

Feeling High but Playing Low: Power, Need to Belong, and Submissive Behavior

Kimberly Rios¹, Nathanael J. Fast², and Deborah H. Gruenfeld³

Personality and Social
Psychology Bulletin
2015, Vol. 41(8) 1135–1146
© 2015 by the Society for Personality
and Social Psychology, Inc
Reprints and permissions:
sagepub.com/journalsPermissions.nav
DOI: 10.1177/0146167215591494
pspb.sagepub.com



Abstract

Past research has demonstrated a causal relationship between power and dominant behavior, motivated in part by the desire to maintain the social distinctiveness created by one's position of power. In this article, we test the novel idea that some individuals respond to high-power roles by displaying not dominance but instead *submissiveness*. We theorize that high-power individuals who are also high in the need to belong experience the social distinctiveness associated with power as threatening, rather than as an arrangement to protect and maintain. We predict that such individuals will counter their feelings of threat with submissive behaviors to downplay their power and thereby reduce their distinctiveness. We found support for this hypothesis across three studies using different operationalizations of power, need to belong, and submissiveness. Furthermore, Study 3 illustrated the mediating role of fear of (positive) attention in the relationship between power, need to belong, and submissive behavior.

Keywords

power, need to belong, submissiveness, fear of positive evaluation, distinctiveness

Received September 16, 2014; revision accepted May 26, 2015

The state of having power, or asymmetric control over resources relative to another person, is known to afford a variety of psychological and social benefits (see Fiske, 2010), including increased distinctiveness (Lee & Tiedens, 2001) and heightened attention from others (Fiske, 1993). Because power provides material, psychological, and social benefits, it is generally perceived as a desirable and desired social commodity (Kifer, Heller, Perunovic, & Galinsky, 2013). In addition, power facilitates behavioral approach orientation (Keltner, Gruenfeld, & Anderson, 2003), leading to a focus on the self as well as an agentic tendency to pursue rewards. Consistent with these findings, power often triggers dominant behaviors, either in the service of goal pursuit or in an attempt to preserve one's position in the hierarchy (Georgeson & Harris, 1998; Goodwin, Operario, & Fiske, 1998; Kipnis, 1972). By displaying such dominance and thus exerting asymmetric control over their more submissive peers, power-holders are able to maintain their distinctive and superior positions.

In contrast to the idea that power is an appealing experience, however, some people report discomfort with if not outright distaste for power, even the power that they themselves possess (Gruenfeld & Tiedens, 2010). For instance, Lee and Tiedens (2001) described how power feels lonely despite being accompanied by high levels of actual interdependence. Other research has shown that mismatches between power and self-perceptions can lead to psychological and behavioral displays of discomfort (Chen, Langner, &

Mendoza-Denton, 2009; Fast & Chen, 2009). This leads to the possibility that some powerful individuals exhibit more (or less) dominance than others. In the present research, we examine a novel idea—that power-holders who have a high need to belong and fit in with others will view the distinctiveness that accompanies their power as threatening, and will respond by engaging in more *submissive* behaviors relative to power-holders who have a low need to belong.

Power and Social Distinctiveness

Traditional definitions of power state that power-holders are less dependent on their subordinates than subordinates are on power-holders (e.g., Emerson, 1962). This difference in relative dependence serves to enhance distinctiveness from others, in part because power-holders are less motivated to attend to the needs, characteristics, and psychological states of their subordinates than the reverse (Fiske, 1993). For example, power makes people less likely to take others' perspectives

¹Ohio University, Athens, USA

²University of Southern California, Los Angeles, USA

³Stanford University, CA, USA

Corresponding Author:

Kimberly Rios, Department of Psychology, Ohio University, 219 Porter Hall, Athens, OH 45701, USA.
Email: rios@ohio.edu

(Galinsky, Magee, Inesi, & Gruenfeld, 2006), more likely to see others as objects (Gruenfeld, Inesi, Magee, & Galinsky, 2008), and more prone to react against the goals that others would like them to pursue (Inesi & Rios, 2013). At the same time, it is in subordinates' best interests to pay close attention to the powerful and monitor their actions (Fiske, 1993), which means that power-holders frequently come to be seen—and to see themselves—as distinctive (Lee & Tiedens, 2001).

As noted earlier, holding power is widely regarded as a positive state for those who have it. For example, power affords the ability to control others' outcomes and get what one wants, as well as respect and admiration from one's peers (i.e., high status; Fiske, 2010). Thus, to maintain their position on top of the social hierarchy, power-holders often exhibit indirect as well as direct attempts to dominate and control other people. Such attempts include stereotyping lower-power individuals and groups (Fiske, 1993; Goodwin et al., 1998), evaluating others negatively (Georgeson & Harris, 1998), and using coercive influence tactics (Kipnis, 1972). Through these behaviors, power-holders remain distinctive by continuing to garner disproportionate levels of control, status, and attention relative to others (Fiske, 1993; Lee & Tiedens, 2001).

The above ideas are predicated on the notion that the powerful are motivated to be distinctive from other people. To maintain their position, power-holders must demonstrate that they stand out from their peers in positive ways—for example, that they are larger, more competent, better liked, or generally superior. Otherwise, they may come to be seen as no different and no more worthy of a dominant position, compared with the general population. Yet, there is reason to suggest that the distinctiveness and attention that accompany power are not always desirable. For instance, recent research suggests that some people are reluctant to assume high-ranked positions within a group, due to their expectations that other group members will perceive them as contributing little value (Anderson, Willer, Kilduff, & Brown, 2012). As a result, they tend to self-efface by rating themselves as lower in status than do their peers (Anderson, Srivastava, Beer, Spataro, & Chatman, 2006). In the present work, we introduce a different theoretical account of when and why individuals may find power aversive, and we directly explore the consequences of this aversion for *submissiveness*, defined as behavior that signals attempts to be subordinate and yield to others (Gilbert, 1992; Gilbert & Allan, 1994). This explanation is rooted in the notion that people not only have a strong need to be distinctive, but are also motivated to belong and connect with others (Baumeister & Leary, 1995; Brewer, 1991; Leonardelli, Pickett, & Brewer, 2010).

Need to Belong: Seeing Power as a Social Threat and Responding Submissively

According to Optimal Distinctiveness Theory (Brewer, 1991; Leonardelli et al., 2010), individuals' motives for belonging and distinctiveness are simultaneous and often in

competition. As such, when individuals feel too distinctive from others, they will strive to assimilate and fit in with their peers; whereas when they feel too similar to others, they will strive to distinguish themselves from their peers. In other words, excessive distinctiveness presents a threat to belongingness motives, and excessive similarity presents a threat to distinctiveness motives (Brewer, 1991).

People who have a high chronic or situationally induced need to belong strive for meaningful and *mutual* interpersonal connections (Baumeister & Leary, 1995). However, holding a powerful position in a hierarchy is associated with increased distinctiveness (Lee & Tiedens, 2001) and even social distance (Lammers, Galinsky, Gordjin, & Otten, 2012; Magee & Smith, 2013). Although such distinctiveness is often perceived as a positive aspect of power (Lammers et al., 2012; Magee & Smith, 2013), those high in need to belong are likely to consider it at odds with their desire for mutual relationships (see Anderson et al., 2006; Lee & Tiedens, 2001). Thus, they may be more uncomfortable with having and asserting power than their low need to belong counterparts and, accordingly, behave submissively as a means of minimizing distinctiveness between themselves and others.

As noted earlier, power-holders have generally been shown to exhibit dominant rather than submissive behaviors (Georgeson & Harris, 1998; Goodwin et al., 1998), and little research has examined the factors that lead the powerful to act submissively. Nevertheless, some studies suggest that submissiveness can have important functions in social interactions. For example, non-human animals are thought to display submissive behaviors to deescalate conflict and signal to other (i.e., more dominant) parties that they do not pose a threat (Archer, 1988; Caryl, 1988; Schenkel, 1967), and humans who are not in a position of power behave submissively with their superiors so as to maintain smooth social interactions (Tiedens & Fragale, 2003). Extending these findings, we suggest that power-holders who have a high need to belong may also perceive that submissiveness serves a valuable purpose.

What, specifically, makes powerful individuals more likely to respond submissively when they are high (versus low) in need to belong? Some scholars have speculated that people who are concerned with social acceptance might fear the backlash that could result from attaining a powerful or high-status position. For instance, they may face resentment from those who already occupy such positions for attempting to subvert their power and/or from those who do not occupy such positions for competing directly with them (Anderson et al., 2006). According to research in clinical psychology, such anticipated backlash can manifest itself through fear of positive evaluation, or anxiety about drawing unwanted positive attention to the self (e.g., attention that results from prominence or status). For individuals high in fear of positive evaluation, distinctiveness is a drawback rather than an advantage of holding power (Weeks, Heimberg, Rodebaugh, & Norton, 2008).

Notably, fear of positive evaluation and fear of negative evaluation (i.e., the fear that others will notice one's shortcomings and faults; Leary, 1983) both independently predict submissiveness. However, in the case of fear of negative evaluation, the submissiveness stems from internalizing the (presumably negative) way that others see the self. By contrast, in the case of fear of positive evaluation, the submissiveness stems from not wanting one's distinctive *positive* characteristics (e.g., power) to stand out—that is, from not wanting to risk the reprisals triggered by one's distinctiveness (Weeks, Jakatdar, & Heimberg, 2010).

We argue that one predictor of fear of positive evaluation, and ultimately submissiveness, is the specific combination of power and need to belong. For individuals who are chronically or induced to be high in need to belong, fitting in with others is of paramount importance. Because of this, such individuals will seek to blend in with those from whom they believe they will incur social repercussions due to their power and might do so by behaving more submissively than those who are low in need to belong. Submissiveness may be perceived as curbing potential backlash and even aggression by reducing the amount of attention garnered from others (Anderson et al., 2006). Therefore, although power has generally been found to trigger dominant behavior (Fiske, 1993; Georgesen & Harris, 1998; Goodwin et al., 1998), we do not expect high need to belong individuals to respond to power with dominance. In fact, we predict that, when in power, people high in need to belong will be more *submissive* than their low need to belong counterparts.

Overview of Research

We tested the relationship between power, need to belong, and submissiveness across three studies. In each study, we collected data from at least 20 participants per cell, consistent with previous research (e.g., Narayanan, Tai, & Kinias, 2013). In Study 1, participants were assigned to either a high-power or neutral-power role and were induced to feel either high or low in need to belong. They then wrote an autobiographical essay, which was coded for dominance versus submissiveness. In Study 2, participants completed the Need to Belong Scale and recalled a previous situation in which they either had or lacked power, prior to participating in an online debate in which they could adopt a more or less submissive strategy. In Study 3, participants were primed with either high need to belong or a control topic, and were assigned to either a high-power or neutral-power role. They also completed the Fear of Positive Evaluation Scale (Weeks, Heimberg, & Rodebaugh, 2008) and a self-reported measure of submissive behavior. We predicted that high-power participants would evince more submissive behaviors the higher they were in need to belong and that fear of positive evaluation would drive these effects.

Study 1

In this study, we examined whether high (relative to low) need to belong would foster submissiveness among high-power, but not neutral-power, participants.

Method

Participants. One hundred and fifty-eight U.S. residents (90 men, 66 women, 2 unspecified; $M_{\text{age}} = 31.45$, $SD = 11.90$) completed the study on Amazon's Mechanical Turk website. Although (as part of the game described below) participants were initially told that they would receive US\$1 and the opportunity to earn additional money, all participants received US\$2. Participants were randomly assigned to either the high-power or neutral-power condition, and to either the high need to belong or control (low need to belong) condition. In addition, they were randomly assigned to learn that their autobiography would be read either by the same person from the first part of the study or by a different person.¹

The data from one participant who completed the study twice, one participant who did not complete the need to belong manipulation, two non-native English speakers, and three non-U.S. citizens were omitted, leaving 151 individuals in the final sample.

Procedure and materials. All experimental materials were administered online. Participants were told that the study consisted of three unrelated experiments, which had been combined because of their brevity.

Participants first completed the need to belong prime (Sommer & Baumeister, 2002), described as a "language judgment study." Participants in both conditions were given 20 sets of four words and were instructed to form meaningful phrases by omitting one "filler" word. In the high need to belong condition, 10 of the sets contained a word related to interpersonal rejection (e.g., feels she top *rejected*), whereas in the control (low need to belong) condition, 10 of the sets contained a word related to interpersonal acceptance (e.g., feels she top *accepted*).

Immediately after the need to belong prime, participants completed two measures of their belongingness needs, serving as a manipulation check. The first was the 10-item Need to Belong scale (e.g., "I have a strong need to belong"; Leary, Kelly, Cottrell, & Schreindorfer, 2013). The second was the 5-item Fear of Social Isolation Scale (e.g., "One of the worst things that could happen to me is to be excluded by people I know"; Hayes, Matthes, & Eveland, 2013; see also Morrison & Matthes, 2011). These measures were strongly correlated ($r = .87$, $p < .001$), so all 15 items were averaged to form a composite ($M = 3.12$, $SD = 0.82$, $\alpha = .93$).

For the "next study," participants read that they were going to play a game with "another participant." In the high-power condition, participants played a "Dictator Game," in

which they had the power to choose how to divide five quarters between themselves and the other person. To raise the stakes, participants also read that they and the other participant would keep the quarters they had been allocated (i.e., that it would be added to their compensation on Mechanical Turk). In the neutral-power condition, participants played a "Divide Quarters" game, in which they had to decide how many quarters (out of five) to put in their right versus left hand. Participants read that at the end of the study, they and the other participant would see how each other responded in the game.

Due to a programming error, the power manipulation check that was intended to follow the game was not administered. However, 104 participants in a separate sample were assigned to either the high-power or neutral-power condition and then responded to the question "How much power do you feel you have relative to the other participant?" (1 = *the other participant has much more power than I do*, 7 = *I have much more power than the other participant*). Participants in the high-power condition reported feeling more powerful ($M = 5.92$, $SD = 1.15$) than did participants in the neutral-power condition ($M = 3.84$, $SD = 1.14$), $F(1, 102) = 82.97$, $p < .001$, $\eta_p^2 = .45$, thus validating our power manipulation.

For the ostensible "third study," participants read that they would write a brief autobiographical essay, which another participant would read and evaluate. Two independent coders rated the degree to which each participant expressed dominance versus submissiveness in the autobiographical statement. Specifically, they rated (a) how submissive versus dominant the writer seemed to be (1 = *very submissive*, 5 = *very dominant*) and (b) how low in power versus high in power the writer seemed to be (1 = *very low in power*, 5 = *very high in power*). Because the four ratings (i.e., each coder's rating on each of the two traits) demonstrated high reliability ($\alpha = .83$), we averaged them to form a submissiveness score. Given our focus on submissiveness, we reverse-coded the ratings so that *higher* scores indicated more submissive self-presentations.²

Finally, participants were debriefed and paid.

Results

Need to belong manipulation check. The need to belong manipulation has been previously validated (Morrison & Matthes, 2011; Rios & Chen, 2014). In addition, we administered a manipulation check. As anticipated, participants in the high need to belong condition ($M = 3.24$, $SD = 0.84$, 95% confidence interval [CI] = [3.05, 3.44]) reported higher subsequent belongingness needs than did participants in the control condition ($M = 3.02$, $SD = 0.78$, 95% CI = [2.85, 3.20]), $F(1, 149) = 2.74$, $p = .10$, $\eta_p^2 = .02$. Although this difference was marginal, it is consistent with prior studies.

Power, need to belong, and submissiveness. We predicted that participants in the high-power condition would present themselves more submissively in their autobiographies after being

primed to have a high need to belong, but that the self-presentations of participants in the neutral-power condition would not differ as a function of need to belong prime. To test this hypothesis, we conducted a 2 (high-power vs. neutral-power condition) \times 2 (high need to belong vs. control prime) between-subjects ANOVA with submissiveness scores as the dependent measure.

Surprisingly, participants in the high-power condition presented themselves as more submissive overall ($M = 3.08$, $SD = 0.86$, 95% CI = [2.93, 3.27]) than did participants in the neutral-power condition ($M = 2.74$, $SD = 0.66$, 95% CI = [2.53, 2.90]), $F(1, 147) = 8.80$, $p < .005$, $\eta_p^2 = .06$. However, this main effect was qualified by the predicted interaction between power condition and need to belong prime, $F(1, 147) = 4.03$, $p < .05$, $\eta_p^2 = .03$. Simple-effects tests revealed that high-power participants presented themselves as marginally more submissive in the high need to belong prime condition ($M = 3.24$, $SD = 0.82$, 95% CI = [2.99, 3.48]) than in the control prime condition ($M = 2.95$, $SD = 0.88$, 95% CI = [2.72, 3.18]), $F(1, 147) = 2.87$, $p = .09$, $\eta_p^2 = .02$. By contrast, neutral-power participants presented themselves as equally submissive in the high need to belong prime condition ($M = 2.61$, $SD = 0.61$, 95% CI = [2.33, 2.89]) and the control prime condition ($M = 2.83$, $SD = 0.69$, 95% CI = [2.58, 3.07]), $F(1, 147) = 1.38$, $p = .24$, $\eta_p^2 = .01$. In additional simple effects tests, participants in the high need to belong prime condition demonstrated significantly greater submissiveness in the high-power than neutral-power condition, $F(1, 147) = 11.22$, $p = .001$, $\eta_p^2 = .07$, whereas participants in the control prime condition did not differ in their submissiveness across power conditions, $F(1, 147) = .51$, $p = .48$, $\eta_p^2 = .003$.

Discussion

The results of this study supported our prediction that need to belong would be associated with increased submissiveness tendencies among power-holders. Participants who were assigned to divide quarters between themselves and another person in a "Dictator Game" (but not participants who played a neutral, power-irrelevant game) presented themselves as lower in power and more submissive in their autobiographical essays after they had unscrambled rejection-related words than acceptance-related words.

There was also an unexpected main effect of power on submissiveness tendencies: Those in the high-power role of "dictator" presented themselves as *more* submissive than did those in a neutral role. This effect should be interpreted with caution until replicated, as we were primarily interested in the interaction between power and need to belong. However, one possible explanation is that high-power participants may have felt a need to compensate for their tendency to allocate more quarters to themselves than to the "other participant." Indeed, the mean number of quarters that high-power participants kept for themselves was 3.46 ($SD = 1.05$) out of 5, which is more self-interested than the scale midpoint of 2.5, one-sample $t(82) = 37.12$, $p < .001$.

Study 2

In Study 2, we sought to increase generalizability by using different operationalizations of power, need to belong, and submissiveness. Participants completed an individual-differences measure of need to belong and were primed with power by recalling a previous instance in which they either had or lacked power. Thus, the control condition in this study was a low-power manipulation, rather than a neutral-power manipulation as in Study 1. This helps to rule out an alternative account, which is that exposure to any kind of hierarchy—regardless of whether one is high or low in the hierarchy—may have produced the effects observed in Study 1, rather than feelings of high power as we have theorized. After the power prime, participants engaged in an online debate in which they had the opportunity to send either submissive or non-submissive messages to their partner.

Method

Participants. Eighty-one U.S. residents (47 men, 34 women; $M_{\text{age}} = 33.72$, $SD = 11.86$) completed this study on Mechanical Turk in exchange for US\$.50. Participants were randomly assigned to either the high-power or low-power condition.

Eight participants suspected that the online debate was not real and were omitted. One participant was omitted for being a non-native English speaker, and one participant was omitted for completing the study in less than 3 min ($M = 9.64$ min, $SD = 1.41$ min). In addition, one participant was excluded because his or her Cook's D score on the Power condition \times Need to belong regression analysis (.16) was more than 5 SD above the sample mean, thus rendering him or her an influential outlier.³ The data from the remaining 70 individuals were retained.

Procedure and materials. All materials were administered online. Participants read that the purpose of the study was to better understand the relationship between language use and debate styles, and that they would complete both a writing task on their own and a debate with another participant.

First, participants completed a demographic questionnaire, which included a question assessing their attitude toward the issue that they would be debating: Whether clinically obese airline passengers should be required to purchase two plane tickets instead of one. Forty-one participants responded “yes,” and 29 participants responded “no.”

Participants then completed the 10-item Need to Belong Scale (Leary et al., 2013; $M = 3.08$, $SD = 0.73$ on a 5-point scale; $\alpha = .84$), described as a self-perceptions survey.

Next, participants completed the power manipulation, described as a writing task (Galinsky, Gruenfeld, & Magee, 2003). In the high-power condition, participants were instructed to write about a time that they had power over another person (i.e., were in a position to evaluate him or her and controlled his or her ability to get what he or she wanted).

In the low-power condition, participants were instructed to write about a time that another person had power over them (i.e., was in a position to evaluate them and controlled their ability to get what they wanted). Immediately after the writing task, participants completed the following manipulation check: “How much power did you feel that you and the other person had in this situation?” (1 = *the other person had much more power than I did*, 7 = *I had much more power than the other person did*).

Participants then completed a behavioral measure of conflict style (Rios, DeMarree, & Statzer, 2014; see also De Dreu & van Knippenberg, 2005). Participants were told that they would partake in a debate with another person who was also currently participating in the study and had the opposite attitude toward the airline policy as they did (i.e., they were told that the other person opposed [supported] the policy if they themselves supported [opposed] it). To “set the stage” for the debate, participants had the opportunity to send pre-written messages to the other person in each of four rounds. They could choose from nine messages: Three reflected a competitive style (e.g., “Don’t count on me to compromise on this issue”), three reflected a problem-solving style (e.g., “Hi, let’s work together on this issue and see where we agree”), and three reflected a yielding (submissive) style (“I’m uncertain of my views so you should try to convince me of yours”; “I think your opinion on this issue is probably correct”; and “It is likely that you will be able to convince me of your opinion on this issue”). Participants had the option not to send a message in any given round and could send the same message more than once.

Following Rios et al. (2014), we summed the number of each type of message that participants chose to send to their debate partner, ranging from 0 to 3 (competitive: $M = 0.39$, $SD = 0.82$; problem-solving: $M = 1.94$, $SD = 1.22$; yielding $M = 0.21$, $SD = 0.44$). Because the numbers of competitive and yielding messages were highly positively skewed (*skewness* = 2.52 for competitive messages, *skewness* = 1.94 for yielding messages; $SE = .29$), we took the square root of these scores to reduce skew (*skewness* = 1.50 for competitive messages, *skewness* = 1.62 for yielding messages after transformation) and used the transformed scores in the analyses below.

After participants sent their messages to the “other person,” they were debriefed and paid.

Results

Power manipulation check. Participants in the high-power condition reported that they felt more powerful relative to the person they wrote about ($M = 6.11$, $SD = 1.05$, 95% CI = [5.74, 6.49]) than did participants in the low-power condition ($M = 1.71$, $SD = 1.18$, 95% CI = [1.34, 2.09]), $F(1, 68) = 272.05$, $p < .001$, $\eta_p^2 = .80$, which validates our power manipulation.

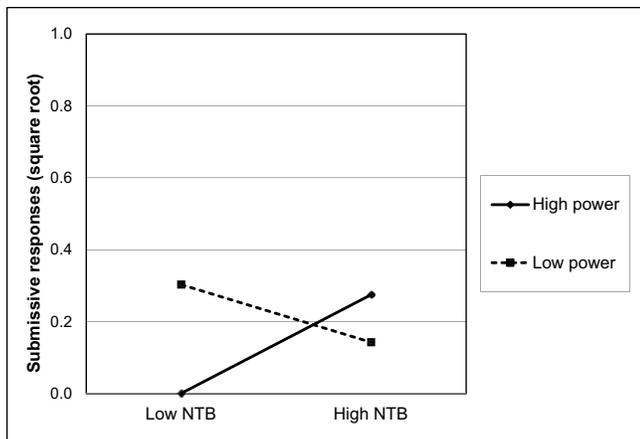


Figure 1. Number of submissive responses (square root) as a function of power condition (high vs. low) and Need to Belong (± 1 SD), Study 2.

Power, need to belong, and debate style. We did not have any a priori hypotheses about the numbers of competitive or problem-solving messages that participants would send, as these two types of messages are not directly related to dominance versus submissiveness. However, we hypothesized that Need to Belong scores would (positively) predict the number of yielding messages sent to one's debate partner in the high-power condition, but not in the low-power condition. To test this prediction, we regressed number of yielding messages onto power condition (0 = low-power, 1 = high-power), Need to Belong (mean-centered continuous variable), and the Power condition \times Need to Belong interaction term, with the main effects interpreted in the first block and the interaction in the second block of the analysis (Aiken & West, 1991).

There were no main effects of power condition or Need to Belong ($ps > .41$). However, the predicted interaction between power condition and Need to Belong was significant ($b = .31$, $SE = .14$, $t(66) = 2.23$, $p < .03$, total $R^2 = .08$ (see Figure 1). Simple slopes tests revealed that participants in the high-power condition sent more yielding (submissive) messages to their debate partner the higher their Need to Belong scores ($b = .19$, $SE = .10$, $t(66) = 2.08$, $p < .05$, whereas participants in the low-power condition showed no relationship between their Need to Belong scores and the number of yielding messages sent ($b = -.11$, $SE = .10$, $t(66) = -1.10$, $p = .27$). In addition, whereas the high-power manipulation caused participants with low Need to Belong scores (1 SD below the mean) to send fewer yielding messages than those in the low-power condition ($b = -.30$, $SE = .14$, $t(66) = -2.17$, $p = .03$, it did not do so among participants with high Need to Belong scores (1 SD above the mean; $b = .15$, $SE = .14$, $t(66) = 1.02$, $p = .31$).

Discussion

The results of Study 2 conceptually replicated those of Study 1 by showing that Need to Belong scores predict submissiveness

among individuals made to feel powerful, but not among individuals made to feel powerless. In so doing, Study 2 used a different power manipulation (asking participants to recall a past instance in which they had or lacked power in a hierarchical relationship), a measure rather than manipulation of need to belong, and a different dependent variable (number of submissive messages sent to "another person" in a debate).

One discrepancy between the findings of Studies 1 and 2 is that in Study 2, participants low in need to belong were more submissive when they lacked power than when they had power, and participants high in need to belong were equally submissive regardless of power condition. By contrast, in Study 1, low need to belong (control) participants were equally submissive across power conditions, whereas high need to belong participants were more submissive when they had power than when they lacked power. This may be because Study 1 primed power using a role manipulation (i.e., assigning participants to be the "dictator" in a game), whereas Study 2 primed power using a mindset manipulation (i.e., asking participants to recall a time in which they were powerful), and perhaps the former was more likely to trigger submissiveness due to participants' motives to compensate for their self-interested behavior in the Dictator Game. We return to this issue in the "General Discussion" section.

Study 3

The primary goal of Study 3 was to test our theory regarding *why* power and need to belong interact to predict submissive behavior. As noted earlier, individuals with a chronically high or situationally induced need to belong seek to affiliate with others (Maner, DeWall, Baumeister, & Schaller, 2007). Consequently, high need to belong individuals may be apprehensive of the attention and distinctiveness that accompanies their power, as they may worry that their power creates distance from others at best and social backlash (i.e., from being perceived as competing with others for resources and attention) at worst. To address this possibility, we measured Fear of Positive Evaluation (Weeks, Heimberg, & Rodebaugh, 2008) as a mediator of the relationship between power, need to belong, and submissiveness. As noted earlier, people with a high fear of positive evaluation dislike receiving positive attention—such as that associated with power—from their peers and would instead prefer to "blend in," as this positive attention may render them targets of others' resentment (Weeks, Heimberg, & Rodebaugh, 2008).

Method

Participants. One hundred and forty-one U.S. residents, all of whom reported being native English speakers and U.S. citizens, completed the study on Mechanical Turk. Participants were randomly assigned to either the high need to belong or control condition, and to either the high-power or neutral-power condition.

One participant who completed the study twice, three participants who completed the study in 3 min or less, and one participant with an extremely high score on the Submissive Behavior Scale (4.88—more than 3 *SD* above the sample mean) were omitted from analyses. The data from the remaining 136 participants were retained.

Procedure and materials. All materials were administered online. The study was described as three separate experiments, which had been combined due to their brevity. For the first “experiment,” participants were asked to describe in writing a personal experience that they had had. This constituted the need to belong manipulation. Participants in the high need to belong condition described a time that they had been socially excluded (e.g., were not invited to a party, felt left out of a group; see Knowles & Gardner, 2008, for a similar manipulation), whereas participants in the control condition described the last time that they went grocery shopping. Immediately after the writing task, participants completed the Leary et al. (2013) Need to Belong scale as a manipulation check ($M = 3.22$, $SD = 0.75$; $\alpha = .86$).

For the “second experiment,” actually the power manipulation, participants were told that they and another person would each complete two different reasoning tasks (in reality, there was no such person). In the high-power condition, participants were told that they had been assigned the role of “boss” and the other person had been assigned the role of “worker,” meaning that participants had the authority to select which two tasks they would complete and which two tasks the “worker” would complete. In the neutral-power condition, participants were told that they and the other person had both been assigned the role of “worker,” meaning that the computer would select which two tasks they would each complete. To increase participants’ involvement in the manipulation, they were instructed to write one or two sentences either describing to the “worker” why they chose the tasks they did (high-power condition) or describing to the computer which tasks they preferred and why (neutral-power condition). The four tasks from which participants could choose were as follows: an anagram task, an emotion recognition task, a logic task, and a creativity task.

Participants then responded to the following question as a power manipulation check: “In this study, how much power do you feel you have?” (1 = *no power at all*, 5 = *a great deal of power*).

For the “third experiment,” participants were told that they and the other person from the second study would partake in a first impressions task, in which they would complete two personality measures and evaluate each other’s responses. The first measure was the Fear of Positive Evaluation Scale (e.g., “If I was doing something well in front of others, I would wonder whether I was doing ‘too well’”; Weeks, Heimberg, & Rodebaugh, 2008). The second measure was the Submissive Behavior Scale (e.g., “I do what is expected of me even when I don’t want to”; “I avoid direct eye contact”; Gilbert & Allan, 1994). Participants were

instructed to respond to all items according to how they felt at the moment, rather than in general or on average, and their responses were averaged into two separate composites (Fear of Positive Evaluation Scale: $M = 4.39$, $SD = 1.83$ out of 9, $\alpha = .89$; Submissive Behavior Scale: $M = 2.59$, $SD = 0.65$ out of 5, $\alpha = .89$).

Finally, participants were debriefed and paid.

Results

Power manipulation check. Participants in the high-power condition ($M = 3.44$, $SD = 1.09$, 95% CI = [3.20, 3.69]) reported feeling more powerful than did participants in the neutral-power condition ($M = 2.00$, $SD = 0.83$, 95% CI = [1.77, 2.22]), $F(1, 134) = 76.51$, $\eta_p^2 = .36$, $p < .001$. Thus, our power manipulation was successful.

Need to belong manipulation check. Participants in the high need to belong condition ($M = 3.38$, $SD = 0.74$, 95% CI = [3.21, 3.57]) had higher subsequent scores on the Need to Belong measure than did participants in the control condition ($M = 3.08$, $SD = 0.73$, 95% CI = [2.91, 3.26]), $F(1, 134) = 5.60$, $p < .02$, $\eta_p^2 = .04$, which validates our need to belong manipulation.

Submissiveness. We predicted that among participants in the high-power (but not neutral-power) condition, those who had been primed with need to belong would exhibit higher scores on the Submissive Behavior Scale than those who had been primed with a control topic. To test this prediction, we conducted a 2 (high-power vs. neutral-power condition) \times 2 (high need to belong vs. control prime) between-subjects ANOVA with submissiveness scores as the dependent measure.

There were no main effects of power condition or need to belong prime on submissiveness ($ps > .19$). However, the predicted Power condition \times Need to belong prime interaction was significant, $F(1, 132) = 3.91$, $p = .05$, $\eta_p^2 = .03$. Consistent with Studies 1 and 2, simple effects tests indicated that high-power participants demonstrated more submissiveness in the high need to belong prime condition ($M = 2.78$, $SD = 0.64$, 95% CI = [2.55, 3.01]) than in the control prime condition ($M = 2.42$, $SD = 0.64$, 95% CI = [2.19, 2.64]), $F(1, 132) = 5.01$, $p < .03$, $\eta_p^2 = .03$. In contrast, neutral-power participants demonstrated equivalent levels of submissiveness in the high need to belong prime condition ($M = 2.54$, $SD = 0.60$, 95% CI = [2.32, 2.76]) and the control prime condition ($M = 2.62$, $SD = 0.68$, 95% CI = [2.41, 2.82]), $F(1, 132) = .25$, $p = .62$, $\eta_p^2 = .002$. The comparisons between the high-power and neutral-power conditions were not significant in either the high need to belong or control prime conditions ($ps > .14$).

Fear of positive evaluation. We further predicted that high-power participants would report a higher fear of positive evaluation in the high need to belong than control prime

condition. To test this prediction, we submitted participants' Fear of Positive Evaluation scores to a 2 (high-power vs. low-power) \times 2 (high need to belong vs. control) between-subjects ANOVA.

There were no main effects ($ps > .38$). However, a significant interaction between power condition and need to belong prime condition emerged, $F(1, 132) = 4.27, p = .04, \eta_p^2 = .03$. Decomposition of the interaction indicated that participants assigned to the high-power role had higher Fear of Positive Evaluation scores after being primed with the need to belong ($M = 4.99, SD = 1.73, 95\% CI = [4.35, 5.63]$) than after being primed with a control topic ($M = 4.08, SD = 1.74, 95\% CI = [3.45, 4.72]$), $F(1, 132) = 3.92, p = .05, \eta_p^2 = .03$. By contrast, participants assigned to the neutral-power role had equivalent Fear of Positive Evaluation scores regardless of whether they were primed with the need to belong ($M = 4.07, SD = 1.78, 95\% CI = [3.46, 4.68]$) or a control topic ($M = 4.46, SD = 1.95, 95\% CI = [3.88, 5.03]$), $F(1, 132) = .82, p = .37, \eta_p^2 = .01$. Additional simple effects tests revealed that whereas high need to belong participants had higher Fear of Positive Evaluation scores in the high-power than neutral-power condition, $F(1, 132) = 4.17, p = .04, \eta_p^2 = .03$, low need to belong participants did not differ in their Fear of Positive Evaluation scores across power conditions, $F(1, 132) = .74, p = .39, \eta_p^2 = .01$.

Mediation analysis. Given our hypothesis that power and need to belong would elicit submissive behavior because of a fear of unwanted attention (and possibly backlash resulting from this distinctiveness) among high-power, high need to belong individuals, we tested whether Fear of Positive Evaluation scores would mediate the interactive effects of power and need to belong on submissiveness. We did so via a mediated moderation analysis (Preacher, Rucker, & Hayes, 2007). As noted above, power condition (0 = neutral, 1 = high) and need to belong prime condition (0 = control, 1 = high need to belong) interacted to predict both submissiveness (the proposed dependent measure; $b = .44, SE = .22, t(132) = 1.98, p = .05$, and Fear of Positive Evaluation scores (the proposed mediator; $b = 1.29, SE = .62, t(132) = 2.07, p = .04$). Furthermore, there was a positive relationship between Fear of Positive Evaluation scores and submissiveness ($b = .26, SE = .02, t(134) = 12.35, p < .001$). Thus, the first three criteria for mediation were satisfied.

When submissiveness scores were regressed onto power condition, need to belong condition, the Power \times Need to belong interaction term, and Fear of Positive Evaluation scores, the relationship between Fear of Positive Evaluation scores and submissiveness remained significant ($b = .26, SE = .02, t(131) = 11.92, p < .001$). Importantly, however, the effect of the Power \times Need to belong interaction term on submissiveness was reduced to non-significance ($b = .11, SE = .16, t(132) = .69, p = .49$). A bootstrapping analysis with 1,000 estimates revealed that this reduction was reliable ($boot = .33, SE = .16, 95\% CI = [0.04, 0.66]$). Thus, Fear of

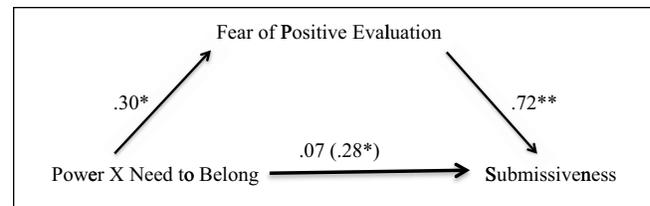


Figure 2. Mediation analysis, Study 3 (standardized beta coefficients).

* $p \leq .05$. ** $p \leq .01$.

Positive Evaluation scores mediated the relationship between power condition, need to belong prime, and submissiveness (see Figure 2).

Discussion

In addition to demonstrating the effects of power and need to belong on a different measure of submissiveness (the self-reported Submissive Behavior Scale), the results of Study 3 shed light on *why* high-power, high need to belong individuals are motivated to downplay their power. Specifically, the results showed that these individuals are fearful of the social repercussions of their distinctiveness and of being evaluated too positively (i.e., being seen by others as potential competitors). As a result, they present themselves in a way that makes their power less evident and conspicuous—by behaving submissively. Indeed, in this study, the tendency for power-holders primed with a high need to belong to exhibit submissiveness was mediated by Fear of Positive Evaluation scores.

General Discussion

Building on a small but growing literature indicating that possessing power is sometimes aversive (e.g., Chen et al., 2009; Fast & Chen, 2009), we predicted that individuals who have a high need for acceptance and belonging would feel uncomfortable with the social attention that accompanies power. This attention—despite being largely positive—could eventually breed resentment from others who are competing for valued commodities (Weeks et al., 2008). The mere possibility of such resentment born of positive evaluation is aversive to high-power, high need to belong individuals, and as a result, such individuals may downplay their power in an effort to reduce their distinctiveness from others. The findings of three studies are consistent with this idea.

In Study 1, participants in a high-power role (but not a neutral-power role) presented themselves more submissively in an autobiography when they were induced to have a high need to belong. In Study 2, participants who were primed with a high-power mindset, and who were chronically high in need to belong, sent more submissive messages to “another person” in an ostensible debate. Study 3 was designed to

elucidate the mechanism behind these effects. We predicted that the combination of power and need to belong would induce submissive behavior because individuals high in need to belong are uncomfortable with their power (and the distinctiveness associated with it). In this study, high-power, high need to belong participants reported more submissiveness in their social relationships, and this effect was driven by their fear of positive evaluation. That is, these participants were concerned about the unwanted attention they might receive from others (e.g., jealousy and/or resentment of their high power) as a result of their holding a dominant position, which in turn led them to exhibit greater *submissiveness*.

Although need to belong significantly predicted greater submissiveness among high-power participants in all three studies, one inconsistency in the present results involves the relationship between power and submissiveness among those high (vs. low) in need to belong. Specifically, our effects were driven by high need to belong participants (who became significantly more submissive when in power) in Study 1, by low need to belong participants (who became significantly *less* submissive when in power) in Study 2, and by neither high nor low need to belong participants in Study 3. As noted earlier, one potential explanation is that we used three different manipulations of power (assignment to roles in Studies 1 and 3, and recalling an instance of power in Study 2), which perhaps produce slightly different effects on submissiveness. To address this inconsistency and determine whether our overall effects were strongest among participants high or low in need to belong, we conducted a combined analysis of Studies 1, 2, and 3. First, we dummy-coded power (0 = low/neutral, 1 = high) and standardized need to belong and submissiveness scores. We then regressed submissiveness scores onto power, need to belong, and their interaction.⁴

As predicted, the only significant result was the Power \times Need to belong interaction ($b = .35$, $SE = .10$), $t(353) = 3.41$, $p = .001$. Simple slopes analyses revealed that high need to belong participants (1 *SD* above the mean) were more submissive when primed with power than when not primed with power ($b = .51$, $SE = .15$), $t(353) = 3.45$, $p = .001$, whereas low need to belong participants (1 *SD* below the mean) were equally submissive across power conditions ($b = -.20$, $SE = .15$), $t(353) = -1.38$, $p = .17$. These findings thus suggest that on the whole, power increases submissiveness among people high in need to belong.

Implications

Our results contribute to an emerging literature identifying circumstances under which power can be a source of discomfort. Although power is associated with many psychological benefits (e.g., Fiske, 2010), recent work has revealed that the expectations introduced by high-power roles can cause people to feel threatened and to engage in compensatory behaviors

when they feel unable to fulfill their roles (Cho & Fast, 2012; Fast & Chen, 2009). However, the present findings identify an additional reason that some people may find power aversive. Namely, having power creates feelings of distinctiveness and invites attention from others, both of which are potentially threatening to those with a high need to belong. High need to belong individuals are motivated to blend in and connect with, rather than stand out from, others (see Leary, 2010), and so they attempt to downplay their power to minimize their social distinctiveness and the chances of incurring backlash.

Notably, a recent set of studies demonstrated that power-holders respond to heightened belongingness needs by subsequently expressing greater motives for social affiliation (Narayanan et al., 2013). These studies complement the present results by highlighting another consequence of the high-power, high need to belong combination. However, we see them as distinct from our research in two ways. First, whereas the desire to connect with others involves prosocial behaviors by nature, submissiveness may involve either prosocial behaviors (e.g., conforming to others) or antisocial behaviors (e.g., avoiding direct eye contact; Gilbert & Allan, 1994). Second, the effects on affiliative tendencies in the Narayanan et al. (2013) studies were driven by approach-oriented motives among power-holders (i.e., power-holders tend to behave consistently with their personal goals, which for high need to belong individuals means connecting with others; Keltner et al., 2003). The present findings, by contrast, are not well explained by approach-oriented motives; rather than acting as a vehicle for goal pursuit among high need to belong individuals, power *interferes* with these individuals' ability to establish mutual (versus hierarchical) social connections. Indeed, our results were mediated by a fear of the social attention that individuals high in need to belong anticipate receiving because of their power.

One possibility we did not consider here is that for individuals with a high need to belong, possessing power raises the specter of not just positive but also negative attention. Power is widely associated with ruthless greed, ambition, and self-interest. These perceptions may be grounds for social exclusion. If this were the case, high-power, high need to belong individuals might try to appear submissive to show humility and provide reassurance about their motives, not just to reduce distinctiveness. Humility, according to recent studies (e.g., Ashton & Lee, 2005), is perceived in others who are modest (claiming no special entitlements or stature) and straightforward (without ulterior motives). Although humility is somewhat related to our submissiveness measures, it is a distinct construct that appears more closely related to the dimension of agreeableness than dominance. Humility also seems more likely to be driven by a fear of negative, not positive, evaluation. Whether power and need to belong affect expressions of humility, and through what process, are questions that await future investigation.

Limitations and Future Directions

Although our studies provide convergent evidence for the relationship between power, need to belong, and submissiveness across several different operationalizations, one limitation is that they were all conducted with online samples, thus calling into question the generalizability of these findings to more realistic situations. The fact that we manipulated power by assigning participants to particular roles in Studies 1 and 3 is reassuring, as is the fact that we measured submissiveness in an ostensibly real online chat with “another person” in Study 3. Nevertheless, we hope the present studies inspire researchers to replicate our effects in the laboratory, using face-to-face interaction paradigms (e.g., coding participants’ nonverbal behaviors in the presence of a confederate, after having been primed with power and need to belong).

It would also be interesting to consider other circumstances or individual differences—besides need to belong—that may contribute to feelings of threat among power-holders. Some prior work has shown that women feel more ambivalent about holding positions of power than do men (e.g., Fong & Tiedens, 2002), but it remains to be seen whether this ambivalence leads female power-holders to experience more fear of positive evaluation, exhibit more submissive behaviors, or both. In addition, perhaps members of numerical minority groups (e.g., opinion minorities, social category minorities) who hold positions of power are particularly likely to demonstrate submissiveness, due to their power being perceived—either by themselves or by others—as inconsistent with their minority status (Horcajo, Petty, & Briñol, 2010; but see Prislín, Sawicki, & Williams, 2011).

Another intriguing possibility, given that our need to belong manipulations and measures likely invoked feelings of social exclusion as well as belongingness motives, is that social exclusion has different effects on power-holders’ submissive behaviors, depending on the perpetrator of the exclusion. In the present studies, need to belong was unrelated to one’s sense of power (e.g., participants in Study 3 wrote about a previous instance of social exclusion prior to being assigned a power role). However, it may be that powerful participants would have behaved more *dominantly* rather than submissively had they been excluded by their subordinates. Some research indeed suggests that social exclusion triggers antisocial behavior against the perpetrators of the exclusion, but not against unrelated others (Maner et al., 2007).

Finally, although our studies provide insight into why and under what conditions power-holders will attempt to downplay their dominance, it is important to consider how these tendencies toward submissiveness influence other people’s perceptions of power-holders. On one hand, others may like (even if they do not respect) power-holders who exhibit submissive behaviors more than those who do not. On the other hand, others may prefer power-holders who are more dominant and hence consistent with societal stereotypes of a “good”

leader (Eagly & Karau, 2002). In light of these issues, future research will need to take into account not only how people react to having power, but also how their reactions ultimately affect (and are interpreted by) those with whom they interact.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

Notes

1. This manipulation was included for exploratory purposes and produced no main effects or interactions with the other independent variables on the submissiveness composite ($ps > .25$), so it will not be discussed further. The results of this study are therefore reported as a 2 (high-power vs. low-power) \times 2 (high need to belong vs. control) design.
2. Example excerpts from essays coded as dominant included “I am a hardworking individual that is very career-minded and always looking to succeed . . .” and “I was the first person in my family to go to college and obtained a master’s degree in economics. I then had a very successful career as a consultant . . .” Example excerpts from essays coded as submissive included “I am short, fat, and balding . . . I prefer to avoid people. I usually only leave my apartment to go grocery shopping” and “I have had a very difficult life. I was born into a family with limited resources . . . I do not know what the future will bring but I suspect I might be in for a great deal more pain.”
3. There were no participants with Cook’s D scores more than 5 SD above the sample mean in Study 1 or Study 3.
4. When two dummy-coded variables corresponding to study/sample were included in the analysis as a factor, there were no significant three-way interactions with power and need to belong on submissiveness ($ps > .49$), indicating that our effects did not differ significantly by study.

Supplemental Material

The online supplemental material is available at <http://pspb.sagepub.com/supplemental>.

References

- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Thousand Oaks, CA: SAGE.
- Anderson, C. L., Srivastava, S., Beer, J. S., Spataro, S. E., & Chatman, J. A. (2006). Knowing your place: Self-perceptions of status in face-to-face groups. *Journal of Personality and Social Psychology, 91*, 1094-1110.
- Anderson, C. L., Willer, R., Kilduff, G. J., & Brown, C. E. (2012). The origins of deference: When do people prefer lower status? *Journal of Personality and Social Psychology, 102*, 1077-1088.
- Archer, J. (1988). *The behavioural biology of aggression*. Cambridge, UK: Cambridge University Press.

- Ashton, M. C., & Lee, K. (2005). Honesty-humility, the Big Five, and the five-factor model. *Journal of Personality, 73*, 1321-1354.
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin, 117*, 497-529.
- Brewer, M. B. (1991). The social self: On being the same and different at the same time. *Personality and Social Psychology Bulletin, 17*, 475-482.
- Caryl, P. G. (1988). Escalated fighting and the war of nerves: Games theory and animal combat. In P. H. Bateson & P. H. Klopfer (Eds.), *Perspectives in Ethology: Vol. 4. Advantages of diversity* (pp. 199-224). New York, NY: Plenum Press.
- Chen, S., Langner, C., & Mendoza-Denton, R. (2009). When dispositional and role power fit: Implications for self-expression and self-other congruence. *Journal of Personality and Social Psychology, 96*, 710-727.
- Cho, Y., & Fast, N. J. (2012). Power, defensive denigration, and the assuaging effect of gratitude expression. *Journal of Experimental Social Psychology, 48*, 778-782.
- De Dreu, C. K. W., & van Knippenberg, D. (2005). The possessive self as a barrier to conflict resolution: Effects of mere ownership, process accountability, and self-concept clarity on competitive cognitions and behavior. *Journal of Personality and Social Psychology, 89*, 345-357.
- Eagly, A. H., & Karau, S. J. (2002). Role congruity theory of prejudice toward female leaders. *Psychological Review, 109*, 573-596.
- Emerson, R. E. (1962). Power-dependence relations. *American Sociological Review, 27*, 31-41.
- Fast, N. J., & Chen, S. (2009). When the boss feels inadequate: Power, incompetence and aggression. *Psychological Science, 20*, 1406-1413.
- Fiske, S. T. (1993). Controlling other people: The impact of power on stereotyping. *American Psychologist, 48*, 621-628.
- Fiske, S. T. (2010). Interpersonal stratification: Status, power, and subordination. In S. T. Fiske, D. T. Gilbert, & G. Lindzey (Eds.), *Handbook of social psychology* (5th ed., Vol. 2, pp. 941-982). Hoboken, NJ: John Wiley.
- Fong, C. T., & Tiedens, L. Z. (2002). Dueling experiences and dual ambivalences: Emotional and motivational ambivalence of women in high status positions. *Motivation and Emotion, 26*, 105-121.
- Galinsky, A. D., Gruenfeld, D. H., & Magee, J. C. (2003). From power to action. *Journal of Personality and Social Psychology, 85*, 453-466.
- Galinsky, A. D., Magee, J. C., Inesi, M. E., & Gruenfeld, D. H. (2006). Power and perspectives not taken. *Psychological Science, 17*, 1068-1074.
- Georgeson, J. C., & Harris, M. J. (1998). Why's my boss always holding me down? A meta-analysis of power effects on performance evaluations. *Personality and Social Psychology Review, 2*, 184-195.
- Gilbert, P. (1992). *Depression: The evolution of powerlessness*. New York, NY: Guilford.
- Gilbert, P., & Allan, S. (1994). Assertiveness, submissive behavior and social comparison. *British Journal of Clinical Psychology, 33*, 295-306.
- Goodwin, S. A., Operario, D., & Fiske, S. T. (1998). Situational power and interpersonal dominance facilitate bias and inequality. *Journal of Social Issues, 54*, 677-698.
- Gruenfeld, D. H., Inesi, M. E., Magee, J., & Galinsky, A. D. (2008). Power and the objectification of social targets. *Journal of Personality and Social Psychology, 95*, 111-127.
- Gruenfeld, D. H., & Tiedens, L. Z. (2010). Organizational preferences and their consequences. In S. T. Fiske, D. T. Gilbert, & G. Lindzey (Eds.), *Handbook of social psychology* (5th ed., Vol. 2, pp. 1251-1287). Hoboken, NJ: John Wiley.
- Hayes, A. F., Matthes, J., & Eveland, W. P. (2013). Stimulating the quasi-statistical organ: Fear of social isolation motivates the quest for knowledge of the opinion climate. *Communication Research, 40*, 439-462.
- Horcajo, J., Petty, R. E., & Briñol, P. (2010). The effects of majority versus minority source status on persuasion: A self-validation analysis. *Journal of Personality and Social Psychology, 99*, 498-512.
- Inesi, M. E., & Rios, K. (2013). Fighting for independence: Significant others' goals for oneself incite reactance among the powerful. *Journal of Experimental Social Psychology, 49*, 1168-1176.
- Keltner, D., Gruenfeld, D. H., & Anderson, C. A. (2003). Power, approach, and inhibition. *Psychological Review, 110*, 265-284.
- Kifer, Y., Heller, D., Perunovic, W. Q. E., & Galinsky, A. D. (2013). The good life of the powerful: The experience of power and authenticity enhances subjective well-being. *Psychological Science, 24*, 280-288.
- Kipnis, D. (1972). Does power corrupt? *Journal of Personality and Social Psychology, 24*, 33-41.
- Knowles, M. L., & Gardner, W. L. (2008). Benefits of membership: The activation and amplification of group identities in response to social rejection. *Personality and Social Psychology Bulletin, 34*, 1200-1213.
- Lammers, J., Galinsky, A. D., Gordjin, E. H., & Otten, S. (2012). Power increases social distance. *Social Psychological & Personality Science, 3*, 282-290.
- Leary, M. R. (1983). A brief version of the Fear of Negative Evaluation Scale. *Personality and Social Psychology Bulletin, 9*, 371-375.
- Leary, M. R. (2010). Affiliation, acceptance, and belonging: The pursuit of interpersonal connection. In S. T. Fiske, D. T. Gilbert, & G. Lindzey (Eds.), *Handbook of social psychology* (5th ed., Vol. 2, pp. 864-897). Hoboken, NJ: Wiley.
- Leary, M. R., Kelly, K. M., Cottrell, C. A., & Schreindorfer, L. S. (2013). Construct validity of the Need to Belong Scale: Mapping the nomological network. *Journal of Personality Assessment, 95*, 610-624.
- Lee, F., & Tiedens, L. Z. (2001). Is it lonely at the top? The independence and interdependence of power holders. *Research in Organizational Behavior, 23*, 43-91.
- Leonardelli, G. J., Pickett, C. L., & Brewer, M. B. (2010). Optimal distinctiveness theory: A framework for social identity, social cognition, and intergroup relations. *Advances in Experimental Social Psychology, 43*, 63-113.
- Magee, J. C., & Smith, P. K. (2013). The social distance theory of power. *Personality and Social Psychology Review, 17*, 158-186.
- Maner, J. K., DeWall, C. N., Baumeister, R. F., & Schaller, M. (2007). Does social exclusion motivate interpersonal reconnection? Resolving the "porcupine problem." *Journal of Personality and Social Psychology, 92*, 42-55.
- Morrison, K. R., & Matthes, J. (2011). Socially motivated projection: Need to belong increases perceived opinion consensus on

- important issues. *European Journal of Social Psychology*, 41, 707-719.
- Narayanan, J., Tai, K., & Kinias, Z. (2013). Power motivates interpersonal connection following social exclusion. *Organizational Behavior and Human Decision Processes*, 122, 257-266.
- Preacher, K. J., Rucker, D. D., & Hayes, A. F. (2007). Addressing moderated mediation hypotheses: Theory, methods, and prescriptions. *Multivariate Behavioral Research*, 42, 185-227.
- Prislin, R., Sawicki, V., & Williams, K. (2011). New majorities' abuse of power: Effects of perceived control and social support. *Group Processes & Intergroup Relations*, 14, 489-504.
- Rios, K., & Chen, Z. (2014). Experimental evidence for minorities' hesitancy in reporting their opinions: The roles of optimal distinctiveness needs and normative influence. *Personality and Social Psychology Bulletin*, 40, 872-883.
- Rios, K., DeMarree, K. G., & Statzer, J. (2014). Attitude certainty and conflict style: Divergent effects of correctness and clarity. *Personality and Social Psychology Bulletin*, 40, 819-830.
- Schenkel, R. (1967). Submission: Its features and function in the wolf and dog. *American Zoologist*, 7, 319-329.
- Sommer, K. L., & Baumeister, R. F. (2002). Self-evaluation, persistence, and performance following implicit rejection: The role of trait self-esteem. *Personality and Social Psychology Bulletin*, 28, 926-938.
- Tiedens, L. Z., & Fragale, A. R. (2003). Power moves: Complementarity in dominant and submissive nonverbal behavior. *Journal of Personality and Social Psychology*, 84, 558-568.
- Weeks, J. W., Heimberg, R. G., & Rodebaugh, T. L. (2008). The Fear of Positive Evaluation Scale: Assessing a proposed cognitive component of social anxiety. *Journal of Anxiety Disorders*, 22, 44-55.
- Weeks, J. W., Heimberg, R. G., Rodebaugh, T. L., & Norton, P. J. (2008). Exploring the relationship between fear of positive evaluation and social anxiety. *Journal of Anxiety Disorders*, 22, 386-400.
- Weeks, J. W., Jakatdar, T. A., & Heimberg, R. G. (2010). Comparing and contrasting fears of positive and negative evaluation as facets of social anxiety. *Journal of Social & Clinical Psychology*, 29, 68-94.