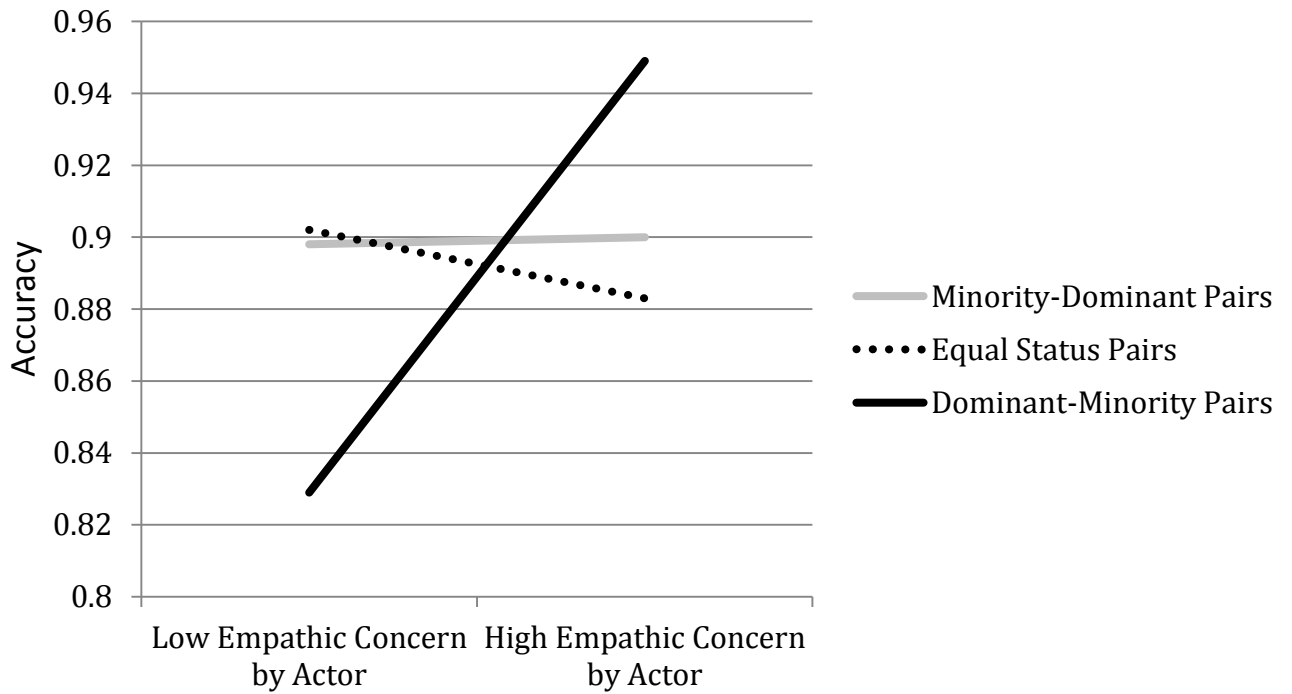
Minority-Dominant Pairs

	Actors' Outcomes			Targets' Outcomes		
	goal focus	cognitive depletion	abstract processing	goal focus	cognitive depletion	abstract processing
Actor empathic concern (<i>r</i>)	.021	.089	-.127	.425	-.017	.128
<i>p</i>	.923	.686	.536	.043	.939	.532

Note. Significant correlations ($p < .05$) are bolded. Values for goal focus and cognitive depletion are partial correlations controlling for accuracy and reaction time on control trials respectively.

Figure 1

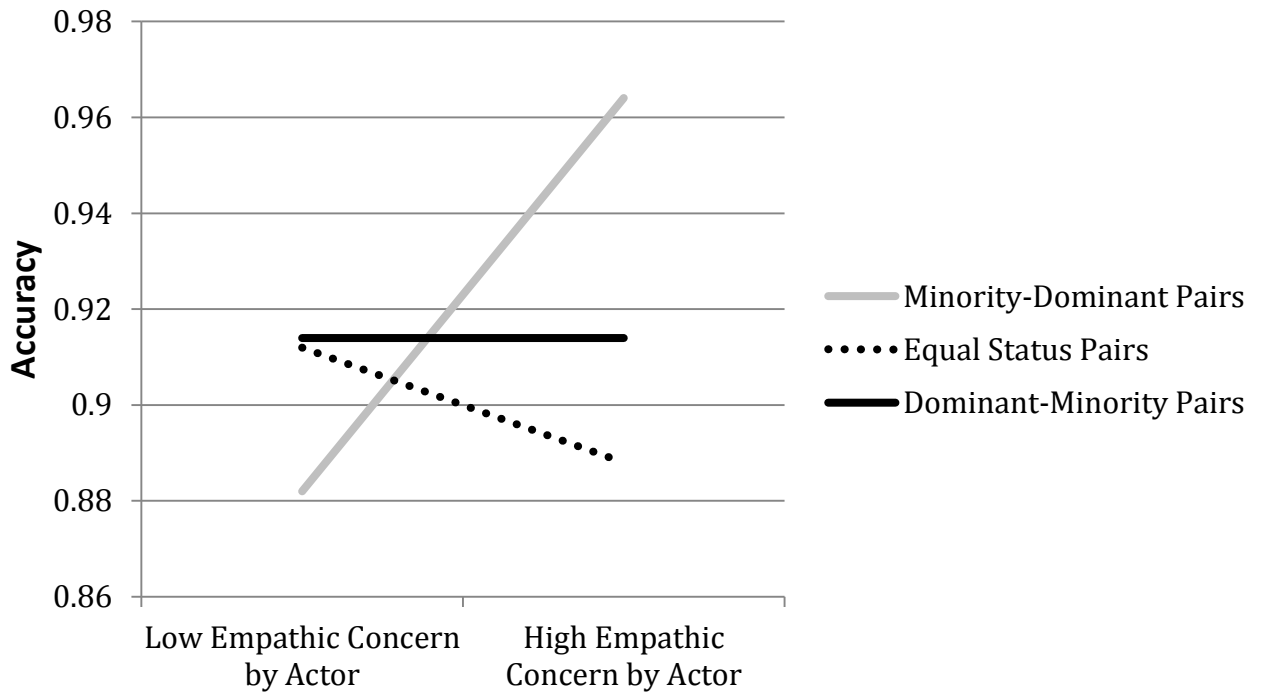
Predicted Values for Actors' Ability to Exert Executive Control to Maintain Goal Focus as a Function of Actors' Empathic Concern and Pair Composition in Study 1



Notes. Values are average accuracy on incongruent trials. Results are shown at one standard deviation above and below the mean for actor empathic concern.

Figure 2

*Predicted Values for **Targets**' Ability to Exert Executive Control to Maintain Goal Focus as a Function of Actors' Empathic Concern and Pair Composition in Study 1*



Notes. Values are average accuracy on incongruent trials. Results are shown at one standard deviation above and below the mean for actor empathic concern.

Figure 3

Predicted Values for Actors' Behavioral Positivity (Respectfulness, Politeness, and Friendliness) Relative to Targets' Behavioral Positivity as a Function of Actors' Empathic Concern and Pair Composition in Study 1

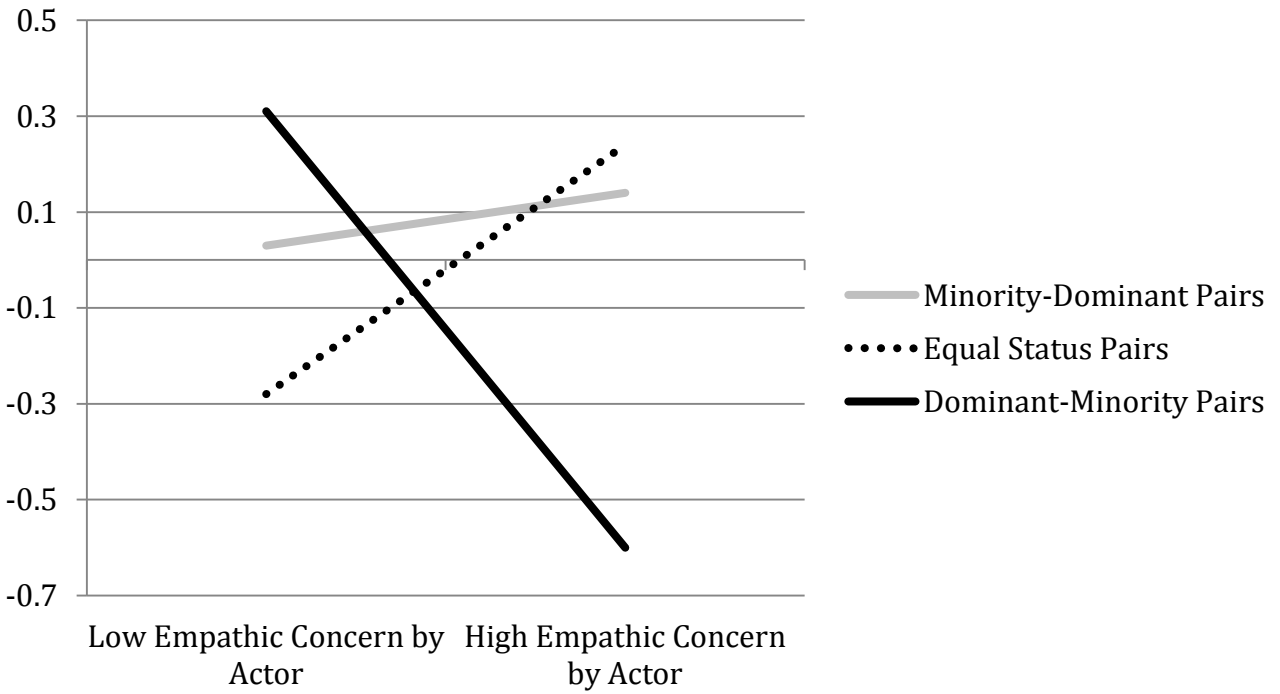
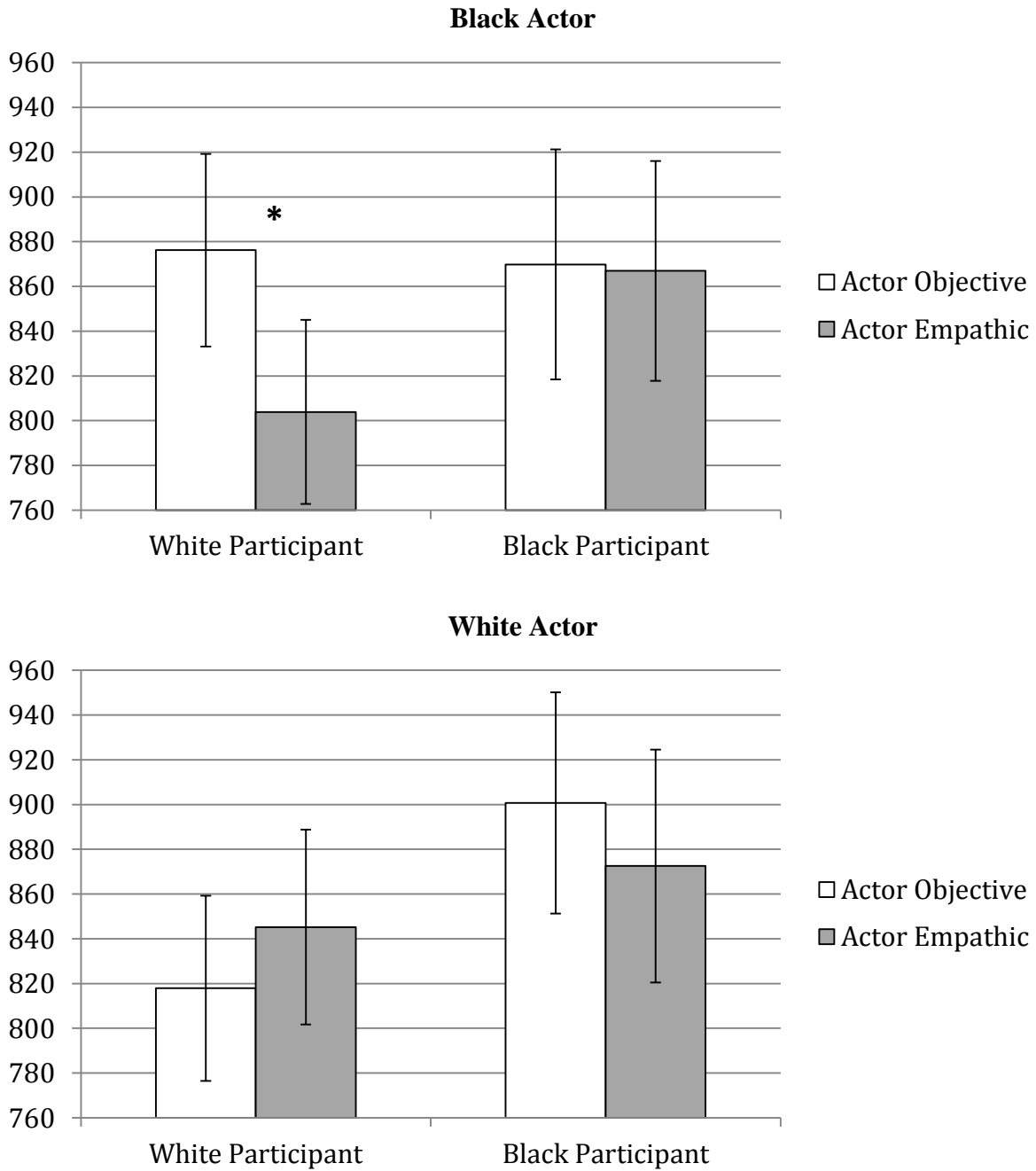


Figure 4

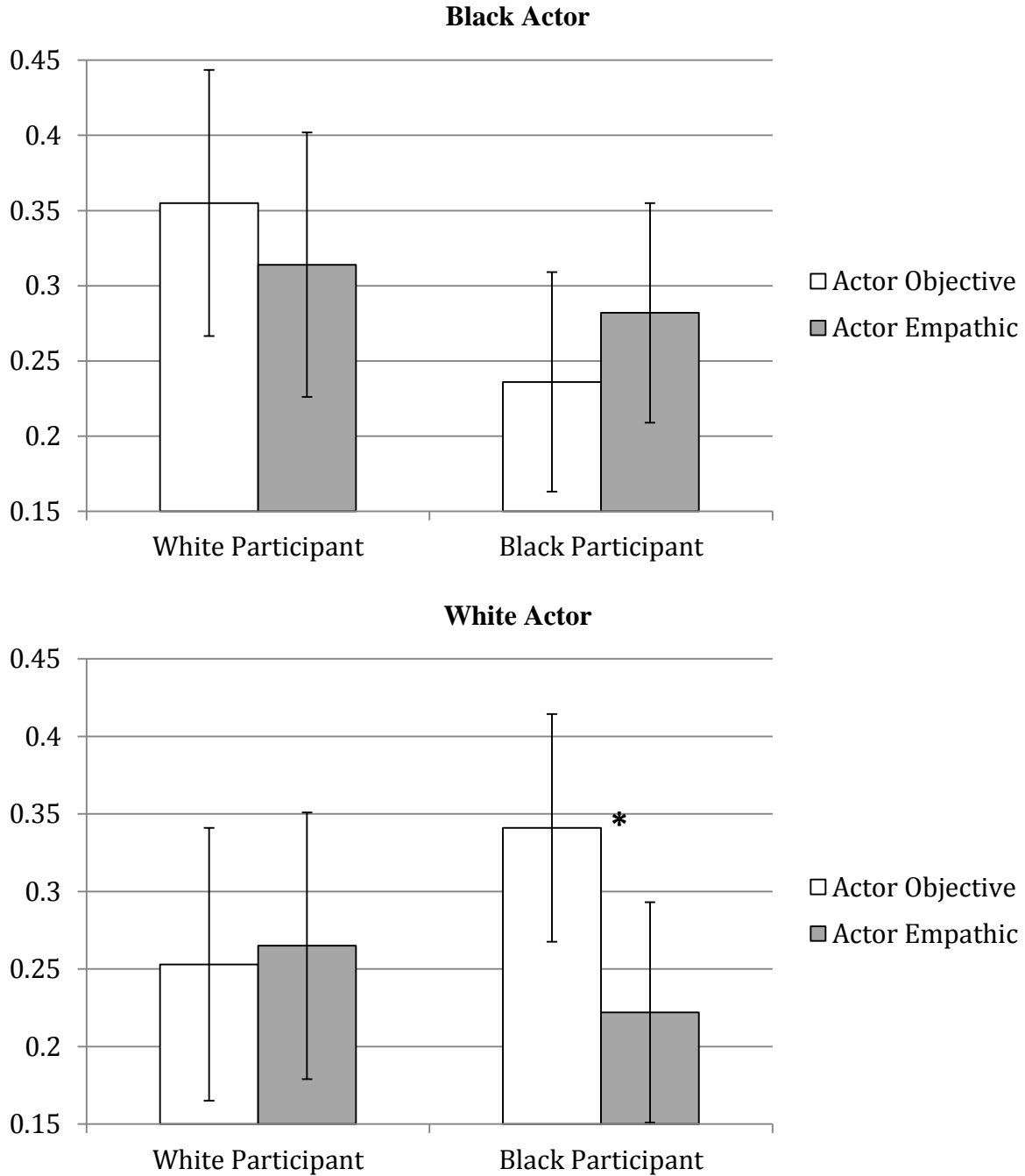
White and Black Participants' Vulnerability to Cognitive Resource Depletion as a Function of Actor Ethnicity and Actor Mindset in Study 2



Notes. Values are average response times on incongruent trials (covariate-adjusted). Bars represent 95% confidence intervals. Significant simple effects for actor mindset are indicated with an asterisk.

Figure 5

White and Black Participants' Abstract Information Processing as a Function of Actor Ethnicity and Actor Mindset in Study 2

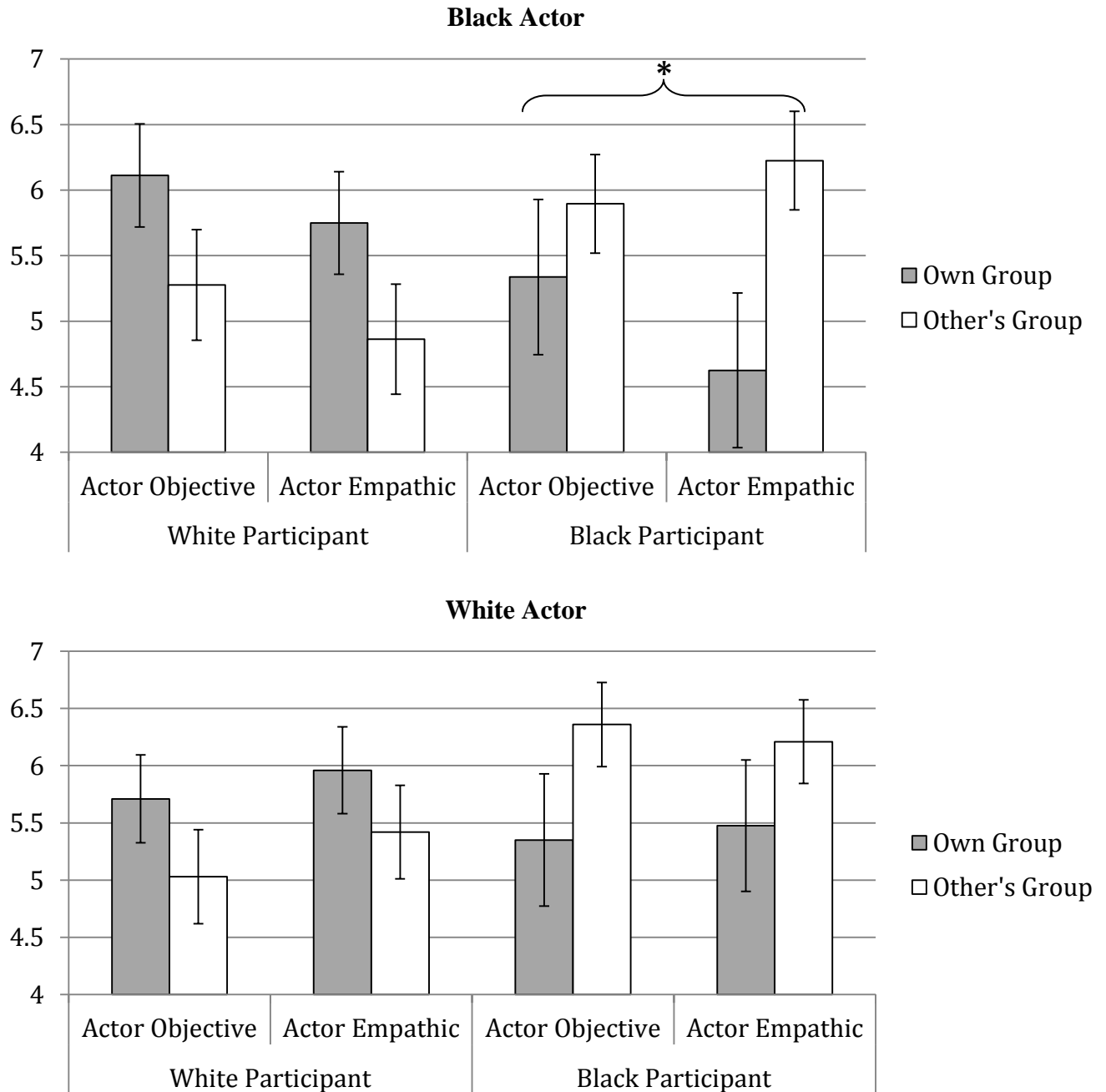


Notes. Values are average proportion of weak exemplars included in the category (covariate-adjusted). Bars represent 95% confidence intervals. Significant simple effects for actor mindset are indicated with an asterisk.

Figure 6

White and Black Participants' Ratings of Their Own Group's Power and Their Interaction

Partner's Power as a Function of Actor Ethnicity and Actor Mindset in Study 2



Notes. Values are average ratings on the 7-point scale (covariate-adjusted). Bars represent 95% confidence intervals. Significant simple effects for actor mindset on difference between ratings of own versus other group's power are indicated with an asterisk. The analysis used difference scores; ratings of own and other's group are displayed separately here to enhance interpretability.