The Personal Sense of Power

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ABSTRACT   Scholars who examine the psychological effects of power have often argued that possessing power shapes individual behavior because it instills an elevated sense of power. However, little is known about the personal sense of power because very few studies have examined it empirically. In studies involving a total of 1,141 participants and nine different samples, we found that the personal sense of power was coherent within social contexts; for example, individuals who believed that they can get their way in a group also believed that they can influence fellow group members' attitudes and opinions. The personal sense of power was also moderately consistent across relationships but showed considerable relationship specificity; for example, individuals' personal sense of power vis-à-vis their friend tended to be distinct but moderately related to their personal sense of power vis-à-vis their parent. And the personal sense of power was affected not only by sociostructural factors (e.g., social position, status) but also by personality variables such as dominance.

Power considerations are ubiquitous in interpersonal relationships, emerging among workplace colleagues, neighbors, friends, family members, and even romantic partners (for a review, see Keltner, Gruenfeld, & Anderson, 2003). As a recent resurgence of scholarship on power has shown, power also has a profound impact on the individual. For example, possessing power leads individuals to experience more positive and less negative affect, pursue a more assertive approach to the world, and enjoy higher self-esteem, physical health, and longevity (Adler, Epel, Castellazzo, & Ickovics, 2000; Barkow, 1975; Bugental & Cortez, 1988; Keltner et al., 2003; Marmot, 2004).

   Traditionally, conceptual and operational definitions of power have focused on the control over valued resources. Power has often

been construed as the control over money, information, or decision-making premises (Burt, 1992; Emerson, 1962; Fiske, 1993; Galinsky, Gruenfeld, & Magee, 2003; Kipnis, 1972; Perrow, 1970). Correspondingly, experimental manipulations of power have typically involved assigning individuals to positions that provide control over such resources (e.g., Anderson & Berdahl, 2002; Galinsky et al., 2003; Kipnis, 1972; Neuberg & Fiske, 1987).

However, power is not simply the control over resources or composed solely of one's social position. Power is also a psychological state—a perception of one's capacity to influence others (Bugental, Blue, & Cruzcosa, 1989; Galinsky et al., 2003). For example, consider Bugental and colleagues' research on "powerless parents" (e.g., Bugental & Lewis, 1999). Parents typically have much more power over their young children than vice versa. Parents control resources critical to their children such as food, safety, comfort, and nurturance, and they make most of the decisions for their children. Yet many parents perceive themselves as *lacking* power over their young children. They attribute their child's behavior to factors outside their own control, such as the child's disposition or personality. Further, these parents typically use less effective techniques in dealing their children, thus reducing their actual influence (Bugental et al., 1989; Bugental & Lewis, 1999). These findings dovetail with research on supervisors, showing that individuals in supervisory roles who lack confidence in their managerial skills tend use ineffective and coercive influence tactics (Goodstadt & Hjelle, 1973; Goodstadt & Kipnis 1970; Kipnis & Lane 1962; Raven & Kruglanski, 1970).

The findings above highlight two critical points often overlooked in the literature on power. First, individuals' personal sense of power is distinct from sociostructural indicators of their power. Sometimes individuals' personal sense of power coincides with their control over resources, position of authority, or status in the eyes of others, and sometimes it does not (Anderson, Srivastava, Beer, Spataro, & Chatman, 2006; Fast & Chen, 2009). Second, individuals' beliefs about their power can shape their actual influence over others, above and beyond the effects of their sociostructural position. Those who perceive themselves as powerful behave in more effective ways that increase their actual power (Bandura, 1999; Bugental & Lewis, 1999; Mowday, 1978).

Yet despite its importance, very little is known about the personal sense of power. Bacharach and Lawler's (1976) claim made long

ago—"The perception of power remains a relatively understudied area in sociology and social psychology" (p. 123)—still rings true today, and it is all the more relevant given the renaissance of interest in the study of power, and the common assumption that the subjective sense of power influences thought, feeling, and action most directly. What is the personal sense of power? Is it a fleeting sentiment, entirely bound to specific social contexts? Is it a more enduring belief about longer-term relationships with others? Does the sense of power have trait-like properties, with some people generally perceiving themselves as more powerful than others? And what are the personal antecedents of the personal sense of power—does feeling powerful depend on one's personality in addition to one's social position?

Our aim was to better understand the personal sense of power by addressing these basic questions. First, we tested whether individuals form a coherent and organized sense of their power within specific relationship or group contexts. Second, we assessed the consistency of the personal sense of power across discrete social contexts. Third, we examined the personal sense of power at different levels of abstraction. For example, do individuals form an organized sense of their power in single interactions with another person (like a job interview setting), in an enduring group where they have developed multiple dyadic relationships, and on a general level that incorporates all of their important relationships and groups? Finally, we aimed to understand individual differences in the personal sense of power, or why two people who have control over the same resources can have two very different senses of their power. To pursue these aims, we developed an index of the personal sense of power.

Conceptually Defining Personal Sense of Power

In line with many other theorists, we define power as an individual's ability to influence another person or other people (Copeland, 1994; French & Raven, 1959; Goldhamer & Shils, 1939; Thibaut & Kelley, 1959). Therefore, power is a social-relational concept and an individual's power can be understood only in relation to another individual or group of individuals (Emerson, 1962; Thibaut & Kelley, 1959). For example, an individual's power in her peer group can be understood only with reference to her relationships with the other individuals in the group.

Accordingly, we define the personal sense of power as the perception of one's ability to influence another person or other people. It is important to note that power is defined as the *capacity* to influence others. French and Raven (1959) likened power to potential energy and influence to kinetic energy. Thus, in principle, individuals do not need to use their power to be considered powerful. A boss does not need to constantly give orders to be considered powerful, for example, but needs only the ability to modify her employees' behavior (Leavitt, 2005).

The personal sense of power as a psychological construct is thus similar to expectancy beliefs or cognitive models of relationships that have been examined in prior work (Bowlby, 1969; Leary, Tambor, Terdal, & Downs, 1995). For example, Sullivan (1953) and Erikson (1950) examined generalized expectancies of significant others that involve beliefs about how close and trustworthy or how punitive and rejecting those others are. Bowlby's (1969) work focused on infants' mental models of their relationship with caregivers, which reflect the degree to which they could trust and rely on their caregiver to satisfy their needs. And more recently, researchers have focused on adults' models of self and relationships that involve beliefs about acceptance or rejection by others (Downey & Feldman, 1996; Hazan & Shaver, 1987; Leary et al., 1995).

Yet individuals' relationships with others can be organized along two primary dimensions: how close, accepted, and connected they are to others, which is often called the "communion" dimension; and how much control, power, and agency they have vis-à-vis others, which is often called the "power" dimension (Bakan, 1966; Foa & Foa, 1974; Hogan, 1983; Moskowitz, 1994; Wiggins, 1979). While much research has focused individuals' beliefs along the communion dimension, little research has examined these beliefs along the power dimension, despite the profound importance of power to human functioning.

The Coherence of Personal Sense of Power

Our first question in the current research concerned the coherence of individuals' beliefs with respect to specific manifestations of power. There are many specific ways in which power, or the ability to influence another person or other people, can manifest in relationships or group contexts. Previous research has demonstrated at least four manifestations of power: the ability to control joint decisions

(Gray-Little & Burks, 1983), influence others' behavior (Goldhamer & Shils, 1939), shape others' internal states (Keltner et al., 2003), and satisfy one's own desires even when those desires compete with those of others (Ng, 1980). Thus, we asked, do individuals who believe they have the ability to satisfy their own desires also tend to believe they have the ability to influence others' behavior, and to make the decisions? Or are these separate beliefs independent?

The Consistency of Personal Sense of Power Across Relationship Contexts

A second question we asked concerned the consistency of the personal sense of power across relationship contexts. Do individuals tend to have a uniformly high or low sense of power across their different interpersonal relationships? For example, if someone perceives herself as having high power in her relationship with her parent, does she also tend to perceive herself as powerful vis-à-vis her closest friend, or her work supervisor?

Based on many theoretic conceptions of power, there is no obvious reason to expect much cross-relationship consistency. Because power is a relationship-specific construct, theoretically individuals' power across relationships is independent. Further, many of the personal attributes that lead to power differ across social contexts (Anderson, Spataro, & Flynn, 2008). For example, quantitative skills might give an individual power in a group of engineers, but not necessarily on an athletic team.

However, even though power is relationship specific, individuals show consistency in the power they attain across contexts (Kenny & Zaccaro, 1983; Zaccaro, Foti, & Kenny, 1991). Some individuals reliably attain more power than others in their different relationships. Moreover, many of the stable dispositional attributes that help individuals achieve power are consistent across contexts (Judge, Bono, Illies, & Gerhardt, 2002; Lord, De Vader, & Alliger, 1986). Therefore, we expected individuals to exhibit at least moderate consistency in their personal sense of power across relationships.

Personal Sense of Power at Multiple Levels of Abstraction

Although power is theoretically a relational construct, we also examined whether the personal sense of power exists in more generalized forms as well. It is possible that individuals develop a stable,

trait-like sense of their power based on their sense of power within specific relationships and groups. For example, if some individuals tend to attain higher levels of power across social contexts (Lord et al., 1986), they might form a higher generalized sense of power.

We thus suggest that the personal sense of power exists and can be studied at four distinct levels of abstraction: in a specific momentary social setting (e.g., a single interaction with one other person), in a long-term dyadic relationship (e.g., with a friend), in a long-term group (e.g., in a family), and in generalized form, across an individual's relationships and group memberships.

Determinants of Personal Sense of Power

Finally, we examined the personal antecedents of the personal sense of power. We propose that individuals' personal sense of power in a given context is related to their sociostructural position within that context. At the same time, particular personality traits can help individuals attain higher levels of influence and control in their relationships, thus contributing to the personal sense of power as well.

For example, the personality trait dominance tends to help individuals achieve higher levels of power regardless of the relationship or group (Lord et al., 1986; Megargee, 1969; Moskowitz, 1988, 1990). Individuals high in trait dominance behave in assertive, forceful, and self-assured ways (Buss & Craik, 1980). Therefore, everything else being equal, individuals who are more dominant should have a greater ability to influence others than those who are more introverted, timid, or submissive.

Previous Indices

To examine these questions about the personal sense of power, it was necessary to develop a new index, as previous power-related indices were not entirely appropriate for our needs. For example, the Internal-External Locus of Control Scale (LOC; Rotter, 1966) addresses whether individuals believe that people in general control their fate (i.e., the locus of control lies internally), or that fate is controlled by external factors such as chance and luck. It does not measure individuals' beliefs regarding their own power. As an example, one item asks individuals to endorse one of two statements:

"Many of the unhappy things in people's lives are partly due to bad luck" or "People's misfortunes result from the mistakes they make." Individuals' beliefs about humankind's control over events might differ from their beliefs about their own power. For example, someone might believe that people in general control their fate, but that he lacks power in his own relationships. Moreover, locus of control ranges from the belief that people control their outcomes to the belief that impersonal factors such as luck control their outcomes. The distinction lies between personal and impersonal factors. In contrast, individuals' personal sense of power ranges from the belief that they or others have power. The distinction lies between the self and others.

Another index, the Parental Attribution Test (PAT; Bugental, Lyon, Krantz, & Cortez, 1997), measures caregivers' perceived causes of their success and failure when dealing with children. Bugental and colleagues developed and used the PAT to generate numerous insights into power dynamics (Bugental & Lewis, 1999), and much of that work has served as an inspiration and theoretical foundation for the current research. However, the PAT is tailored specifically to the particular relationship of caregiver and child, from the caregiver's perspective. Thus, we needed something more flexible to measure sense of power in other social contexts and at different levels of abstraction.

Research Overview

We conducted five studies that involved a diverse set of methodologies and study designs. Studies 1 and 2 examined the coherence and consistency of the personal sense of power within and across relationship contexts. In Study 3, we moved up a level of abstraction and examined individuals' personal sense of power in a specific group context. We also examined the personality-based predictors of the personal sense of power. In Study 4, we moved to the level of a specific interaction between two unacquainted individuals. We conducted a controlled experimental design to more directly show that sociostructural factors causally determine personal sense of power. In Study 5, we extended our investigation to the highest level of abstraction, the generalized level. We examined the antecedents of the personal sense of power as well as whether it was linked with other theoretically related individual difference variables.

STUDY 1: POWER IN LONG-TERM DYADIC RELATIONSHIPS

Inspired by Bugental's work on parent-child relationships, we began by examining individuals' personal sense of power in the context of close, long-term, intimate relationships. Although Bugental's work typically focused on caregivers' beliefs of their power vis-à-vis younger children, we focused on college-age individuals' beliefs of their power vis-à-vis their parents. We also examined these same college-age individuals' beliefs of their power in a second relationship type that is inherently more equal in power: a same-sex friendship with someone of roughly equal age. We hypothesized that individuals' personal sense of power would be higher in their role as a close friend than in their role as a son or daughter because individuals tend to have lower status in relationships with parents and depend more on their parents for resources.

Method

Participants

Sixty-eight undergraduates (53% women) participated for course credit.

Relationship-Specific Index of Personal Sense of Power: Parent and Friend

So that we could focus on power dynamics rather than gender dynamics in close relationships, participants rated their power vis-à-vis their same-sex parent (i.e., their mother if they were female, their father if they were male) and vis-à-vis a specific same-sex college-age friend (for a similar design, see Donahue, Robins, Roberts, & John, 1993). For example, for female participants rating their power vis-à-vis their mother, each item began with "In my relationship with my mother . . . "

   Based on pilot work, we selected 8 items from a larger set of 28 items initially derived from previous definitions of power and informed by a detailed theoretical review (Keltner et al., 2003). These items assess various beliefs individuals hold regarding the four specific domains of power discussed in the introduction: beliefs about their ability to make decisions in the relationship (e.g., "If I want to, I get to make the decisions"), to influence the other person's behavior (e.g., "I can get her to do what I want") and opinions and beliefs (e.g., "Even if I voice them, my views have little sway," reverse-coded), and to satisfy their own desires and wishes in the context of the relationship (e.g., "Even when I try, I am not able to get my way," reverse-coded). The items are in Appendix A.

Results and Discussion

The specific beliefs (e.g., "I can get my mother to do what I want" and "I have a lot of power in my relationship with my mother") exhibited internal consistency within each relationship, with alphas of .78 for the friend relationship and .87 for the parent relationship. Therefore, individuals did possess coherent beliefs across various manifestations of power within each relationship.

How consistent was personal sense of power across the two relationships? The correlation was positive and significant but only moderate in size, $r = .31$, $p < .01$. In other words, only about 10% of the variance was shared from one close relationship to another, suggesting that sense of power was largely relationship-specific. This correlation did not depend on the sex of the participant.

Did individuals have a higher sense of power in their relationship with their friend than with their parent? The effect of relationship type was significant, $F(1, 67) = 9.28$, $p < .01$. On average, individuals' sense of power in their relationship with their friend ($M = 5.17$, $SD = .83$) was higher than in their relationship with their parent ($M = 4.74$, $SD = 1.14$). This difference across relationship type did not depend on sex of the participant; the interaction between sex and relationship role was not significant $F(1, 66) = .01$, *ns.*

However, this significant mean difference must be interpreted within the context of the considerable individual differences in personal sense of power. In standard deviation terms, the significant mean difference amounts to $d = .44$, that is, about half a standard deviation or a medium effect size (Cohen, 1969). Therefore, relatively speaking, there was considerable variation in sense of power across individuals around the sample mean.

STUDY 2: POWER ACROSS MULTIPLE DYADIC RELATIONSHIP CONTEXTS

We studied only two relationships in Study 1, making it possible that our findings were limited to those two specific contexts. In Study 2, we thus examined a broader range of relationships. We asked college student participants to rate their sense of power in five different relationship contexts: vis-à-vis their closest same-sex friend and their same-sex parent, thus replicating Study 1, as well as in their relationships with a current or recent dating partner, a supervisor at work,

and a teaching assistant from a current class. We expected to again find moderate but not high correlations in personal sense of power across relationships. We also again expected participants to have a higher sense of power in their relationships with similar-status others (i.e., friend, date) than with higher-status others (i.e., parent, teaching assistant, supervisor).

Method

Participants

One hundred forty-five undergraduates (30% men) participated for course credit. The ethnic breakdown was 21% Caucasian, 62% Asian American, 5% Hispanic, 4% African American, and 8% other. The average age was 20 years ($SD = 2.38$).

Personal Sense of Power in Five Relationships

Participants rated their power in five different relationship contexts using the same eight items as in Study 1. We chose five relationship contexts that pilot testing showed were common to most students' lives. The items were tailored to each relationship. For example, for ratings of power vis-à-vis one's supervisor, each item began with "In my interactions with my supervisor . . . "

Results and Discussion

Coefficient alpha reliabilities for the eight-item index averaged .85 and were satisfactory for each of the five relationships, ranging from .76 to .90. This provides further evidence that within each of their relationships, individuals possess coherent beliefs about their power across specific manifestations of power.

We next ascertained the cross-relationship consistency of personal sense of power by examining the correlations for each pair of relationships. The full correlation matrix is shown in Table 1. As in Study 1, the correlations between relationships were all positive but were only moderate in size, averaging $r = .23$. These findings again suggest that with this wider sampling of important relationship contexts, personal sense of power shows some consistency across relationships but is largely relationship-specific. There were no sex differences in any cross-relationship correlation. Therefore, men's and women's sense of power exhibited the same level of consistency across relationship type.

Table 1
Study 2: Correlations of Personal Sense of Power Across Five
Relationship Contexts

	Relationship With			
	Friend	Parent	Dating Partner	Supervisor
Parent	.19*			
Dating partner	.47**	.30**		
Supervisor	.29**	.03	.14	
Teaching assistant	.20*	.15	.13	.32**

Note. $N = 145$.
*$p < .05$. **$p < .01$.

As hypothesized, the omnibus effect of relationship type on personal sense of power was significant, $F(4, 135) = 7.27$, $p < .01$. The means ranged from 5.57 ($SD = .86$) for the dating relationship and 5.39 ($SD = .71$) for the friend relationship, to 4.94 ($SD = 1.17$) for the parent relationship, 4.43 ($SD = 1.06$) for the supervisor, and 4.11 ($SD = .85$) for the teaching assistant. Further, the combined mean in the two relationships with similar-status peers ($M = 5.48$, $SD = .67$) was higher than the combined mean in the three relationships with older and higher-status adults ($M = 4.51$, $SD = .69$), $F(1, 144) = 229.85$, $p < .01$. This difference was not moderated by the participant's sex, $F(1, 140) = 1.04$, *ns.*

STUDY 3: SOCIOMETRIC STUDY OF STATUS HIERARCHIES IN SOCIAL-LIVING GROUPS

In Studies 1 and 2, individuals were asked about their relationship with only one person. In such contexts, it might be relatively simple to assess one's power. In larger group contexts, in contrast, individuals have multiple dyadic relationships, which might complicate the assessment of one's power. For example, individuals might have higher power than some group members but lower power than others.

However, we hypothesized that individuals would be able to reliably assess their power in larger social groups because power differences in groups are based primarily on the group's status hier-

archy. Status hierarchies are the differences in prominence and respect that group members have in the eyes of others (Barkow, 1975; Goldhamer & Shils, 1939). Group members high in the status hierarchy are looked up to, are admired, are listened to, and have more influence; in contrast, lower-status members are ignored, and their opinions and views have less impact (e.g., Blau, 1964; Savin-Williams, 1977).

In Study 3, we moved up a level of abstraction to the group level and examined the sense of power in two different group contexts. To increase the generalizability of the findings, we studied two separate group contexts, a sorority and a coeducational dormitory, that differed in selection processes, composition, interaction activities, and duration. To assess individuals' informal status in the sorority and dormitory, we obtained peer-based measures of their prominence and respect (Anderson, John, Keltner, & Kring, 2001).

Finally, we have found considerable individual differences in individuals' personal sense of power, even when individuals occupied the same sociostructural role. Can we account for these individual differences in personal sense of power, or is this individual variation simply random error?

We predicted individual differences in personal sense of power with the personality trait Extraversion, which has been linked with status and resource control in previous research (Anderson et al., 2001). Extraversion implies an "energetic approach to the social and material world" (John & Srivastava, 1999, p. 121) and includes such power-relevant traits as assertiveness, sociability, activity, and positive emotionality. Assertive and extraverted individuals are predicted to report a higher sense of power because they are used to "getting their way" and have the ability to influence others in their relationships (Anderson et al., 2008). Therefore, above and beyond the effects of sociostructural factors, individuals who behave in a more assertive fashion and who are more sociable should also have a greater ability to influence.

Method

Participants

Study 3 involved two separate samples and a total of 122 participants. The "sorority sample" consisted of 52 female sorority members, the majority Caucasian, with a mean age of 19 years ($SD = 1.04$). The "dormitory

sample" consisted of 70 college freshman and sophomore dormitory residents (63% women). The ethnic composition was 42% Caucasian, 50% Asian American, and 8% other. Both samples came from large research universities.

Personal Sense of Power

Participants rated the same eight items as those in Studies 1 and 2, which were again tailored for each context. Participants in the sorority sample rated their sense of power in their sorority (e.g., "In my sorority, I can get others to do what I want"), and participants in the dormitory sample rated their sense of power on their dormitory floor (e.g., "In my dormitory, I think I have a great deal of power"). There was not a gender difference in personal sense of power.

Sociometric Status

In the sorority sample, we measured sorority members' status in the house through peer nominations. Similar to the status measure used by Coie, Dodge, and Coppotelli (1982), each participant nominated the other sorority members they perceived as having high status ($M = 2.4$, $SD = 2.7$).

In the dormitory sample, as in Anderson, Keltner, and John (2003), participants' status on the dormitory floor was rated by their roommate with four items. Roommates reported whether the participant had high status and respect on the dormitory floor, influence and control, and whether dorm mates listened to the participant. These items were combined to measure status ($\alpha = .68$, $M = 4.79$, $SD = .87$). There was not a gender difference in sociometric status in the dormitory sample.

Extraversion

We measured Extraversion using the Big Five Inventory (BFI; John, Donahue, & Kentle, 1991), which has shown substantial internal consistency, retest reliability, and clear factor structure, as well as considerable convergent and discriminant validity (Benet-Martinez & John, 1998; John & Srivastava, 1999).

Results and Discussion

The coefficient alpha reliabilities for the sense of power were satisfactory, on average .91 across the two samples. Therefore, again, individuals exhibited coherent perceptions of their power across specific domains of power.

Table 2
Studies 3–5: Zero-Order Correlations Between Personal Sense of Power, Sociostructural Position, and Personality Traits

Study 3: The Dormitory Sample			Study 3: The Sorority Sample		
	Sense of Power	Sociometric Status		Sense of Power	Sociometric Status
Sociometric status	.33**		Sociometric status	.37**	
Extraversion	.48**	.30**	Extraversion	.48**	.15
Study 4			Study 5		
	Sense of Power	Control Over Resources		Sense of Power	Socioeconomic Status
Control over resources	.23*		Socioeconomic status	.37**	
Dominance	.28*	−.07	Dominance	.59**	.26*

Note. Ns = 70 in the dormitory sample of Study 3, 52 in the sorority sample of Study 3, 62 in Study 4, and 77 in Study 5.
*$p < .05$. **$p < .01$.

    As expected, personal sense of power was related to sociometric status in both samples. Zero-order correlations for each sample are shown in the top row of correlations in Table 2. In both samples, the personal sense of power correlated with peer-measured status. It is important to point out that the status measures in both the sorority and dormitory samples were based on independent data, and therefore these correlations cannot be due to overlapping method variance.

    It is worth noting that these correlations were again only moderate in size, however, suggesting that there were again considerable individual differences in personal sense of power not accounted for by social status position. Can we account for these individual differences? We conducted simultaneous regression analyses in each sample, predicting personal sense of power with sociometric status and Extraversion.

    In the sorority sample, the standardized regression coefficients were .30 ($p < .01$) for sociometric status and .44 ($p < .01$) for

Extraversion; the overall R-squared value was .32, $p < .01$. In the dormitory sample, the standardized regression coefficients were .20 ($p < .05$) for sociometric status and .42 ($p < .01$) for Extraversion; the overall R-squared value was .27, $p < .01$. This shows that individuals in the same sociostructural position who differed in their personal sense of power did so partly because of their level of Extraversion. For example, dormitory members who achieved equal levels of status in the eyes of their dorm mates differed in their sense of power in the dormitory partly because of their personality. Moreover, there was not a significant gender difference in the effect of sociometric status or of Extraversion.

Finally, in the sorority sample, members differed in their seniority in the group, with some older members being part of the group longer than younger members. We thus wanted to rule out the possibility that seniority (age) might act as a third variable, leading members to have a higher personal sense of power and attain higher sociometric status. In a regression predicting personal sense of power, sociometric status still had a significant effect ($\beta = .37$, $p < .01$), whereas age had a surprisingly negative effect ($\beta = -.32$, $p < .05$); the overall R-squared value was .23, $p < .01$.

STUDY 4: EXPERIMENTAL STUDY OF RESOURCE CONTROL IN A SINGLE INTERACTION

So far we have focused on relationships that were established and continuing, in which individuals' power-related beliefs were based on multiple, accumulated interactions. It is likely then that participants had developed an abstracted representation of the relative power in those contexts. Do individuals also develop a clear and measurable personal sense of power in a single interaction, vis-à-vis someone with whom they have no prior experience?

In Study 4, we randomly paired students in an MBA negotiations class together into dyads, making sure they had little or no prior acquaintance with their dyad partner. These dyads negotiated with each other in a role-playing bargaining exercise (Neale, 1997). Negotiations are an ideal context for our purposes because power differences are an important part of negotiations and develop quickly in these interactions (Lawler & Yoon, 1993; Pinkley, Neale, & Bennett, 1994).

We also wanted to more directly establish the causal effects of sociostructural factors on personal sense of power. Given that control over resources that others value is a key source of power (Emerson, 1962), we used a classic method in studies of negotiation that involves manipulating participants' dependence on their opponent for valued resources (e.g., Pinkley et al., 1994). Moreover, we used a negotiation exercise that is realistic and personally relevant and important to these MBA students: a negotiation with a job recruiter over a hiring package. This time we predicted individual differences in personal sense of power with trait dominance, which is strongly tied to the attainment of influence (Lord et al., 1986; Megargee, 1969; Moskowitz, 1988, 1990). Finally, in Studies 1–3, personal sense of power and all antecedent measures were taken simultaneously, which might have inflated the magnitude of the correlations. In Study 4, we measured trait dominance weeks before the negotiation, manipulated resource control before participants negotiated with their counterpart, and measured the personal sense of power after the negotiation.

Method

Participants

Participants were 62 MBA students at a major business school (23% women). The demographic distribution of the students in the school is 54% Caucasian, 30% foreign citizens, 10% Asian American, 4% African American, 2% Hispanic; the mean age is 28 years.

Experimental Manipulation of Resource Control

In each dyad, one member was randomly assigned the role of a job candidate, the other the role of a recruiter. In dyads where the job candidate was assigned to the high-control condition and the recruiter to the low-control condition, job candidates were told they had a second, equally attractive job offer, and recruiters were told they had no other job candidates available (Pinkley et al., 1994). Therefore, in this condition the recruiters were more dependent on job candidates than vice versa. Conversely, in dyads where the recruiter was assigned to the high-control condition, recruiters were told they had a second, equally attractive candidate available for the job, and job candidates were told they had no other job offer. There were no effects of negotiator role (i.e., recruiter vs. candidate), and thus we collapsed across the two roles in our analyses, focusing on the resource control manipulation.

Measuring Sense of Power in One Specific Interaction

Participants rated the same eight items as did participants in Studies 1–3. The MBA students rated their power "in the negotiation" immediately following the negotiation exercise.

Dominance

We measured dominance weeks before the negotiation exercise with Wiggins's Revised Interpersonal Adjective Scales (Wiggins, Trapnell, & Phillips, 1988).

Results and Discussion

Did these participants show consistency in their self-perceptions, even with no history of prior interaction? Coefficient alpha reliability was .77; therefore, these beliefs did again show consistency. Also, as expected, personal sense of power differed as a function of our experimental manipulation of control over resources. Individuals assigned to the high-control condition ($M = 5.44$, $SD = .63$) reported a higher sense of power in the negotiation than individuals in the low-control condition ($M = 5.16$, $SD = .59$), $t(56) = 1.72$. In terms of Cohen's d, the effect size was .46, which is a moderate effect size. There was no effect for gender. Zero-order correlations are shown in the bottom left quadrant of Table 2.

Similar to the previous studies, however, there were considerable individual differences in the personal sense of power among individuals who possessed the same level of control over resources. For example, 35% of participants in the low-control condition had a personal sense of power that was higher than the median score in the high-control condition.

We again conducted a simultaneous regression analysis, predicting personal sense of power with the assigned control over resources and trait dominance. The standardized regression coefficients were .24 ($p < .05$) for assigned control over resources and .31 ($p < .05$) for trait dominance; the overall R-squared value was .14, $p < .05$. Therefore, individuals in the same sociostructural position who differed in their personal sense of power did so in part because of the personality characteristics that they brought with them to the experimental situation. As in previous studies, gender did not moderate any of these effects.

STUDY 5: POWER AT THE GENERALIZED LEVEL: SOCIOECONOMIC STATUS AND OTHER POWER-RELATED CONSTRUCTS

In Study 5, we extend our investigation to the highest level of abstraction, the generalized level, examining individuals' beliefs about their power across all salient relationships and group contexts. On this generalized level, socioeconomic status likely shapes the personal sense of power, as individuals higher in socioeconomic status have more money, better access to educational and professional resources, and thus greater control and choice in general (Adler et al., 1994; Domhoff, 2002; Marmot, 2004). Also, as in Study 4, we expected trait dominance to again account for individual differences.

A second major aim in Study 5 was to provide additional conceptual clarity to the personal sense of power. A critical question about power is its pro- versus antisocial association. Power, as we have argued, is the ability to influence others. According to this conception, power is by itself neutral; it is neither good nor bad, moral nor immoral, ethical nor unethical (Chen, Lee-Chai, & Bargh, 2001). Accordingly, we believe personal sense of power is also neutral in this regard.

We examined the relation between personal sense of power and four individual difference variables that address pro-versus antisocial orientations: Machiavellianism, narcissism, how strongly the individual values power, and agreeableness. Machiavellianism involves the manipulation and exploitation of others for one's own personal gain (Christie & Geis, 1970; Wilson et al., 1996). Narcissism involves a preoccupation with success and demands for admiration (see Morf & Rhodewalt, 2001, for a review). Individuals who value power seek to control and dominate others and tend to be more selfish (Schwartz & Bilsky, 1987, 1990). Finally, agreeableness involves altruism, trust, modesty, and a tender-minded concern for others (John & Srivastava, 1999). Therefore, each of these variables is related to pro-versus antisocial tendencies; narcissists, Machiavellian individuals, those who strongly value power, and disagreeable individuals have a more antisocial approach to the social world. Because we do not believe that the personal sense of power is pro- or antisocial, we did not hypothesize a relation between personal sense of power and any of these four variables.

Third, so far we have focused on traits such as dominance as variables that account for individual differences in personal sense of power because more assertive and forceful individuals attain more influence in their relationships with others (e.g., Anderson & Kilduff, 2009). However, it is also possible that individual differences in perceptual tendencies also play a role in shaping personal sense of power. In other words, individuals in the same sociostructural position might differ in their personal sense of power because they actually have different levels of influence, and because they differ in their biases in perceiving their own influence.

In Study 5, we thus examined the relation between personal sense of power and variables that reflect cognitive and perceptual tendencies: locus of control (Rotter, 1966) and the behavioral activation and inhibition systems (Carver & White, 1994). We expected personal sense of power to correlate with an internal locus of control because individuals who perceive people in general as having control in their lives are likely to believe they have power in their own relationships. The behavioral activation and inhibition systems (BAS and BIS, respectively; Carver & White, 1994) are general motivational systems proposed to underlie perception, behavior, and affect. We expected BAS to relate positively to personal sense of power because people higher in BAS attend more to the positive, rewarding aspects of themselves and their relationships (Gray, 1982; Higgins, 1997). In contrast, we expected BIS to relate negatively to personal sense of power because people higher in BIS focus more on the negative, threatening aspects of themselves and their relationships.

Our final goal was to more fully establish the nomological net of the personal sense of power by examining how it correlates with the other Big Five personality dimensions and with self-esteem. As in Study 3, we expected a strong correlation between Extraversion and the personal sense of power. Neuroticism, which involves negative emotionality and vulnerability to stress (Costa & McCrae, 1992), relates to lower status and power (Anderson et al., 2001; Keltner et al., 2003). Thus, we expected a negative relation between Neuroticism and the personal sense of power. Conscientiousness facilitates task- and goal-directed behavior (John & Srivastava, 1999, p. 121), which should lead to higher effectiveness in task settings like school and work, contributing to a higher sense of power. Openness describes the breadth, originality, and complexity of an individual's mental and experiential life (John & Srivastava, 1999, p. 121). We expected it to relate

positively to the personal sense of power because perceiving oneself as powerful should free individuals to explore and take risks by trying new things (Keltner et al., 2003). Self-esteem, which involves an appraisal of one's own value or worth (Rosenberg, 1965), should positively relate to personal sense of power, as power tends to be related to more positive self-perceptions (e.g., Harvey, 1953).

Method

Participants

The current study involved four samples and a total of 744 participants. The first sample (Sample A) consisted of 77 undergraduates (56% women) from a large research university; the average age was 20 years ($SD = 2.99$). The ethnic composition of Sample A was 32% Caucasian, 50% Asian American, 7% Hispanic, 5% African American, and 6% other. The second sample (Sample B) consisted of 145 full-time MBA students (40% women) at a private business school, where the average age is 28 years and the demographic distribution is 54% Caucasian, 30% foreign citizens, 10% Asian American, 4% African American, and 2% Hispanic. The third sample (Sample C) consisted of 316 undergraduates (68% women) from a large research university; the average age was 22 ($SD = 3.85$). The ethnic composition of the undergraduate sample was 26% Caucasian, 46% Asian American, 12% Hispanic, 1% African American, and 15% other. The fourth sample (Sample D) consisted of 206 undergraduates (43% women) at a large research university; the average age was 19 years ($SD = 2.33$). The ethnic composition of the undergraduate sample was 22% Caucasian, 63% Asian American, 4% Hispanic, 3% African American, and 8% other.

   Measures of socioeconomic status, trait dominance, locus of control, and the behavioral activation and inhibition systems were available in Sample A. Machiavellianism was measured in Sample B. Measures of the Big Five dimensions, narcissism, and valuing power were available in Sample C. A measure of self-esteem was available in Sample D.

Personal Sense of Power

We were focused here on participants' generalized sense of power, that is, their sense of power across their salient relationships. Thus, each item began with the stem "In my relationship with others . . ." Participants then completed the same eight items as those in Studies 1–4, but each item was tailored for this generalized level (e.g., "I think I have a lot of power"). There was no gender difference in scores on this measure.

Other Measures

We measured socioeconomic status with Adler and colleagues' (2000) "ladder" scale, which presents a drawing of a ladder with 10 rungs and asks participants to place an X on the rung that best represents their position in society. We measured trait dominance with the Revised Interpersonal Adjective Scales (Wiggins et al., 1988), Machiavellianism with Christie and Geis's (1970) MACH-IV Scale, Narcissism with the Narcissistic Personality Inventory (NPI; Raskin & Hall, 1979, 1981; 263 participants in Sample C completed this measure), valuation of power with Schwartz and Bilsky's value measure (1987, 1990), Agreeableness and the other Big Five dimensions with the Big Five Inventory (BFI; John et al., 1991) and the NEO-PI-R (Costa & McCrae, 1985; 194 participants in Sample C completed this measure), self-esteem with Rosenberg's (1965) measure, locus of control with the 29-item Internal-External Locus of Control Scale (LOC; Rotter, 1966), and the behavioral activation and inhibition systems with Carver and White's (1994) BAS and BIS scales. Each item was rated on a scale from 1 (*strongly disagree*) to 5 (*strongly agree*).

Results and Discussion

The coefficient alpha reliability for personal sense of power at the generalized level was satisfactory and similar in all four samples (.84 in Sample A, .85 in B, .82 in C, and .82 in D), indicating that participants showed internally consistent and coherent power-related beliefs even when no specific context is specified. We also tested whether on this generalized level the eight power belief items formed a unidimensional scale or measured several distinct factors. Principal components analyses conducted separately in each sample provided clear and replicated evidence for a single general factor. Specifically, all samples showed a very strong first unrotated factor, which accounted for almost half (47%) of the total item variance; even the next-largest factor accounted for only 13% of the variance. Moreover, in all four samples, the scree test showed a clear break after the first factor. Finally, in all four samples, each of the eight items had a substantial loading (always exceeding .50) on the first unrotated factor (mean absolute loading = .69), and these loadings were always larger than those on the second unrotated factor (mean = .35). That is, all the requirements for the presence of a general factor were fulfilled (see John & Benet-Martinez, 2000).

Antecedents of the Personal Sense of Power at the Generalized Level

Zero-order correlations for our hypothesized antecedents are presented in the bottom right quadrant of Table 2. In a simultaneous regression, the standardized regression coefficients were .23 ($p < .05$) for socioeconomic status and .50 ($p < .01$) for dominance; the overall R-squared value was .37, $p < .01$. Consistent with the previous results, participant gender did not moderate the effect of socioeconomic status. However, gender did interact with trait dominance, with an interaction regression coefficient of .23 ($p < .05$), indicating that the personal sense of power was more strongly tied to traitd-Dominance in women than in men. Given that we did not observe a similar effect in either Study 3 or 4, however, we hesitant to emphasize this effect.

Is Personal Sense of Power Inherently Antisocial?

Zero-order correlations between personal sense of power and all other variables are shown in Table 3. If the personal sense of power is antisocial in nature, one would expect it to relate positively with Machiavellianism, yet we found a negative correlation. This suggests that individuals who believe they have power in their relationships with others were *less* likely to behave in manipulative and deceitful ways. Individuals with a lower personal sense of power might perceive others as less trustworthy (Anderson & Galinsky, 2006), which could contribute to a more cynical approach to the world.

Narcissism correlated with the personal sense of power. However, Emmons (1984) found that narcissism comprises four factors: Exploitativeness/Entitlement, Leadership/Authority, Superiority/Arrogance, and Self-Absorption/Self-Admiration. The sense of power correlated most strongly with Leadership/Authority, $r = .47$, $p < .01$, which is not surprising given the content overlap. It was uncorrelated, however, with Exploitativeness/Entitlement, $r = -.03$, *ns*, suggesting that the most antisocial factor was not related to the sense of power. The sense of power did correlate with Superiority/Arrogance and Self-Absorption/Self-Admiration, rs = .36 and .32 (both ps < .01), suggesting individuals with a higher sense of power tend toward feelings of superiority and self-admiration.

The tendency to value power was also not correlated with the personal sense of power. Note that higher scores on the value scale indicate that people hold control over others and dominance as highly

Table 3
Study 5: Relationships between Personal Sense of Power and
Theoretically Relevant Constructs

	Zero-Order Correlation	Coefficient Alpha Reliability
Machiavellianism[B]	−.17*	.72
Value power[C]	.08	.64
Locus of control[A]	.35**	.66
Behavioral activation[A]	.45**	.82
Behavioral inhibition[A]	−.34**	.68
Narcissism[C]	.46**	.86
Exploitativeness/Entitlement	−.03	
Superiority/Arrogance	.36**	
Self-absorption/Self-admiration	.32**	
Leadership/Authority	.47**	
Self-esteem[D]	.45*	
Extraversion[C]		
BFI	.49**	.85
NEO-PI-R	.43**	.90
Agreeableness[C]		
BFI	.10	.87
NEO-PI-R	.02	.88
Conscientiousness[C]		
BFI	.35**	.85
NEO-PI-R	.37**	.92
Neuroticism[C]		
BFI	−.28**	.78
NEO-PI-R	−.37**	.93
Openness to experience[C]		
BFI	.26**	.80
NEO-PI-R	.25**	.91

Note. Superscripts A, B, C, and D indicate the measure came from Sample A ($n = 77$), B ($n = 145$), C ($n = 316$), or D ($n = 206$), respectively.
*$p < .05$. **$p < .01$.

important. Therefore, individuals with a higher personal sense of power did not value these outcomes more highly than individuals with a lower personal sense of power (see also Winter & Stewart, 1983).

Finally, the correlation between personal sense of power and Agreeableness was not significant for either measure. Therefore, this

suggests that individuals with a higher generalized sense of power were not more selfish, cold, and hostile. To more fully understand these null correlations, we examined each of the Agreeableness facets from the NEO-PI-R. Personal sense of power did not correlate with straightforwardness ($r = -.10$, ns), compliance ($r = .08$, ns), or trust ($r = .07$, ns). However, it did correlate with altruism ($r = .24$, $p < .01$), with tender-mindedness ($r = .19$, $p < .01$), and negatively with modesty ($r = -.25$, $p < .01$). Thus, the personal sense of power was related to generosity in one's relationships, a belief in taking care of the underprivileged, as well as with less modesty. The former findings are consistent with prior work showing that prosocial people often attain higher power in groups (Flynn et al., 2006; Willer, 2009).

There was also not a significant curvilinear relation between personal sense of power and any of the four relevant individual difference variables; scatterplots of the relations also did not show a curvilinear effect. Therefore, individuals with an extremely high personal sense of power did not have more antisocial tendencies. Also, as in previous studies, none of these correlations were moderated by gender.

Links to Self-Perceptual Tendencies at the Generalized Level

As expected, personal sense of power was positively related to locus of control. Therefore, individuals who believe that people in general control their fate also tend to perceive that they have higher power in their relationships with others. Personal sense of power related positively to BAS and negatively to BIS. This suggests people who perceive that they have more power in general have a heightened behavioral approach system and a dampened behavioral inhibition system. None of these correlations were moderated by gender.

Nomological Net

As expected, personal sense of power was positively correlated with Extraversion, negatively correlated with Neuroticism, positively correlated with Conscientiousness, positively correlated with Openness, and positively correlated with self-esteem. Therefore, these correlations conform with our hypotheses, and importantly, none exceeds .50, which helps provide discriminant validity for the personal sense of power.

GENERAL DISCUSSION

Our aim in the current research was to advance the definition and conceptualization of the personal sense of power, a little understood but profoundly important construct. We found that personal sense of power is largely coherent within social contexts; for example, individuals' beliefs that they can get their way in a given social relationship covary with beliefs that they can also influence another's attitudes. We found that at the relationship level, personal sense of power is specific to particular relationships, but that it is also moderately consistent across relationships. For example, individuals' beliefs about their power vis-à-vis their friend is distinct from their beliefs about their power vis-à-vis their work supervisor, but these beliefs are also somewhat consistent. We also found that personal sense of power is coherent and organized at multiple levels of abstraction; individuals can reliably gauge their power in single discrete dyadic interactions, longer-term relationships, larger social groups, and in general, across all important relationships and groups. Finally, the personal sense of power was related not just to sociostructural factors but also to personality variables.

Limitations and Future Directions

Compared to many studies that solely use college-age students as participants, the current research involved a wider range of individuals in terms of their ages and experiences. However, because much of the current work did involve undergraduates, it is still important that future research conduct studies involving subjects from more diverse samples. College-age students' awareness and understanding of power is almost certain to differ for individuals who have more worldly experience.

Several of our samples were also quite diverse with respect to ethnic background. Our findings regarding the sociostructural and personality determinants of personal sense of power generalized across these different ethnic groups. Nevertheless, it is important to note that all five of our studies involved U.S. participants, and the United States is certain to have a fairly specific ideology with respect to power (e.g., Abu-Lughod, 1986). Further research should thus also extend these studies to different cultures.

In addition, it is important to address how highly correlated is individuals' sense of power on the level of generalized power beliefs

with their sense of power in more specific social contexts. One interesting question to pursue is whether some social contexts are more important than others in determining individuals' generalized sense of power. For example, individuals' sense of power at work might shape their generalized sense of power more than their sense of power in their peer group (or vice versa). The importance of each social context may depend on individuals and their value system (e.g., how much they value their work colleagues' opinions vs. their peers' opinions).

It would also be useful for future research to examine temporal consistency in the personal sense of power at different levels of abstraction as well. One might expect individuals' generalized sense of power to be highly consistent across time, for example. In long-term groups, however, one might expect individuals' sense of power to show changes when the individual rises or drops in status in the group.

In examining the personal sense of power, we focused primarily on the self-perceived ability to influence others—for example, whether individuals believed their expressed opinions were influential. However, it is theoretically possible for power to be exerted more indirectly, by strategically selecting or modifying situations or environmental conditions (Andrade & Ho, 2007). Accordingly, future research should examine how the self-perceived ability to influence social outcomes through the use of indirect tactics relates to the personal sense of power as conceived here.

Finally, future research should examine the boundary conditions for many of the effects we observed. In particular, gender is a critical boundary condition in need of further study. Some research has found differences in how men and women relate to others (e.g., Ackerman, Kenrick, & Schaller, 2007). In the current studies, we did not find gender differences in mean scores on personal sense of power, and out of the 27 relations between personal sense of power and other variables reported across studies, only one relation was moderated by gender (which did not replicate in other studies). Nonetheless, the current study represents only a first examination of the personal sense of power; we cannot conclude from these findings that gender effects do not come into play.

Conclusion

The present work clarifies important issues within the study of power: personal sense of power is coherent within social-relational contexts, wherein individuals generally tend to see themselves as

more or less powerful along specific dimensions of influence. Personal sense of power is moderately consistent across relationship contexts but shows substantial specificity. Individuals form systematic perceptions of their power in general, across their relationships, and in groups. Personal sense of power does not entirely follow from social-contextual factors that endow some individuals with greater resources and control than others. Personality variables also play a critical role in determining how powerful people feel.

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APPENDIX A

Sense of Power Scale Items

In rating each of the items below, please use the following scale:

1	2	3	4	5	6	7
Disagree strongly	Disagree	Disagree a little	Neither agree nor disagree	Agree a little	Agree	Agree strongly

_____1. I can get him/her/them to listen to what I say.
_____2. My wishes do not carry much weight. (r)
_____3. I can get him/her/them to do what I want.
_____4. Even if I voice them, my views have little sway. (r)
_____5. I think I have a great deal of power.
_____6. My ideas and opinions are often ignored. (r)
_____7. Even when I try, I am not able to get my way. (r)
_____8. If I want to, I get to make the decisions.

We have used the Sense of Power Scale with the following instructions:

Specific interaction:
   In the negotiation . . .
   (*Note*. All items were written in the past tense when assessing prior specific interactions.)

Relationship (multiple interactions):
   In my relationship with my friend . . .
   In my relationship with my mother . . .
   In my interactions with my TA . . .
   In my interaction with my date . . .
   In my interactions with my supervisor . . .

Group (multiple relationships):
   In my sorority . . .
   In my dormitory floor . . .

Generalized (all relationships, groups):
   In my relationships with others . . .