

## Contextualizing Social Power Research within Organizational Behavior

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## Abstract

Although there has been tremendous scientific interest in social power, much of this recent research has relied on experiments in context-poor settings. However, organizations – a context in which power differences emerge naturally – are more complex and dynamic. The current review discusses whether and how defining organizational features at the *intrapersonal level* (multiple dimensions of hierarchy, dynamics over time, attentional demands), *interpersonal level* (interdependence, repeated interactions), and *organizational level* (accountability, culture, virtual work) moderate the effects of power. We also discuss ways to systematically incorporate organizational complexities into the study of social power and recommend fruitful avenues for future research.

Social power, defined as asymmetric control over valued resources (Blau, 1964; Dépret & Fiske, 1993; Emerson 1962; Magee & Galinsky, 2008; Thibaut & Kelley, 1959), is a fundamental feature of individual, social, and organizational life. Power has been shown to have transformative effects on the self as it influences how individuals think, feel, and behave (see Galinsky, Rucker, & Magee, 2015 for a review). It is also a foundational force governing relationships, both within and outside of organizations (e.g., Emerson, 1962). Gaining power and control over resources leads people to engage in business transactions, take up employment, or marry powerful partners (e.g., Baumeister & Vohs, 2004; Coleman, 1990). Having power is desirable not only because power allows people to meet their needs with less dependence on others and affords the freedom to act with less constraint, but power is also self-reinforcing: having power allows one to control even more resources by obtaining better outcomes in mixed-motive interactions, and disproportionately persuading and influencing others (Anderson & Brion, 2014; Magee & Galinsky, 2008).

The questions of what leads to power and what consequences follow from power have long been of interest to social scientists (Freud, 1930; Fromm, 1941; Weber, 1947). Building off this historical importance, there has been an increasing interest in social power by organizational behavior and social psychological researchers in the past decades. In fact, a recent analysis found that the number of articles about power published in social psychology journals over the past twenty years has almost doubled every five years (Galinsky, Rucker, & Magee, 2015). This explosion of research has found that people in powerful positions – as opposed to those with less power – tend to think more abstractly (Smith & Trope, 2006), have an enhanced view of the self (Wojciszke & Struzynska-Kujalowicz, 2007; Tost, Gino, & Larrick, 2012), are less likely to be swayed by contextual influences (Galinsky, Magee, Gruenfeld, Whitson, & Liljenquist, 2008; Pitesa & Thau, 2013), obtain more profitable negotiation outcomes (Galinsky, Schaerer, &

Magee, 2017; Schaerer, Swaab, & Galinsky, 2015), engage in greater risk-taking (Anderson & Galinsky, 2006; Pitesa & Thau, 2013) and are better able to perform under stressful conditions (Lammers, Dubois, Rucker, & Galinsky, 2013).

Despite the plethora of studies documenting the pervasive effects of power, the lion share of this research has relied on experiments conducted in laboratory and online settings. One potential concern with this approach is that the experiments do not effectively capture the features and complexities of the organizational context in which power is embedded. The logic of the situation in many laboratory studies also fails to control for the consequential impact of organizational decisions (e.g., the number of people affected by an individual's decision; variation in the costliness of "wrong decisions"), and ignores the impact of other defining features of organizations, such as the continued interdependence between people, accountability mechanisms, or attentional demands (see e.g., Pitesa & Thau, 2013; Smith & Hofmann, 2016). In a recent review, Sturm and Antonakis (2015) even speculated that some effects in the experimental power literature may be difficult to reproduce in field settings because the study paradigms used in social psychological research tend to have "little or no ecological validity" (p.150). Although their conclusion may be overstated, it is relevant to the extent that defining features of organizational contexts are systematically neglected. Specifically, many study designs in past research have lacked organizational and experimental realism. By organizational realism we refer to a specific form of mundane realism, i.e., the extent to which experimental cover stories, manipulations, and dependent tasks correspond to the organizational context of a given situation (Miner, 2015). Experimental realism is the degree to which participants' psychological experience in the experiment corresponds to the psychological experience of power in organizations (Aronson, Carlsmith, & Ellsworth, 1990).

To address the lack of organizational context in past research on social power, the current review aims to place established findings of the social power literature in the context of organizational behavior. Furthermore, we propose ways in which defining features of organizations can be effectively manipulated in experimental designs.

We have structured our review to both capture the advances made using the social psychological approach and to identify how taking the organizational context seriously may moderate some of these conclusions. First, we briefly review the evolution of social power research. Second, we discuss potential shortcomings of existing power research for our understanding of organizational behavior. Third, we systematically review how some of the most widely-established conclusions about the effects of power may change once organizational realities are taken into consideration, from the intrapersonal level (by considering the multifaceted, dynamic nature of power, as well as the role of attentional demands), to the interpersonal level (by considering the role of repeated interactions and continued interdependence), to the organizational level (by considering the role of accountability, culture, and virtuality). Finally, we discuss ways to systematically incorporate organizational complexities into the study of social power and recommend fruitful avenues for future research.

### **The Evolution of Experimental Research on Social Power**

Some of the earliest known social psychological investigations of power were inspired by the horrific acts reported during and preceding World War II. Trying to understand these historic events, psychologists started to examine whether and why individuals in positions of power and authority engage in dehumanizing, antisocial, and immoral behavior. Notably, Milgram's (1963) and Zimbardo's (1973) seminal studies demonstrated the shocking consequences that power can have; everyday-people recruited through newspaper ads behaved in disrespectful and aggressive ways towards others when they were given authority or showed a striking propensity to inflict

harm on others when instructed by an authority. Follow-up research by Kipnis (1972) further cemented Lord Acton's notion that "power corrupts" by showing that people put in the position of a "manager" derogated their subordinates, devalued their work, and viewed them as manipulable objects; Kipnis showed that these effects were driven by power by showing that they only occurred when the manager was given the ability to reward and punish their "worker" but not when they were not given such abilities.

The reorientation of social psychology around social cognition (Fiske & Taylor, 1991) changed the focus of power research from examining the behavioral and interpersonal consequences of power towards understanding its impact on thinking. For example, Fiske and colleagues (Fiske, 1993; Fiske & Dépret, 1996) formulated a power-vigilance hypothesis which states that power determines information-seeking and processing in social relationships. They speculated that those with little power would seek more diagnostic information, but the powerful, in contrast, typically engage in more superficial information-seeking and are susceptible to stereotyping.

Although there was steady interest in the topic of power throughout the 1980s and 1990s, it was the combination of Keltner and colleagues' (2003) approach-inhibition theory combined with a new experimental manipulation that same year (recall-a-time with power, Galinsky, Gruenfeld, & Magee, 2003) that sparked what has since become one of the most burgeoning literatures in social psychology and micro-organizational behavior (Galinsky et al., 2015). One reason for the success of this theoretical lens is the simple proposition by Keltner and colleagues that high and low power map onto the behavioral approach and inhibition systems, two biopsychological systems thought to control behavioral activity (Carver & White, 1994). Keltner and colleagues (2003) claim that because having power is associated with rewards and freedom, it triggers approach-related tendencies, whereas the threat and constraints that accompany having

less power leads to the activation of inhibitory tendencies. Although many of the basic propositions of Keltner's theory have received empirical support (see Galinsky et al., 2015 for a review), some study findings are inconsistent with the approach-inhibition framework. Consequently, more refined and focused theories emerged to address some of these inconsistencies (Anicich & Hirsh, 2017; Guinote, 2007; Hirsh, Galinsky, & Zhong, 2011; Magee & Smith, 2013; Rucker & Galinsky, 2016).

Despite the increasing theoretical diversity in the field, power has been studied using a narrow range of manipulations. Indeed, more than half (54%) of the manipulations used to induce differences in power are comprised of experiential manipulations, especially the recalling a personal episode with high or low power from Galinsky et al. (2003). Less than a third of power manipulations used by past research are structural manipulations (31%) mimicking defining features of power in organizational life, such as assigning participants to the role of a manager or subordinate or being given control over actual resources (Schaerer, du Plessis, Yap, & Thau, 2016). Although such simple and efficient methods allow researchers to easily and efficiently manipulate power in laboratory, online, and classroom settings, the ease of implementation may have come at the expense of organizational and experimental realism.

### **Can Organizational Power be Studied in the Lab?**

The proliferation of laboratory research in the social power literature raises the question of whether power as it plays out in organizations can be realistically studied in the lab. On the one hand, using laboratory settings to study power has important advantages. First, experiments are the only method allowing for causal inferences and thus are "currently the best available method to build strong and robust knowledge about causes of organizational behavior" (Thau, Pitesa, & Pillutla, 2014, p.434). Second, laboratory environments offer a clean and isolated platform to test causal effects free of noise and contextual influences. Laboratory experiments are an ideal

method for capturing “the intended essence of the theoretical variables” with great accuracy and precision (Berkowitz & Donnerstein, 1982, p.248).

On the other hand, laboratory research has certain limitations in terms of its ability to provide insight into the dynamics of social power within organizations. Specifically, two limitations of experiments are directly relevant to the study of social power. A first limitation is the inherent difficulty of manipulating the construct of power in a valid way. Experimental manipulations are often noisy representations of the constructs they intend to capture (Shadish, Cook, & Campbell, 2002). Several scholars have raised concerns that popular power manipulations may not capture the underlying constructs in a very effective way. As a case in point, the often-used recall-a-time procedure that asks participants to recall a time when they had high or low power may differ from having real power (Flynn, Gruenfeld, Molm, & Polzer, 2011). In addition, the type of relationships that people recall are widely varied, including manager-subordinate, teacher-student, coach-player, parent-child, etc. (Galinsky et al. 2003). Recalling having power over a child’s schedule may produce a different psychological experience compared to determining budget assignments; these two situations may differ on, for example, the number of people affected by making a wrong decision, the imagined audience when making the decision, the anticipated resistance for a particular decision, or experience with making similar decisions.

A related problem is that experimental power studies may suffer from the use of confounded manipulations that can give rise to third-variable effects and demand characteristics. For instance, asking participants to take on (or imagine) a high or low power role may inadvertently activate a strategic orientation, or a sense of competition (Tost, 2015). However, the relationship between managers and subordinates may or may not be competitive, and in many cases, the outcomes of managers and subordinates are positively linked (Hollander, 1992). In



addition, these straightforward manipulations may communicate to participants what is expected of them in this role or task (Sturm & Antonakis, 2014). Indeed, activating the schemas and scripts as to how powerful and powerless individuals ought to behave can lead to fundamentally different outcomes than the actual experience of high and low power. For example, a series of studies found that when people focused on the experience of power, the powerless processed information more carefully and showed a stronger preference for status than the powerful, but when people focused on the expectations of power the powerful processed information more thoroughly and had an increased preference for status than those with less power (Rucker, Hu, & Galinsky, 2014).

A final constraint of experimental power research lies in its limited organizational realism. There is growing concern that many of the findings in the power literature may not generalize to organizational contexts (Flynn et al., 2011). Smith and Hofmann (2016) noted that “it is not a given that theories developed in the experimental laboratory will generalize to real-world power experiences” (p.1). Even if power manipulations are based on meaningful operationalizations, the tasks laboratory participants encounter often do not involve consequential outcomes or real decisions that reflect organizational realities.

**Three differences between organizations and laboratory environments.** Building on these constraints of psychology-based social power research, we highlight three substantive ways in which organizational environments deviate from the way laboratory studies have been designed in past social power research: diversity of participant samples, richness of social context, and dynamics over time.

First, past laboratory research has largely been based on *narrow and homogenous participant samples* from a limited subpopulation. A study conducted by Henrich and colleagues estimated that as many as four out of five participant samples in social psychology studies are

based exclusively of undergraduate students in psychology courses and that an American undergraduate is more than 4,000 times as likely to participate in experiments than a randomly selected person elsewhere (Henrich, Heine, & Norenzayan, 2010). In contrast, many modern work organizations are a collection of a diverse set of individuals with different demographics, roles, educational backgrounds, abilities, beliefs, and cultural values (Katz & Kahn, 1978; March & Simon, 1958; Mintzberg, 1979). Thus, the typical laboratory study sample used in past social power research may not represent the characteristics of a typical organizational workforce well.

In addition, one could argue that laboratory settings – by nature – induce differences in power that are exogenous to the experimental paradigm. Experimenters take on a powerful, authoritative role in a laboratory as they tell participants what to do and provide financial rewards to participants (e.g., Milgram, 1963; Minor, 1970). Study participants, on the other hand, are on the receiving side of rewards and under constant supervision by laboratory staff. Consequently, participants may be actively trying to discern the experimenter’s intentions to achieve positive evaluations and maximize potential rewards (Riecken, 1962; Rosenberg, 1965). It is possible that study participants already experience a state of low power even before being exposed to an actual power manipulation. This raises the question of whether existing high-power manipulations can elevate participants’ power to a level that corresponds to a true high-power state and how the consequences of low power can be studied effectively. This is particularly important as it is possible that each level of power, ranging from low to middle to high power, comes with its own unique cognitive, motivational, and behavioral characteristics (Anicich & Hirsh, 2017).

Second, individuals in organizations are part of a broader *social context full of ongoing interdependencies* whereas laboratory settings in many social power studies tend to be relatively context agnostic. A significant share of recent research on social power has focused on examining isolated actors and treated power as an individual characteristic (Flynn et al., 2011). The primary

approach to recent social power research has been treating power as a psychological state, with sense of power being the underlying mechanism driving the effects of power (Galinsky et al., 2015). Yet, individuals in organizations interact with other individuals, often multiple ones at the same time, both within and outside of their institutional environment. In organizations, power is not merely a property of an individual but is embedded in interpersonal relationships (Emerson, 1962; Thibaut & Kelley, 1959) and a broader social and institutional context (Zhong, Magee, Maddux, & Galinsky, 2006; Sturm & Antonakis, 2015). Furthermore, Tost (2015) argued that the experience of psychological power, which is rooted in the individual, is unlikely to function in the same way as structural power that is often found in hierarchical organizations.

In addition to neglecting relational and structural elements, psychological research on social power neglects key features of organizational realities. For example, laboratory-based scenarios and tasks barely hold participants accountable for their behavior or performance (Pitessa & Thau, 2013). Accountability is assumed to be a boundary condition of social power rather than a baseline assumption (Sturm & Antonakis, 2014). Yet, institutional arrangements that constrain potentially self-serving behaviors are often purposefully incorporated in groups and organizations (Lerner & Tetlock, 1999; Frink & Klimoski, 1998) and thus the rule rather than the exception.

A third substantive difference between recent laboratory-based power research and organizations is the *dynamic nature of real-world settings*. Social psychological power research is primarily based on mono-episodic situations and interactions. But people in organizations tend to interact with others on a continuous basis, often over the course of several months or years. Interactions and relationships, including power-dependence relations, are dynamic phenomena that change and evolve over time (Rusbult & Van Lange, 2003). Whether people expect to interact with others in the future can fundamentally alter the dynamics of interpersonal interactions and the effect of power on personal and collective outcomes (e.g., Axelrod, 1984;

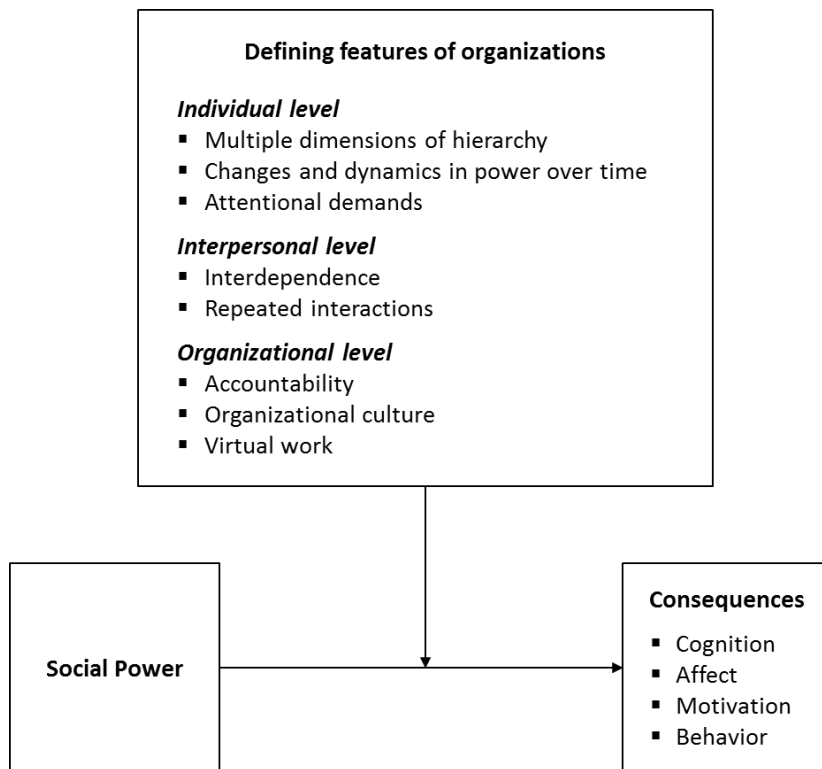
San Martin, Swaab, Sinaceur, & Vasiljevic, 2015). In addition, psychology studies tend to place people into new positions of power, making it challenging to discern whether people's reactions are due to differences in the psychological experience of power or sudden changes in power (Flynn et al., 2011); this is true of many experiments in which people want to test immediate reactions to experimental stimuli. It is possible that people adapt to certain levels of power over time and that one-shot experiments overestimate the long-term effects of power on individuals' experiences and reactions.

### **Increasing Organizational Realism for Social Power Research**

Given past social power research may not have sufficiently captured organizational realities, we believe there is a need to systematically examine how defining characteristics of the organizational context impact the effects of power. Although there is merit in understanding power dynamics in more general or context-independent settings, scholars of organizational behavior are tasked with understanding the decisions and behaviors within the organizational context (Robbins & Judge, 2003).

In the following, we review major findings from social psychological research on power and discuss whether and why the existing causal relationships have been established in the lab or on-line may change in organizational settings. We do so by looking at differences at the individual level, the interpersonal level, and the organizational level (see Figure 1).

Figure 1. The influence of organizational features on the effects of power



## Individual Level

At the individual level, we examine three ways in which organizational contexts may affect the conclusions regarding the effects of power that have been observed in the laboratory.

**Multiple dimensions of hierarchical differentiation.** A typical social power experiment involves a participant taking on a single role of high or low power. For instance, the popular hierarchical role manipulation involves randomly assigning participants to the role of a boss or a subordinate, ostensibly based on the scores of a leadership questionnaire (Anderson & Berdahl, 2002; Kunstman & Maner, 2011; Pitesa & Thau, 2013). Yet, within any organization, people are part of multiple power relationships. As people go about their day they engage in multiple interactions, some in which they are the low-power party and others in which they are the

powerful party (Smith & Hofmann, 2016). In an organization, managers may be high in power because they have asymmetric control over their subordinates, but are simultaneously low in power when dealing with their bosses who have asymmetrical control over them (Anderson & Brion, 2014). Even a CEO, the individual with the most power in an organizational hierarchy, is accountable to the board of directors and a company's shareholders.

What do the daily fluctuations in power imply for the effects of power? Being in a high or low power position is not always a clear distinction. Indeed, recent theorizing suggests that people are often simultaneously in high *and* low power relationships. As a result, they undergo a fundamentally different biophysical and psychological experience than when they are exclusively in high or low power relationships. Anicich and Hirsh (2017) proposed that people who interchangeably interact with both high and low power interaction partners may experience heightened role conflict and, consequently, behavioral inhibition tendencies – an outcome that has previously been associated exclusively with being low in power (Anderson & Berdahl, 2002; Keltner et al., 2003).

In addition to balancing multiple power-based relationships at the same time, people are also part of other hierarchies that create hierarchical differentiation between people, most notably status hierarchies. In contrast to power, which is a property of the actor, status reflects the extent to which an individual is admired and respected by others (Ridgeway & Walker, 1995). Whether power affects people's behavior not only depends on their relative level of power but also on how much status they enjoy. For example, social psychological research has suggested that the powerful tend to be less effective perspective-takers than those with less power (Galinsky et al., 2006). But Blader and colleagues (2016) have shown that the reverse effect occurs for status: those higher in status are better perspective-takers than those with less status. Similarly, research has found that the powerful tend to be more demeaning and aggressive towards others compared

to those who hold less power (Bargh, Raymond, Pryor, & Strack, 1995; Gruenfeld, Inesi, Magee, & Galinsky, 2008; Kipnis, 1972). Yet, more recent research has started to take organizational complexities into consideration and investigated whether one's level of status modulates the effects of power. Indeed, this research found that power is especially likely to fuel demeaning behavior and conflict when the powerful party also lacks status, such as an immigration officer who has the power to deny the entry of an individual at the border but is in a position that is not very esteemed (Anicich, Fast, Halevy, & Galinsky, 2015). In contrast, power is less likely to lead to demeaning behavior when the powerful individual also enjoys high status.

In sum, the straightforward and compelling theories of power may not hold in complex organizational settings. These settings critically influence how organizational members navigate the multitude of power relationships they are part of; and organizational members often find themselves being high and low power at the same time (e.g., middle power). In addition, the effects of power also depend on whether the powerful position one is in also holds respect and admiration in the eyes of others; when the powerful lack status they behave very differently than when power and status are in unison with each other.

**Changes and dynamics in power over time.** Another organizational reality at the individual level is the fact that social hierarchies are changing over time. Individuals may gain power when they accumulate expertise (Emerson, 1962), get promoted, associate themselves with powerful others (Goldstein & Hays, 2011), or gain control over other valuable resources. However, power is also easily lost. The powerful can be challenged and replaced by a more capable individual (De Waal, 2007; Fleming & Spicer 2008) when they don't attend to their relationships and alliances (Brion & Anderson, 2013, Gould, 2002), when their decision biases hurt their performance (e.g., Weick & Guinote, 2010), or when an external shock occurs to the power hierarchy (e.g., Hambrick & Cannella, 1993). In contrast to the idea that power can be

gained and lost, most social psychological experiments implicitly assume power to be fixed and stable over time (Galinsky et al., 2015; Flynn et al., 2011). This raises the question of how adding the stability of power influences the psychological experience and consequences of power within organizations. There are several studies that hint at the idea that dynamic social hierarchies may fundamentally alter the effects of power.

For example, some initial studies have investigated the moderating effects of hierarchy stability. Stability refers to the extent to which one's current position in a hierarchy is constant or seen as possibly changing (Cummings, 1980; Tajfel & Turner, 1979). When hierarchies become unstable, the powerful may experience reduced freedom with which they can act and increased threat-related emotions as their position may be in jeopardy (Keltner et al., 2003). In contrast, unstable hierarchies may be an opportunity for the powerless to act and speak out to challenge the powerful and improve their position in the hierarchy.

Such tendencies have been observed in research on power and risk-taking. Qualifying the finding that being powerful is associated with elevated risk-taking (Anderson & Galinsky, 2006), follow-up research suggests that the powerful may become more risk-averse when their position is threatened due to unstable hierarchies (Maner, Gailliot, Butz, and Peruche, 2007). Similarly, low-power individuals may have a particularly high propensity to take risk when they are part of an unstable power hierarchy (Hiemer & Abele, 2012). In stark contrast to this research, Jordan and colleagues (2011) concluded the exact opposite. They found that the unstable powerful and the stable powerless were the most likely to engage in risky behaviors in organizational decision-making scenarios. Such inconsistencies can emerge due to differences in whether high power, low power, or both are being studied (Schaerer et al., 2016) and whether the risk-taking is relevant or irrelevant to the stability of one's power-position (Galinsky et al., 2015).



Beyond risk-taking, other research also points at the idea that hierarchy stability matters for how power is experienced and enacted. Karremans and Smith (2010) found that power was positively associated with forgiveness, but that this effect was much weaker when the powerful were in relatively unstable relationships. In addition, research by Sligte, de Dreu and Nijstad (2011) suggests that when power positions are unstable, powerless individuals become more flexible thinkers and generate more creative insights. This finding qualifies more static research that has assumed creativity to be the sole property of the powerful (Galinsky et al., 2008; Duguid & Goncalo, 2015).

Overall, a number of studies strongly suggest that a) whether hierarchies are stable or unstable fundamentally changes the psychological experience of one's power position and that b) the results observed in static laboratory research may not generalize well to dynamic organizational settings. Thus, we believe more research is needed to better understand the exact effects power has on risk-taking and other behaviors in organizational contexts.

**Attentional demands.** Another characteristic of organizations that may alter the impact of social power is attentional demands. Simon (1947) was among the first management scholars to recognize that organizational members have limited cognitive resources to complete their daily routines and make decisions. Attentional demands emerge in work environments with chronically high workload pressures and cognitively challenging tasks. Organizational members often work under high time pressures when completing tasks, are frequently interrupted by coworkers, complete tasks that conflict with each other, or have little control over the pacing, timing, and quality of their work (Elsbach & Hargadon, 2006; Perlow, 1999).

Given that organizational environments significantly constrain individuals' cognitive resources, it is useful to consider how such constraints influence power dynamics at the workplace. Having high levels of attentional demands implies that the total amount of mental

capacity utilized by working memory is relatively high, leaving relatively few resources available for task completion, learning, and decision-making (Sweller, 1988). Thus, we believe that the high attentional demands produced by workplace settings likely attenuate some of the differences that have been documented between high and low power.

Many theories of power suggest that the powerful engage in less careful processing of information because they face high attentional demands. (Fiske, 1993; Goodwin, Gubin, Fiske, & Yzeryt, 2000). In contrast, the powerless are predicted to pay close attention to others to recognize and avoid environmental threats (Dépret & Fiske, 1999) and are thus less likely to engage in superficial processing of social cues. However, those in low-power situations often experience higher levels of stress than those in high-power situations (Smith & Hofmann, 2016). Furthermore, research shows that stress impairs the attentional focus of individuals (Todd et al., 2015). Thus, systematic processing by the powerless is less likely when their lack of power produces high levels of stress. A related argument has also been made by Hirsh and colleagues (2011) who suggested that a reduction of cognitive resources likely leads to an increased state of disinhibition. According to Keltner and colleagues (2003), disinhibition is a major driver of power effects, including an increased automaticity of social cognition responsible for stereotyping. Thus, the same behavioral tendencies that are activated by being powerful can also emerge because of workplace pressures. Therefore, there may be little difference in the extent to which high and low power individuals engage in systematic processing; this lack of difference may be driven, however, by different factors, such as the many decisions the powerful must make relative to the stress of lacking of power.

The same logic may apply to other work-related outcomes. For instance, several studies support the notion that the possession of power reduces perspective-taking (Blader, Shirako, & Chen, 2016; Galinsky, Magee, Inesi, & Gruenfeld, 2006). Yet, similar tendencies have been

found for individuals who were put under attentional demands (Roxβnagel, 2000). Thus, organizational pressures may reduce the perspective-taking abilities of those low in power – thereby, attenuating differences in perspective-taking between high- and low-power individuals. Similarly, research suggests that reduced power can impair creativity as it increases the extent to which the powerless are influenced by contextual cues during the creative process (Galinsky, Magee, Gruenfeld, Whitson, & Liljenquist, 2008). However, attentional demands may similarly impair the ability of powerful individuals to be creative. Indeed, intense workload, time pressures, and frequent interruptions have been shown to be detrimental to creativity (Amabile, Hadley, & Kramer, 2002).

In sum, the powerful and the powerless face different forms of attentional demands, from the many decisions and competing forces of the powerful to the stress of the powerless. Given that both the powerful and the less powerful face significant demands on their attention, it would not be surprising to see some differences found in the lab to not replicate within an organizational context.

### **Interpersonal Level**

Organizational contexts not only have implications for individuals' own personal experiences but also change how people interact with each other. In the following, we discuss two important characteristics of organizations at the interpersonal level—interdependence and repeated interactions—that can alter how power operates.

**Interdependence.** Organizations are collections of individuals with the purpose of achieving a collective goal (Baum, 2002). Thus, the individuals within an organization are inherently interdependent in the pursuit of their higher-order goal. Interdependence involves two or more actors being emotionally, economically, and ecologically reliant on each other (Rusbult & Van Lange, 2003). For example, a salesperson relies on the company's IT specialist to provide

functioning information technology, while the IT specialist relies on the salesperson generating revenue for the company to pay his or her salary. More generally, interdependence requires frequent interaction between organizational members to share information, coordinate activities, negotiate the allocation of resources, and make collective decisions.

Like the individual factors discussed above, the level of interdependence between individuals can alter the experience of power. One illustration of how interdependence affects power lies in the distinction between social and personal power. While social power involves exercising control over other people such as the power of managers over their employees (Magee & Galinsky, 2008), personal power is defined as the ability to control one's outcomes and being personally independent (Van Dijke & Poppe, 2006). Thus, social power involves a certain level of interdependence while personal power is based on the idea of independence. Based on this distinction, Lammers and colleagues (2009) argued that these two types of power would have differential effects on social impression formation. Past studies that found a positive effect of power on stereotyping generally manipulated power in independent settings (Fiske & Dépret, 1996), whereas studies that documented a negative effect manipulated power in interdependent settings (Overbeck & Park, 2001). In line with this prediction Lammers and colleagues (2009) found that the more independent type of power (personal power) increased stereotyping, whereas the more interdependent type of power (social power) decreased stereotyping.

High levels of interdependence also emerge in mixed-motive interactions such as negotiations and teamwork. For instance, power research suggests that because the powerful tend to be more confident in their abilities and can more easily overcome environmental constraints, they tend to achieve better outcomes for themselves than those with little power (for reviews, see Anderson & Brion, 2014; Galinsky et al., 2015; Galinsky, Schaerer, & Magee, 2017). However, negotiation research finds that the answer is not so straightforward once interdependencies are

taken into consideration. For instance, Mannix and Neale (1993) found that equal-power dyads (i.e., both negotiators had the same amount of power) created significantly more value than unequal-power dyads (i.e., where one negotiator has high and the other has low power), suggesting that not only one's absolute level of power matters but that of the opponent. While actual power structures play an important role, perceptions about another individual's power can be sufficient to change the outcomes of interdependent situations. In a similar vein, another study found that although alternatives, a negotiator's primary source of power, strongly influence the ambitiousness of one's first offer, this effect was attenuated when negotiators thought that their opponent was powerful (Schaerer, Swaab, & Galinsky, 2015).

To conclude, individual outcomes not only depend on one's own power but are also affected by the actual or perceived power of other individuals. These effects are most likely to occur when social interactions are characterized by high levels of interdependence.

**Repeated interactions.** In addition to being highly interdependent, interactions between individuals in organizations also occur repeatedly over longer periods of time. This stands in contrast to psychological power research that has primarily relied on one-shot interactions between strangers (Flynn et al., 2011). In the light of such a mono-episodic approach it is perhaps not surprising that the literature documents numerous negative consequences of being powerful, such as stereotyping (Fiske & Dépret, 1996), cheating (Lammers et al., 2010; Yap, Wazlawek, Lucas, Cuddy, & Carney, 2013), denigration of subordinates (Kipnis, 1972), objectification (Gruenfeld et al., 2008), and suppression of group minorities (Nemeth, 1986).

However, organizational and game theoretic research highlighted that there can be profound differences in individuals' behavior depending on their reputation and relational history (shadow of the past; e.g., Milinski, Semmann, & Krambeck, 2002; Poppo, Zhou, & Ryu, 2008) and whether they expect to interact again in the future or not (shadow of the future; e.g., Heide &

Miner, 1992). A key difference between one-shot and repeated interactions is that the latter enables individuals to employ strategies based on contingencies and reciprocity, such as tit-for-tat strategies that penalize negative behavior (Axelrod, 1984; Murnighan & Roth, 1983). Consequently, actions that individuals have been documented to use in mono-episodic interactions may not occur to the same extent in repeated interactions (Halevy, Weisel, & Bornstein, 2011).

Although there has been relatively little research investigating the effect of repeated interactions on power dynamics in organizational behavior, one notable study should be mentioned. San Martin and colleagues (2015) investigated how group members' expectations about future interactions affected the influence of minority group members. Groups are often split into a majority faction (the high-power party) and a minority faction (the low-power party) based on diverse attributes such as opinions, expertise, gender, and race (Latane & Wolf, 1981; Nemeth, 1986). In such settings, the less powerful minority often struggles to get their viewpoints heard and the powerful majority tends to ignore minority viewpoints when making decisions on behalf of the group. The studies by San Martin and colleagues (2015) found that when majority group members expected future interactions, they were more likely to consider the group minority's dissenting opinions. Paradoxically, however, minorities were more likely to share their diverging views when they did not expect future interactions. The authors concluded that group decision-making performance was highest when minorities did not expect future interactions (because they had a lower need for approval by the majority) and when majorities did expect future interactions (because they were more open towards the opinion of others) (San Martin et al., 2015).

We have highlighted how the shadow of the future of repeated interactions may alter the effects of power that have been found in single-shot situations in the lab. We believe more

research is needed to better understand whether findings from mono-episodic laboratory experiments generalize to dynamic organizational settings.

### **Organizational Level**

Power not only depends on an individual's personal attributes or those of an interaction partner, but is contingent on the institutional environment in which actors are embedded (Sturm & Antonakis, 2014). In the following section, we highlight three ways in which organizational contexts deviate from laboratory experiments: organizational members are often held accountable for their actions and decisions, organizations vary in their culture, and modern work settings often involve virtual interactions.

**Accountability.** Accountability refers to the implicit or explicit expectation that one may be asked to justify one's beliefs, feelings, and actions to others (Lerner & Tetlock, 1999; Tetlock, 1992). People who fail to justify their actions in a compelling way often face negative consequences (Lerner & Tetlock, 1999). In organizations, individuals are held accountable through various ways, such as transparency (e.g., Bernstein, 2012), codes of ethical conducts (Somers, 2001), performance evaluations (DeNisi & Murphy, 2017), or financial incentives (Gerhart, Rynes, & Fulmer, 2009). According to the social contingency model (Lerner & Tetlock, 1999; Tetlock, 1992), accountability is a universal feature of organizational decision-making that regulates individuals' actions. Accountability exerts a powerful force on individuals' decision-making and has been shown to mitigate workplace prejudice (Tetlock & Mitchell, 2009), reduce cognitive biases in feedback settings (Schaerer, Swaab, Kern, Berger, & Medvec, 2015), and increase information sharing in teams (Scholten, van Knippenberg, Nijstad, & De Dreu, 2007).

In existing social psychological studies on social power, people are rarely held responsible for their behavior or decisions; for example, participants were not punished for being selfish in negotiations (e.g., Maner & Mead, 2010), for cheating on performance tasks (e.g., Yap et al.,

2013), or for denigrating others (e.g., Kipnis, 1972). Such behavior may, however, be less likely to occur when the powerful are held accountable to a diverse set of stakeholders. Indeed, Keltner and colleagues (2003) suggested that accountability is already implicit in the psychology of being powerless, in that low-power individuals tend to carefully consider how their behavior will be seen and evaluated by others. In contrast, if high-power individuals are held accountable “their affect, cognition, and behavior will shift toward a pattern of increased inhibition” (p.278) – a state commonly associated with being powerless (Keltner et al., 2003). This implies that accountability is likely operating as a hierarchical equalizer in that it makes the powerful behave more like the powerless.

This idea was tested by Pitesa and Thau (2013), who investigated the influence of power and accountability on financial investment decisions. Their studies showed that although elevated power lead to more self-serving decisions in systems of outcome accountability (i.e., in which people have to justify their outcomes), this effect no longer occurred when people were held accountable to the process by which they arrived at an investment decision as process accountability is more likely to cause individuals to carefully think about their decisions (Pitesa & Thau, 2013). Another study found that the risk-seeking tendency of powerful individuals was attenuated when they felt a sense of responsibility for their decisions (Anderson & Galinsky, 2006).

More recent studies have found that accountability can combine with power to produce synergistic benefits for decision notifications (Galinsky, Magee, Rus, Rothman, & Todd, 2014). Galinsky and colleagues argued that although power often magnifies people’s dispositions, it does not improve the ways in which individuals navigate their environments. They suggested that holding the powerful accountable may cause them to communicate their decisions more effectively. In their study, they had executives take part in a layoff scenario in which they had to



communicate a layoff decision to an employee over email. They manipulated power through the recall task. They also manipulated accountability; half of the participants were held accountable by being told that they would have to justify their responses to the rest of the class, explaining how and why they arrived at their decision. The researchers then coded the layoff notifications for interactional justice, the tendency for decision makers to explain the reasoning behind their decisions candidly and respectfully. Galinsky and colleagues (2014) found that when the powerful were held accountable for their decisions, they engaged in communicated their decisions more candidly and sensitively.

**Organizational culture.** In addition to the presence or absence of accountability mechanisms, a second contextual feature of organizations that has the potential to alter power dynamics is culture. Organizational culture is typically defined as “a complex set of values, beliefs, assumptions, and symbols that define the way in which a firm conducts its business” (Barney, 1986, p.657).

Organizational cultures can vary across different countries (Hofstede, 1980), across organizations in similar locations (Barney, 1986), and even across different sub-groups within the same organization (Schein, 2009). Culture not only determines the mundane details of everyday life (e.g., the clothes people wear, the languages they speak, what they eat), but it also serves as the broader context within which people perceive, think, and act (Kitayama & Uskul, 2011). Numerous studies have shown how cultural differences among organizational members affect a broad range of work-related behavior such as communicating requests (Hirokawa & Miyahara, 1986), mediation and negotiation strategies (Brett & Okumura, 1998; Brett & Gelfand, 2006), decision-making processes (Stewart, 1986), and even firm performance (Barney, 1986).

Because of culture’s pervasive influence on interpersonal and organizational behavior (for reviews, see Bond & Smith, 1996; Schneider, Ehrhart, & Macey, 2013), it is almost inevitable

that culture affects how people in high and low power positions behave. Power is an inherently social and contextually-embedded phenomenon and so the cultural context in which individuals are in influences how they gain, use, challenge and lose power (Anderson & Brion, 2014). For example, numerous studies have demonstrated that how hierarchical a culture is determines whether low power people have the ability to express themselves. For example, high power-distance country cultures affect whether low-power individuals are allowed to share their perspectives. This lack of voice for the powerless can have devastating consequences. Anicich, Swaab, and Galinsky (2015) found that when a Himalayan expedition came from a country with a hierarchical culture, they were more likely to have climbers die on the mountain. They speculated that the less powerful members of these expeditions didn't feel comfortable sharing their perspectives and those insights may have prevented disaster. Similarly, studies have found that organizational culture affects the safety and efficacy that employees feel speaking up within an organization (Detert & Burris, 2007; Morrison, Wheeler-Smith, & Kamdar, 2011). For instance, Detert and Burris (2007) found that employees of a restaurant chain were more likely to voice improvement-oriented suggestions to their higher-power counterparts when the organizational culture provided psychological safety to do so.

Cultural differences can also affect how power is experienced and affects basic psychological processes. Building on the cultural distinction of independence versus interdependence (Markus & Kitayama, 1991), Zhong and colleagues (2006) developed a model to explain how culture differentially affects the perception and use of power. Western cultures (e.g., US, Canada) tend to be relatively individualistic as people construe themselves as separate from others and focus on attributes that makes them unique (Lee, Aaker, & Gardner, 2000; Markus & Kitayama, 1991). In contrast, Eastern cultures (e.g., Southeast Asia) tend to be relatively interdependent. Interdependent cultures focus more on the relationships among people

and are characterized by a higher level of interconnectedness and intra-group harmony (Heine, Lehman, Markus, & Kitayama, 1999; Markus & Kitayama, 1991). Because of this distinction, power is conceptualized in terms of influence and entitlement in independent cultures. In other words, independent cultures tend to focus their behaviors on satisfying oneself. In contrast, power is conceptualized as a responsibility in interdependent cultures, with people focusing on how their actions affect others (Zhong et al., 2006).

Culture not only affects the accessibility of cultural constructs, but also affects behavior. Kopelman (2009) compared how managers from Western countries (U.S., Germany, and Israel) and managers from Eastern countries (Hong Kong) allocated resources in a commons dilemma. She found that Westerners took more resources for themselves when they were high rather than low in power. However, the opposite pattern emerged for Hong Kong-based managers who voluntarily took fewer resources when they were high in power. Similar cultural variability has also been found in a large-scale cross-cultural comparison of ultimatum game outcomes. The ultimatum game is an economic game that measures what percentage of an initial endowment people allocate to others versus themselves. For example, the percentage of money that was given to others by the “allocators” ranged from a very low 26% in a Peruvian sample to a rather high 58% in an Indonesian sample (Henrich et al., 2001).

Culture also influences the ways in which people embody power and infer power from others. For instance, a study by Park and colleagues (2013) compared different types of postural displays of power. While certain postures were universally seen as displaying powerfulness (e.g., an expansive posture with the hands spread on a desk), other postures (e.g., an expansive posture with the feet on the desk) only signaled power in Western cultures. The latter posture was perceived as inconsistent with East Asian cultural norms such as humility, modesty, and restraint (Park, Streamer, Huang, & Galinsky, 2013).

**Virtual work.** A third factor that differentiates organizational environments from most social power research settings is the emerging trend of virtual interactions. The nature of collaboration within organizations has been changing at an accelerating pace. Over the past two decades, virtual work has become increasingly common as organizations try to access new talent, resources, and markets (Hinds & Mortensen, 2005; Wageman, Gardner, & Mortensen, 2012). For example, a recent survey found that up to 80% of knowledge workers report working frequently in dispersed settings (Ferrazzi, 2014).

Whether interactions between people take place in a face-to-face or virtual setting matters because communication channels vary in the extent to which visual and vocal cues can be exchanged (Daft & Lengel, 1986), influence to what extent positive and meaningful relationships can be developed (Walther, 1992, 1994), and affects social influence processes in dyadic and team interactions (Spears & Lea, 1994). This idea is supported by a recent meta-analysis suggesting that communication channels can fundamentally change the dynamics of mixed-motive interactions such as negotiations and decision-making in groups (Swaab, Galinsky, Medvec, & Diermeier, 2012).

One way in which virtual environments can affect power dynamics is by equalizing power differentials. Sproull & Kiesler (1991) were one of the first to note that virtual communication can increase upward influence and “decrease the power of traditional gatekeepers” (p.107). For example, virtual interactions can decrease a powerful individual’s opportunities to use that power or increase a powerless individual’s likelihood to exert influence on a powerful individual.

First, the absence of vocal and visual cues makes it harder for high-power individuals to use such cues in their favor. People often infer others’ power through verbal behaviors such as voice pitch and volume (Ko, Sadler, & Galinsky, 2014), and through nonverbal behaviors such as interruptions, less positive emotions, and other touching (Hall, Coats, & LeBeau, 2005). In the

context of negotiations, for example, negotiating using asynchronous communication channels such as email can make it harder for powerful negotiators to intimidate their less powerful opponent by using power tactics such as the expression of anger (Sinaceur & Tiedens, 2006; Van Kleef, De Dreu, Pietroni, & Manstead, 2006).

Second, the communication environment also affects people's information processing in group decision-making contexts. For example, Swaab and colleagues (2016) found that when team members were given the opportunity to engage in secret conversations with other team members by using private chat windows during group deliberations, the less powerful group had more influence on final group decisions compared to when all group members had to communicate using the same public channel. This occurred because the presence of secret communication opportunities reduced the perceived power of the dominant group and increased their motivation to attend to the diverging views of the minority (Swaab, Phillips, & Schaerer, 2016).

Although virtual environments seem to operate as an equalizing force of power differentials, at times this may come at a disadvantage for the powerless. For instance, one study found that in allocation games, the powerful allocators were more generous when their opponents had no power rather than low power (Handgraaf, Van Dijk, Vermunt, Wilke, & De Dreu, 2008). The reason for this generosity is that the powerful showed heightened feelings of responsibility when their opponents were completely powerless. The increased physical and social distance of virtual environments may make it harder for the powerless to evoke sympathy in their powerful counterparts as virtual environments tend to increase social distance (Wilson, Crisp, & Mortensen, 2013).

## **Final Conclusions**

Our review has demonstrated that social power research would benefit by systematically considering the organizational context of powerful and powerless actors. Features of the organizational context—from the temporal dynamics and type of hierarchical differentiation (e.g., power vs. status) that regulate behavior, to the interdependencies and history of interaction that alter interpersonal dynamics, to the accountability systems, culture, and virtuality that provide constraints on behavior—are all both amenable to experimental manipulation and likely qualify the conclusions drawn from context-free social power research that has been conducted in the past.

We also believe that there is benefit to increasing the organizational realism of experimental manipulations of power and with combining experimental work with archival and survey studies on the paper level. Such methods allow researchers to observe people's thoughts, feelings, and behavior in their natural environment where people have (or lack) meaningful power, engaging in ongoing interactions, and are embedded in consequential organizations. For example, Smith and Hofmann (2016) surveyed people several times per day over a period of three days while participants went about their daily routines. Although they could confirm several findings derived from laboratory studies (e.g., power is positively associated with mood and perceived control), it also led to some novel insights at odds with prior research. For example, Smith and Hofmann (2016) found that those in high-power positions felt closer to others than those in low-power positions which directly contradicts the social distance theory of power (Magee & Smith, 2013) which has argued that power increases social distance. We realize that archival and survey-based methods have their own validity threats, but the variety in methods used is necessary for building a robust body of research.

Finally, our review also suggests that research on social power could gain external validity by examining the effect of manipulations that are higher in experimental realism. One

option is to more frequently manipulate power using role assignments. In their critique of the writing prime, Sturm and Antonakis (2015) suggest that researchers adopt the approach used by behavioral economists, asking participants to engage in strategic allocation games (e.g., the dictator game). For example, Handgraaf and colleagues (2008) endowed participants with monetary resources in an ultimatum game context where the offer sender proposes an initial allocation that can then be accepted or rejected by the recipient. The level of power was manipulated by varying the delta factor, an exogenously determined discount factor ( $0 \leq \delta \leq 1$ ) that is used to calculate the final payoff of the players involved in an ultimatum game. In case the proposal of the sender is rejected by the recipient, the offer is multiplied by the delta. The appealing feature of this manipulation is that it not only captures the relational nature of power by having two people interact with each other, but also has real financial consequences for participants. This approach may well hold promise, but it is also important to point out that such games often evoke a confrontational or competitive orientation on the part of the powerful individual (Larrick & Blount, 1997). Yet another approach is the manipulation of real alternatives in negotiations. For example, Schaerer and colleagues manipulated the presence, strength, and/or number of alternatives with the help of a confederate who provided alternative offers during the first part of a multi-stage negotiation (Schaerer et al., 2015) or by having participants listen to pre-recorded voicemail messages that contained alternative offers (Schaerer, Loschelder, & Swaab, 2016).

Although our review has offered constructive criticism to the field of social power, we are hopeful that with some important but easily implementable adjustments, social power research will truly represent organizational behavior. We look forward to this organizational turn in social power research, where increasing levels of organizational and experimental realism in laboratory tasks will more effectively capture the realities of organizational actors.

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