
Power, Risk, and the Status Quo: Does Power Promote Riskier or More Conservative Decision Making?

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Two experiments suggest that the experience of power can interact with a person's level of power motivation to produce effects on risky decision making. In Study 1, assignment to a position of power increased risk taking among participants with low levels of power motivation but reduced risk taking among participants with high levels of power motivation. In Study 2, participants high in power motivation again made more conservative decisions, but only under circumstances in which the dominance hierarchy was unstable and there was potential for losing their power. When power was irrevocable and participants' choices had no bearing on their ability to retain power, both high and low power-motivated participants responded by making riskier decisions. Findings suggest that although power may generally lead to riskier decisions, power may lead to more conservative decisions among power-motivated individuals, especially when the status quo is perceived to be in jeopardy.

Keywords: *power; risk; decision making; motivation; dominance*

Interpersonal power is a profoundly influential component of social interaction and has been throughout human evolutionary history (e.g., Buss, 1994; Cummins, 1998; de Waal, 1982; Ellis, 1995; Keltner, Gruenfeld, & Anderson, 2003; La Freniere & Charlesworth, 1983). The experience of power, in turn, exhibits a number of important influences on psychological and interpersonal processes (Anderson & Berdahl, 2002; Chen, Lee-Chai, & Bargh, 2001; Ebenbach & Keltner, 1998; A. P. Fiske, 1992; S. T. Fiske, 1993; Guinote, Judd, & Brauer, 2002;

Keltner & Robinson, 1997; Overbeck & Park, 2001; Tiedens & Fragale, 2003).

In particular, there are reasons for thinking that power may have important effects on basic decision-making processes, especially those that pertain to decision making under conditions of risk (e.g., Anderson & Galinsky, 2006; Galinsky, Gruenfeld, & Magee, 2003). The nature of these effects, however, remains understudied. Although a growing body of evidence suggests that power may evoke action, disinhibition, and a tendency to make risky choices (see Keltner et al., 2003, for a review), there also is evidence suggesting that power may sometimes lead people to make conservative choices (e.g., Tetlock, 2002; Winter & Barenbaum, 1985). The current research, therefore, was designed to delineate some of the factors that might determine whether power leads to risky versus conservative decision making. In two experiments, we provide evidence suggesting that the influence of power on risky decision making depends on moderating variables within both the person and the situation.

Authors' Note: This research was supported by National Institutes of Health Grant MH72848 awarded to Jon Maner. The authors thank Carl Lejuez for his generous assistance with the Balloon Analog Risk Task (BART) as well as Brandon Schmeichel and Mary Gerend for their helpful comments on earlier drafts of this article. Correspondence should be addressed to Jon Maner, Department of Psychology, Florida State University, Tallahassee, FL 32306-4301; e-mail: maner@psy.fsu.edu.

PSPB, Vol. 33 No. 4, April 2007 451-462
DOI: 10.1177/0146167206297405

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Does Power Beget Risky Decision Making?

Power is typically conceptualized as a person's ability to exercise control over the rewards, punishments, and outcomes of others (see Keltner et al., 2003).¹ Having power means possessing the relatively unconstrained capacity to provide (or to withhold) resources, rewards, and punishments to other people. Similar to dominance in nonhuman species (e.g., Archer, 1988), power in humans is inextricably tied to one's "resource-holding potential," the extent to which one controls access to desired group-level resources. Having power gives one relatively free access to a variety of material and social resources, including group assets, friends, mates, respect, praise, and admiration (e.g., Cummins, 1998; Eibl-Eibesfeldt, 1989; Sadalla, Kenrick, & Vershure, 1987). Moreover, although powerful people often have the capacity to control or punish others, they tend not to be as susceptible to punishment from other people. Thus, powerful people often enjoy the luxury of acting without concern of serious reprisal or consequence.

There are reasons to expect that power generally increases the tendency for people to make risky decisions. As a result of their disproportionate exposure to rewards versus punishments, powerful people tend not to worry especially about punishment and instead tend to focus optimistically on potential rewards associated with their choices (Anderson & Galinsky, 2006; Keltner et al., 2003). This differential focus on rewards versus punishments is likely to have direct implications for decisions pertaining to risk. Risk decision making is the process of making decisions in which one's choices can result in either positive or negative consequences. For example, starting a conversation with a stranger could result in a new friendship (a reward) or it could result in rejection and embarrassment (a punishment), depending on the stranger's reaction. Such choices are guided by perceptions of potential outcomes (e.g., Maner & Schmidt, 2006; Mellers, 2000). When people focus on rewards and perceive them as strong and likely to occur, they tend to make risky, action-oriented choices. In contrast, when punishments are perceived to be strong and likely to occur, people tend to become more risk avoidant. The strong focus on rewards typically exhibited by powerful people, therefore, implies that the experience of power might increase the tendency to make risky choices.

Although few studies have focused directly on the implications of power for risk decision making, the hypothesis that power begets risk is consistent with previous evidence that power increases optimism and action-orientation and decreases inhibition. Anderson and Berdahl (2002), for example, found that people who were either high in dispositional dominance or for whom power had been experimentally assigned were

more likely to perceive social rewards (e.g., to think that other people liked them) and were less sensitive to social punishments (e.g., that others might get angry at them). Powerful people, in turn, were relatively disinhibited and were less inclined than control participants to censor their true attitudes during a social interaction (which in some sense reflects a willingness to take social risks; see also Anderson & Galinsky, 2006; Van Kleef, De Dreu, & Manstead, 2004). Galinsky et al. (2003) showed that priming a sense of power increased people's orientation toward taking action. Participants for whom a sense of power had been primed were more likely than control participants to act against an aversive stimulus and to take and give more in a public resource dilemma. Galinsky et al. also found that power increased the tendency to "hit" in a game of blackjack, an action that reflects a basic form of risk taking. Thus, there are firm theoretical and empirical reasons for thinking that the psychological experience of power may increase the likelihood of risky decision making.

Or, Does Power Beget Risk Avoidance?

There are also reasons, however, to hypothesize that power may sometimes lead to more conservative (i.e., less risky) decisions. This hypothesis follows from a consideration of the link between goal satisfaction and risk aversion. As mentioned earlier, powerful people tend to enjoy a variety of important social and material rewards. It comes as no surprise, then, that many people are highly motivated to achieve and retain positions of power (Barkow, 1989; Bugental, 2000; Frank, 1985; Maslow, 1937). Moreover, there are individual differences in the extent to which striving for power represents a focal goal, with some individuals exhibiting especially keen interest in achieving and retaining positions of power (e.g., Cassidy & Lynn, 1989). As a result, there are also likely to be individual differences in the extent to which achieving a position of power reflects a form of goal satisfaction. Achieving a position of power should serve as a salient cue signaling that one is satisfying an important goal, and this should be the case especially for individuals who are high in power motivation.

What consequences might achieving a position of power have for people who are high in power motivation? First, consistent with the notion that power serves as a form of goal satisfaction, having power often is accompanied by the experience of positive affect (Keltner et al., 2003). There is evidence that experiencing positive affect can promote loss aversion, especially when potential losses are salient (e.g., Isen, Nygren, & Ashby, 1998; Isen & Patrick, 1983). Loss aversion can motivate people to avoid risky decisions because risky choices are inherently associated with potential for loss (e.g., Mittal &

Ross, 1998; Nygren, Isen, Taylor, & Dulin, 1996). The positive state potentially experienced by power-motivated individuals who have achieved a position of power, therefore, could increase the likelihood of risk aversion.

Second, power might lead power-motivated individuals to become especially vigilant to the potential for loss of power (Isen & Geva, 1987; Scheepers & Ellemers, 2005). Indeed, power-oriented individuals are typically motivated not just to achieve positions of power but also to retain those positions (e.g., Barkow, 1989; see also Sapolsky, 2005), and powerful individuals often make choices designed to increase their ability to retain power (e.g., Tetlock, 1981). Thus, power might be expected to elicit conservative choices aimed at retaining one's current position in the hierarchy, particularly among those with high levels of power motivation.

Might situational factors (e.g., the type of decision, the specific nature of the power arrangement) moderate this hypothesized increase in risk-avoidant decision making? If the risk aversion hypothesized to occur among power-motivated individuals is aimed simply at maintaining their positive mood, then it might be observed regardless of other situational variables because presumably almost any type of loss could hurt one's mood. If this risk aversion is designed to increase the likelihood of retaining one's power, however, then power-motivated individuals might be expected to exhibit risk aversion in circumstances in which risky choices could be perceived—implicitly or explicitly—as threatening their current status within the group. In contrast, if circumstances lead individuals to believe that their power within the group is irrevocable and not contingent on their choices and actions, then risk aversion might be less likely to occur among even highly power-motivated individuals.

Overview of the Current Research

Two experiments were conducted to examine hypothesized interactive effects of power and power motivation on decision making. In each experiment, we manipulated the experience of power and then assessed the extent to which participants were inclined to make riskier versus more conservative choices (relative to participants in a control condition). Previous studies suggesting that power increases disinhibition and action orientation imply that the experience of power may increase the likelihood that participants will make risky choices. A different pattern might be expected for highly power-motivated individuals, however, wherein power may promote more conservative, rather than riskier, choices.

In Study 2, we directly manipulated whether participants thought their choices could influence their status within the group. We expected that if the risk aversion

hypothesized to occur among power-motivated participants is aimed at facilitating the preservation of power, then this risk aversion should be observed when participants are told that their choices may influence their power within the group but not when participants are led to believe that their power is irrevocable and not contingent on their choices.

STUDY 1

In Study 1, we manipulated participants' expected role in a group task and evaluated effects on decision making. Some participants believed they would be serving as leader on the group task, whereas control participants believed each member of their group would have equal power. We used a behavioral dependent variable wherein participants were given the opportunity to wager money they had earned for their participation in the study.

Method

Participants. Eighty-four undergraduate psychology students (52 women, 32 men) received course credit and \$5 in exchange for their participation. Data from 6 additional participants were excluded from analysis; 3 because they failed to complete the dependent measures and 3 because they expressed prior knowledge of the study's true purpose.

Design and procedure. Participants were told that the study investigated spatial ability and that they would be paid \$5 for their participation. Participants were told that they would begin by completing tests of their individual spatial ability, after which they would work with other participants on a task designed to assess group spatial ability. Participants were instructed that the group spatial ability task involved the construction of a Lego-like structure called a Tanagram (for similar procedures, see Anderson & Berdahl, 2002; Galinsky et al., 2003).

Participants then completed a test purported to measure individual spatial ability. The test contained 10 difficult problems requiring geometry and logic skills; each problem included five possible answers from which participants chose the answer they believed to be correct. Participants were given 10 min to complete this test. The test was included, in part, to give participants a baseline performance expectation on which the later risk-taking opportunity would be based.

Power manipulation. While the experimenter purportedly scored the spatial ability test, participants completed

a leadership questionnaire, which ostensibly would help determine participants' suitability for a manager role on the Tanagram task. This questionnaire consisted of items from the Big Five personality inventory (John & Srivastava, 1999). After completing the leadership questionnaire, participants received feedback regarding their performance on the earlier spatial ability test. All participants were told that they had scored a 5 out of 10 on the test, which the experimenter assured was "pretty good." To increase the credibility of this feedback, the experimenter handed the participant the test, which had "5/10" written on the top of the first page and 5 randomly selected problems marked incorrect.

After a short break, during which the experimenter allegedly scored participants' leadership questionnaires, participants were presented with a folder that contained written instructions regarding their role assignment for the group task. Participants assigned to the Power condition were told that, based on their performance on the earlier spatial ability task and on the leadership questionnaire, they had been assigned to the position of group manager. Instructions in the high-power condition were adapted from Galinsky et al. (2003):

As manager, you are in charge of directing the subordinates across the hall in building a Tanagram from a set of Legos. You will decide how to structure the process for building the Tanagram and the standards by which the work is to be evaluated. In addition, you will also evaluate the builders at the end of the session in a private questionnaire—that is, the builders will never see your evaluation. The builders will not have the opportunity to evaluate you. Your evaluation will determine how the experimental credits for being in this experiment will be divided between the builders and you. Thus, as a manager, you will be in charge of directing the building, evaluating your subordinates, and determining the rewards you and your subordinates will receive.

Participants assigned to the Control condition were told instead that all group members would have equal authority and responsibility in performing the task and would receive equal rewards. After reading these instructions, participants completed the Positive and Negative Affect Schedule (PANAS; Watson, Clark, & Tellegen, 1988). Participants were then told that before the Tanagram task, they would need to complete a second test designed to confirm their spatial ability. The risk-taking measure was incorporated into this test.

Risk-taking measure. As in the previous test of spatial ability, participants were again given 10 spatial ability questions to answer. Participants were given instructions that in performing this task they would have an opportunity to stake some (or all) of the \$5 earned for participating

in the study. Participants were told that if they performed especially well on the test (at least 6 questions out of 10 correct, which they were reminded was 1 more than the score they had previously received), they could triple the amount of their wager. If they did not answer at least 6 questions correctly, however, they would lose the amount of their wager.

After indicating their wager, participants completed a postexperimental questionnaire, which included a measure of power motivation. Participants responded to items from the dominance and status-aspiration subscales of the Achievement Motivation Scale (Cassidy & Lynn, 1989) in terms of how they generally felt most of the time using a 5-point Likert scale (1 = *strongly disagree*, 5 = *strongly agree*). Items included, "I find satisfaction in having influence over others" and "I think I would enjoy having authority over other people" ($\alpha = .83$). Responses to these items did not vary by experimental condition ($F < 1$), indicating that they were unaffected by the experimental manipulation. On completing this questionnaire, participants were probed for suspicion, debriefed, given credit, and paid \$5.

Results

See Table 1 for descriptive statistics and zero-order correlations. Regression was used to assess effects of the power manipulation and level of power motivation on participants' wagers. Wager amounts were predicted from experimental condition, level of power motivation, and the centered interaction. Because previous evidence suggests that men tend to be higher than women in both power striving (e.g., Symons, 1978) and risk taking (Byrnes, Miller, & Schaffer, 1999), we controlled for participant sex. In addition to a main effect of participant sex, $\beta = .45$, $p < .001$, such that men ($M = \$3.65$, $SD = 1.40$) wagered more than women did ($M = \$2.12$, $SD = 1.26$), we observed an interaction between the power manipulation and participants' level of power motivation, $\beta = .29$, $p = .005$ (see Figure 1). No other significant effects were found.

To interpret this interaction, two sets of follow-up analyses were conducted. First, the relationship between power motivation and wager amount was assessed separately within the Control condition and the Power condition. Within the Control condition, higher levels of power motivation were associated with riskier wagers, $r(42) = .42$, $p < .01$. In contrast, high levels of power motivation were associated with more conservative wagers in the Power condition, $r(42) = -.31$, $p < .05$. Second, the effect of the power manipulation was assessed separately among participants who were relatively high versus low in dispositional power motivation (1 SD above and below the mean; Aiken & West,

TABLE 1: Study 1. Zero-Order Correlations and Descriptive Statistics

| | N | M | SD | 1 | 2 | 3 | 4 |
|---------------------|----|--------|--------|-------|------|------|---|
| 1. Power motivation | 84 | 3.49 | 0.55 | — | | | |
| 2. Positive affect | 78 | 41.35 | 8.37 | .33** | — | | |
| 3. Negative affect | 78 | 18.67 | 5.46 | -.14 | -.07 | — | |
| 4. Wager amount | 84 | \$2.70 | \$1.51 | .11 | .02 | -.07 | — |

** $p < .01$.

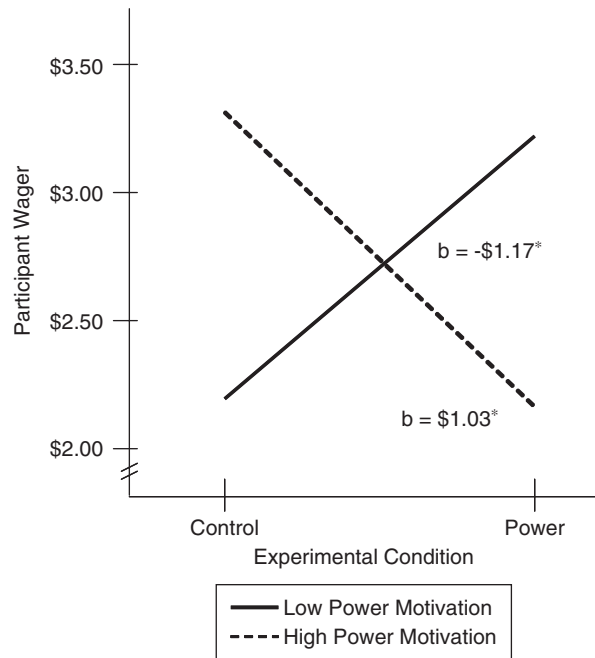


Figure 1 The experience of power (being assigned to serve as leader on a group task) increased risky decision making among participants with low levels of power motivation but led to more conservative decisions among participants with high levels of power motivation (Study 1).

* $p < .05$.

1991). Whereas power reduced risk taking among those high in power motivation, $\beta = -.39$, $p = .01$ (partial $r = -.28$), power increased risk taking among those low in power motivation, $\beta = .34$, $p = .03$ (partial $r = .24$).

Ancillary analyses: The potential role of affect. We performed additional analyses in which we predicted participants' affect (using the positive and negative affect subscales of the PANAS) from the same set of predictors as in the previous analyses. For positive affect, we observed only a main effect of power motivation, $\beta = .36$, $p = .002$ (such that those high in power motivation reported more positive affect than did those low in power motivation), and a main effect of participant sex, $\beta = .25$, $p = .03$ (such that men reported more positive affect than did women). Although a marginally significant interac-

tion between power condition and dispositional power motivation was observed, $\beta = .20$, $p = .08$, simple effect tests showed no significant change in positive affect among participants high or low in power motivation (both $ps > .22$). For negative affect, no significant effects were observed (all $ps > .11$). Thus, the power manipulation apparently did not lead to any appreciable changes in participants' affect.

Moreover, neither positive nor negative affect were related to participants' wagers (see Table 1), and measures of positive and negative affect were unrelated to participants' wagers within the control condition (both $ps > .37$) and power condition (both $ps > .89$).

Discussion

The results of Study 1 suggest that the experience of power may interact with a person's level of power motivation to produce effects on risk decision making. Consistent with evidence that power sometimes begets a tendency to make risky choices, the experience of power increased risk taking among participants with relatively low levels of power motivation. The experience of power elicited the opposite tendency, however, among participants with high levels of power motivation. For these individuals, the experience of power led to more risk-avoidant choices, consistent with the hypothesis that power might promote conservative decision making among power-motivated individuals.

The increase in risk-avoidant choices among power-motivated participants apparently was not caused by changes in affect. The power manipulation did not cause a significant change in positive or negative affect, and neither positive nor negative affect was related to participants' choices. One might have expected power to increase positive affect among power-motivated participants because attaining power should represent a form of goal satisfaction. One possible reason for the apparent lack of positive affect among power-motivated participants is that any positive affect resulting from the attainment of power was balanced by concern over performing well or maintaining one's position.

Indeed, it is possible that participants high in power motivation may have become more conservative out of a desire to maintain the status quo, that is, their current

sense of power within the group. The risk-taking measure was embedded within a task purportedly designed to reevaluate the very quality on which their leadership position was based. Although participants were not told anything explicit about the implications their choice or their performance on the test might have for their leadership role, people's choices and actions can be influenced by implicit evaluative concerns pertaining to one's ability to retain power (Tetlock, 2002). Thus, it is possible that conservative choices among those high in power motivation may have reflected a desire to maintain the status quo. This reasoning is speculative, however, and the extent to which participants may have explicitly or implicitly perceived a link between their choices and their power within the group is unknown. Thus, the extent to which conservative choices among power-oriented individuals might be motivated by a desire to maintain the status quo also remains unclear. Study 2, therefore, was conducted to assess this possibility more directly.

STUDY 2

In Study 1, we found that power led those low in power motivation to make riskier choices, whereas it led those high in power motivation to make more conservative choices. The increase in risk taking among participants low in power motivation is consistent with previous research suggesting that power can promote action orientation and disinhibition. Study 1, however, did not provide clear insight into the reasons underlying the drop in risk taking among participants high in power motivation. Study 2, therefore, was designed to examine more carefully the possible drop in risk taking exhibited by those high in power motivation.

Study 2 directly examined the possibility that a desire to maintain one's powerful role within the group may motivate conservative decision making among power-oriented individuals. We reasoned that if making conservative choices is aimed at maintaining the status quo, then power should lead power-motivated participants to become more conservative when they are led to believe that the hierarchy may be unstable and that their choices can influence their role in the group. In contrast, if power-motivated participants are led to believe that their power is irrevocable and not contingent on their choices, a drop in risk taking may be less likely to occur.

This reasoning led us to manipulate the purported stability of the group hierarchy. In addition to manipulating participants' role in a group task (power vs. control), we manipulated the extent to which participants thought their group hierarchy was stable versus unstable and, in addition, whether their choices might have implications for their ability to retain their current level

of power. In one condition, participants were led to believe that their position in the hierarchy was fixed and that their choices would have no bearing on their leadership role. In another condition, participants believed that the hierarchy was potentially changeable and that their choices could have implications for their ability to retain power.

Based on the findings of Study 1, we again expected that power might interact with a person's level of power motivation to produce effects on decision making. We expected that whereas power might generally increase the likelihood of risky choices among participants low in power motivation, power might lead to more conservative decisions among participants with high power motivation. Moreover, we expected that this increase in conservative decision making among power-motivated participants would be apparent under conditions in which the power hierarchy is unstable. Under these circumstances, power-motivated individuals should be especially vigilant to the potential for loss and therefore these individuals may react by making conservative choices. When participants were explicitly told that the group hierarchy was fixed and that their choices were unrelated to their level of power, however, we expected that power-motivated participants would be less likely to exhibit an increase in conservative decision making and might even make riskier choices.

Study 2 included two other methodological enhancements. First, we used a different measure of risk taking—the Balloon Analog Risk Task (BART; Lejuez et al., 2002)—which provided a well-validated and highly reliable measure of risk decision making. Second, rather than assessing individual differences in power motivation at the end of the session, we measured this variable during mass screening in the beginning of the semester.

Method

Participants. One hundred fifty-three undergraduate students (123 women, 30 men) participated in exchange for partial course credit. Data from 8 additional participants were excluded from analysis because they reported significant suspicion about aspects of the experimental procedure (suspicious participants were distributed across conditions). To obtain a measure of dispositional power motivation, we matched participants' data to mass screening data collected earlier in the semester (we again used items from the Achievement Motivation Scale, see Study 1).

Design and procedure. As in Study 1, the experiment was introduced as a study of individual and group tasks, and participants were told that they would be working

TABLE 2: Study 2. Zero-Order Correlations and Descriptive Statistics

| | N | M | SD | 1 | 2 | 3 | 4 |
|---------------------|-----|--------|--------|------|--------|--------|---|
| 1. Power motivation | 115 | 3.70 | 0.70 | — | | | |
| 2. BART score | 153 | 28.35 | 14.29 | -.04 | — | | |
| 3. Explosions | 151 | 7.56 | 3.77 | .01 | .93*** | — | |
| 4. Total points | 153 | 593.00 | 218.00 | -.09 | .94*** | .85*** | — |

NOTE: BART = Balloon Analog Risk Task.

*** $p < .001$.

on a group Tanagram task with several other participants. They were told that one of the participants would be selected to serve as group manager and were given detailed information pertaining to the authority and responsibility associated with the manager role. These instructions were identical to those used in Study 1. Participants then completed a leadership questionnaire, ostensibly allowing the researchers to select the participant best suited to the leadership role. Upon completion of this questionnaire, the experimenter left the room to assess the participant's natural leadership ability.

After several minutes, the experimenter returned and delivered a set of videotaped instructions, which included the experimental manipulation. In the Fixed Power condition, participants were told that based on their natural leadership abilities, they had been assigned the position of group manager and were reminded of the authority and responsibilities associated with their role. Participants were assured that their leadership role was irrevocable and not contingent on any aspects of their performance during the session. To reinforce the fact that the risk taking would have no implications for participants' leadership role, participants were told that the BART was unrelated to the current study and that they would be pretesting it for another experiment while the materials for the group task were being prepared.

In the Unstable Power condition, similar to the Fixed Power condition, participants were told that based on their natural leadership abilities they had been assigned the role of group manager and were reminded of the authority and responsibilities associated with their role. In addition to receiving their role assignment, these participants were told that changes to the group structure were still possible, depending on participants' performance during the session. They were told that if they performed poorly during the session, they could be reassigned to a more subordinate role on the group task.

Thus, participants in both the Fixed Power and Unstable Power conditions were led to believe that, based on their abilities, they had been selected to serve as the group manager. However, only in the Unstable Power condition did participants believe that changes to the hierarchy were still possible and that their subsequent performance could have implications for their level of power.

Participants in the Control condition were told that the group roles had not yet been assigned and the leader on the group task had not yet been determined. The participant was told that before receiving their role assignment and participating in the group task, they would be pretesting another task (the BART) for use in another study.

Participants next were given detailed instructions for performing the BART, a computer task that provides a behavioral index of basic risk decision making. In the BART, participants accumulated rewards by blowing up 15 virtual balloons. For each pump of the balloon (performed by clicking a mouse), participants earned a point toward an accumulating number of raffle tickets in a \$50 raffle drawing (to be held at the study's end). Each balloon had an explosion threshold that varied from balloon to balloon and which, if reached, resulted in the loss of all points for that balloon. Therefore, in deciding whether to make each pump, participants weighed the potential gain of accruing more rewards against the potential risk of losing all points for that balloon. The BART reflects real-world situations in which excessive risk produces diminishing returns and increasing threats because each successive pump increases the amount to be lost due to an explosion and decreases the relative gain of an additional pump. As in previous research (e.g., Lejeuz et al., 2002), the average number of pumps per unexploded balloon served as the primary dependent variable. We also examined two supplemental measures: the number of balloons each participant popped and the total number of points each participant earned. The BART provides a more valid and generalizable assessment of risk decision making than many other common risk-taking tasks (e.g., gambling; Lejeuz, Aklin, Zvolensky, & Pedulla, 2003; Lejeuz et al., 2002). After completing the BART, participants were probed for suspicion, debriefed, provided credit, and dismissed.

Results

Descriptive statistics and zero-order correlations are provided in Table 2. Regression was used first to assess basic main effects of the experimental power manipulation.

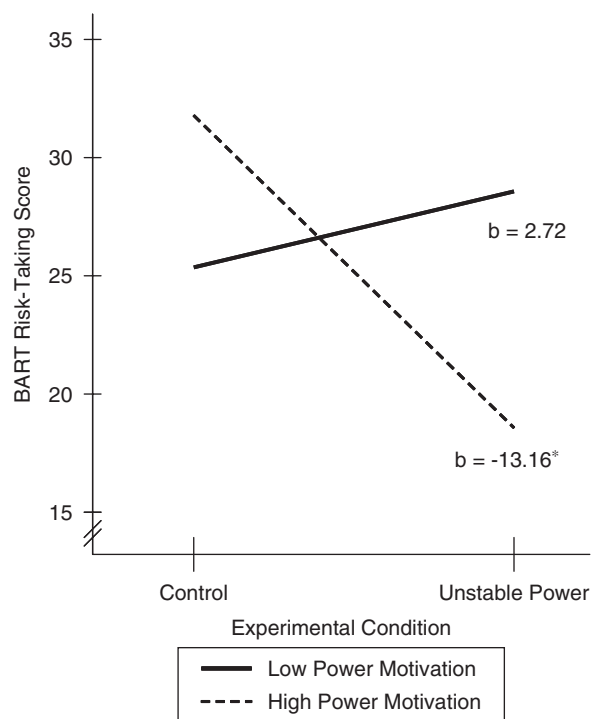


Figure 2 The drop in risky decision making observed in the Unstable Power condition was limited to participants with high levels of power motivation. Whereas these participants become more conservative in their choices, no such tendency was observed in participants with lower levels of power motivation (Study 2).

NOTE: BART = Balloon Analog Risk Task.

* $p < .05$.

Experimental conditions were dummy coded so as to compare participants in the (a) Fixed Power versus Control and (b) Unstable Power versus Control. As in Study 1, participant sex was included as a covariate. Results indicated that compared to control ($M = 28.74$, $SD = 14.10$), participants in the Fixed Power condition made riskier choices ($M = 33.79$, $SD = 12.83$), $\beta = .18$, $p = .04$, partial $r = -.17$. In contrast, participants in the Unstable Power condition ($M = 22.88$, $SD = 14.03$) made more conservative choices than did those in the control condition, $\beta = -.19$, $p = .03$, partial $r = -.17$. This pattern was mirrored by the number of popped balloons and number of points earned. Whereas participants in the Unstable Power condition popped fewer balloons than did participants in the Control condition, $\beta = -.22$, $p = .02$, partial $r = .20$, they also earned fewer points, $\beta = .21$, $p = .02$, partial $r = .19$. In contrast, participants in the Fixed Power condition earned more points than did control participants, $\beta = .18$, $p = .04$, partial $r = .17$, while popping slightly fewer (although not significantly fewer) balloons, $\beta = .11$, $p = .15$, partial $r = .12$.

Next, we conducted analyses to assess whether effects of the power manipulation depended on participants'

level of power motivation. Experimental condition (again dummy coded so as to compare each of the two power conditions to control), level of power motivation, the interactions between power motivation and experimental condition, and participant sex were used to predict performance on the BART.² The only significant effect was a two-way interaction, which indicated that the effect of unstable power (vs. control) depended on power motivation, $\beta = -.33$, $p = .006$ (see Figure 2).

We tested the simple effect of unstable power (vs. control) among participants who were relatively high versus low in power motivation (1 SD above and below the mean). Among participants low in power motivation, the Unstable Power manipulation elicited no change in risk taking, $\beta = .09$, $p = .54$. Among participants high in power motivation, however, the Unstable Power manipulation reduced risk taking, $\beta = -.45$, $p = .004$, partial $r = -.28$. This drop in risk taking was reflected in fewer popped balloons, $\beta = -.50$, $p = .001$, partial $r = .31$, but also fewer points earned, $\beta = -.47$, $p = .002$, partial $r = -.29$. Notably, within the Unstable Power condition, participants' level of power motivation was negatively correlated with all three dependent variables (all r s $> .37$, all p s $< .02$). Participants' level of power motivation was uncorrelated with BART performance in both the Fixed Power condition and the Control condition (all r s $< .20$, p s $> .20$).

In contrast to effects of unstable power, the fixed power manipulation (relative to control) did not interact with participants' level of power motivation. No moderating effects were observed on any of the dependent measures, all β s $< .14$, p s $> .19$. Notably, participants high in power motivation did not make more conservative choices as a result of being assigned to the Fixed Power condition (relative to control, $p = .72$).

Discussion

The results of Study 2 suggest that effects of power on risk decision making depend not only on a person's level of power motivation but also on the nature of the power arrangement, in particular, the extent to which the power hierarchy is stable versus potentially malleable. When they thought the group hierarchy was potentially malleable and that their status within the group depended on their performance during the session, individuals high in power motivation tended to make more conservative choices. As a result, power-motivated participants suffered fewer punishments (popped balloons) but also earned fewer rewards (raffle ticket points).

When told that the group hierarchy was fixed and that their choices had no bearing on their level of authority, however, power did not lead to conservative decision making among power-motivated participants. Under

conditions of stable power, we observed only a main effect such that participants tended to make riskier decisions (although this main effect was reduced to nonsignificance when moderated regressions were conducted within the reduced sample, see Note 2). Thus, the increase in conservative decision making among power-motivated participants was observed only when there was potential for loss of power and not when power was described as irrevocable, suggesting that the tendency to make conservative choices may have been driven by a desire to maintain the status quo (i.e., one's current level of power).

GENERAL DISCUSSION

The current research suggests that the experience of power can lead to both riskier and more conservative decision making. These studies provide evidence that the specific effects power has on risk decision making depend on factors within both the person (individual differences in power motivation) and the situation (the stability of the power arrangement). In highlighting these moderating factors, this research may help reconcile previous studies suggesting that power elicits disinhibition and increased tolerance for risk (Anderson & Galinsky, 2006; Galinsky et al., 2003) with previous evidence for conservative decision making among powerful people (McDermott, 1998; Winter & Barenbaum, 1985).

Evidence from the current studies suggests that power sometimes leads to risky decision making. In Study 1, participants with relatively low levels of power motivation responded to power by increasing their tendency to make risky choices. In Study 2, participants placed within a position of stable power generally increased their tendency to take risks. These findings are consistent with previous theory and evidence suggesting that power elicits a focus on potential rewards, promotes disinhibition, and evokes risk taking (e.g., Anderson & Berdahl, 2002; Anderson & Galinsky, 2006; Galinsky et al., 2003; Keltner et al., 2003).

The current research, however, suggests theoretically important boundary conditions to the link between power and increased risk taking and provides evidence that power can sometimes lead people to make conservative, risk-avoidant choices. The first boundary condition pertains to an individual's level of power motivation. In both of these studies, individuals who were high in power motivation sometimes reacted to power by making more conservative choices. For individuals high in power motivation, achieving a position of power should act as a positive cue signaling that their wish for power is being satisfied, thereby motivating a desire for the status quo.

Indeed, findings from Study 2 imply that loss-aversion among participants high in power motivation may

have reflected a desire to maintain the status quo, that is, one's powerful position within the group hierarchy. The increase in conservative decision making was observed only when potential for loss of power was made salient and participants' choices were believed to have implications for their ability to maintain a powerful position in the group. When participants were told that their position in the hierarchy was irrevocable and that their choices would have no consequences for their role, no evidence for conservative choices was observed.

Notably, power led to conservative decision making among power-motivated participants even when no explicit information was provided about the stability of the power arrangement or the link between participants' choices and their position within the group (Study 1). Why, in contrast, did power-motivated participants not become more conservative in the stable power condition of Study 2? One possibility is that whereas participants in Study 1 were told very little about the stability of their power, participants in Study 2 were told explicitly that their power was irrevocable and that their performance would have no implications for their power. Another possibility is that whereas the decision-making task in Study 1 was embedded within a test purportedly designed to evaluate the very quality on which participants' leadership position was based (and therefore may have generated concerns about power), the risk-taking task in Study 2 was divorced from the context of group power (the task was purportedly being pretested for a different study). In further clarifying the effects of power on decision making, additional research is needed to determine more precisely the potential interplay between the experience of power, one's perceptions of the power arrangement, and the specific nature of the decision.

Findings from the current research are consistent with evolutionary reasoning and with comparative evidence suggesting that the stability of the power hierarchy has profound implications for members of other primate species. Sapolsky (2005), for example, reviewed evidence that when primate power hierarchies are stable, powerful group members tend to experience relatively low levels of stress. When instabilities within the hierarchy arise, however, those in power experience heightened psychological and physiological stress and react in ways aimed at maintaining their position atop the hierarchy.

Implications of the Current Research

Most current perspectives on risk decision making presume that normal functioning is characterized by a balanced and moderate level of risk taking. At one extreme, exaggerated risk taking (e.g., substance abuse, unsafe sexual behavior; precarious financial ventures) can lead

to negative physical, psychological, and interpersonal consequences (e.g., Loewenstein, 1996; Maner & Gerend, *in press*; Mittal & Ross, 1998). At the other extreme, exaggerated risk aversion may be associated with various forms of dysfunction (e.g., Allen & Badcock, 2003; Maner et al., 2007). The current research suggests that the experience of power may affect the normal balance struck between risk seeking and risk aversion. The link between power and decision making is particularly noteworthy because very often it is powerful people (rather than people who lack power) who are in a position to make important group-level choices.

The current research also may help explain the presence of seemingly discrepant findings in the literature, with some studies suggesting riskiness among powerful people (e.g., Anderson & Galinsky, 2006) and others suggesting conservative choices among the powerful (e.g., Winter & Barenbaum, 1985). The current research suggests that whether power leads to riskier versus more conservative decision making depends on factors within both the person (e.g., level of power motivation) and the situation (e.g., the stability of the power hierarchy).

The current research also suggests one factor that may mitigate the risk-promoting effects of power: increased accountability. Making people's level of power contingent on their choices and actions, as we did in the current research, could temper increased risk taking among powerful people. The current findings are consistent with previous evidence that accountability can reduce judgment and decision-making biases (Lerner & Tetlock, 1999). Indeed, Tetlock (1992, 2002) proposed that people often act as "intuitive politicians," seeking the positive regard of individuals to whom one feels accountable and making choices that can ultimately enhance one's ability to retain authority and to maintain the status quo (see also McDermott, 1998).

Group hierarchies, of course, vary in the extent to which power is stable. In certain systems, power is negotiable; in other systems, power is irrevocable. The stability of power varies from culture to culture, from the unchecked authority of kings and emperors to the checks and balances imposed on democratic political leaders. Risky decision making among powerful individuals may be especially likely when power seems nonnegotiable (e.g., a dictatorship or a corporation run by an all-powerful chief executive officer). Risky decisions made by powerful people may be less likely when power is negotiable (as it is in democratic societies) than when power is perceived to be absolute.

Limitations and Future Directions

Several limitations of the current research warrant discussion. In line with previous studies (e.g., Galinsky

et al., 2003), we used methods in which the expectation of power was manipulated, although participants did not actually have a chance to exercise their power over others. Consistent with previous studies, we observed that the expectation of power can influence cognitive processes even when power over others is not directly experienced. It remains for future research to directly explore the more dynamic consequences of power for decision making in ongoing social interactions.

A second limitation pertains to the nature of the specific decision-making tasks used here. In the current studies, participants were faced with a limited number of decision tasks, and thus, this research falls short of exhausting the many different types of choices that powerful people typically face. Some research, for example, suggests that risk decision making is partially domain specific; people's tolerance for risk depends on the specific type of choice being made (Weber, Blais, & Betz, 2002). Future research is needed to evaluate the extent to which the current findings generalize to other types of decisions and choices. For example, power may have particular implications for decisions that have consequences for other people, especially for people over whom the decision maker has power. The current findings suggest that decisions about other people may be affected by moderating variables, such as the stability of the leadership hierarchy and the level of accountability applied to powerful decision makers, insofar as decisions that affect group-level outcomes also can affect people's powerful standing within the group.

Third, although affect did not appear to serve as a mediator in the current research (see Study 1), it is possible that affect may play a role in power and decision making more broadly. The current studies unfortunately do not provide great insight into the potential role of mood or affect. Future research would benefit from examining more carefully the role that affect may play in processes pertaining to power and decision making.

Finally, the current research directly investigated only a small subset of power's effects. Although the current findings may have implications for understanding other cognitive and interpersonal consequences of power, it remains for other studies to directly explore these implications. In particular, future research might explore the possibility that consequences of power are influenced by moderating variables such as individual differences in power motivation or the perceived stability of the power hierarchy. For example, although evidence suggests that powerful people exhibit greater cognitive complexity than do people who lack power (Keltner et al., 2003), evidence also suggests that U.S. presidents tend to deliver policy speeches to constituents in an overly simplistic fashion in the period leading up to reelection, when the political hierarchy is especially malleable (Tetlock, 1981).

Conclusion: Power, Risk, and the Status Quo

Bertrand Russell (1938) wrote, "Love of power is the chief motive producing the changes which social science has to study" (p. 6); "it is only by realising that love of power is the cause of the activities that are important in social affairs that history . . . can be rightly interpreted" (p. 4). Insofar as the important events in history have been shaped by human choices and decisions, Russell may have been right. Although power certainly is not the only factor that guides people's choices and actions, the current research supplements a growing body of evidence suggesting that the experience of power can have profound effects on cognition and behavior. The current research demonstrates that the experience of power influences basic processes of decision making under conditions of risk. Consistent with previous studies, this research suggests that power sometimes can pave the way for risky decision making. The current studies, however, also provide evidence for important boundary conditions to the accumulated evidence of action orientation and disinhibition among powerful people. The current research suggests that the experience of power can sometimes lead people to make more conservative decisions, particularly among individuals who are especially motivated to achieve positions of power, and particularly when one's choices are perceived to have consequences for one's ability to maintain one's place in the group hierarchy. Hence, whereas power and authority may sometimes produce risky decision making, conservative decision making instead may arise from a desire for the status quo.

NOTES

1. The construct of power should be differentiated from other related constructs such as social status or prestige. Although they often go hand-in-hand, it is possible to have prestige without power (e.g., a figurehead monarch who has no real influence) and it also is possible to have power without prestige (e.g., a nefarious dictator).

2. Screening data were only available for three quarters of the sample (115 participants out of 153). Therefore, the sample size is smaller for analyses including power motivation as a predictor.

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Received July 25, 2006

Revision accepted October 13, 2006