

Interpersonal Power: A Review, Critique, and Research Agenda

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ABSTRACT

Power is a fundamental force in social relationships and is pervasive throughout various types of interactions. Although research has shown that the possession of power can change the powerholder, the full extent of power's consequences on individuals' decision making capabilities and social interactions within organizations is not fully understood. The goal of this paper is to review, synthesize, and critique the literature on power with a focus on its organizational and managerial implications. Specifically, we propose a definition of power that takes into account its three defining characteristics—having the *discretion* and *means to enforce* one's will—and summarize the extant literature on how power influences individuals' thoughts, emotions, and actions both in terms of prosocial and antisocial outcomes. In addition, we highlight important moderators of power and describe ways in which it can be studied in a more rigorous manner by examining methodological issues and pitfalls with regard to its measurement and manipulation. We also provide future research directions to motivate and guide the study of power by management scholars. Our desire is to present a thorough and parsimonious account of power's influence on individuals within an organizational context, as well as provide a foundation that scholars can build upon as they continue to make consequential contributions to the study of power.

Keywords: Power; control; agency; priming; incentives; endogeneity; corruption; process model

INTERPERSONAL POWER: A REVIEW, CRITIQUE, AND RESEARCH AGENDA

Power is a basic force in social relationships (Russell, 1938). Power thus plays a vital role in economic, political, and social interactions and is an omnipresent force in organizations (Fehr, Herz, & Wilening, 2013; Rucker & Galinsky, 2008). The effects of power at times appear to be paradoxical (DeCelles, DeRue, Margolis, & Ceranic, 2012). That is, the possession of power usually engenders a sense of entitlement (Kipnis, 1972) yet its consequences are not always predictably negative (Chen, Lee-Chai, & Bargh, 2001). It seems that not only can the possession of power profoundly change the powerholder, but that power also affords individuals with the freedom to self-express (Anderson & Berdahl, 2002; Keltner, Gruenfeld, & Anderson, 2003). Consequently, individual-level variables may determine whether power engenders positive or negative outcomes.

The notion that power is a corruptive force has interested philosophers for centuries. Plato (1901) believed it important to exclude from office individuals who would be tempted to use power for self-serving reasons; only those with a highly developed sense of justice should be allowed to exercise power. For Plato, rulers should be carefully chosen and developed to govern, because those who seek power as an end would be easily corrupted (see also Williamson, 2008). Plato's insights are important because as will become evident in this review, we must disentangle the effect of power from the predisposition to seek it in order to understand power's impact on individuals, groups, organizations, and society.

Scholarly examination of the properties and outcomes of power has, however, only fairly recently begun in management studies (e.g., Seppälä, Lipponen, Bardi, & Pirttilä-Backman, 2012). In addition, much of the research on power has focused on declarative information that pertains to features of a target while neglecting the importance of subjective and more automatic

experiences (e.g., feelings) that accompany having power (Weick & Guinote, 2008). Also, how actual power may change individuals in incentivized conditions, which sets individual gain against the common good, has been neglected (Bendahan, Zehnder, Pralong, & Antonakis, 2014). Furthermore, what we know about power's negative effects (e.g., corruption) has not been studied in a very rigorous manner: much of the research that has been undertaken experimentally has confounded power manipulations with experimental demand effects (cf. Zizzo, 2010).¹ Additionally, much of the fieldwork does not rule-out possible selection effects and endogeneity (i.e., those who are corrupt may seek power making it difficult to tease out effects of individual dispositions from the effects of power, see Antonakis, Bendahan, Jacquart, & Lalive, 2010). As a result of such limitations, the full gamut of power's consequences on individuals' decision making capabilities and social interactions is not fully understood.

Given the vast literature on the topic, the first goal of our review is, therefore, to take stock of the literature on power in social contexts, focusing particularly on its organizational and managerial implications. We delimit our review to the micro-oriented psychological and interpersonal processes related to the possession of power. Although our review will not detail structural and institutional considerations of power, it will touch upon relevant macro-oriented perspectives in order to broaden our understanding of the dynamics of power. Our second goal is to provide a more targeted review that aims at fleshing out the "tough issues" of the power literature that are usually avoided (e.g., measurement issues, endogeneity); although we commend past scholarly efforts in providing key insights into the antecedents and consequences of power, we invite other types of methodologies, particularly from the economics discipline, to build upon this knowledge base in order to improve the ecological validity of findings and policy relevance (e.g., by giving participants real power, in real stakes situations and varying

consequential parameters that have real-world analogs). In order to accomplish our goals, we limit our review to defining power, which has important consequences for operationalizing and measuring it; we also summarize and integrate past and recent findings on power from several disciplines, discuss limitations regarding manipulations of power and the measurement of its ostensive corruptive nature, and suggest research directions.

We organized our article in five major sections. First, we review past definitions of power while also describing its antecedents. Because power has been studied as a state, trait, and psychological experience, there have been differences in regard to how scholars have operationalized and subsequently measured power. We seek to address some of this conceptual confusion by presenting a clear and concise definition of power. Second, we demonstrate how the possession of power can change the powerholder in systematic ways by organizing the most salient research trends on the experience of power through a cognition-affect-behavior (CAB) approach. Thus, we seek not to provide an exhaustive review of all of the findings in the extant literature, but instead offer a representative summary of the literature on the effects of power. In the third section, we summarize possible moderators, as well as subsequent consequences of power to illustrate how power can facilitate self-expression in powerholders. Although the relationships between power and certain outcomes appear to be well understood, results have been contradictory; some of these inconsistencies may be explained by possible individual (e.g., moral identity), group (norms), organizational (e.g., rules) or country (e.g., legal origin) level factors. Fourth, we examine the methodological issues and concerns surrounding the manipulation and measurement of power, as well as how to measure outcomes of power. Lastly, we propose a future research agenda on studying power within organizations for management scholars.

INTERPERSONAL POWER DEFINED AND DELINEATED

For the purposes of this review, we take an interpersonal or social approach to power; this perspective extends notions of personal power, which represents one's ability to act for oneself with agency, into the social domain (Overbeck & Park, 2001). Interpersonal power (henceforth power) then involves both power over and freedom from others' influence, and the decision right to decide one's own fate (Fehr et al., 2013; Lammers, Stoker, & Stapel, 2009).

A Definition of Power for Management Scholars

Power has been defined in an array of ways (Koning, Steinel, van Beest, & van Dijk, 2011). It has been defined in terms of antecedents, units of analysis, actor's intentions, target's responses, and outcomes of interest, and it has been measured in terms of dependency, influence, resistance, and the modification of others' states (cf. Keltner et al., 2003). Yet, definitions that use antecedents or outcomes of power are limited because they do not articulate the nature of the phenomenon (MacKenzie, 2003). A suitable definition of power then identifies the key conceptual denominators that capture the essence of this phenomenon. Accordingly, it is important to provide a clear and concise definition of power, which will necessarily determine what power is and how it should be measured (or manipulated).

For organizational scholars interested in studying power, we propose the following general definition of power, covering both personal and interpersonal power: *Power is having the discretion and means to asymmetrically enforce one's will over entities*. Of course, the term "entity" can be applied to various levels of analysis (viz. at the individual, group, organizational, cultural, country level). Given that we are focusing on interpersonal power our definition can be further delineated to: *Power is having the discretion and the means to asymmetrically enforce one's will over others*. Discretion refers to the latitude of action available to powerholders (refer

to the upper-echelons literature, e.g., Hambrick & Finkelstein, 1987) and the means through which this discretion operates can include charisma, incentives, expertise, punishment, and so forth. What one wills has to do with regulating or controlling aspects of one's environment, including others.

Below, we review how power has been previously operationalized in order to provide support and evidence for our definition of power.

The Defining Characteristics of Power

In Table 1, we list definitions of power gleaned from the literature; from the basis of these definitions, we have extracted the essence of what power is². There are three essential characteristics that emerge from previous definitions of power: power is about having (a) *discretion* (agency) to act and (b) the *means* (innate, position) to (c) *enforce* one's will. That is, a powerful agent is one who can exogenously impact his or her environment or others at will.

Insert Table 1 about here

Some of the earlier thinking on the three essential characteristics of power arose from the field of sociology. For example, Weber's (1947) definition of power as the probability that a person can carry out his or her own will despite resistance has provided the initial foundation for most conceptualizations of power. This definition suggests that power could represent an ability of a person—the ability to influence others and make them do things they would not do otherwise. Whereas individuals represent the locus of Weber's definition of power, other sociological conceptualizations of power take a more “structuralist” (i.e., Marxian) approach. This perspective emphasizes how “power centers” (i.e., leaders) of the organization attempt to influence workers as well as the ensuing social coercion and conflict between powerholders and

workers (Etzioni, 1964). The focal point may shift in these differing operationalizations of power; however, it is apparent that power is a force for influence (Lewin, 1951/1997), generally social influence.

Whereas power has been conceptualized as an ability (e.g., Weber, 1947), it has also been conceptualized as a property of a social relation (Emerson, 1962). The power of an actor A over actor B is the amount of resistance on the part of B which can be potentially overcome by A (Emerson, 1962: 32). Power is therefore a function of the extent to which actor B is dependent upon actor A for scarce and valuable resources. Thus, A becomes more powerful when B is more dependent on A. Also, power is not static, but instead is a force that interacts with contextual factors and individual difference variables (Chen et al., 2001); as such, it has broad implications too for the evolution of social networks in organizations (Friedkin, 2011).

Our definition of power integrates these past sociological perspectives of power by including characteristics of both discretion and properties of the social relationship, including the means through which power is gained and enforced. However, we recognize that the possession of power is different from how power is gained (e.g., the antecedents of power).

Delineating Power from Antecedents and Related Constructs

One of the classic conceptualizations of the determinants of power is French and Raven's (1959) bases of power which include: reward, coercive, referent, expert, and legitimate. According to French and Raven for example, one's position in a formal hierarchy (i.e., legitimate authority) is a sociostructural variable that can lead to power (e.g., head coaches of NFL teams have power over their players due to their position as coach). Some of these bases of power, such as reward power, relate directly to control over valued resources—a manager controls a

subordinate's salary and promotion—whereas others, such as referent (e.g., charismatic power), do not.

Power differences can also arise from basic human motives, social exchange processes (e.g., bureaucratic structures and political coalitions), and individual-difference variables including authoritarianism and motivational style (Anderson & Brion, 2014; Galinsky, Gruenfeld, & Magee, 2003). Rucker, Galinsky, and Dubois (2012) organize the antecedents of power according to structural, cognitive, and physical factors. Structural factors include social roles (e.g., a parent, employee, community volunteer, etc.) that can create shifts in the experience of power if there is a temporary change in structure (e.g., a workaholic may feel powerful at work but relatively powerless coming home to a spouse who disapproves of the exorbitant amount of time spent at work). Cognitive factors suggest that power is embedded within individuals (Rucker et al., 2012) and can be activated through semantic priming, such as having individuals unscramble sentences containing words related to power (Smith & Trope, 2006). An individual's accrual of power can also be influenced by environmental or physical factors as well as the positioning of one's body (e.g., posing, Carney, Cuddy, & Yap, 2010; Cuddy, Wilmuth, & Carney, 2012). Our definition of power takes these different “levers” of power into account by using the term “means” to indicate that power can be gained and enforced through different mechanisms (such as sitting in a higher status chair).

Power has also been linked to constructs such as status, authority, and dominance (see Anderson and Brion, 2014; Keltner et al., 2003), which again, are different from power. For example, Blader and Chen (2012) found status to be positively related to justice toward others, whereas power was negatively related to justice toward others. In addition, power is distinct from influence and resistance, which can be overcome or act as a hindrance to the powerholder

(Magee & Galinsky, 2008); Magee and Galinsky argue that power does not necessitate some sort of action by either party and that by defining power as influence is tautological, wherein the independent and dependent variables are conflated. Indeed, we agree that influence is an outcome of power.

Although it is outside the scope of this review to detail the differences between power and related constructs, it is important to recognize that the operationalization of power is related to constructs such as dominance, but that it is a distinct phenomenon that warrants its own study.

How Power Manifests Itself in Social Interactions

Drawing from the field of social psychology, organizational scholars have frequently operationalized power as realized outcome control (Overbeck & Park, 2001), specifically as control over valued resources. For example, Magee and Galinsky (2008) define power as asymmetric control over valued resources in social relations and Keltner et al. (2003) define power as an individual's relative capacity to modify others' states by providing or withholding resources or administering punishments. We think though, that some of these conceptualizations of power are problematic. The sine qua non of power is not about one party controlling valued resources over another in a social relationship.

According to French and Raven (1959: 259), "the processes of power are pervasive, complex, and often disguised in our society" and are not limited to intentional acts of the powerholder (such as administering a punishment); for instance, the passive presence of the powerholder alone (e.g., the mere presence of a celebrity in the same restaurant as you or a police officer wearing his uniform to a bar) can induce change in individuals that coincides with the powerholder's will. Hence, narrowing the conceptualization of power to "control over valued resources," limits our understanding of the qualitatively different variables, including

psychological factors or cultural variables, which may enable powerholders to exert their will on others. For example, if Actor A makes a promise to help Actor B and if Actor A values her word too much to break the promise and actually helps Actor B during his time of need, then Actor B has power over Actor A. Moreover, if men are allowed to vote in a certain society and women are not, then men have more power than women—that is, men can exert their will through their votes—because of their gender and other cultural injunctions.

Power can result from referent or symbolic sources too (Etzioni, 1961; French & Raven, 1959). For instance, charismatic leaders can induce followers to do things that they would not do otherwise and this purely for reasons of intrinsic motivation. In fact, French and Raven (1959) assert that a powerholder can exert their will on another person without that person even being aware (of this referent power). Additionally, power can even be informal (Etzioni, 1964), which does not necessitate control over resources. For instance, in a work group, an individual can exert power even if he or she is not in the position of manager. Consequently, from this perspective, the typical requirement that power should be defined as control *over resources*, such as reward or the coercive component of power (e.g., Galinsky et al., 2003; Jordan, Sivanathan, & Galinsky, 2011; Magee & Galinsky, 2008; Rucker, Dubois, & Galinsky, 2011), is necessarily restrictive. Moreover, power over others can operate from a distance (Antonakis & Atwater, 2002; Shamir, 1995) and does not require that there even is an interpersonal relationship between the individuals concerned (e.g., political leaders).

Furthermore, power does not necessitate having a social relationship per se given that one can have the power to alter organizational-level variables that impact individuals (Hambrick & Mason, 1984); in the leadership literature this type of influence is usually referred to as leadership *of* organizations (Hunt, 1991). As a result, instead of focusing on control in our

definition, which is closely related to influence, we see power as involving the discretion and means to enforce one's will over entities, including others. Specifically, we see power as involving "power to" or the "production of intended effects" (Overbeck & Park, 2001: 550) and "power over" which involves compelling others to do what one wants them to do (Dahl, 1957), thereby having the capability to induce change in them (Overbeck & Park, 2001: 550).

Whereas it is broad, our definition of power is appropriate when conducting research in management because it illustrates the interactive property of power—when applied to interpersonal situations—as a social process and not as a position. Our definition allows power to become available through multiple sources such as charisma and expertise because it involves a "means" and it takes into account the potential to enforce one's will and the element of discretion that powerholders have over others in the workplace.

WHAT DOES POWER DO TO THE POWERHOLDER?

Flynn, Gruenfeld, Molm, and Polzer (2011) assert that psychologists studying power have focused their recent research efforts on understanding the following question: "What is it like to have power?" (p. 495). This approach to studying power has spurred related empirical research in the management forum on how the individual powerholder might change as a result of possessing power (Jordan et al., 2011; Keltner et al., 2003). Given the vast array of findings in the extant literature on this topic, the goal of this section is to provide a representative summary of how power can change the powerholder—as opposed to providing an exhaustive list of findings. We therefore organized a variety of past findings on this topic by categorizing them into one of three groups: cognition, affect, and behavior. We present Table 2 as a way of highlighting a few of the characteristic findings on how power can influence an individual's thoughts, emotions, and actions.

Insert Table 2 about here

Power and Cognition

Much of the past research examining power's influence on people has studied how power impacts cognition or how people process information (Guinote, 2007). In general, power induces a simplified processing orientation that emphasizes single sources of information as well as reliance on ease of retrieval (Goodwin, Operario, & Fiske, 1998; Lammers & Stapel, 2009). A number of scholars for instance, have found power to promote stereotyping (Fiske, 1993; Fiske & Dépret, 1996; Overbeck & Park, 2006; Vescio, Snyder, & Butz, 2003; Weick & Guinote, 2008). Information processing, however, is affected via two routes: Individuals who have power (e.g., leaders) must rely on stereotyped information processing by (a) default (i.e., because of scarce cognitive resources) and by (b) design (i.e., to legitimize their power differentials, see Goodwin et al., 1998; Goodwin, Gubin, Fiske, & Yzerbyt, 2000).

In addition to inducing stereotyping and ease of retrieval of information, power leads to more global processing and prevents distraction by details. Smith and Trope (2006) found that powerful individuals focused on the important, central aspects of an event or object and tended to process information at abstract rather than concrete levels. Hence, powerholders may be better at extracting the gist from incoming information (Smith & Trope, 2006: 591); they also tend to use universalistic instead of particularistic decision-making principles (e.g., powerholders tend to emphasize moral rules and are less inclined to make exceptions to those rules than are low power individuals, who focus on outcomes, Lammers & Stapel, 2009).

That power tends to make powerholders less individuating (Erber & Fiske, 1984) may explain why they tend to be more hypocritical (Lammers, Stapel, & Galinsky, 2010) and less

likely to take others' perspectives into account (Galinsky, Magee, Inesi, & Gruenfeld, 2006). Lammers et al. (2010) found that powerholders were more likely to impose strict moral standards on others and to judge others more strongly while practicing less strict moral behavior themselves. Galinsky et al. (2006) had participants write the letter "E" on their foreheads; participants primed with high power wrote the letter in the correct direction for themselves but the letter was backwards for everyone else (those primed with low power wrote the letter in the correct direction for everyone else); however, other research has suggested that power can actually increase perspective taking (Hall, Coats, & LeBeau, 2005; Mast, Jonas, & Hall, 2009).

Power also facilitates confidence-inducing states. Using an experimental design, Fast, Sivanathan, Mayer, and Galinsky (2012) found that high power individuals were more likely to overestimate the accuracy of their knowledge and to assign narrower confidence intervals for their answers compared to low power individuals (i.e., when asked to provide a range of numbers to the extent to which they were 95% certain they had the correct answer, high power participants provided a smaller range of numbers). Moreover, Inesi (2010) demonstrated that powerholders were less loss averse because power reduces the anticipated threat associated with loss; thus, power reduces the negative anticipated value of losses.

Power and Affect

Affect primarily involves energy transformations and represents a discrete reaction precipitated by a specific event. Even though individuals' "first level of response to the environment is affective" (Ittelson, 1973: 16), this area is understudied when it comes to power. Only a handful of studies have examined how power influences individuals' emotions.

In general, high power individuals are inclined to experience and express positive affect, including desire, enthusiasm, and pride (Keltner et al., 2003) as well as optimism (Anderson &

Galinsky, 2006; Fast, Sivanathan, Gruenfeld, & Galinsky, 2009). Those who were randomly assigned to lead discussion groups about a controversial social issue experienced more positive emotions, such as happiness and interest, compared to low power participants who reported experiencing more negative emotions such as discomfort and fear (Berdahl & Martorana, 2006). Using a fraternity hierarchy to identify high versus low power individuals (active brothers were defined as having high power whereas recently initiated members were defined as having low power), Keltner, Young, Heerey, Oemig, and Monarch (1998) found that powerful individuals were more likely to display smiles of pleasure than were low power individuals. Moreover, Kemper (1991) linked power to emotional display and found that sadness (compared to joy/happiness, fear, and anger) was more difficult to detect in powerholders. Additionally, van Kleef and colleagues (2008) found power to be associated with a decrease in reciprocal emotional responses to another person's suffering (i.e., high power individuals felt less distressed even though the other person was distressed) and with reduced complementary emotion (i.e., high power individuals had less compassion); such results may help explain why powerholders are inclined to experience and express positive affect more so than others do.

Power and Behavior

Although it is important to examine both cognitive and affective aspects of how power impacts individuals, policy makers are normally interested in actual behavior—how power influences people's actions. Generally, research has shown that power increases an action orientation and thus leads directly to the taking of action for those who possess it (Galinsky et al., 2003; Gonzaga, Keltner, Londahl, & Smith, 2001; Keltner et al., 2003; Magee, Galinsky, & Gruenfeld, 2007). Magee et al. (2007) found that powerful individuals exhibited a greater propensity to initiate a negotiation and Galinsky et al. (2003) found that participants in positions

of high power were more likely to act and move an annoying fan during an experiment (even though it was unclear whether or not they were allowed to do so).

High power individuals may also be more sensitive to potential gains compared to low power individuals (Keltner et al., 2003) and thus, may be more likely to approach rewarding outcomes and use other individuals to achieve personally rewarding outcomes (see Chen et al., 2001; Gruenfeld, Inesi, Magee, & Galinsky, 2008). In a marketing context for example, Rucker et al. (2011) found that high power consumers spent more money on themselves. As a result, it seems that power may make individuals behaviorally more selfish, even corrupt. Bendahan et al. (2014) support this latter assertion by demonstrating that high power individuals are more prone to using power to violate social norms and serve themselves (i.e., increase their monetary payoffs) to the detriment of the common good (i.e., destroy public wealth). Such behavior occurs because high power individuals tend to depend less on others (Emerson, 1962) and feel more distant from others (Magee & Smith, 2013), among other psychological processes that may buffer powerful individuals from experiencing guilt when knowing that they are violating social norms (Bendahan et al., 2014).

Research suggests too that powerholders show more variable and less normative behavior (Galinsky, Magee, Gruenfeld, Whitson, & Liljenquist, 2008; Murali & Yang, 2013). Galinsky et al. (2008) found that powerholders express themselves more freely and generate creative ideas that are less influenced by salient examples. Also, consumer behaviorists showed how power enhances consumers' ability to resist social influence (Murali & Yang, 2013). Power has also been linked to risk-seeking behavior; participants with a high power mind-set took more risks in a face-to-face negotiation by disclosing their interests because they perceived the chances of success as greater (Anderson & Galinsky, 2006). Related research shows that powerholders are

more likely to engage in touching (Guinote, Judd, & Brauer, 2002) and flirting behavior (Keltner et al., 2003). That is, power affords individuals more degrees of liberty in behavior.

MODERATORS AND CONSEQUENCES OF POWER

Whereas the preceding discussion demonstrates that power can change the powerholder in systematic ways, it also shows that power tends to liberate individuals to take action to achieve rewarding outcomes. Accordingly, power seems to trigger action consistent with one's goals (Anderson & Berdahl, 2002; Malhotra & Gino, 2011; Overbeck & Park, 2006). Hence, those who experience power are more likely to act in accordance with their desires and to satisfy their own needs (Galinsky et al., 2003). The possession of power also appears to magnify responses in line with dispositions of the person (Chen et al., 2001; Weick & Guinote, 2008). These findings perhaps explain how power can corrupt because it encourages individuals to place greater importance on their own self-interests. Kipnis (1976) argued that repeated exercise of power can lead to vainglorious self-concepts whereas Lord Acton asserted "power tends to corrupt, and absolute power corrupts absolutely" (Acton & Himmelfarb, 1948: 335-336).

Taken another way though, this self-anchoring characteristic of power (Overbeck & Drouman, 2013) suggests that the experience of power changes individuals in ways that can be either positive or negative in the workplace by activating individuals' underlying traits or attributes. That is, if individuals are morally inclined, power may actually facilitate ethical choices. This is so because individual differences should be stronger predictors of behavior in "weak" situations (Barrick & Mount, 1993); such situations are characterized by providing individuals the freedom to express their behavior or attitudes. Given that power affords one with discretion or autonomy in the decision-making process, and that the amount of discretion on the job has been used as a proxy for conditions that "permit individual differences in personality to

be expressed” (Barrick & Mount, 1993: 112), power can create “weak” situations that facilitate powerholders’ self-expression (Bendahan et al., 2014). For example, the psychological experience of power was associated with less self-interest for individuals who had a strong moral identity (DeCelles et al., 2012) and communally oriented individuals who were given power acted more altruistically (Chen et al., 2001).

Although the possession of power makes individuals likely to act upon their preferences (Overbeck & Droutman, 2013), it is not clear whether the outcome will be positive for either the powerholder or the common good. This tension between determining what is good for the individual compared to what is good for the group is well recognized in sociobiology but less so in management forum (Pfeffer, 2013). The trade-offs between individual and collective well-being create a paradox related to self-interest for powerholders within organizations—powerful individuals can become corrupt when they act solely in their own self-interest and neglect the common good; contrarily though, there is evidence that powerholders might focus on others’ needs as opposed to their own interests (DeCelles et al., 2012). To untangle the complexities of this paradox, it is important to understand what variables (i.e., moderators) might influence the consequences of power on interpersonal dynamics.

Figure 1 presents a model of interpersonal power which identifies possible moderators at the individual, group, organizational, and country levels that can influence the relationship between power and its consequences.

Insert Figure 1 about here

Individual-Level Moderators

Past research examining moderating variables of power has concentrated on the individual-level (i.e., the traits or dispositions that a person possesses that can influence how they react to possessing power). Utilizing a field survey of working adults and a lab experiment with students for example, DeCelles et al. (2012) found the psychological experience of power to be associated with greater (or lesser) self-interest only in the presence of a weak (or strong) moral identity. Moral identity is the extent to which an individual holds morality as part of his or her self-concept (Aquino & Reed, 2002). DeCelles et al. further explain that this effect occurred through moral awareness, that is, a weak moral identity decreased moral awareness, which in turn facilitated self-interested behavior.

In addition to moral identity, other individual-level moderating variables that have been linked to power include the powerholder's communal versus exchange orientation (Chen et al., 2001) as well as having an "other orientation" (Blader & Chen, 2012). Chen et al. (2001) found that when given power, communally-oriented individuals—those who primarily focus on responding to the interests and needs of others—acted in a more altruistic fashion. However exchange-oriented individuals—those who focus on keeping "tally" of the ratio to which they give and receive benefits from others—acted in self-serving ways. Building on Chen and colleague's research, Blader and Chen (2012) found power to be negatively associated with justice toward others when the powerholder did not hold an "other orientation"; hence, powerful individuals were less likely to treat others fairly when they were not predisposed to be attentive to social relations and to have concern for others.

In addition to having a predisposition to focus on others, activity or responsibility disposition, a psychosocial motive, has also been identified as a potential moderator of the power motive in leaders; individuals high on this variable are concerned with expressing their power in

socially responsible ways (Winter & Barenbaum, 1985). Indeed, CEO's high on the power motive were more effective as measured by corporate-level outcomes (i.e., return on average equity) only when responsibility disposition was coupled with high levels of need for power (Jacquart, Antonakis, & Ramus, 2008).

Biological variables like testosterone, which predicts antisocial behavior in a variety of situations, may also play a role (Dabbs & Dabbs, 2000). Although few studies have been conducted in this area, recent evidence suggests that baseline levels of testosterone moderate the effect of exogenously given power on outcomes by enhancing power's corruptive effects, with corruption highest when testosterone and power are both high (Bendahan et al., 2014).

Group-Level Moderators

Some research has related intragroup characteristics to the consequences of power (see Anderson & Brion, 2014). For example, Seppälä and colleagues (2012) identified the important role that group identification plays in the relationship between power and change-oriented organizational citizenship behaviors (OCBs), which represent constructive efforts of an employee to recognize and produce changes to workplace practices. Specifically, the authors found that employees' self-rated sense of power interacted with their work unit identification and openness to change values to predict supervisor-rated change-oriented OCBs. Their findings suggest that powerholders who highly identify with their work units are inclined to pursue their openness to change values in ways that lead to organizational success.

Organizational-Level Moderators

At an organizational level, Pitesa and Thau (2013) examined the interaction between power and institutional arrangements (i.e., how accountable the powerholders are for their actions) on self-interested decisions within a financial investment context. The authors were

particularly interested in understanding the nature of moral hazard, which occurs when economic agents have the potential to maximize their own utility to the detriment of others in situations where they do not bear the full consequences of their actions (Kotowitz, 2008). Pitesa and Thau maintained that whereas powerful individuals were inclined to behave in a self-interested manner, this behavior was attenuated when the appropriate accountability mechanisms were in place. Specifically, when powerholders were held accountable for their decision-making procedures, the level of their self-interested decisions under moral hazard decreased. In addition, Core, Holthausen, and Larcker (1999) found that CEOs were paid more and that their firms performed more poorly if the firms had weak governance structures. Interestingly too, Anderson and Galinsky (2006) found that when powerful individuals felt a sense of responsibility for their decisions, they were less inclined to make risky decisions. Hence, it appears that accountability or having a sense of responsibility are important moderating variables at the organizational level that can influence the effects of power.

Country-Level Moderators

As for macro-level variables, it appears that legal or cultural-level factors may affect the extent to which power is used to serve the public good. For example, the legal origin of countries (i.e., based on common law, Napoleonic code, etc.) has been shown to directly affect the quality of institutions and hence corruption (La Porta, Lopez-de-Silanes, Shleifer, & Vishny, 1999; La Porta, Lopez-De-Silanes, & Shleifer, 2008). Moreover, having a higher proportion of females in positions of legislative and executive power, presumably a function of cultural-level factors, reduces corruption at a country level (Swamy, Knack, Lee, & Azfar, 2001). Although beyond traditional organizational behavior research perspectives, using macro-level data in multilevel

moderator models to studying firm behavior could provide some interesting insights into power's effects on organizational outcomes.

To summarize the above section on moderators, power represents a double-edged sword—it can lead to both prosocial and antisocial outcomes—depending on who the powerholder is (e.g., their traits, dispositions, goals) and the context in which the power is exercised (e.g., accountability mechanisms, legal origin). Research has linked power to *positive* outcomes such as altruism (Chen et al., 2001), OCBs (Seppälä et al., 2012), and the tendency to avoid self-interested decisions during times of moral hazard (Pitesa & Thau, 2013); however, these positive outcomes are contingent on whether or not powerholders focus their attention on others (e.g., communally-oriented), identify with their work units, and are held accountable for the decisions they make, respectively. Power has also been linked to *negative* outcomes including corruption (Bendahan et al., 2014), withholding valuable information from group members (Manner & Mead, 2010), withholding effort from tasks (DeWall, Baumeister, Mead, & Vohs, 2011), and being morally hypocritical and judging others' actions harsher (Lammers et al., 2010); yet, some of these negative outcomes may depend on whether or not powerholders have a high baseline level of testosterone, a dominance motivation, believe a task to be unworthy of their effort, and hold positions of illegitimate (as opposed to legitimate) power, respectively.

MANIPULATING AND MEASURING POWER

As evidenced by the preceding sections, there is a vast body of research on power. However, there are two major issues that temper what conclusions we can draw from part of this research. The first issue concerns the manipulation and measurement of power in experimental settings and the second concerns the measurement of power in field settings. Experimental settings are key to studying power in a causal way because correlating power with outcomes

(e.g., corruption) in field settings makes it difficult to deal with selection effects, social desirability, and endogeneity (Antonakis et al., 2010). Random assignment can of course, deal with these issues; yet, many of the experimental studies suffer from having used confounded manipulations (engendering demand effects, discussed below).

Note too that for Flynn et al. (2011), a significant question that scholars must address, which has important implications for the manipulation and measurement of power, is whether the consequences of feeling powerful are distinct from the consequences of being powerful (i.e., having real power). “Feeling powerful” studies are the mainstay of psychology; Galinsky et al. (2003) for instance, assume that power is experienced by most individuals at one time or another and that this experience can be activated by having people think about a time they had power. Whereas we agree that there are important implications of studying the consequences of feeling powerful, it is likely that some of the effects observed in the literature may be biased from confounding effects and/or may not be reproducible because no real power is given and decision-making outcomes have little or no ecological validity—this issue particularly concerns organizational-related outcomes of power.

As a result, we invite other manipulations of power that seek to provide management scholars with a more realistic account of the outcomes of power because management research more directly affects business policy than does psychology research. In addition, we encourage the use of other methodologies so that researchers can eventually conduct a meta-analysis on the different methodologies and findings pertaining to power in order to see how findings may vary (note, even if the effects of “feeling powerful” manipulations are found to be similar to the effects of real power manipulations, it does not imply that the “feeling powerful” effects are real). Currently, there are very few studies that have manipulated power in consequential ways,

which is why we provide some guidelines for how researchers can address this issue. Yet, researchers probably believe that they face a conundrum: study power in relatively low-fidelity psychological experimental settings (which do not involve actual consequential power to make real decisions over others) or study real power in the field (wherein it is difficult to disentangle the effects of endogeneity); we believe that this tradeoff is actually unnecessary, as becomes evident below.

Manipulating Power

Possible problems with the power “prime”. Studying power in experimental settings has contributed to many interesting findings. However, given the way in which power has been manipulated, it will become evident that the results of some of these findings may be questionable. Psychological studies often manipulate power by “priming” individuals (also called a “recall” task by the authors) to think of times they were powerful and then write about it. This power manipulation is very common (e.g., Briñol, Petty, Valle, Rucker, & Becerra, 2007; DeCelles et al., 2012; DeWall et al., 2011; Galinsky et al., 2003; Inesi, Botti, Dubois, Rucker, & Galinsky, 2011; Lammers & Stapel, 2009; Lammers, et al., 2009; Rucker & Galinsky, 2008; Rucker et al., 2011) and is attractive to researchers because of its low implementation cost (i.e., it is cheap to employ); similar manipulations have been achieved by prompting participants to “Remember a time you felt powerful?”, or having participants read about a high-power individual (e.g., boss) and then imagine how they would feel, think, and act in this role (Inesi et al., 2011; Malhotra & Gino, 2011). Power has also been primed through role-playing scenarios, where participants have been asked to play the role of a supervisor (high power) or an employee (low power) (e.g., Anderson & Berhahl, 2002; Brinol et al., 2007; Inesi et al., 2011).

According to Flynn et al. (2011: 498), “Unfortunately, results derived from [such methods] often are difficult to interpret in real terms.” To see why, and focusing on the recall task, typical instructions given to participants include a variant of the following:

“Please recall a particular incident in which you had power over another individual or individuals. By power, we mean a situation in which you controlled the ability of another person or persons to get something they wanted, or were in a position to evaluate those individuals. Please describe this situation in which you had power – what happened, how you felt, etc.” (Galinsky et al., 2003).

One type of manipulation (i.e., treatment) check of this power prime is to have blinded coders count power themes present in the essay and compare this frequency to either a low-power condition (in which subjects are asked to write about a time when they were in a subordinate position, which is also demand-effect plagued) and/or a control condition (in which subjects usually write about something banal like what they did yesterday). The recall task treatment condition or the role-playing task though cannot establish that *only* power was manipulated. Such manipulations are not ecologically valid because they may induce demand effects; that is, “the subject’s awareness of the implicit aspects of the psychological experiment may become the principal determinant of [the subject’s] behavior” (Orne, 2009: 111). Subjects have received cues “which communicate what is expected of [them] and what the experimenter hopes to find” (Orne, 2009: 112).

As is evident, the above manipulation makes salient to participants the purpose of the experiment, which creates expectations for them on how to behave (i.e., in a manner that is representative of the demand; that is, the subjects are made aware that power is being manipulated and will thus act according with how they think they are expected to act). Demand

effects can be problematic and confound outcomes if correlated with the treatment, which is the case when the subject is “primed” in an explicit and obvious manner. With such a manipulation (recall task or role play) subjects are merely doing what is asked of them, which makes prominent “how the subjects’ *expected* experimental objectives and corresponding actions *relate to the true* experiment objectives by the experimenters” (Zizzo, 2010: 86). In this case of the aforementioned treatments, the demand effects are “positively correlated with the true experimental objectives” (Zizzo, 2010: 88). Hence, results are confounded: is the subject’s behavior due to the manipulation or to the demand effect? A definite answer is not clear.

To put this problem into context, suppose we manipulate power, p (high power = 1; else = 0), and we observe a decision, d (selfish decision = 1; else = 0). Subject A, who has been told to write about power probably knows what the experiment is about; subject B, who was told to write about something banal (what she did yesterday), does not. When faced with a hypothetical decision regarding a power-related theme, would subject A and subject B behave different merely because of their knowledge of the point of the experiment? We think yes, particularly if the theme is about power (and not a cognitive task like a Stroop Task). Subject A is more likely to know what the experiment is about and may act in accordance with what she thinks is stereotypically expected of her in the situation that she is in; that is, A will act in a more script-concordant manner (see Abelson, 1981). Subject A will act how she thinks powerful individuals would have acted in that particular situation given that the script has been invoked (started) when writing about being powerful; given her commitment to having written the essay, the natural reaction of Subject A is thus to finish the script (Abelson, 1981) and behave in a cognitively consistent manner. However, subject B has no idea what the experiment is about and does not know what the experimenter is looking for; she cannot act in a scripted manner with respect to

the situation she is in because what has been invoked by the manipulation she is in (what she did yesterday) has nothing to do with the situation in which she has been put (power theme). Hence, the demand effect positively correlates with the manipulation inducing $\text{corr}(p, d) > 0^3$.

In addition, the treatment (manipulation) check often used in power primes is nothing of the sort—treatment checks are meant to establish if the treatment had its intended effect and not whether the subject recalled the treatment (cf. Sigall & Mills, 1998) or did what they were asked to do (i.e., write an essay on a time they were in power). Additionally, explicit manipulation checks (e.g., “do you feel powerful”) if measured before the outcome variable might also induce demand effects; if measured after the outcome, they may be answered in a demand-induced manner, which is why “external manipulation” checks, using another sample, may be more appropriate (see Bendahan et al., 2014). Moreover, such “priming” manipulations oftentimes do not involve real stakes having real-life consequences at hand (cf. Flynn et al., 2011) and thus, have not actually aligned with conceptualizations of what power is.

Power primes à la Bargh. In social psychology, primes, as originally intended by Bargh (e.g., Bargh & Chartrand, 1999, 2000; Bargh & Pietromonaco, 1982; Bargh, Raymond, Pryor, & Strack, 1995), are unobtrusive and induce non-conscious information processing creating limited or no demand characteristics. The primes used are supposed to trigger mental representations—beyond the subjects’ awareness—that influence attitudes and behaviors as a result of treatment. Bargh and colleagues have amassed an impressive body of evidence of demonstrating robust effects for this priming paradigm across various phenomena; specifically, these researchers go to great lengths to ensure that subjects are not aware of the manipulations so as to ensure interpretable treatment effects, which are not confounded with demand effects (e.g., Higgins, Bargh & Lombardi, 1985). An example of such primes include getting participants to sit in the

chair of a high-status individual, as opposed to a lower-status chair, and then to observe their decision or behavioral outcomes (Chen et al., 2001). Simpler primes that work effectively too include completing words searches or unscrambling words, some of which are related to power themes (Chen et al., 2001; Smith & Trope, 2006; Lammers & Stapel, 2009). Notwithstanding some recent debate about this paradigm (Molden, 2014), apart from being subtle primes, such manipulations may offer better alternatives to the recall tasks and can be used in combination with tasks involving real stakes and the possibility to have an impact on others.

Giving real power: Insights from behavioral economics. Oftentimes experimental outcomes in psychology studies are hypothetical and subjects are not affected in real and consequential ways (e.g., scenario/vignette studies). Also, psychologists, particularly social psychologists, periodically use deception, which can prompt some problems in experiments and can have unintended effects on subjects' behaviors in experiments both in the short and long term (Ortmann & Hertwig 1997, 2002). From an experimental economics paradigm, it is important to set up a microeconomic institutional structure with real players and real consequential decision making that occurs within a transparent pay-off setting to thus “ensure a direct and salient connection between decisions taken and desired monetary outcome, and therefore [...] the interpretability and the internal validity of the experiment” (Zizzo, 2010: 77).

Giving real power over others can easily be achieved by using variants of the dictator game. Briefly, this game is used in experimental economics whereby a randomly appointed “dictator” (who is not called that in the experiment) is given the opportunity to apportion a sum of money between himself or herself and another passive player (e.g., Kahneman, Knetsch, & Thaler, 1986). The game is usually played anonymously and affords the dictator complete discretion and autonomy (i.e., the dictator has complete power) to choose how to apportion the

money as per the options made available by the experimenter. This is where the strength of the behavioral economics paradigm is evident because the experimenter can create trade-offs between self-interest (of the dictator) and public interest (of the passive follower/s). An option could be a prosocial decision where the dictator can create wealth for the passive players (i.e., increase relative payoffs for the public good) to his or her own detriment (i.e., reduce his or her relative payoff); another option could be for the dictator to profit himself or herself to the detriment of the public good (Bendahan et al., 2014).

Power could be manipulated, for instance in terms of how many passive players the dictator can affect and the number of resources that can be apportioned, the types of choices that are given, or other types of conflict of interest or tradeoffs. In addition—and as a way to avoid deception—endogenous cultural norms can be communicated to dictators specifying what is “appropriate” behavior; note, this kind of “demand effect” is not correlated with the treatment because both high and low power leaders could receive it. Thus, the extent to which dictators violate the social norms shows whether the experimental treatment engenders the induced effect, corruption, because the dictator violates social norms and takes advantage of his or her positional power to benefit his or her self-interest (Bendahan et al., 2014). Thus, given between-subjects design, and the use of neutral terms that will not make salient what the manipulations are, the experimenter uses “*non-deceptive obfuscation*” (Zizzo, 2010: 90). If subjects are not aware of what the other treatments are, then the true purpose of the experiment is unknown to them, and they do not have demands on them on how to behave; if they behave in a particular way it is because of how the subjects truly felt in the situation they were in.

Such set-ups, or similar ones (e.g., Sivanathan, Pillutla, & Murnighan, 2008) using real players, real stakes, and real payoffs, in addition to other real-world manipulations using dictator

game setups—such as the likelihood of getting caught when dipping into public good coffers, what occurs when introducing altruistic punishment by third parties, how repeated games effect outcomes, what occurs when power is given to those who were not initially powerful, manipulation of endogenous norms over time, manipulation of governance structures, collegial decision making, and so forth—will lead to new discoveries about the effects of power because it allows experimenters to investigate the effects of power in a more ecologically valid manner. Such findings are limited of course by what budget the researcher has and the extent to which decisions taken have real-world analogs.

Measuring Power

Trait perspectives of power. Other than priming a psychological experience of power, the literature has also measured power as either a trait or a state. Measures of trait power assess it as a disposition; hence, it is something that individuals generally possess or intrinsically value (cf. Fehr et al., 2013). On a basic level and for a variety of reasons, males have more power than females do (Eagly & Karau, 2002). Also, those with a right “look” gain power (i.e., emerge as leaders in positions of legitimate power) more easily (Antonakis & Dalgas, 2009; Todorov, Mandisodza, Goren, & Hall, 2005) as do taller individual (Judge & Cable, 2004).

Other studies (e.g., Inesi et al., 2011; Lammers et al., 2009; Langner & Keltner, 2008; McClelland, 1975; Weick & Guinote, 2006) have also examined individual-difference predictors of power including trait dominance. For instance, Anderson, John, and Keltner’s (2012) Sense of Power Scale assesses self-rated power in relationships. Such perspectives, however, have several limitations. Self-reports might be linked to socially desirable outcomes, depending on cultural norms or contextual triggers (Podsakoff & Organ, 1986; Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). In addition, measuring these traits makes salient what is being measured and

may induce demand effects that are correlated with the outcome measured; consequently, common-method variance effects may bias estimates (Podsakoff, MacKenzie, & Podsakoff, 2012). Finally, it is not clear if such measures are truly stable traits that exhibit temporal and situational consistency and whether they show incremental validity beyond the “usual” personality variables like the “big five” (cf. Antonakis, Day, & Schyns, 2012). More research is required using strong designs to determine whether such measures actually predict outcomes.

Field observations. Field studies could offer some advantages relative to experimental studies because they study power in situ; examples include: rating how much power romantic partners have and predicting their affective outcomes (Langner & Keltner, 2008); how self-ratings of power interact with personality to predict work outcomes (Seppälä et al., 2012); whether holding a position of power engenders a sense of overconfidence (Fast et al., 2012); whether social class (affording individuals greater autonomy and wealth, which is related to power) engenders immorality (Piff, Stancato, Cote, Mendoza-Denton, & Keltner, 2012); whether self-rated personal and social power predict stereotyping (Lammers et al., 2009). Although interesting, these studies have limitations due to endogeneity (i.e., selection effects).

Put simply, power in field settings is not exogenously assigned and thus cannot be used as a regressor because its effects will be confounded with the individual’s disposition or other unobserved factors; that is, unobserved variance in predicting power may be correlated with unobserved variance in predicting the outcomes of power—an omitted variable problem (Antonakis et al., 2010). For example, suppose a researcher wished to study whether power makes leaders corrupt. It is likely that those who are easily corrupted seek power as an instrumental end, which may explain why such individuals might act corruptly when in a position of power. There are many ways to deal with the endogeneity problem—readers should

refer to more technical literature on the topic (Antonakis et al., 2010; Bascle, 2008; Foster & McLanahan, 1996; Larcker & Rusticus, 2010).

FUTURE RESEARCH AGENDA

In the introduction of our review, we explained that research must disentangle the effect of power from the predisposition to seek it so as to understand the multi-level consequences of power. Throughout this review, we have supported this claim by demonstrating that it is important for management scholars to appropriately define power (e.g., not confuse it with antecedents) and ensure that they obtain unconfounded measures of power by manipulating it in a way that avoids demand effects and/or studying it in the field with proper statistical or design measures to rule out endogeneity.

In order for scholars to continue addressing this claim, as well as investigate power in general, we propose that the primary future research avenue considers broad-based research efforts starting with conceptual articles and targeted empirical studies that will lead to cumulative research efforts. So far, few efforts have been made to synthesize the findings of power into a cohesive framework that can account for its multifaceted nature; we hope the current review provides some small steps towards this end.

Prior conceptual research on power includes Keltner and colleagues' (2003) behavioral-approach theory of power, which provides a foundation for understanding how the experience of power can change the powerholder in specific ways. That is, the powerholders' actions are a product of increased activation of the Behavioral Approach System (which regulates behavior associated with rewards); however, those who lack power experience increased activation of the Behavioral Inhibition System (which equates to an alarm system, Jordan et al., 2011). In

addition, Kim, Pinkley, and Fragale (2005) proposed an integrative model of negotiator power that emphasizes four aspects of power: (a) potential power, (b) perceived power, (c) power tactics, and (d) realized power. It would be beneficial for future research to build on these past research efforts so as to devise cohesive conceptual frameworks of power that integrate various approaches to power and addresses questions surrounding what power is, where it comes from, and how it is used (Kim et al., 2005). Then, specific causal pathways can be proposed that explain how power unfolds and under what conditions it has pro- or anti-social outcomes.

Also, in terms of conceptual articles and cumulative research efforts (that will eventually lead to meta-analyses), we see great value in interdisciplinary work. Whereas many of the interesting findings provided in our review have stemmed from the field of psychology, we also included insights from behavioral economics, sociology, and consumer behaviorism. We believe that continual integration of these fields and others (e.g., biology) may provide fruitful ways of studying power.

More Specific Future Research Avenues

In general, the extant literature on power has provided much insight into the psychological experience of power and how that can both encourage self-expression in powerholders as well as transform their thoughts, emotions, and actions. However, there are still many important research questions that need to be addressed. For example, what happens to powerholders when they lose their power; how do they cope? What about those who are powerless, how do their moral identities impact their behavior when they are not in power (DeCelles et al., 2012)? In an attempt to start answering these questions and others, we propose six topic areas that have received insufficient scholarly attention and that management scholars in particular can concentrate their future research efforts on: (a) how power is gained and lost;

(b) different types of power; (c) the powerless; (d) physiological underpinnings of power; (e) different contexts related to power; and (f) institutionalized considerations of power.

The first future research avenue considers *how individuals gain, as well as lose, power*. There has been ample research examining sources of power (e.g., Anderson & Brion, 2014; French & Raven, 1959; Galinsky et al., 2003; Rucker et al., 2012). Although we described this research previously, our interest here lies in how individuals actually gain access to these “means” in general. Thus, we take the notion of antecedents one step further by emphasizing the strategies individuals use in order to gain access to the different “levers” of power including rewards, information, and charisma. For example, Malhotra and Gino (2011) investigated the pursuit of power by examining the extent to which individuals invest in creating outside options. Building on Emerson’s (1962) assertions, these authors found that investing in outside options can lead to feelings of entitlement when these options prove to be sunk investments.

In addition to investing in outside options, Treadway, Shaughnessy, Breland, Yang, and Reeves (2013) identified the importance of performance as a means through which individuals high in political skill gain more power. Moreover, in a clever study on the transference of power, Goldstein and Hays (2011) found that individuals who had a temporary but cooperative association with powerful others, mentally adopted the others’ power as if it were their own and acted as if they themselves were powerful outside the boundaries of the association. The authors term this phenomenon “illusory power transference” and reveal that men are more susceptible to this phenomenon than are women. It would be advantageous for future research to continue exploring ways in which individuals gain power, such as social networking.

In a different yet somewhat similar vein, how powerholders lose power has been scarcely studied in the management forum (Anderson & Brion, 2014); examining the determinants of

power loss is particularly significant in the dynamic context of today's workplace where changes occur quickly and power is often shifted from one party to the next in a relatively short period of time. Brion and Anderson (2013) posited that powerful individuals that experience difficulty in managing their interpersonal relationships, especially as it relates to forming and maintaining alliances, will most likely lose their power. These authors found that powerholders who overestimated the strength of their relationships with others (i.e., held illusions of alliance) acquired fewer resources, were more regularly excluded from alliances, and ultimately lost their power (Brion & Anderson, 2013). Also, powerholders seem to not want to part with their power once they have it (Fehr et al., 2013; Owens, Grossman, & Fackler, in press). Thus, it would be useful for future research to more fully examine the determinants and consequences of power loss as well as powerholders' intrinsic desire to retain power.

The second future research avenue considers *different types of power* (e.g., stable or unstable power) as well as tenure of the powerholder. A majority of the literature examining the possession of power in the management forum has focused on the psychological experience of power and consequently, has intuitively investigated power as being a constant. However, a quick glance at the news reveals that power can exist in varying degrees and levels. Taking this view into account, Jordan and colleagues (2011) inspected the propensity to take part in risky behavior with a 2x2—stable versus unstable power and powerful versus powerless—experimental design. The authors revealed that the unstable powerful and the stable powerless favored probabilistic over certain outcomes and engaged in more risky behaviors compared to the stable powerful and the unstable powerless. Jordan et al. (2011) identified stress, which produced more physiological arousal, as the factor through which power and stability interacted to affect risk taking behavior.

In addition, the tenure of the powerholder is another important factor for management scholars to explore. Strelan, Weick, and Vasiljevic (2013) found that individuals who were not familiar with possessing power were more likely to be vengeful when placed in a position of power compared with more experienced powerholders, who were found to be more tolerant of perceived wrongdoing. Also, research has found that individuals overreact to gains in power, in that they markedly increase their demands following an increase in power (Sivanathan et al., 2008). Management scholars interested in empirically investigating different types of power as well as tenure of the powerholder may consider using longitudinal designs.

The third future research avenue considers those who are *powerless*. There has been some scholarly attention directed towards understanding those who lack power but given that a majority of individuals in the workplace are more likely to have less power than more, this area is understudied in the management forum. Whereas research has suggested that power corrupts (Kipnis, 1972), it could also be that the lack of power corrupts. For example, Koning et al. (2011) maintain that both power and a lack of power can facilitate deception (which they define as an opportunity to increase one's own outcomes). The authors explain though that the powerless were not only trying to increase their own outcomes, but were also trying to prevent exploitation from those who were more powerful. It would be interesting for future research to continue exploring different motivational biases in the powerless (as compared to the powerful).

The fourth future research avenue considers the *physiological underpinnings of power*. Our review identified that scholars have focused most of their efforts on examining the intrapsychic changes that the possession of power has on individuals' thoughts and actions (Jordan et al., 2011), and not so much on their more automatic experiences, such as emotions (Weick & Guinote, 2008). Moreover, there has been scant attention devoted to understanding what happens

to individuals physiologically when they are exposed to power. For instance, does experiencing power correlate with specific brain areas? Also, if power makes powerholders self-anchor and focus on themselves (Anderson & Berdahl, 2002; Overbeck & Droutman, 2013; Weick & Guinote, 2008), then do areas in the brain normally associated with the self become activated when individuals are exposed to power? Using neuroscientific methods would especially be interesting when studying the powerless—how does their brain activity differ from those who are powerful? What happens to followers when they are exposed to powerful leaders? Studying neuroendocrinological correlates (or manipulating them) could also prove fruitful.

The fifth future research avenue considers the study of *power in different contexts*. The power literature has mostly focused on power in negotiations, specific decision making contexts (e.g., financial investments), and behavioral ethics. Practicing managers though, will be confronted with power dynamics in an array of contexts. For example, how does power affect performance appraisals or self-other rating agreement (i.e., congruence across self and other ratings)? Do powerful individuals self-rate higher compared to those who are less powerful? Research has revealed that three measures of dominance (confidence in one's intellectual abilities, confidence in social settings, and determination and forcefulness) are positively related to self-ratings of performance in assessment center tasks, even though others' ratings of performance for these dominant self-raters were not in agreement (Jackson, Stillman, Burke, & Englert, 2007). We hope to see future research exploring power in more varied contexts.

The sixth future research avenue considers the emergence of power across levels as well as *institutional considerations of power*. Our review mainly focused on the interpersonal nature of power and examined moderators at the individual, group, organizational, and country levels that would impact individual powerholders. However, it is important for future research to

investigate power at organizational and societal levels as well as industry dynamics related to power. At the organizational level for example, Ma, Rhee, and Yang (2013) demonstrated how the match (or mismatch) between two sources of power, ownership and status, influenced the effectiveness of interorganizational relations (e.g., venture capital syndication). It would be advantageous for future research to integrate both micro and macro perspectives of power.

CONCLUSION

Russell (1938) likened power in social science to energy in physics, thus identifying it as a fundamental force in the laws of social dynamics. Given the myriad social interactions that occur in the workplace, power represents an important phenomenon for management scholars to more fully understand. Accordingly, we took an interpersonal approach to power and made what we think are some steps toward sharpening our understanding of what power is, how it should be defined, how it should be measured and manipulated, its moderators, and its consequences; we also made several suggestions about questions that remain unanswered that could help stimulate future research. Ultimately, we hope our review will serve as a platform for organizational scholars to continue making consequential contributions to the study of power.

To conclude, power is ubiquitous and is usually concentrated at the very top of social hierarchies. Individuals gain power in various ways, sometimes because they seek it, other times because institutions or collectives believe that they will use it responsibly, and sometimes because of chance or other factors. As our review has made clear, it is important that we better understand the process by which individuals, particularly leaders—who wield consequential power—gain it. It is only once we understand this production system that we will be better able to predict who receives power and thus ensure, like Plato would have wished, that power is put to good use for organizations, collectives, and countries.

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FOOTNOTES

¹Much of the research that has employed the term and has manipulated power via “priming” has not actually used a veritable priming paradigm in the tradition of Bargh and colleagues (Bargh & Chartrand, 2000). In addition, the “priming” manipulations were not done in a way that would be unobtrusive and engender a non-conscious treatment effect but were done in a conscious and explicit manner, that would have been obvious to participants, and which probably engendered experimental demand effects. We discuss this issue in detail in the section titled: **Possible problems with the power “prime.”**

²Although control over “resources” or “valued resources” is often mentioned in definitions of power, as we explain later, we did not use this feature in our definition because a powerful individual (e.g., an informal charismatic leader) can still influence others without having control over valued resources. Also, we did not include the word “control” in our definition because this term ties our definition of power too closely to influence (because some have argued that control and influence are on the same continuum), which is a consequence of power, and constructs should not be defined in terms of their consequences (MacKenzie, 2003).

³Of course, a script may also be triggered when giving a subject real power; however, in this case, if the manipulation works, the subject will be naturally induced to feel powerful, which is rather different from being told what the experiment is about.

Table 1
Definitions of Power

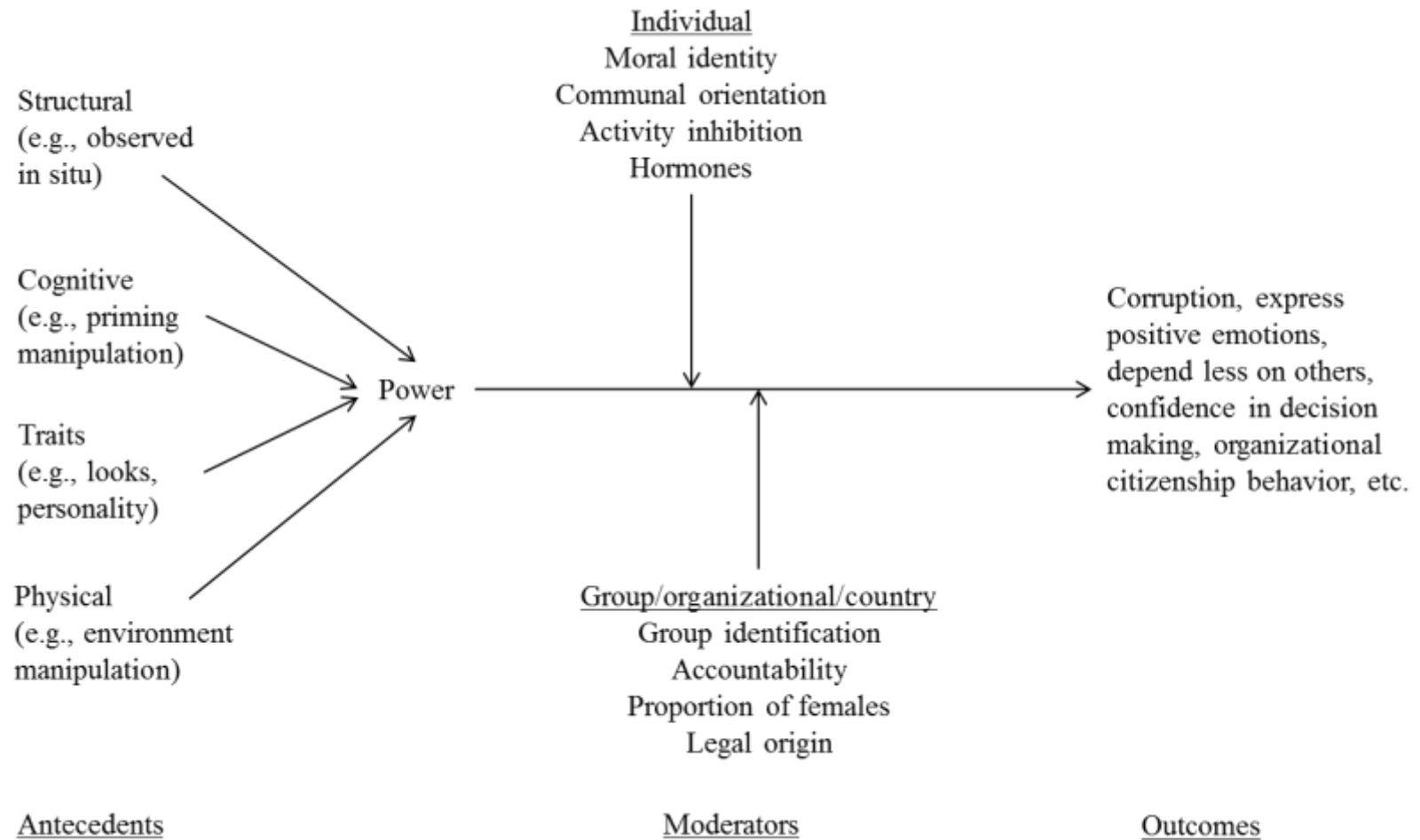
Source	Date	Definition of power	Defining property		
			Discretion	Means	Enforce will
Weber	1947	Ability to carry out his or her own will	x		x
Dahl	1957	Ability to compel others to do something			x
French & Raven	1959	The ability to influence via different means		x	x
Thibaut & Kelley	1959	The ability to control others' outcomes			x
Cartwright	1959	Being able to influence others at will			x
Mechanic	1962	A force that results in behavior			x
Emerson	1962	Influencer is independent and target is dependent for resources	x	x	x
Etzioni	1965	Holding preferences of followers in "abeyance"			x
Siu	1979	Influencing beliefs, emotions, and behaviors of people			x
McClelland	1975	Having impact on others or systems			x
Dépret & Fiske	1993	Asymmetrical outcome control			x
Fiol et al.	2001	Power is the ability or potential to influence others			x
Keltner et al.	2003	Modify others' states via resources and punishments		x	x
Galinsky et al.	2003	Control own and others' resources	x	x	x
van Dijke & Poppe	2006	A general striving for agency	x		
Sivanathan et al.	2008	Control, modify, or influence others via rewards and punishments		x	x
Magee & Galinsky	2008	Asymmetric control of resources in social relations		x	x
Lammers et al.	2009	Agency without influence by others	x		
Malhotra & Gino	2011	Control one's own and other's resources and outcomes	x	x	x
Jordan et al.	2011	Asymmetric control over valued resources		x	x
Goldstein & Hays	2011	Asymmetric control of valued resources, rewards, and punishments		x	x
Rucker et al.	2011	Asymmetric control over other people or valued resources		x	x
Rucker et al.	2012	Perceived asymmetric control relative to others			x

Table 2
Examples of how Power can influence Cognition, Affect, and Behavior

Source	Date	Finding	Defining property		
			Cognition	Affect	Behavior
Kemper	1991	Power influences emotional display		X	
Fiske & Dépret	1996	Power promotes stereotypical social perceptions	X		
Overbeck & Park	2001	Powerful individuals are better at remembering individuating info.	X		
Guinote et al.	2002	High power promotes more touching behavior			X
Galinsky et al.	2003	High power participants are more likely to act			X
Keltner et al.	2003	Powerholders are more likely to approach rewarding outcomes			X
Vescio et al.	2003	Powerholders use stereotypes when they're relevant to the context	X		
Anderson & Galinsky	2006	Experiencing power increases optimism and risk-taking behavior	X	X	X
Galinsky et al.	2006	Power can reduce the taking of additional perspectives into account	X		
Smith & Trope	2006	Power leads to global processing and prevents distraction by details	X		
Briñol et al.	2007	Power increases perceptions of confidence	X		
Guinote	2007	Power induces a selective processing of information	X		
Magee et al.	2007	Powerholders exhibit a greater propensity to initiate a negotiation			X
van Kleef et al.	2008	Powerholders experience less compassion towards others' suffering		X	
Weick & Guinote	2008	Power promotes individuating and ease of information retrieval	X		
Fast et al.	2009	Power increases optimism and the perception of personal control	X	X	
Lammers & Stapel	2009	Power is associated with rule-based moral thinking	X		
Mast et al.	2009	Power can increase perspective taking	X		
DeWall et al.	2011	Power motivates self-regulation toward effective performance	X		
Rucker et al.	2011	Powerful individuals spend more money on themselves			X
Inesi et al.	2012	Power provides a reason to doubt the purity of others' favors	X	X	
Bendahan et al.	2014	High power individuals are more prone to being corrupt			X
Magee & Smith	2013	High power individuals feel more distant from others	X	X	
Mourali & Yang	2013	Powerholders demonstrate less normative behavior			X

Note. The examples provided in this table came from a more comprehensive list of findings. In order to systematically organize this table, we conducted a content analysis wherein two graduate students placed each of the findings into one or more of the three categories; we decided to present only the findings that received 100% inter-rater reliability in this table.

Figure 1
A Model of Interpersonal Power



Note: “Instruments” (exogenous sources of variance) are required to ensure consistent (unconfounded) estimation of the effect of structural power on outcomes from observational studies (e.g., when regressing outcomes on degree of power of managers).