### Power Reduces the Press of the Situation: Implications for Creativity, Conformity, and Dissonance

Adam D. Galinsky Northwestern University Joe C. Magee New York University

Deborah H Gruenfeld Stanford University Jennifer A. Whitson University of Texas at Austin

Katie A. Liljenquist Brigham Young University

Although power is often conceptualized as the capacity to influence others, the current research explores whether power psychologically protects people *from* influence. In contrast to classic social psychological research demonstrating the strength of the situation in directing attitudes, expressions, and intentions, 5 experiments (using experiential primes, semantic primes, and role manipulations of power) demonstrate that the powerful (a) generate creative ideas that are less influenced by salient examples, (b) express attitudes that conform less to the expressed opinions of others, (c) are more influenced by their own social value orientation relative to the reputation of a negotiating opponent, and (d) perceive greater choice in making counterattitudinal statements. This last experiment illustrates that power is not always psychologically liberating; it can create internal conflict, arousing dissonance, and thereby lead to attitude change. Across the experiments, high-power participants were immune to the typical press of situations, with intrapsychic processes having greater sway than situational or interpersonal ones on their creative and attitudinal expressions.

Keywords: power, influence, conformity, dissonance, creativity

The assertion that social and mental life is directed by the situation is almost a truism in social psychology. Situational cues, social norms, and the attitudes and behavior of others all provide guidance and boundaries for acceptable thought and behavior, pressing individuals in predictable directions. Indeed, the range of situational elements that have been found to influence individual psychology, from various subtle nonsocial cues (e.g., Dijksterhuis & Bargh, 2001; Higgins, 1996; Ward, 1994) to overt acts of social influence (e.g., Asch, 1955; Cialdini & Goldstein, 2004; Deutsch & Gerard, 1955; Sherif, 1935), is astounding. As a result, elements of the situation are often more important determinants of expressions and behavior than are individuals' dispositions (Ross & Nisbett, 1991; cf. Mischel & Shoda, 1995; Pervin & John, 1999).

Adam D. Galinsky, Management and Organizations, Kellogg School of Management, Northwestern University; Joe C. Magee, Robert F. Wagner Graduate School of Public Service, New York University; Deborah H Gruenfeld, Graduate School of Business, Stanford University; Jennifer A. Whitson, McCombs School of Business, The University of Texas at Austin; Katie A. Liljenquist, Marriott School of Management, Brigham Young University.

We wish to thank Grace Adamson, Christina Appleton, Kelly Boutton, Manoj Budidha, Brian Cadena, Gabriel Cooper, Katherine Dover-Taylor, Laura Howland, and Justin Wear for their help with data collection.

Correspondence concerning this article should be addressed to Adam D. Galinsky, Management and Organizations, Kellogg School of Management, Northwestern University, 2001 Sheridan Road, Evanston, IL 60208. E-mail: agalinsky@northwestern.edu

One of the chief mechanisms of influence in social life is power. Because the powerless are more dependent on those with power than vice versa, the powerful serve as an especially potent source of influence, limiting and steering the behavior of others (Emerson, 1962; French & Raven, 1959; Goldhamer & Shils, 1939; Lewin, 1951; Thibaut & Kelley, 1959). Although power can certainly impose influence and constraints on others, possessing power can also be conceptualized as freeing people from the influence of external forces (Overbeck, Tiedens, & Brion, 2006). Indeed, Keltner, Gruenfeld, and Anderson (2003) have suggested that the normal restrictions that govern thought, expression, and behavior for most people do not seem to apply to the powerful. According to this insight, power might provide one answer to a lingering question at the very heart of social psychology: What key features of the social world immunize individuals from the dominating influence of the situation (Lewin, 1951)?

In the current research, we examine whether power reduces the influence of the situation on thought and expression. We hypothesize that individuals with power are less influenced and constrained by salient information in the environment than are individuals without power, and as a result, intrapsychic processes and predilections matter more than the situation in determining the creative and attitudinal expressions of the powerful. At first blush, our prediction might seem inconsistent with recent research demonstrating that the powerful can sometimes be more affected by the situation than the powerless (Guinote, 2008; Overbeck & Park,

2006). We reconcile these seemingly conflicting perspectives by noting that both highlight how power increases goal-directed behavior and cognition (Galinsky, Gruenfeld, & Magee, 2003; Guinote, 2007a; P. K. Smith, Jostmann, Galinsky, & Van Dijk, 2008). The research demonstrating sensitivity by the powerful to situational information has focused on situations that are designed to activate or facilitate goals. In contrast, the current research uses situational information and cues that do not directly create or aid power holders' goals; thus, we expect power to decrease the influence of this type of situational information (e.g., the creative and attitudinal expressions of others).

#### Power and the Influence of the Situation

Power is often defined as asymmetric control over valuable resources and outcomes within a specific situation and set of social relations (Fiske, 1993; Fiske & Berdahl, 2007; Keltner et al., 2003; Magee & Galinsky, 2008; Thibaut & Kelley, 1959). This definition of power implicitly involves both control over and independence from others in obtaining important outcomes. As a control mechanism, power often involves putting pressure on others, driving others to do the things that will help the powerful accomplish their own objectives. Thus, many people have defined power as the capacity to influence others (Copeland, 1994; French & Raven, 1959; Weber, 1947). Power, it could also be said, is the capacity to be *uninfluenced* by others. Without power, one's outcomes are constrained by others. With power, one is relatively free of such forces, at least within the context of the specific power relationship.

Power has long been suspected of transforming how people live their lives (Kipnis, 1976; Russell, 1938), and an exploding body of research has confirmed that power fundamentally alters how an individual construes and approaches the world (Bargh, Raymond, Pryor, & Strack, 1995; Chen, Lee-Chai, & Bargh, 2001; Galinsky et al., 2003; Galinsky, Magee, Inesi, & Gruenfeld, 2006; Gruenfeld, Inesi, Magee, & Galinsky, 2008; Guinote, 2007a, 2007b, 2008; Keltner et al., 2003; Magee, Galinsky, & Gruenfeld, 2007; P. K. Smith et al., 2008; P. K. Smith & Trope, 2006; Weick & Guinote, 2008). This research makes clear that those with power roam in a very different psychological space than those without power.

#### Reducing the Strength of the Situation

We propose that possessing power reduces the influence of the situation, not only within the confines of a specific power relationship but also through the transformative effects of power on psychological states (Keltner et al., 2003; Kipnis, 1976). Objectively, the powerful are less dependent on others for acquiring and maintaining important social resources and they are subject to fewer threats (Keltner et al., 2003; Weber, 1947). Thus, certain forms of influence are simply encountered less often by individuals with power.

In addition to the absence of threats faced by the powerful, the possession of power decreases the extent to which individuals incorporate available threatening or constraining information into their thoughts and intentions (Anderson & Berdahl, 2002; Anderson & Galinsky, 2006). High-power individuals, for example, underestimate the extent to which subordinates feel negative emo-

tions toward them, whereas low-power individuals overestimate these emotions in their bosses (Anderson & Berdahl, 2002). Similarly, power immunizes negotiators from the influence of their opponents' emotional displays, with low-power negotiators conceding more to an angry opponent compared with high-power negotiators (Van Kleef, De Dreu, Pietroni, & Manstead, 2006). Even innocuous information in the situation seems to weigh less heavily on high-power minds. Consistent with this reasoning, Galinsky et al. (2006) found that high-power participants were less likely to consider another person's perspective and less likely to take into account that another person might lack knowledge to which they had privileged access. The powerful are also able to stay focused on their goals even in the face of obstacles or distracting goalirrelevant information (Gruenfeld et al., 2008; Guinote, 2007a, 2008; P. K. Smith et al., 2008; Whitson, Galinsky, Magee, Liljenquist, & Gruenfeld, 2008). All of these studies suggest that the situation loses its suffocating hold over the thoughts and behavior of the powerful.

#### Increasing the Strength of the Person

If the thoughts and expressions of the powerful are uninfluenced by social and situational cues, what does animate their thinking? We argue that high-power individuals are less affected by situational information than low-power individuals because power increases sensitivity to internal states. For example, power increases confidence in one's thoughts and perspectives (Anderson & Galinsky, 2006; Briñol, Petty, Valle, Rucker, & Becerra, 2007), and the powerful are more sensitive to their own subjective experiences and feelings while generating thoughts and reactions (Briñol et al., 2007; Weick & Guinote, 2008).

In support of the argument that power heightens responsiveness to internal states as guides for attitude and creative expression, a number of studies have demonstrated that possessing power strengthens the correspondence of one's expressions and behavior with one's temporary and chronic internal states. For example, the correspondence between smiling and subjective happiness is stronger among high-power than among low-power individuals (Hecht & LaFrance, 1998). Galinsky and colleagues (2003) demonstrated that when individuals are confronted with an annoying stimulus in the environment (in their case a fan blowing in participants' faces), the powerful are more likely than the powerless to remove it. Similarly, Anderson and Berdahl (2002) found that high-power individuals self-report that they express their true attitudes more than do low-power individuals. These studies demonstrate that the expressions of the powerful are often more closely aligned with their internal states than are the expressions and behavior of the powerless.

Power also appears to strengthen the correspondence between traits and expression (Anderson, John, Keltner, & Kring, 2001; Chen et al., 2001). That is, the personalities of high-power individuals are better predictors of their expressions and behavior than are the personalities of low-power individuals. For instance, the personalities of high-status members of a group predict the expression of both positive and negative emotions, but no such correspondence occurs for low-status members (Anderson et al., 2001). Also consistent with this line of thinking, Chen et al. (2001) found that the possession of power leads those with a communal orientation to demonstrate greater generosity, whereas those with an

exchange orientation engage in more self-serving behaviors when they have power; this difference, however, was not apparent when individuals lacked power. Other research has found that for men with a proclivity toward sexual harassment or aggression, the activation of power triggers concepts associated with sex, which in turn cause them to think of female partners in sexual terms (Bargh et al., 1995). High-power groups also exhibit more intragroup (or interpersonal) behavioral variability than low-power groups (Guinote, Judd, & Brauer, 2002), suggesting that in high-power groups, behavior is governed more by individual desires and idiosyncratic tendencies than by norms (Brauer, 2005). In each of these studies, power led to behavior that was more consistent with existing dispositions and idiosyncratic tendencies than with features of the situation.

#### Overview

The above review offers suggestive evidence that the powerful are immune to the influence of situational information. Our basic position is that situational information will have less influence on the attitudes, intentions, and creative expressions of high-power individuals than it will on individuals without power. Our approach demonstrates an interest in power and responsiveness to the situation in general, rather than a specific form of power or situational influence, and we draw on a variety of classic social psychological paradigms to investigate how power moderates the influence of various types of situational information.

Experiments 1-4 are straightforward in their predictions: Highpower individuals will express thoughts and ideas that reflect less influence from situational information and cues as compared with individuals in low-power or baseline conditions. Experiments 1 and 2 exposed individuals to nonsocial examples and tested whether these examples would constrain and limit the creative expression of low-power and baseline participants to a greater extent than the powerful. Experiments 3 and 4 investigated whether power protects individuals from the influence of social information (i.e., the attitudes and reputations of others). Experiment 4 also explored whether the dispositions of the powerful are better predictors of their attitudes and expressions than the situation, even when high-power individuals recognize and acknowledge the situational information as much as baseline participants. This study provides evidence that power not only decreases awareness of or attention to situational information but also immunizes individuals from the influence of that information.

In Experiment 5, however, we predicted an ironic byproduct of this effect. Freed from the pressures of social and situational influence, one typically will perceive a greater degree of choice in one's behavior. Thus, we predicted that when high-power individuals are asked to advocate a counterattitudinal position, they will perceive more choice than low-power individuals, thereby leading the powerful to experience greater cognitive dissonance and to alter their underlying attitudes to reduce this state of psychological discomfort.

The current experiments extend research and theory in a number of ways. By manipulating aspects of the situation and demonstrating that high-power individuals disregard both social and nonsocial situational cues, we add key insights regarding the role of power in driving the expression of creative ideas and attitudes. Even when the individuals are aware of or pay attention to infor-

mation in the situation, power immunizes them from the influence of that information. We demonstrate this immunizing effect of power across a panoply of psychologically important domains, including creativity, conformity, negotiations, and dissonance. Second, by measuring aspects of the person while manipulating aspects of the situation, we provide clear evidence for the importance of the person and intrapsychic processes relative to the situation for the powerful. Third, we offer mediating evidence that the powerful are vulnerable to intrapersonal influence through their very immunity to situational influences: By seeing choice where others see constraint, the powerful become vulnerable to dissonance. In sum, the current set of studies provides robust evidence that intrapsychic processes have a greater effect than situational or interpersonal ones on the creative and attitudinal expressions of the powerful.

#### Experiment 1: Creating Product Labels

In the first experiment, we explored whether power would immunize individuals from the influence of nonsocial information on creativity. Although precise definitions vary, the creation of novel ideas is generally regarded as a core component of creativity (Amabile, 1983). Individual performance on creative generation tasks tends to be impaired because participants borrow from and rely too heavily on salient, existing examples in society or on related information that they have recently heard or seen (S. M. Smith, Ward, & Schumacher, 1993; Ward, 1994). For example, individuals instructed to make up creatures "beyond their wildest imagination" tend to produce results that conform to the attributes of realistic earth creatures or known science fiction characters (Ward, 1994). Similarly, one of the classic findings in research on creativity (Osborn, 1953) is that a collection of individuals working alone produces more novel ideas than the same number of individuals brainstorming together, because group members block each other's generation of novel ideas; one member's ideas limit and constrain the imagination of other group members. Thus, existing ideas and examples in the environment have been shown to limit novel output.

In our first experiment we asked participants to create new product names and exposed them to benchmark examples, which have been shown to limit the generation of unique and creative ideas (cf. Rubin, Stoltzfus, & Wall, 1991). We predicted that individuals primed with power would produce ideas less influenced by the presence of salient examples, which typically act as barriers to creativity, compared with baseline participants who had not been primed with power.

#### Method

#### Participants and Design

Participants were 52 undergraduate students who participated for payment of \$10. Owing to a procedural omission, gender of participant was not recorded. The experiment consisted of two between-subjects conditions: a high-power condition and a baseline condition.

#### Procedure

Participants were greeted in the laboratory by an experimenter who explained that they would complete several questionnaires related to decision making. The experimental manipulations and our dependent variables were embedded in the packet of materials that participants received.

*Power manipulation.* Participants were given 15 word fragments and instructed, "Please complete the following word fragments with the first word that comes to mind. Try to work quickly, spending no more than a few seconds on each word."

In the *high-power* condition, five of the word fragments could be completed only with words related to power (*authority*, *boss*, *control*, *executive*, *influence*) (see Chen et al., 2001). In the *baseline* condition, words were selected to be similar in length and difficulty to the power words, but they could be completed only with words unrelated to power (*automobile*, *bass*, *song*, *envelope*, *bookmark*).

Creative task. We used a modified version of the generative cognitive task described in Rubin et al. (1991). Participants were told that they were interviewing with a top marketing firm and that part of the interview involved testing their aptitude for that business. To measure participants' potential as employees with the firm, they were told that they were going to create novel names for three different product types: pasta, nuclear element, and pain reliever. They were instructed to create at least one and up to three new labels for each category. Participants also were told that six examples were provided for each category with the kinds of names typically found in each of the categories of products. It was stressed that their names should be creative and novel and therefore that they should not use or copy any aspects of the examples provided.

For each of the categories, all of the provided examples had one of two or three common endings. All of the examples of nuclear elements ended in *on* or *ium* (e.g., *radon*, *plutonium*); all of the examples of pasta ended in *na*, *ni*, or *ti* (e.g., *lasagna*, *rigatoni*, *spaghetti*); and all of the analgesics ended in *ol* or *in* (e.g., *tylenol*, *bufferin*). Our main dependent measure was whether participants copied the ending aspects of the examples in creating their own product names. For example, if someone came up with the example *platon* for a nuclear element, it would be classified as incorporating aspects of the examples because it ended in *on*.

#### Results and Discussion

Consistent with Rubin et al.'s (1991) and Kray, Galinsky, and Wong's (2006) analyses, we assessed participants' creative output through the number as well as the proportion of product names created for each category that did not share the word endings of the examples. The first measure assesses novelty and the second assesses novelty relative to overall output; both measures reflect a lack of reliance on the examples in the environment.

To examine the novelty of name generation, we submitted the total number of names with endings deviating from the supplied examples to a 2 (condition: high power vs. baseline)  $\times$  3 (product category: pasta vs. nuclear element vs. pain reliever) mixed-model analysis of variance (ANOVA) with repeated measures on the product category factor. The only significant effect to emerge from this analysis was a main effect for power, F(1, 50) = 4.23, p = .045. Across the three categories, participants primed with power (M = 2.70, SD = 2.51) generated significantly more novel names than participants in the baseline condition (M = 1.48, SD = 1.66).

We also submitted the proportion of novel names generated to a similar  $2 \times 3$  mixed-model ANOVA. Again, the only significant effect was a main effect for power, F(1, 50) = 7.43, p = .009. High-power participants (M = .40, SD = .36) generated a larger proportion of novel names than did participants in the baseline condition (M = .18, SD = .20).

Activating the concept of power reduced the limiting effect of salient examples on creativity; participants primed with power generated more novel responses in the word generation task than did baseline participants. These results provide evidence in support of our hypothesis that the powerful are less influenced by salient information in the situation, but one limitation of this experiment is that the presence of salient examples was not manipulated, making it unclear whether the presence of examples per se accounts for the difference in creativity. We address this limitation in Experiment 2.

#### Experiment 2: The Winged Alien

To demonstrate that the powerful are immune to salient information in their creative expressions, the next experiment manipulated the presence or absence of an example in the environment. Following the manipulation of power, all participants were told to imagine they were visiting a new planet and were instructed to draw a creature that was endemic to this planet (Ward, 1994). We manipulated the presence of an example by providing some of the participants with an example of a creature with massive wings. We predicted that high-power participants would be equally likely to include wings in their drawings when they had seen an example as when they had not, demonstrating that the examples in this situation did not influence their creative output. Conversely, we predicted that low-power participants would be significantly affected by the example and would have a higher rate of including wings in their drawings when they were exposed to a winged example than when there was no example.

#### Method

#### Participants and Design

Participants were 75 undergraduates (47 women and 28 men) who participated for payment of \$10. The experiment involved a 2 (power: high vs. low)  $\times$  2 (example provided: none vs. winged alien) between-subjects design.

#### Procedure

Participants received a packet containing instructions and the experimental tasks and were asked to complete the packet one page at a time.

Power manipulation. The first task participants completed comprised the power manipulation, which was identical to the procedure used by Galinsky et al. (2003). Participants were asked to recall and write about a particular incident in their lives and were given a sheet of paper with 19 lines to complete this task. Those participants assigned to the *high-power* condition were instructed,

Recall a particular incident in which you had power over another individual or individuals. By power, we mean a situation in which you

controlled the ability of another person or persons to get something they wanted, or were in a position to evaluate those individuals. Please describe this situation in which you had power—what happened, how you felt, etc.

Those participants assigned to the *low-power* condition were instructed,

Please recall a particular incident in which someone else had power over you. By power, we mean a situation in which someone had control over your ability to get something you wanted, or was in a position to evaluate you. Please describe this situation in which you did not have power—what happened, how you felt, etc.

Creative task. Following Ward (1994), we asked participants to

imagine going to another galaxy in the universe and visiting a planet very different from earth. On your trip, you discover a creature that is local to this planet. On the next page you will be asked to draw this creature that you encounter.<sup>1</sup>

For the winged alien example manipulation, those participants who were exposed to an example read the following:

On this page is an example that a previous participant produced. Keep in mind, however, that you need not use or copy aspects of the example we have shown you. Draw your creature on the next page.

Below these instructions was a drawing of a creature with giant wings attached to its back.

Coding of drawings. Two independent coders, who were blind to condition, coded participants' drawings for the presence of wings. These codings served as our primary measure of whether participants were influenced by the winged example. Drawings were counted as possessing wings if the participant had drawn wings that were attached to any part of the body. The two coders agreed on all but one of the drawings, and this disagreement was resolved by a third coder.

#### Results and Discussion

Preliminary analyses found that gender of participant did not significantly interact with the power manipulation, so we collapsed across gender in all subsequent analyses.

We predicted that low-power participants would be affected by exposure to the winged alien but that high-power participants would be unaffected by seeing the winged example. A 2 (power: high vs. low)  $\times$  2 (example provided: none vs. winged)  $\times$  2 (wings present in participant drawing: yes vs. no) log-linear analysis produced the predicted significant three-way interaction,  $\chi^2(1, N = 75) = 5.20$ , p = .023. As shown in Figure 1, low-power participants were significantly affected by the presence of wings in the example,  $\chi^2(1, N = 37) = 8.18$ , p = .004. Low-power participants who had been exposed to a winged alien example were more likely to include wings in their own drawings (37%) than were those who were not exposed to an example (0%). High-power participants, however, were unaffected by the presence of a winged alien example,  $\chi^2(1, N = 38) = 0.01$ , p = .911 (winged example, 11%; no example, 10%).

High-power participants' drawings were unaffected by the salient example compared with low-power participants' drawings. Regardless of whether they were exposed to a winged alien, they

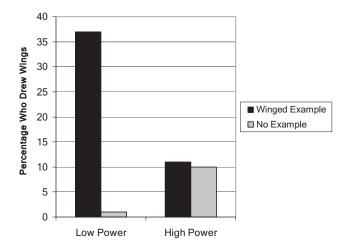


Figure 1. Percentage of participants who included wings in their drawings by power condition and whether a winged example was provided or not, Experiment 2. The low-power, no-example condition actually equals zero percent.

were equally unlikely to use wings in their drawings. In contrast, low-power participants were influenced by the example; they were more likely to include wings in their own drawings when exposed to the winged example. Collectively, the first two experiments demonstrate that the imaginations of the powerful are less influenced by examples in the environment, which typically place boundaries on creative cognition, relative to both low-power and baseline conditions. In the next experiment we investigated whether the pattern holds for responsiveness to others' opinions in the expression of attitudes.

#### Experiment 3: Nonconformity to Peers

A long line of research dating back to Asch's (1955) seminal work demonstrates that the attitudes of individuals are influenced by the opinions of others. Social influence pressures can come from many different sources—authority, peers, or information in the environment—that suggest how one should think or behave (Cialdini, Reno, & Kallgren, 1990; Deutsch & Gerard, 1955; for reviews, see Aronson, 2004; Cialdini & Goldstein, 2004). The threat of social sanctions in expressing public dissent can effectively enforce conformity pressures; even when one feels that others' positions are incorrect, one often agrees in order to avoid feeling ostracized (Dittes & Kelley, 1956). For college students, conformity pressures often originate in the overt attitudinal expressions and evaluations of their peers.

We hypothesized that power would protect individuals' own attitudes from the divergent and contradictory attitudes expressed by others around them, with the powerful anchoring instead on their own

<sup>&</sup>lt;sup>1</sup> Twenty-nine participants were given a more elaborate description of the planet: "This planet is creased with a chain of ridges and suffers from winters that last for many years." We included these instructions to see whether adding a description would make it easier for participants to complete the task. Because the description did not have a direct impact on the number of wings that participants drew and did not interact with the power manipulation, we combined the data for all analyses.

attitudes and experience. Support for this prediction can be found in research demonstrating that elevated status is associated with reduced conformity (Hollander, 1958; Jetten, Hornsey, & Adarves-Yorno, 2006; Montgomery, 1971). The next study tests directly whether the same is true for power.

Following the procedure of Epley and Gilovich (1999), we operationalized conformity by asking participants to complete a somewhat tedious task, after which they were exposed to the rather favorable ratings of the task from other (bogus) participants who had supposedly completed the task at an earlier time. To test our predictions we also included two baseline conditions. In one baseline condition, participants experienced conformity pressure in the absence of a power manipulation; this condition served as a baseline for conformity pressure. Participants in the other baseline condition simply completed the task and rated it without being exposed either to conformity pressure or to a power manipulation; this condition served as a baseline for true average attitudes toward the task

We predicted that participants primed with high power would conform less to the positive opinions of others and rate the task as less interesting and enjoyable than participants who had been primed with low power or who simply were exposed to the conformity pressure (the conformity baseline condition). Furthermore, we expected the attitudes of high-power participants to be similar to the true average attitude toward the task (the attitude baseline condition).

#### Method

#### Participants and Design

Participants were 45 undergraduates (28 women and 17 men) who participated for payment of \$10. All participants were asked to complete a deliberately tedious task (a sentence formation task), after which they rated their enjoyment of the task. The experiment involved four between-subjects conditions: high-power prime/conformity pressure versus low-power prime/conformity pressure versus no-power prime/conformity pressure (conformity baseline) versus no-power prime/no conformity pressure (attitude baseline).

#### Procedure

Participants arrived at the laboratory in groups of two or three. Upon their arrival, participants were told that they would be completing several tasks, some of which would involve asking about their perceptions and some of which would involve recalling past experiences.

Power manipulation. In one room, participants first completed the same power-priming procedure from Experiment 2 in which they were asked to write about an autobiographical experience when they either had power over someone else or someone else had power over them. Participants in the attitude baseline condition went straight to the private rooms.

Tedious task. The researchers next took the participants to private rooms and asked them each to complete a sentence-formation task. This task and the creation of conformity pressures were directly adapted from Epley and Gilovich (1999). Participants were told that this task was being pilot tested by some other researchers for inclusion in a future experiment on "psycholinguis-

tic decision-making processes." The experimenter explained that because this was only a pilot study, the researchers would like to receive feedback from them and would be asking them a few questions about what they thought of the task. The actual task consisted of forming a sentence by selecting four words from a set of five and arranging them into a sentence. Participants were given 20 such sets, none of which had anything to do with power.

Conformity measure. Whereas Epley and Gilovich (1999) created conformity pressure through the use of confederates, we produced conformity pressure through an evaluation sheet containing other supposed participants' ratings. After they completed the task, participants were presented with an evaluation sheet (see Figure A1 in the Appendix) and were asked to rate how much they enjoyed the task. Each participant was given the same feedback sheet. Specifically, the sheet provided spaces for people to mark how interesting and how enjoyable they had found the task  $(1 = not \ much; 11 = very \ much)$ . The sheet had numerous lines on it, such that multiple participants could mark their ratings on the same page. The evaluation sheet already contained feedback from 10 "previous participants" who had ostensibly performed the word-unscrambling task previously, with 4 of them also adding written comments. This bogus feedback sheet showed that the task had been rated very favorably by those who had completed it before them. The bogus ratings of how interesting the task was fell between 9 and 11, with a mean of 9.9. The ratings concerning how enjoyable the task was fell between 8 and 11, with a mean of 9.6. Thus, the overall mean of the (bogus) ratings was 9.75. The comments also spoke well of the task, including lines such as "Much better than the typical experiment" and "Fun, like a puzzle."

The participants were then asked to rate how interesting and how enjoyable they found the task by adding their responses below those of the "previous participants." Higher scores would indicate greater conformity to the preexisting feedback. Participants in the attitude baseline simply entered their evaluations of the task on a blank feedback sheet.

#### Results and Discussion

Three participants were removed from the analyses because they were suspicious of the feedback sheet's authenticity. Preliminary analyses found that gender of participant did not significantly interact with the power manipulation, so we collapsed across gender in all subsequent analyses. As in Epley and Gilovich (1999), we created an overall conformity index by averaging participants' ratings of how enjoyable and interesting they found the task ( $\alpha = .85$ ).

Ratings of the task differed by experimental condition, F(3, 38) = 3.44, p = .03 (see Figure 2). As predicted, the ratings of high-power participants (M = 8.68, SD = 1.03) were less favorable toward the task than were the ratings of low-power participants (M = 9.55, SD = 0.73), t(38) = 2.00, p = .05.

We also predicted that participants primed with high power would express their true feelings toward the task and resist the influence of peer opinions. If this prediction is correct, then the ratings of high-power participants should be statistically indistinguishable from the attitude baseline condition, in which participants completed the sentence formation task in the absence of either a power prime or the conformity manipulation, but should

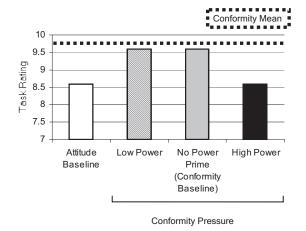


Figure 2. Mean evaluations of sentence formation task by conformity and power condition, Experiment 3. Conformity mean is the average of the "previous participants" ratings that participants saw on the bogus task evaluation sheet.

differ from the conformity baseline condition, in which participants were exposed to the conformity pressure in the absence of a power prime. High-power participants did indeed differ from participants in the conformity baseline condition (M=9.59, SD=0.77), t(38)=2.19, p=.04, but did not differ from participants in the attitude baseline condition (M=8.56, SD=1.23), t<1. These results provide support for the notion that high-power participants expressed their true attitudes despite being exposed to the opinions of others. The opposite pattern was true of the low-power prime condition; the evaluations of low-power participants differed from the attitude baseline condition, t(38)=2.31, p=.03, but did not differ from the conformity baseline condition, t<1.

Ancillary analyses provide further evidence that high-power participants were indeed more resistant to the conformity pressures. Low-power participants did not differ significantly from the mean of the ratings of the "previous participants" (9.75), t(8) < 1. However, ratings of the task made by high-power participants were significantly less favorable than the mean of these bogus ratings, t(10) = -3.44, p = .01.

Consistent with our predictions, power predicted the amount of conformity displayed by participants, with high-power participants exhibiting less conformity than low-power participants. Despite the presence of a clear norm for liking the task, high-power participants deviated from the "previous participants" opinions and expressed less favorable attitudes toward the task. The ratings of low-power participants, however, virtually matched the mean of the sentiments of the "previous participants." One may note that the ratings overall seem high given the task was designed to be somewhat tedious; indeed, the overall ratings are about a point higher than what Epley and Gilovich (1999) found using a similar task. It is important to note, however, that the ratings varied by power and conformity pressure: Those in the low-power and baseline conditions, but not those in the high-power condition, reported significantly more positive evaluations of the task when they were exposed to the positive attitudes of their peers.

We collected additional data to bolster our conclusions. We primed 25 participants with either high or low power, asked them

to complete the sentence-formation task, and then asked them to report their attitudes toward the task but without being exposed to the "previous participants" attitudes (i.e., on blank feedback sheets). Because none of these participants had been exposed to conformity pressures, we expected that power would not affect their attitudes toward the task. This is exactly what we found. Power did not significantly affect attitudes, t(23) < 1, p = .68, with both the high-power (M = 8.46, SD = 2.03) and low-power (M = 8.17, SD = 1.48) conditions reporting attitudes that were similar to the attitude baseline/no conformity condition and the high-power/conformity condition. These additional data support the contention that differences between the attitudes of the powerful and powerless will be observed only when conformity pressures are present. When there were no pressures from the attitudes of peers, the powerful and powerless expressed the same level of enjoyment in the task. Overall, the experience of power led participants to be immune to attitudinal information in the environment, which typically serves as a form of social pressure and influences.

### Experiment 4: Ignoring an Opponent's Reputation at the Bargaining Table

One of the central elements of our argument is that because the powerful are less influenced by social information, their dispositions and underlying attitudes matter more than the situation in determining their intentions and expressions. In the interpersonal context of bargaining and negotiation, research has found that aspects of both the person and the person's opponent (a salient aspect of the situation) can exert profound influence over bargaining intentions and behavior. For example, expecting one's opponent to be competitive typically reduces a desire to create, maintain, invest, and show trust in a cooperative relationship (Kelley & Stahelski, 1970; Tinsley, O'Connor, & Sullivan, 2002; Steinel & De Dreu, 2004; but see Diekmann, Tenbrunsel, & Galinsky, 2003). As a result, expecting one's opponent to be competitive leads to less investment in relationship building (Tinsley et al., 2002), more strategic misrepresentation and less trust (Steinel & De Dreu, 2004), and greater conflict (Kelley & Stahelski, 1970). An opponent's reputation typically weighs heavily on negotiators' minds and influences their concerns and interests in negotiations.

Individual differences are also critical determinants of how people approach mixed-motive contexts. One well-understood individual difference in the context of bargaining and negotiation is social value orientation (SVO), a personality trait that describes relatively stable individual differences in preferences for the allocation of outcomes between the self and others (Messick & McClintock, 1968). The two predominant SVOs—proself and prosocial—differ in a number of fundamental ways (De Dreu, Weingart, & Kwon, 2000). Prosocial individuals strive for maximizing joint outcomes, whereas proself individuals assign greater importance to their own outcomes. Notably, prosocial individuals' cooperation is rooted in concerns with building and maintaining relationships (Giebels, de Dreu, & van de Vliert, 2003; Stouten, De Cremer, & Van Dijk, 2005; Van Dijk, De Cremer, & Handgraaf, 2004).

Consistent with prior research, we measured participants' SVO and then had them prepare for a negotiation with an opponent whose reputation was manipulated (cooperative vs. competitive) in the negotiation exercise role materials. We then measured the

extent to which participants were interested in building a relationship with their negotiation opponent. As a result of this experimental setup, we were able to explore the degree to which highpower and baseline participants' relationship interest was determined by SVO (a personality trait) versus the reputation of their opponent (a situational variable). For baseline participants, we predicted that the opponent's reputation would exert a greater influence than SVO on their desire to maintain and build a relationship within the context of the negotiation. In contrast, for high-power participants, we predicted that their own SVO would be a stronger predictor than the opponent's reputation of their relationship interest.

We also measured participants' expectations of their opponent's aggressiveness to test directly whether high-power individuals, despite being fully aware of information regarding their opponent's intentions, would still remain relatively uninfluenced by it. We manipulated information about the opponent's reputation in an unambiguous fashion and predicted that all participants would notice this information but that only the intentions of baseline participants would be affected by it. That is, we predicted that power would reduce the influence of but not acknowledgement of the opponent's reputation on participants' own intentions. Power would make them immune to this information.

Finally, we wanted to test our predictions with an additional manipulation of power. In the previous experiments we semantically or experientially primed power. Although previous research has demonstrated across studies that role-based manipulations of power often have the same effects as priming power (e.g., Galinsky et al., 2003; Gruenfeld et al., 2008; Lammers, Galinsky, Gordijn, & Otten, 2008; Magee et al., 2007; P. K. Smith et al., 2008), we wanted to verify that different types of power manipulations would immunize intentions from the influence of situations in a similar fashion. It is possible, for example, that procedures that prime power are particularly effective at eliciting tendencies associated with the liberating effects of power, whereas more formal manipulations of control over others' outcomes are more complex in their instantiations of the psychological experience of power. Thus, we manipulated high power for one group of participants through assignment to a role and for another group through the priming procedure used in Experiments 2 and 3. It is important to note that we predicted that the two manipulations would have equivalent effects on our dependent measure.

#### Method

#### Participants and Design

Participants were 72 undergraduate and MBA students (35 women, 36 men, and one missing response). The experiment involved a 3 (power: baseline vs. high-power prime vs. high-power role)  $\times$  2 (opponent reputation: competitive vs. cooperative) between-subjects design.

#### Materials and Procedure

Participants arrived to the laboratory and were told that they were going to complete a number of different tasks, including a simulated negotiation over the selling of a pharmaceutical plant.

SVO. The first task participants completed was the SVO measure; participants completed a set of nine decomposed games (Messick & McClintock, 1968). In each game, participants were required to choose between three alternative pairs of outcomes, each representing one of the three SVOs: prosocial, competitive, and individualistic. For participants to be classified as cooperative, competitive, or individualistic, they had to make six value-consistent choices. Consistent with previous research, competitive and individualistic participants were classified as proself (e.g., Olekalns & Smith, 1999; Van Lange & Liebrand, 1991). On this basis, 35 participants were classified as proself, 25 participants were prosocial, and 12 participants could not be classified, a ratio similar to previous research (Parks, Sanna, & Posey, 2003; Smeesters, Warlop, Van Avermaet, Corneille, & Yzerbyt, 2003; Van Lange, 1999).

Power manipulation. After completing the SVO measure, participants assigned to the high-power prime condition completed the same power-priming procedure from Experiment 2 in which they were asked to write about an autobiographical experience when they had power over someone else.

Participants in the *high-power role* condition were told they would be participating in a coordination task later in the session. The procedure for creating the position of high power was the same as in Galinsky et al. (2003, Experiment 1) and Anderson and Berdahl (2002). Participants first completed a leadership questionnaire and were told that their responses on this questionnaire would be used to assign them to the role of manager or subordinate in a task with another participant. Actually, all participants in this condition were assigned to the role of manager. They were told that as managers they would be directing and structuring a coordination task using Legos and then would be evaluating and rewarding their subordinates. The experimenter said that they would be doing the coordination task after first engaging in a negotiation with another participant. The experiment did not actually include the coordination task.

Baseline participants completed the negotiation exercise immediately after filling out the SVO measure.

Negotiation exercise. The negotiation involved the purchase of a pharmaceutical plant. In all conditions, participants assumed the role of the buyer. Participants were told that they were the chief financial officer of a company in need of a new plant to manufacture a line of highly specialized compounds and that one of the company's existing plants could not be modified (for complete details about the negotiation exercise, see Galinsky & Mussweiler, 2001). Although participants were led to believe that they would be negotiating with another participant, they simply completed a prenegotiation form with our dependent measures before the experimental session ended.

Reputation manipulation. We manipulated participants' (buyers') expectation of the seller's competitiveness (Diekmann et al., 2003). Participants were given information describing the seller as either very competitive or very cooperative. In the *competitive reputation* condition, participants were told, "You have heard from several sources that this CFO [the seller], in particular, is very competitive. In fact, these sources have said that the CFO is one of the most competitive negotiators that they have ever negotiated against." Participants in the *cooperative reputation* condition were told, "You have heard from several sources that this CFO [the seller], in particular, is very cooperative. In fact, these sources

have said that the CFO is one of the most cooperative negotiators that they have ever negotiated against."

Dependent measures. Participants were first asked, "How aggressive will the seller be in the negotiation?" ( $1 = not \ at \ all; 7 = very$ ). This measure served to determine whether high-power and baseline participants were equally likely to notice the reputation of their opponent.

Next, participants completed our primary dependent measures. They were asked two questions designed to measure their interest in and tendency to invest in a relationship with their partner: "How much do you care about building or maintaining a relationship?" and "How much are you going to trust this other party?"  $(1 = not \ at \ all; \ 7 = very)$ . These two measures were significantly correlated, r(71) = .29, p = .01, and were averaged to create a measure of relationship interest. Finally, participants reported their demographic information on a questionnaire and were then debriefed about the true nature of the experiment.

#### Results and Discussion

Preliminary analyses found that gender of participant did not interact with the power manipulations, so we collapsed across gender in all subsequent analyses.

#### Seller Aggressiveness

Participants' perceptions of the seller's aggressiveness were submitted to a 3 (power: baseline vs. high-power prime vs. high-power role)  $\times$  2 (opponent reputation: competitive vs. cooperative) between-subjects ANOVA. Only a main effect of reputation emerged as significant, F(2, 65) = 122.85, p < .001. When participants were exposed to information that the seller was competitive, they expected the seller to be more aggressive (M = 6.43, SD = 0.70) than when the seller was described as cooperative (M = 3.93, SD = 1.06). The interaction was not significant (F < 1), demonstrating that all participants, regardless of power, equally noticed the reputation information.

#### Building a Relationship

In comparison with baseline participants, we predicted that high-power participants' interest in trusting and building a relationship with their negotiating counterpart would be less affected by their opponent's reputation. We submitted relationship interest to the same  $3 \times 2$  ANOVA, and only the predicted interaction emerged as significant, F(2, 65) = 4.05, p = .02 (see Figure 3). Baseline participants were less interested in building a relationship with a competitive opponent (M = 2.83, SD = 0.90) than with a cooperative opponent (M = 4.20, SD = 1.18), t(17) = 2.81, p =.01. In contrast, high-power prime participants' interest in building a relationship was not affected by the reputation of the opponent (competitive: M = 4.10, SD = 1.04; cooperative: M = 4.00, SD =1.00), t(19) < 1, p = .83. Similarly, participants assigned to a high-power role also were not affected by the competitive (M =4.43, SD = 1.10) versus cooperative (M = 4.20, SD = 0.84) reputation of the opponent, t(29) < 1, p = .51.

## SVO Versus Opponent Reputation as Predictors of Relationship Interest

We have argued that the dispositions of the powerful matter more than situational cues in predicting their attitudes. Thus, we

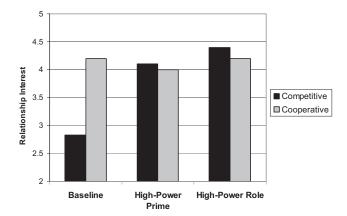


Figure 3. Mean level of relationship interest by opponent reputation and power condition, Experiment 4.

hypothesized that SVO, but not opponent reputation, would predict relationship interest for the powerful. In contrast, we hypothesized that opponent reputation, but not SVO, would predict relationship interest for baseline participants. To test these hypotheses, we conducted separate regressions for baseline participants and for high-power participants (collapsing across the two types of power manipulation) in which relationship interest was regressed on SVO and opponent reputation. Proself was coded as 1 and prosocial as 0, and competitive reputation was coded as 1 and cooperative reputation as 0. For baseline participants, opponent reputation was a significant predictor of relationship interest (b = -1.44, SE =0.53, p = .02), but SVO was not significant (b = 0.46, SE = 0.58, p = .44). For high-power participants, SVO was a significant predictor of relationship interest (b = -0.82, SE = 0.32, p = .01), whereas opponent reputation was not significant (b = 0.07, SE =0.32, p = .82).

We also conducted regressions in which relationship interest was regressed on SVO and subjective ratings of opponent aggressiveness. For baseline participants, ratings of their opponent's aggressiveness were a significant predictor of relationship interest (b = -0.47, SE = 0.21, p = .04), but SVO was not significant (b = 0.05, SE = 0.66, p = .94). In contrast, for high-power participants, SVO was a significant predictor of relationship interest (b = -0.87, SE = 0.31, p = .01), whereas ratings of their opponent's aggressiveness were not significant (b = -0.05, SE = 0.10, p = .61).

This study provides strong support for our predictions that (a) the powerful are less affected by situational information even when they are well aware of and acknowledge that information, and (b) their attitudes and intentions are more influenced by their own propensities than the situational press of others' reputations. For both manipulations of power, high-power participants' relationship interest was

<sup>&</sup>lt;sup>2</sup> Given the modest correlation between the two items, we faced a dilemma between presenting a single-item measure, which can be subject to reliability concerns, and using a combined measure. We decided to average the two items to simplify the presentation of the results; however, entering the items separately in a multiple analysis of variance yielded the predicted interaction between power and opponent reputation as well, F(4, 128) = 2.37, p = .056.

uninfluenced by their opponent's competitive or cooperative reputation. Baseline participants, in contrast, expressed less interest in building a relationship when they expected their opponent to be competitive as opposed to cooperative. Furthermore, for baseline participants, situational information—the reputation of their opponent—mattered more in determining their relationship interest than their own SVO. In contrast, high-power participants' intentions toward the relationship were driven by their social values rather than the reputation of the opposing negotiator. These results occurred even though the powerful were as cognizant of their opponent's reputation as were baseline participants.

## Experiment 5: Seeing Choice and the Arousal of Cognitive Dissonance

The previous experiments have demonstrated that the powerful are less influenced by social and nonsocial information embedded in the situation. Freed from the influence of these factors, highpower participants were more likely to express their intrapsychically generated responses, with power granting individuals more liberty in personal expression. However, this disregard for situational cues and constraints may not always lead those with power to remain uninfluenced in their attitudes. Because the powerful are more attuned to their internal states than situational information, they should be especially sensitive to their own intrapsychic processes, perhaps even processes instigated by their very lack of consideration for cues and information in the situation. Consistent with this idea, Weick and Guinote (2008) found that the attitudes of high-power participants are driven more by temporary subjective experiences and cognitive states than are the attitudes of low-power participants.

By not experiencing the constraining force of situational information, the powerful may see more choice driving their decisions than is warranted. Research suggests that when individuals perceive that they have choice when making a statement that contradicts one's attitude (counterattitudinal advocacy), they experience cognitive dissonance, a state of psychological discomfort (Cooper & Fazio, 1984; Elliot & Devine, 1994; Festinger, 1957). Because attitudes can be altered more easily than previously displayed behaviors, individuals who have made freely chosen counterattitudinal statements often change their attitude as a means of restoring consistency and reducing psychological discomfort. In fact, the perception of choice in performing counterattitudinal behavior is a key moderator of dissonance processes and attitude change (see Cooper & Fazio, 1984, for a review). When people feel they have no choice in engaging in counterattitudinal behavior, they do not shift their attitudes, because the lack of perceived choice provides a plausible explanation for their behavior. Believing that such behavior was imposed, rather than freely chosen, ameliorates the psychological discomfort that one might otherwise feel, leaving individuals unmotivated to reduce dissonance via attitude change.

In a typical dissonance experiment, participants are asked to make a counterattitudinal statement or speech on a topic of personal relevance, and the experience of choice is manipulated. In the high-choice conditions, people are subtly persuaded to make a speech against their attitude, but the request is delivered in a way that leaves people feeling that they have freely chosen to comply. In the low-choice conditions, participants are directly instructed to make the speech or write the essay, leaving them little obvious

choice in the matter. These studies typically reveal a significant correlation between perceived choice and attitudes, such that perceptions of choice are positively associated with the favorability of attitudes toward the position taken in the essay or speech (Cooper & Fazio, 1984).

We hypothesized that under conditions of low choice, the experience of power would lead participants to misconstrue the situation as providing choice; instead of viewing themselves as acting in compliance with the instructions of an authority figure, they would see themselves as having freely chosen to engage in the counterattitudinal advocacy. Because perceptions of having choice induce feelings of dissonance, we predicted that high-power participants would be motivated to reduce this aversive state and therefore change their attitudes. That is, unlike the conformity study, we predicted that high-power participants would be more likely to shift their opinions than low-power participants.

As a test of this hypothesis, all participants made a counterattitudinal speech under conditions of low choice. We predicted that although all participants would have the same low level of choice, high-power participants compared with low-power participants would perceive greater choice and therefore shift their attitudes in the direction of the counterattitudinal speech.

#### Method

#### Participants and Design

Forty-nine undergraduates (9 men, 33 women, and 7 missing responses) participated in the experiment and were compensated \$10. The experiment was a 2 (power: high vs. low)  $\times$  2 (attitude topic: lake fill vs. reading week) between-subjects factorial design. An additional 84 participants who did not make a speech or receive the power manipulation filled out the attitude measure. This attitude baseline condition was run during the same week as the experimental conditions but was conducted in mass testing sessions.

#### Attitude Topic Pretest

Pretesting revealed two attitude topics toward which the students held strong, unfavorable opinions. We wanted to show that the effects were not dependent on one particular attitude topic, so we used both topics. The first topic concerned a proposed lagoon-fill project at the university. To meet its space needs, the university proposed partially filling in a small lagoon that separates the university from the main lake body in order to build more parking structures and buildings. Most students consider the lagoon to be quite majestic and do not want parking structures erected where scenic flora and fauna abound.

The second topic required participants to speak against the university's reading week. All of the undergraduates in the School of Arts and Sciences are free from classes the week before final exams each quarter. Some university officials have been concerned that reading week has become, in practice, a period of extracurricular enjoyment and that the university is below the national average for the number of hours of actual time in the classroom per quarter. Students, on the other hand, are very protective of reading week, relishing the respite from classes and the opportunity to study for exams.

#### Procedure

Upon arrival at the lab, participants were told that the purpose of the research was to investigate how people write about themselves and speak about campus issues. They were told they would be both writing essays and recording speeches. The first task participants completed comprised the experimental manipulation of power. Participants in the *high-power* and *low-power* conditions completed the same priming essay as in Experiments 2 and 3.

Counterattitudinal advocacy. The counterattitudinal advocacy procedure was adapted from Galinsky, Stone, and Cooper (2000). After participants completed the power manipulation task, they were told that the next task was part of an investigation into the relationship between people's personalities and the cogency of their arguments. Ostensibly, the research intended to tease apart the strength of a speaker's arguments from nonverbal cues such as facial expressions or attractiveness. The experimenter explained that in order to investigate the effect of a speaker's personality on persuasion independent of nonverbal cues, participants would need to record a persuasive message via audiotape and complete some personality measures.

The experimenter explained that the University Committee on Education and Development had agreed to fund the research provided that the recorded speech related to a current topic of interest to the committee. Participants were told that the committee was interested in several campus policies and the types of arguments that students used to defend or reject them. The experimenter noted that the committee would probably use these arguments when making its decisions next year. This statement was provided to ensure that participants would perceive that their speech could produce aversive consequences, a necessary condition for the production of dissonance (Cooper & Fazio, 1984).

To ensure that all participants would be in a low-choice condition, participants were told that because the research was concerned only with the characteristics of their speech rather than the actual content of their speech, they would be randomly assigned to speak on one side of a topic of interest to the committee. Ostensibly, this would allow the researchers to measure the cogency on both sides of each issue, as well as provide the committee with a full spectrum of arguments. Participants were told that they had been assigned to record a persuasive argument either in favor of filling in the lagoon or in favor of eliminating reading week.

The researcher then left participants a tape recorder and told them to spend some time constructing an outline before recording their brief 1- to 3-min speech. When participants finished recording their speech, the researcher thanked them and told them that the committee appreciated their input. The experimenter also mentioned that they, as researchers, were interested in the participant's personal attitude toward the topic as well as some other thoughts that the participant had about making the speech.

Dependent measures. Participants who made a speech about the lagoon-fill project were asked to mark their agreement with the statement "The University should proceed with its plans to fill in a portion of the lagoon" (1 = strongly disagree; 11 = strongly agree). Participants who made a speech about reading week responded on the same scale to the statement "Reading week should be eliminated." Thus, higher numbers reflect greater support for the position the participants advocated in their speech. Participants were also asked, "How much choice did you have in making the

speech that you gave?"  $(1 = none \ at \ all; 9 = a \ lot)$ . They were then debriefed about the true nature of the study and were paid before they left.

#### Results and Discussion

Six participants were eliminated from the analysis because they doubted whether a committee was really going to listen to their recorded speech. Preliminary analyses found that gender of participant did not interact with the power manipulation, so we collapsed across gender in all subsequent analyses.

#### Perceptions of Choice

Participants' perceptions of how much choice they had in making the speech were submitted to a 2 (power: high vs. low)  $\times$  2 (attitude topic: lake fill vs. reading week) between-subjects ANOVA. Only a main effect of power emerged, F(1, 39) = 6.23, p = .02. High-power participants (M = 3.43, SD = 2.40) perceived themselves as having more choice to make the speech than did low-power participants (M = 1.95, SD = 1.68).

#### Attitudes

We predicted that high-power individuals would report more favorable attitudes toward their speech topics than would low-power participants. Participants' attitudes toward the university policies were submitted to a 2 (power: high vs. low)  $\times$  2 (attitude topic: lake fill vs. reading week) ANOVA. Only a main effect of power emerged as significant, F(1, 39) = 5.10, p = .03 (see Figure 4). High-power participants (M = 4.90, SD = 3.05) expressed more positive attitudes toward the topics than did low-power participants (M = 3.00, SD = 2.34). There was no effect of attitude topic (F < 1, p = .39), and the interaction between attitude topic and the power manipulation also was not significant (F < 1, p = .99).

To demonstrate that high-power participants were indeed the ones changing their attitudes, we compared each of the power conditions with the attitude baseline condition. High-power participants differed significantly from the attitude baseline condition (M = 3.29, SD = 2.77), t(103) = 2.39, p = .02,

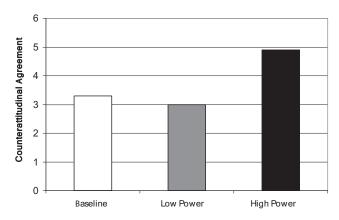


Figure 4. Mean level of agreement with counterattitudinal position by condition, Experiment 5.

whereas low-power participants did not differ from the attitude baseline condition (t < 1).

#### Mediation Analysis

As predicted by dissonance theory, perceptions of choice positively predicted attitudes (b=0.74, SE=0.17, p<.001). To see whether the effect of power on participants' attitudes toward the issues was produced by perceptions of choice, we conducted a mediation analysis following procedures outlined by Baron and Kenny (1986; see Figure 5). When both perceptions of choice and the experimental condition were entered into the regression analysis, perceptions of choice continued to predict attitudes (b=0.67, SE=0.18, p=.001), but the effect of the power manipulation was reduced to nonsignificance (b=0.92, SE=0.78, p=.24). A Sobel test (Sobel, 1982) revealed that perceptions of choice significantly reduced the effect of power (Z=1.98, P=.05).

Power minimized participants' perceptions of situational information that constrained their behavior (i.e., an authority figure's instructions) and increased their experience of choice in making a counterattitudinal speech. It was this feeling of having voluntarily chosen to argue a stance that contradicted one's own attitude that activated the shift in postspeech attitudes. The powerful saw choice, and in doing so, suffered the psychological discomfort of dissonance. Unlike in the previous studies, their attitudes were not resilient because they were not defending against external pressures to alter their attitudes. Rather, it was their own internal need to reconcile the inconsistency between their speech—seemingly freely chosen—and their previous attitude that forced the attitude shift.

#### General Discussion

The current research provides converging evidence that being free from situational influence, both social and nonsocial, is part and parcel of having power. When salient examples in the environment worked to limit creativity, the powerful expressed more novel ideas (Experiments 1 and 2). The powerful resisted conformity pressures and expressed attitudes that were not influenced by the pressure of their peers' positive views (Experiment 3). Although those who experienced power were less susceptible to external influence, they were more vulnerable to internal sources of influence. In Experiment 4, the social value orientation of the powerful determined their intentions whereas an opponent's reputation did not. Moreover, in Experiment 5, through the perception of personal choice, power was actually responsible for altering individuals' attitudes. These seemingly opposed effects on attitudinal expression were driven by the same process: Power reduced

the influence of the situation. As a result, the person—one's dispositions and intrapsychic processes—mattered more than the situation in determining the attitudinal and creative expressions of the powerful.

#### Inattention to or Disregard for Situational Information?

We think there are two predominant psychological reasons why the powerful are less influenced by the situation: (a) they are less likely to notice situational information in the first place, and (b) when they notice this information, they are psychologically less affected by or concerned with it. In the real world, we believe that both of these processes contribute to the effects we have demonstrated here. At times, the powerful are less likely to even notice salient information in the situation, as previous studies on the inverse relationship between power and perspective taking would suggest (Galinsky et al., 2006). At other times they may notice the press of the situation but dismiss its psychological relevance (as in Experiment 4). Most often, it is probably a little bit of both. Given that these two processes likely exist and often coexist, it is not surprising that the situation was consistently less influential on the powerful in the diverse domains of our studies.

## When and How Do Situations Affect the Powerful? The Role of Goals

In the current research we have demonstrated that the powerful are often immune to situational pressures. Our studies are present-day avatars of classic social psychological paradigms, which have found that subtle forces in the environment often steer, direct, and constrain the thoughts and behavior of individuals. For example, in emergencies the nonresponsiveness of some bystanders typically reduces the likelihood that other bystanders will take action (Latané & Darley, 1970). Similarly the opinions of others tend to restrict and constrain one's own creativity (Osborn, 1953) and attitudes (Asch, 1955). When these subtle cues are present, the powerful are less constrained or influenced by them in their own behavior, attitudes, and creative expressions (see also Whitson et al., 2008).

However, other research has found that the powerful can be more sensitive to and guided by the situation. For example, participants in the role of manager show different patterns of attention and individuation depending on whether they are assigned to person-centered organizations or product-centered organizations (Overbeck & Park, 2006). And the powerful have been shown to be more responsive to situation-specific opportunities or affordances, leading to more situation-consistent behaviors (Guinote, 2008).

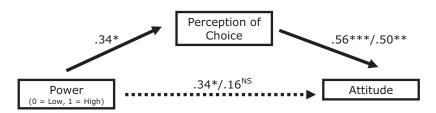


Figure 5. Perception of choice fully mediates the relationship between power and attitude, Experiment 5. Coefficients are standardized. \*p < .05. \*\*p < .01. \*\*\*p < .001.

How do we reconcile our findings that power reduces the strength of the situation with research showing that the powerful are sometimes more responsive to the situation than the powerless? We think the key moderating variable is goals. One of the most robust findings emerging from the literature on power is that power increases goal-directed behavior and cognition (Galinsky et al., 2003; Guinote, 2007a; P. K. Smith et al., 2008). The situation seems to be particularly influential for the powerful when it activates or produces their goals. For example, Overbeck and Park (2006) found that the powerful used the goals of the organization to set their own priorities to a greater extent than the powerless. Similarly, the powerful attend to stereotypes only when they could impact goal attainment (Vescio, Snyder, & Butz, 2003). And in the Guinote (2008) studies, the information processing of the powerful was structured around "the pursuit of the goals activated by the situation" (p. 239). To the extent that the situation itself creates the goals that the powerful pursue, they will be more influenced by the situation than the powerless.

It should also be noted that when the powerful already possess salient goals, they will be more attentive to the aspects of the situation that facilitate their goals, more likely to disregard goal-irrelevant information, and more effective at prioritizing and engaging in goal-directed behavior compared with the powerless (Galinsky et al., 2003; Guinote, 2007a, 2008; Whitson et al., 2008). In fact, such selective attention is partly the foundation for objectification, where the powerful view others through the lens of currently held goals (Gruenfeld et al., 2008). For the powerful, the situation can be an oasis seemingly created to fulfill their pressing goals.

In the current studies, because the situational forces (e.g., the expressions of others) neither activated goals nor directly facilitated individuals' predominant goals, power decreased the influence of the situation. Considering our results in light of the research reviewed above, power appears to immunize individuals against subtle situational pressures that constrain creative and attitudinal expressions, but power does not abolish and can actually strengthen the influence of situational features when they activate or facilitate goals for the power holder.

#### Persuading the Powerful

On the surface, it would seem that power can make one impervious to persuasion (Briñol et al., 2007); however, clever lowpower communicators can wield their target's high sense of power to their own advantage. Because the powerful perceive more choice than the situation may warrant and falsely attribute their actions to their own volition, one secret to influencing powerful individuals is to avoid the overt appearance of persuasion. To the extent that the powerful can be convinced to argue on behalf of an idea (and perceive that they are doing so voluntarily), the dissonance that follows this advocacy can make an ardent ally out of someone who was previously indifferent or even antagonistic. Given that those in power are generally more vocal (Stein & Heller, 1979), they may be vulnerable to this form of selfpersuasion on a regular basis. For those in power, saying is believing. In this way, the powerful represent attractive targets; they may not only be compliant but actually champion the causes craftily introduced by others.

#### Power and Corruption

A great deal of research considers whether power is a functional force or a corrupting one (e.g., Chen et al., 2001; Gruenfeld et al., 2008; Keltner et al., 2003). Our research implies that power is not inherently corrupting. Instead, power simply reduces the strength of the situation. This imperviousness to social norms and situational cues can yield either prosocial or antisocial consequences. On the one hand, focusing only on desires and being (oftentimes blissfully) unaware of constraints on those desires can lead to such malfeasant behaviors as sexual harassment (Bargh et al., 1995) and common good consumption (Galinsky et al., 2003). Power can also lead individuals to ignore the important perspectives and opinions of others; with the powerful anchored on their own opinions, they should be less likely to consider or even notice others' disagreement (Galinsky et al., 2006). As a result, individuals with power may be more susceptible to the false consensus effect (Ross, Greene, & House, 1977), in which they overestimate the extent to which other group members agree with them.

On the other hand, by allowing people to see choice in the environment and by reducing attention to barriers that constrain options, power can provide the capacity to achieve a number of things not ordinarily possible. For one, conformity has been linked to the failure of group decision making and public policy disasters, such as the Bay of Pigs and American wars in Vietnam (Janis, 1972) and Iraq. The social pressure of the group itself often limits the expression of dissenting attitudes and uniquely held information (Asch, 1955; Epley & Gilovich, 1999). Research attests to the benefits of minority opinions in group decision making (Gruenfeld, 1995; Nemeth, 1986; Nemeth & Kwan, 1985, 1987); however, groups can capitalize on novel perspectives and avoid the tendency toward groupthink only if group members feel comfortable voicing opinions in the first place (Janis, 1972; Moscovici & Zavalloni, 1969). Similarly, group discussions are characterized by the tendency to focus collectively on commonly shared information to the relative detriment of uniquely held information; group members tend to focus on what everyone knows rather than on what only some of the group members know, leading to a potential failure of collective intelligence (Larson, Foster-Fishman, & Keys, 1994; Stasser & Stewart, 1992; Stasser & Titus, 1985; Winquist & Larson, 1998). Given the liberating effects of power observed in the current experiments, individuals with a sense of power, because they are less hampered by conformity pressures and the fear of social sanctions, might be more likely to ignore group pressure and express their opinions and unique information.

In light of this reasoning, organizations may wish to look beyond the stereotype of power as corrupting and instead harness the current processes to improve their organizations (Galinsky, Jordan, & Sivanathan, in press), literally empowering employees to discover and express novel perspectives and initiatives. Ultimately, power's ability to wither away the situation and its constraints is neither good nor bad but depends on whether the particular cue in a situation guards against malfeasance or prevents new ideas and important attitudes from emerging from its shadow.

#### Conclusion

In their meditation on the historical foundations of social psychology, Ross and Nisbett (1991) discussed three pillars of social

psychology: the strength of the situation, the "channeling" of behavior, and the importance of construal. On the basis of the data presented here, we suggest that power changes construals, opens up new channels for cognition and behavior that are closed to others, and fundamentally alters the strength of the situation (see also Galinsky et al., 2003; P. K. Smith & Trope, 2006). For the powerful, the situation recedes, and they are left with their own opinions, beliefs, attitudes, and personalities to drive their behavior.

This receding of the situation may be a springboard for new ways of thinking. People who focus on obstacles and barriers in their environment are less assertive in striving for their goals (Locke & Latham, 1990); where others see vast potential, they perceive only barriers and opposition. We have demonstrated how the experience of power liberates individuals from the straightjacket of the social world, allowing them to define for themselves what is and is not achievable. George Bernard Shaw (1921), the Nobel Prize-winning playwright, once wrote, "Imagination is the beginning of creation. You imagine what you desire, you will what you imagine and at last you create what you will" (p. 9). Perhaps human accomplishment is as much about the cans and cannots as it is the haves and the have-nots. Although power is often thought of as a pernicious force that corrupts those who possess it, it is the protection from situational influence demonstrated here that helps powerful individuals surmount social obstacles and reach greater heights of creativity to express the unpopular ideals of today that can lead others to the horizons of tomorrow.

#### References

- Amabile, T. M. (1983). The social psychology of creativity: A componential conceptualization. *Journal of Personality and Social Psychology*, 45, 357–376.
- Anderson, C., & Berdahl, J. L. (2002). The experience of power: Examining the effects of power on approach and inhibition tendencies. *Journal of Personality and Social Psychology*, 83, 1362–1377.
- Anderson, C., & Galinsky, A. D. (2006). Power, optimism, and risk-taking. European Journal of Social Psychology, 36, 511–536.
- Anderson, C., John, O. P., Keltner, D., & Kring, A. (2001). Who attains social status? Effects of personality and physical attractiveness in social groups. *Journal of Personality and Social Psychology*, 81, 116–132.
- Aronson, E. (2004). *The social animal* (9th ed.). New York: Worth Publishers.
- Asch, S. (1955). Opinions and social pressure. *Scientific American*, 193, 31–35.
- Bargh, J. A., Raymond, P., Pryor, J. B., & Strack, F. (1995). The attractiveness of the underling: An automatic power → sex association and its consequences for sexual harassment. *Journal of Personality and Social Psychology*, 68, 768–781.
- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51, 1173–1182.
- Brauer, M. (2005, January). Reactions to norm transgressions in powerful and powerless groups. Paper presented at the meeting of the Society of Personality and Social Psychology, New Orleans, LA.
- Briñol, P., Petty, R. E., Valle, C., Rucker, D. D., & Becerra, A. (2007). The effects of message recipients' power before and after persuasion: A self-validation analysis. *Journal of Personality and Social Psychology*, 93, 1040–1053.
- Chen, S., Lee-Chai, A. Y., & Bargh, J. A. (2001). Relationship orientation as a moderator of the effects of social power. *Journal of Personality and Social Psychology*, 80, 173–187.

- Cialdini, R. B., & Goldstein, N. J. (2004). Social influence: Compliance and conformity. In S. T. Fiske, D. L. Schacter, & C. Zahn-Waxler (Eds.), *Annual Review of Psychology* (Vol. 55, pp. 591–621). Palo Alto, CA: Annual Reviews.
- Cialdini, R. B., Reno, R. R., & Kallgren, C. A. (1990). A focus theory of normative conduct: Recycling the concept of norms to reduce littering in public places. *Journal of Personality and Social Psychology*, 58, 1015– 1026
- Cooper, J., & Fazio, R. H. (1984). A new look at dissonance theory. Advances in Experimental Social Psychology, 17, 229–266.
- Copeland, J. T. (1994). Prophecies of power: Motivational implications of social power for behavioral confirmation. *Journal of Personality and Social Psychology*, 67, 264–277.
- De Dreu, C. K., Weingart, L. R., & Kwon, S. (2000). Influence of social motives on integrative negotiation: A meta-analytic review and test of two theories. *Journal of Personality and Social Psychology*, 78, 889–905.
- Deutsch, M., & Gerard, H. (1955). A study of normative and informational social influence upon individual judgment. *Journal of Abnormal and Social Psychology*, 51, 629–636.
- Diekmann, K. A., Tenbrunsel, A. E., & Galinsky, A. D. (2003). From self-prediction to self-defeat: Behavioral forecasting, self-fulfilling prophecies, and the effect of competitive expectations. *Journal of Per*sonality and Social Psychology, 85, 672–683.
- Dijksterhuis, A., & Bargh, J. A. (2001). The perception-behavior expressway: Automatic effects of social perception on social behavior. Advances in Experimental Social Psychology, 33, 1-40.
- Dittes, J. E., & Kelley, H. H. (1956). Effects of different conditions of acceptance upon conformity to group norms. *Journal of Abnormal and Social Psychology*, 53, 100–107.
- Elliot, A. J., & Devine, P. G. (1994). On the motivational nature of cognitive dissonance: Dissonance as psychological discomfort. *Journal* of *Personality and Social Psychology*, 67, 382–394.
- Emerson, R. M. (1962). Power dependence relations. American Sociological Review, 27, 31–41.
- Epley, N., & Gilovich, T. (1999). Just going along: Nonconscious priming and conformity to social pressure. *Journal of Experimental Social Psychology*, 35, 578–589.
- Festinger, L. (1957). A theory of cognitive dissonance. Stanford, CA: Stanford University Press.
- Fiske, S. T. (1993). Controlling other people: The impact of power on stereotyping. American Psychologist, 48, 621–628.
- Fiske, S. T., & Berdahl, J. (2007). Social power. In A. W. Kruglanski & E. T. Higgins (Eds.), Social psychology: Handbook of basic principles (pp. 678–692). New York: Guilford Press.
- French, J., & Raven, B. (1959). The bases of social power. In D. Cartwright (Ed.), *Studies in social power* (pp. 150–165). Ann Arbor, MI: Institute for Social Research.
- 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., Jordan, J., & Sivanathan, N. (in press). Harnessing power to capture leadership. In D. Forsyth & C. Hoyt (Eds.), Social psychology and leadership. Westport, CT: Praeger Press.
- Galinsky, A. D., Magee, J. C., Inesi, M. E., & Gruenfeld, D. H. (2006). Power and perspectives not taken. *Psychological Science*, 17, 1068–1074.
- Galinsky, A. D., & Mussweiler, T. (2001). First offers as anchors: The role of perspective-taking and negotiator focus. *Journal of Personality and Social Psychology*, 81, 657–669.
- Galinsky, A. D., Stone, J., & Cooper, J. (2000). The reinstatement of dissonance and psychological discomfort following failed affirmation. *European Journal of Social Psychology*, 30, 123–147.
- Giebels, E., de Dreu, C. K., & van de Vliert, E. (2003). No way out or swallow the bait of two-sided exit options in negotiation: The influence of social motives and interpersonal trust. *Group Processes & Intergroup Relations*, 6, 369–386.

Goldhamer, H., & Shils, E. A. (1939). Types of power and status. American Journal of Sociology, 45, 171–182.

- Gruenfeld, D. H. (1995). Status, ideology, and integrative complexity on the U.S. Supreme Court: Rethinking the politics of political decision making. *Journal of Personality and Social Psychology*, 68, 5–20.
- Gruenfeld, D. H., Inesi, M. E., Magee, J. C., & Galinsky, A. D. (2008).Power and the objectification of social targets. *Journal of Personality and Social Psychology*, 95, 111–127.
- Guinote, A. (2007a). Power and goal pursuit. Personality and Social Psychology Bulletin, 33, 1076–1087.
- Guinote, A. (2007b). Power affects basic cognition: Increased attentional inhibition and flexibility. *Journal of Experimental Social Psychology*, 43, 685–697.
- Guinote, A. (2008). Power and affordances: When the situation has more power over powerful than over powerless individuals. *Journal of Per*sonality and Social Psychology, 95, 237–252.
- Guinote, A., Judd, C. M., & Brauer, M. (2002). Effects of power on perceived and objective group variability: Evidence that more powerful groups are more variable. *Journal of Personality and Social Psychology*, 82, 708–721.
- Hecht, M., & LaFrance, M. (1998). License or obligation to smile: The effect of power and sex on amount and type of smiling. *Personality and Social Psychology Bulletin*, 24, 1332–1342.
- Higgins, E. T. (1996). Knowledge activation: Accessibility, applicability, and salience. In E. T. Higgins & A. W. Kruglanski (Eds.), Social psychology: Handbook of basic principles (pp. 133–168). New York: Guilford Press.
- Hollander, E. P. (1958). Conformity, status, and idiosyncrasy credit. Psychological Review, 65, 117–127.
- Janis, I. (1972). Victims of groupthink. Boston: Houghton Mifflin.
- Jetten, J., Hornsey, M. J., & Adarves-Yorno, I. (2006). When group members admit to being conformist: The role of relative intragroup status in conformity self-reports. *Personality and Social Psychology Bulletin*, 32, 162–173.
- Kelley, H. H., & Stahelski, A. J. (1970). The inference of intentions from moves in the Prisoner's Dilemma Game. *Journal of Experimental Social Psychology*, 6, 401–419.
- Keltner, D., Gruenfeld, D. H., & Anderson, C. (2003). Power, approach, and inhibition. Psychological Review, 110, 265–284.
- Kipnis, D. (1976). The powerholders. Chicago: University of Chicago Press.
- Kray, L. J., Galinsky, A. D., & Wong, E. M. (2006). Thinking within the box: The relational processing style elicited by counterfactual mind-sets. *Journal of Personality and Social Psychology*, 91, 33–48.
- Lammers, J., Galinsky, A. D., Gordijn, E. H., & Otten, S. (2008). Illegitimacy moderates the effects of power on approach. *Psychological Sci*ence. 19, 558–564.
- Larson, J. R., Foster-Fishman, P. G., & Keys, C. B. (1994). Discussion of shared and unshared information in decision-making groups. *Journal of Personality and Social Psychology*, 67, 446–461.
- Latané, B., & Darley, J. M. (1970). The unresponsive bystander: Why doesn't he help? New York: Appleton-Century-Crofts.
- Lewin, K. (1951). Field theory in social science: Selected theoretical papers. Chicago: Harper & Brothers.
- Locke, E. A., & Latham, G. P. (1990). Work motivation and satisfaction: Light at the end of the tunnel. *Psychological Science*, *1*, 240–246.
- Magee, J. C., & Galinsky, A. D. (2008). Social hierarchy: The self-reinforcing nature of power and status. *Academy of Management Annals*, 2, 351–398.
- Magee, J. C., Galinsky, A. D., & Gruenfeld, D. H. (2007). Power, propensity to negotiate, and moving first in competitive interactions. *Personality and Social Psychology Bulletin*, 33, 200–212.
- Messick, D. M., & McClintock, C. G. (1968). Motivational basis of choice

- in experimental games. *Journal of Experimental Social Psychology*, 4, 1–25.
- Mischel, W., & Shoda, Y. (1995). A cognitive–affective system theory of personality: Reconceptualizing situations, dispositions, dynamics, and invariance in personality structure. *Psychological Review*, 102, 246–268.
- Montgomery, R. L. (1971). Status, conformity, and resistance to compliance in natural groups. *Journal of Social Psychology*, 84, 197–206.
- Moscovici, S., & Zavalloni, M. (1969). The group as a polarizer of attitudes. *Journal of Personality and Social Psychology*, 12, 125–135.
- Nemeth, C. J. (1986). Differential contributions of majority and minority influence. *Psychological Review*, 93, 23–32.
- Nemeth, C. J., & Kwan, J. L. (1985). Originality of word associations as a function of majority vs. minority influence. *Social Psychology Quar*terly, 48, 277–282.
- Nemeth, C. J., & Kwan, J. L. (1987). Minority influence, divergent thinking and detection of correct solutions. *Journal of Applied Social Psychology*, 17, 788–799.
- Olekalns, M., & Smith, P.L. (1999). Social value orientations and strategy choices in competitive negotiations. *Personality and Social Psychology Bulletin*, 25, 657–668.
- Osborn, A. F. (1953). Applied imagination. Oxford, England: Scribner.
- Overbeck, J. R., & Park, B. (2006). Powerful perceivers, powerless objects: Flexibility of powerholders' social attention. Organizational Behavior and Human Decision Processes, 99, 227–243.
- Overbeck, J. R., Tiedens, L. Z., & Brion, S. (2006). The powerful want to, the powerless have to: Perceived constraint moderates causal attributions. *European Journal of Social Psychology*, 36, 479–496.
- Parks, C. D., Sanna, L. J., & Posey, D. C. (2003). Retrospection in social dilemmas: How thinking about the past affects future cooperation. *Journal of Personality and Social Psychology*, 84, 988–996.
- Pervin, L. A., & John, O. P. (Eds.). (1999). *Handbook of personality: Theory and research* (2nd ed.). New York: Guilford Press.
- Ross, L., Greene, D., & House, P. (1977). The false consensus phenomenon: An attributional bias in self-perception and social perception processes. *Journal of Experimental Social Psychology*, 13, 279–301.
- Ross, L., & Nisbett, R. E. (1991). The person and the situation. New York: McGraw-Hill.
- Rubin, D. C., Stoltzfus, E. R., & Wall, K. L. (1991). The abstraction of form in semantic categories. *Memory & Cognition*, 19, 1–7.
- Russell, B. (1938). Power: A new social analysis. London: Unwin Books. Shaw, G. B. (1921). Back to methuselah: A metabiological pentateuch. New York: Brentano's.
- Sherif, M. (1935). A study of some social factors in perception. Archives of Psychology, 27, 17–22.
- Smeesters, D., Warlop, L., Van Avermaet, E., Corneille, O., & Yzerbyt, V. (2003). Do not prime hawks with doves: The interplay of construct activation and consistency of social value orientation on cooperative behavior. *Journal of Personality and Social Psychology*, 84, 972–987.
- Smith, P. K., Jostmann, N. B., Galinsky, A. D., & Van Dijk, W. W. (2008). Lacking power impairs executive functions. *Psychological Science*, 19, 351–398.
- 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.
- Smith, S. M., Ward, T. B., & Schumacher, J. S. (1993). Constraining effects of examples in a creative generation task. *Memory & Cognition*, 21, 837–845.
- Sobel, M. E. (1982). Asymptotic intervals for indirect effects in structural equation models. In S. Leinhart (Ed.), *Sociological methodology* (pp. 290–312). San Francisco: Jossey-Bass.
- Stasser, G., & Stewart, D. (1992). Discovery of hidden profiles by decision-making groups: Solving a problem versus making a judgment. *Journal of Personality and Social Psychology*, 63, 426–434.
- Stasser, G., & Titus, W. (1985). Pooling of unshared information in group

- decision making: Biased information sampling during discussion. *Journal of Personality and Social Psychology*, 48, 1467–1478.
- Stein, R. T., & Heller, T. (1979). An empirical analysis of the correlations between leadership status and participation rates reported in the literature. *Journal of Personality and Social Psychology*, 37, 1993–2002.
- Steinel, W., & De Dreu, C. K. (2004). Social motives and strategic misrepresentation in social decision making. *Journal of Personality and Social Psychology*, 86, 419–434.
- Stouten, J., De Cremer, D., and Van Dijk, E. (2005). All is well that ends well, at least for proselfs: Emotional reactions to equality violation as a function of social value orientation. *European Journal of Social Psychology*, 35, 767–783.
- Thibaut, J. W., & Kelley, H. H. (1959). *The social psychology of groups*. New York: Wiley.
- Tinsley, C. H., O'Connor, K. M., & Sullivan, B. A. (2002). Tough guys finish last: The perils of a distributive reputation. *Organizational Be-havior and Human Decision Processes*, 88, 621–645.
- Van Dijk, E., De Cremer, D., & Handgraaf, M. J. J. (2004). Social value orientations and the strategic use of fairness in ultimatum bargaining. *Journal of Experimental Social Psychology*, 40, 697–707.
- Van Kleef, G. A., De Dreu, C. K. W., Pietroni, D., & Manstead, A. S. R. (2006). Power and emotion in negotiation: Power moderates the interpersonal effects of anger and happiness on concession making. *Euro*pean Journal of Social Psychology, 36, 557–581.

- Van Lange, P. A. M. (1999). The pursuit of joint outcomes and equality in outcomes: An integrative model of social value orientation. *Journal of Personality and Social Psychology*, 77, 337–349.
- Van Lange, P. A. M., & Liebrand, W. B. G. (1991). Social value orientation and intelligence: A test of the goal prescribes rationality principle. European Journal of Social Psychology, 21, 273–292.
- Vescio, T. K., Snyder, M., & Butz, D. A. (2003). Power in stereotypically masculine domains: A Social Influence Strategy × Stereotype Match model. *Journal of Personality and Social Psychology*, 85, 1062–1078.
- Ward, T. B. (1994). Structured imagination: The role of category structure in exemplar generation. *Cognitive Psychology*, 27, 1–40.
- Weber, M. (1947). *The theory of social and economic organization* (A. M. Henderson & T. Parsons, trans.). New York: Oxford University Press.
- Weick, M., & Guinote, A. (2008). When subjective experiences matter: Power increases reliance on the ease of retrieval. *Journal of Personality and Social Psychology*, 94, 956–970.
- Whitson, J., Galinsky, A. D., Magee, J. C., Liljenquist, K. A., & Gruenfeld, D. H. (2008). Power and overcoming obstacles: Implications for goal pursuit, disobedience, and bystander intervention. Unpublished manuscript.
- Winquist, J. R., & Larson, J. R. J. (1998). Information pooling: When it impacts group decision making. *Journal of Personality and Social Psychology*, 74, 371–377.

(Appendix follows)

### Appendix

Bogus Feedback Sheet (Experiment 3)

# Pilot Task Participant Feedback

<u>DIRECTIONS:</u> In the first two columns, please answer the questions "How interesting was this experiment?" and "Overall, how much did you enjoy this experiment?" Mark from 1 to 11 (1 = not at all, to 11 = extremely).

<u>Participant</u>	Interesting	<u>Enjoyable</u>	Comments
19	9	10	
20	10	9	cool task
21	\ \	( )	Fun, like a puzzle
22	9	8	
23	10	8	
24	9	9	
25	(	1	<u>'</u>
26	10	9	
27	10	( \	Much better than the typical experiment
28	10	10	
29			
30			
31			
32			
33			
34			
35			
36			

Figure A1. The bogus feedback sheet participants saw with previous participants' ratings and comments, Experiment 3. All participants thought they were Participant 29.