When Does Power Trigger Approach Motivation?

Threats and the Role of Perceived Control in the Power Domain

Mianlin Deng

East China Normal University

Mufan Zheng

University College London

Ana Guinote

University College London and Nova School of Business and Economics

accepted by Social and Personality Psychology Compass

Author Note. Mianlin Deng, The School of Psychology and Cognitive Science, East China Normal University. Mufan Zheng, Division of Psychology and Language Science, University College London. Ana Guinote, Division of Psychology and Language Science, University College London; Leadership Knowledge Center, Nova School of Business and Economics.

Please address correspondence to Mianlin Deng and Ana Guinote.
Mianlin Deng. The School of Psychology and Cognitive Science, East China Normal University, 3663 Zhongshan Road N., Shanghai, China; 200062. Phone: +86-21-62232912. Fax: +86-21-62233433. Email: mianlin@outlook.com
Ana Guinote. Division of Psychology and Language Science, University College London, 26 Bedford Way, WC1H 0AP, London, United Kingdom. Phone: +44-20-76795378. Fax: +44-20-74364276. Email: a.guinote@ucl.ac.uk

Abstract

It is widely believed that power activates the behavioral approach system (BAS; Guinote, 2017; Keltner, Gruenfeld & Anderson, 2003), however, findings are inconsistent. Here we discuss evidence suggesting that perceived threats to control in the power domain are key determinants of the association between power and approach motivation. We propose that objective or subjective threats to the exercise of power trigger behavioral inhibition, conflicts between approach and behavioral inhibition, and reactive, negatively valenced approach motivation. Furthermore, threatened power holders reassert power – in particular by using coercion – as defense against threat. We discuss literature in support of these hypotheses involving external threats (e.g., instability, illegitimacy; uncertainty) and subjective states (anxiety, motivation to maintain power, perceived incompetence, submissiveness and perceptions of low power) that trigger the perception of lack of control in the power domain, and undermine the positive tone of power holders' approach motivation.

Keywords: power, threat, defense, behavioral inhibition, behavioral approach

accepted by Social and Personality Psychology Compass

Social power, or the asymmetric ability of some individuals or groups to influence others' outcomes (Fiske, 1993), is prevalent in social life. It is associated with increased access to valued resources and freedom from constraints (e.g., Fiske, 1993; French & Raven, 1959; Keltner, Gruenfeld, & Anderson, 2003). Power affects how people feel, think, and act, increasing optimism and agency (e.g., Fiske & Depret, 1996; Galinsky, Gruenfeld, & Magee, 2003; Guinote, 2017; Keltner et al., 2003).

The dominant paradigm to explain the psychological effects of power posits that power activates the behavioral approach system, a system that is responsive to rewards and opportunities (BAS, see Guinote, 2017; Keltner et al., 2003; for reviews). However, evidence is inconsistent. This article discusses conditions that deactivate the BAS among powerholders. It proposes that factors that raise powerholders' perception of threat to their ability to have an impact in the social world will deactivate or change the tone of behavioral approach, and activate the behavioral inhibition system (BIS; Gray & McNaughton, 2000). BIS is a system associated with the perception of threats and punishments, inducing risk avoidance, negative affect and behavioral inhibition. When powerful people feel threatened, they will fear lacking control, consequently they will be vigilant and engage in pro-active defense aiming at maintaining and asserting their power.

We will begin with conceptual considerations and findings regarding power and approach motivation (Gray, 1991, 1994; Gray & McNaughton, 2000). Specifically, we will discuss theorizing and findings associated with Keltner et al.'s (2003)

accepted by Social and Personality Psychology Compass

approach-inhibition theory of power, as well as the revised model of power as activating, wanting and goal seeking (Guinote, 2017). Subsequently, we will review evidence showing that situational and dispositional factors can reverse the links between power and approach motivation. We posit that they do so via a common element: the perception of threat that directly or indirectly affects control and the exercise of power. We will end the article by discussing how an understanding of powerholders' responses to threats is necessary for a full appreciation of socio-cognitive phenomena associated with power.

Threats can be numerous. They can result from discrepant experiences between one's goals or desires and the ability to attain them (Festinger, 1957; Jonas et al., 2014). This typically involves a discrepancy between the demands of the task at hand, and one's sense of control over them (Karasek, 1979). Of particular importance in the present context are threats that objectively or subjectively undermine the exercise of power. For instance, managers, teachers and parents who are dispositionally anxious often have authority concerns. They fear that they don't have the desired level of influence over their underlings (Bugental, 2010; Maner, Gailliot, Menzel, & Kunstman, 2012; see also Guinote & Chen, 2017). Similarly, objective uncertainty in the hierarchical domain raises concerns over one's authority (Jordan, Sivanathan, & Galinsky, 2011).

accepted by Social and Personality Psychology Compass

Approach and Avoidance Motivation

The dominant paradigm of the last 15 years of socio-cognitive research on power is based on the notion that power triggers approach motivation, and lack of power

triggers avoidance motivation (Keltner et al., 2003). These systems were first proposed by Gray (1991, 1994; see also Gray & McNaughton, 2000), as the two basic motivational systems that drive individuals' reactions to the environment. The BAS is activated by reward cues (e.g., food, money), and is responsible for triggering approach behaviors (e.g., pursuing rewards) and positive affect (e.g., hope, happiness). In contrast, the BIS, is activated in the presence of potential threats and punishments, and is responsible for inhibition or withdrawal behaviors and negative affect (e.g., anxiety, fear). Neuropsychological studies have revealed that BIS and BAS states are associated with asymmetries in prefrontal cortical activation. The left prefrontal cortex is the substrate of the BAS, whereas the right prefrontal cortex is the substrate of the BIS (e.g., Davidson, Ekman, Saron, Senulis, & Friesen, 1990; Harmon-Jones, Lueck, Fearn, & Harmon-Jones, 2006; Sutton & Davidson, 1997).

Most neuropsychological research on BAS was traditionally conducted with animals and utilized primary rewards, particularly food, looking at the hedonic tone of reward seeking (Berridge, 2007; Salamone & Correa, 2012). However, recent human findings have revealed that the same general "reward" system can be activated by a host of different stimuli including primary rewards such as food and sex, secondary rewards such as money, and positive activities such as entertainment (e.g., Alcaro, Huber, & Panksepp, 2007; Salamone & Correa, 2002). New developments in the neuroscience of reward processing have shown that approach motivation is not monolithic, but consists of distinct dimensions (Alcaro et al., 2007; Carver & White, 1994; Corr & Cooper, 2016). Two prominent dimensions are liking and wanting

accepted by Social and Personality Psychology Compass

(Berridge, 2007; Salamone & Correa, 2002, 2012). Liking refers to the experience of pleasure; wanting denotes clarity of focus and eagerness to attain one's desires and aims. In the light of these developments, Guinote (2017) recently proposed that power activates a specific type of approach orientation linked to the pursuit of goals. Power raises activation levels that energize thought and action, increases wanting one's aims and desires, and promotes seeking or working to obtain them. This contrasts with the previously-proposed hedonic tone of power as reward seeking.

While initially BAS and BIS were conceptualized as negatively correlated constructs (Corr, 2002; Gray, 1987; Keltner et al., 2003), a more nuanced and multifaceted perspective has recently emerged. In particular, it is argued that BAS and BIS operate as two orthogonally discrete systems (e.g., Berkman, Lieberman, & Gable, 2009; Jonas et al., 2014; McGregor, Nash, Mann, & Phills, 2010). Following this perspective, we posit that much of the states and behavior of powerholders can be understood as resulting from co-activations of BAS and BIS under threat, and that such co-activations change the tone of approach goals and the means used to attain them. Under threat, the primary goal of powerholders is to increase control and maintain power. They may then experience negative thought processes and emotions that contrast with the typical states of powerholders who feel in control and in charge. For instance, threatened powerholders may experience frustration and anger and think negatively about subordinates (Carver & Harmon-Jones, 2009; Guinote, 2017; Rodriguez-Bailon, Moya, & Yzerbyt, 2000). Crucially, powerholders have power at their disposal and may use coercion as a defense to assert their power (Bugental,

accepted by Social and Personality Psychology Compass

2010).

We will start by discussing evidence for the links between power and approach motivation, and then turn our attention to conditions that trigger BIS, and BAS-BIS conflicts among powerholders.

In Charge and in Control: Power and Approach Motivation

People are motivated to control their lives, and believe they can achieve desired outcomes and avoid undesired ones (Burger, 1989; Fiske, 2004; Rothbaum, Weisz, & Snyder, 1982; Skinner, 1995, 1996). Having control is accompanied by a belief that a person's outcomes are determined by his or her choices and actions rather than by external forces (Ajzen, 2002; Armitage & Conner, 1999; Baumeister, 1999, Rotter, 1966; Lammers, Stoker, Rink, & Galinsky, 2016). A high sense of control strengthens the person' behavioral intentions, facilitates action, and increases perseverance (Ajzen, 1985, 2002; Bruijn, Wiedemann, Rhodes, 2014; Langer, 1983; Notani, 1998). It is an important basis for approach motivation (Jonas et al., 2014).

Typically, people's position within social hierarchies affects their sense of control over their lives (Kraus, Piff, & Keltner, 2009). High social status, or high prestige and reputation that a person enjoys in a social setting, high social class, and power are all linked to enhanced control beliefs (e.g., Fiske, 1993; Galinsky et al., 2003; Keltner et al., 2003; Lammers et al., 2016). For instance, children from poor backgrounds are exposed to more uncertain environments than are wealthy children. This in turn causes disadvantage children to experience a low sense of control, whereas certainty among the wealthy children increases their sense of control (Guinote, Cotzia, Sandhu,

accepted by Social and Personality Psychology Compass

& Siwa, 2015; Lefcourt, 1982; Lewis, Ross, & Mirowsky, 1999).

Keltner et al.'s (2003) approach-inhibition theory of power proposed that elevated power is associated with the possession of resources and rewarding contexts, and that the experience of power makes people act at will without interference. Power gives people control over others and decreases social resistance and constraint (Overbeck, Neale, & Govan, 2010). This, together with easier access to resources and opportunities, gives powerholders more control over what is important to them, as well as the ability to act at will (Smith, Jostmann, Galinsky, & Van Dijk, 2008).

Elevated control over one's aims and desires is a crucial reason why people strive for power (Guinote & Vescio, 2010; Lammers et al., 2016; van Dijke & Poppe, 2006). With an enhanced sense of control and confidence, powerholders eagerly pursue their aims and desires. They are optimistic (Anderson & Galinsky, 2006), readily take action (Galinsky et al., 2003), exhibit overconfident decision-making (Fast, Sivanathan, Mayer, & Galinsky, 2012), and delay immediate gratification to pursue long-term desires and aims (Fast, Gruenfeld, Sivanathan, & Galinsky, 2009; Mittal & Griskevicius, 2014). For example, after recalling a high power past event or enacting of a manager role, participants were more inclined to choose behaviors reflecting a high sense of control (e.g. choosing to roll a die by themselves rather than letting others do it). They also reported a higher likelihood of controlling future outcomes, and this belief mediated a number of effects of power, such as higher optimism about the future, higher self-esteem, and an increased action orientation compared with their low power counterparts (Fast et al., 2009). In summary,

accepted by Social and Personality Psychology Compass

powerholders' elevated sense of control and confidence are necessary ingredients for behavioral approach (McGregor et al., 2010). When power is associated with perceptions of control, it typically activates behavioral approach, and the pursuit of powerholders' aims and desires.

Direct evidence for the effects of power on approach can be seen in self-reports, motor responses, and asymmetric frontal cortical activity (see Guinote, 2017, for a full review). For instance, Smith and Bargh (2008) found that individuals primed with high power reported higher scores on behavioral approach scales compared to others. Lammers, Stoker, and Stapel (2010) provided further evidence in natural environments through a large scale survey in an organizational context measuring employees' subjective power and self-reported BAS. They found that the relationship between power and approach tendencies was stronger among high power employees compared to those with low power.

Evidence supporting the power→approach relationship also stems from response facilitation. Supporting the notion that power activates people (Guinote, 2017), research has consistently found speedy responses in the thought processes, speech, and action of powerholders. For instance, Maner, Kaschak, and Jones (2010) found that priming power reduced the time taken by participants to approach stimuli (e.g., to move the hand toward the stimuli), and increased the time taken to inhibit responses (e.g., to move the hand away from stimuli; see also Smith & Bargh, 2008).

This tendency has even been proven at the physiological level. Researchers conducted several physiological measurements and found that power triggers high

accepted by Social and Personality Psychology Compass

cardiovascular performance. In this situation, the person usually possesses enough resources to deal with the situation and fulfill the demands of the situation, and s/he is able to mobilize energy efficiently. Conversely, low power triggers a threat response, increases concerns, and decreases efficiency in the transport of bodily energy (Scheepers, de Wit, Ellemers, & Sassenberg, 2012).

Neural research has also indicated that having or lacking power affects the relative left-right hemispheric activity. An EEG study showed that the experience of power, compared to lack of power, led to increased activity in the left-frontal region, associated with approach motivation (Boksem, Smolders, & Cremer, 2012). Meanwhile, this preferential hemispheric activation also appears in behavioral measures. Research illustrated that low power participants showed a leftward attentional bias in a line bisection task and in a locomotory task, indicative of greater right-than-left hemisphere (BIS) activation. In contrast, those with high power did not exhibit this tendency (Wilkinson, Guinote, Weick, Molinari, & Graham, 2010).

Mood is another correlate of BAS/BIS (Gray & McNaughton, 2000). In their theory of power and approach, Keltner et al. (2003) proposed that power is associated with positive affect (e.g. Tiedens, Ellsworth, & Mesquita, 2000; Young, Keltner, Londahl, Capps, & Tauer, 1999), as "positive affect facilitates the pursuit of approach-related goals" (Keltner et al., 2003, p. 269; see also Davidson, 1992; Higgins, 1997). Furthermore, power boosts self-esteem and positive mental representations about the self, and thus facilitates approach behaviors. It raises confidence, optimism, and self-esteem (Brinol, Petty, Valle, Rucker, & Becerra, 2007;

accepted by Social and Personality Psychology Compass

Wojciszke & Struzynska–Kujalowicz, 2007). Confidence and elevated self-esteem induce fast decision making and action, as well as risk-taking (Anderson & Galinsky, 2006), but this does not always come without potential drawbacks. Powerholders often engage in overconfident decision making. They are overconfident in the accuracy of their own knowledge and cognitive estimates; they mistakenly think they are better than average and overestimate their control over outcomes (Fast et al., 2012). Brinol et al. (2007) found that induced power increased a sense of confidence, which, in turn, led to the validation of participants' initial views (see also Tost, Gino, & Larrick, 2012). Compared to low power participants, those in a high power condition felt more optimistic about their personal life and were less prone to dangers. This underestimated perception of risk and danger led high power individuals to engage in more risk-taking behavior, some of which were not desirable, such as the willingness to have unprotected sex and divulge their interests in negotiations. In a similar vein, Inesi (2010) found that power decreased awareness of anticipated threats associated with losses among powerful participants.

Power activates or energizes people (Guinote, 2017). Power facilitates the initiation of action, which typically accompanies approach states (Guinote, 2007a, 2007b). For instance, Galinsky et al. (2003) showed that participants randomly assigned to a power condition were more likely to take a card in a blackjack game, to remove an annoying stimulus (such as stopping a fan which disturbed their task), and to take actions in social dilemmas, whatever the results of the actions were (prosocial or not). The powerful are inclined to speak first, and to speak more than others

accepted by Social and Personality Psychology Compass

(Guinote, Judd, & Brauer, 2002; Hall, Coats, & LeBeau, 2005). In negotiations, the action tendency of powerholders is also salient, as they more frequently initiate a negotiation (Magee, Galinsky, & Gruenfeld, 2007).

A great deal of research has shown that power triggers wanting to obtain one's aims and desires and working towards them (Guinote, 2017). Powerholders prioritize and eagerly and readily engage in courses of action that advance their aims and desires (Guinote, 2007a, 2007b; Min & Kim, 2013; Overbeck & Park, 2006; Willis & Guinote, 2011; Vescio, Snyder, & Butz, 2003). Powerful people show a higher goal orientation compared with ordinary and powerless people. They more readily engage in goal pursuit activities, including setting goals and initiating action to pursue goals (Guinote, 2007a). When facing difficulties, powerholders persist. They are less depleted after demanding tasks (DeWall, Baumeister, Mead, & Vohs, 2011), and think of more methods to deal with difficulties and achieve their goals compared to their powerless counterparts (Guinote, 2007a).

To achieve their goals and desires, the powerful also show a higher willingness to communicate with others. In meetings, they tend to make the opening arguments, in negotiations they show intentions to make offers, and actually make the first offer in and so they obtain a competitive advantage (Magee et al., 2007). Managers and other executives spend two thirds of their time in communication with employees (Reid & Ng, 1999). During verbal interactions, the powerful express more authentic attitudes (Anderson & Berdahl, 2002; Kraus, Chen, & Keltner, 2011), and communicate with fewer hedges (e.g. "sort of", "maybe"), hesitations, or disclaimers (e.g. "I don't really

accepted by Social and Personality Psychology Compass

know"; Holtgraves & Lasky, 1999; Reid & Ng, 1999) than do powerless individuals. Powerholders display more nonverbal behavior (e.g., facial expressions, hand/arm gestures) than their powerless counterparts (Hall et al., 2005). When interactions are initiated, powerful individuals stand closer to their partners and look more frequently at others' eyes (Dean, Willis, & Hewitt, 1975; Gobel, Kim, & Richardson, 2015). Power thus leads to greater self-expression, authenticity and disinhibited behavior in social interactions, as an attempt to influence others and to pursue salient goals (Guinote & Chen, 2017; Guinote et al., 2002). For example, studies showed that having power led prosocial people to act in a more prosocial manner and selfish people act in a more selfish way (Chen, Lee-Chai, & Bargh, 2001; Cote et al., 2011). For instance, in one study Guinote, Cai and Weick (2012) first measured traits that participants expressed frequently and chronically, and then assigned them to play a manager or an employee role in a laboratory task. Participants were asked to assess an ambiguous person. They found that the assessments of the participants in managerial roles were more in line with their chronically accessible traits compared to those with employee roles.

To sum up, the association between power and approach orientation has received overall support in a variety of life domains. In nearly all of these studies, powerful participants were free to act at will and felt in charge and in control.

In Charge but Not in Control: BIS-BAS Conflicts

Even though power generally comes with increased control and freedom, under certain circumstances the powerful experience threats to their feelings of control and

accepted by Social and Personality Psychology Compass

power. Whether in business, education, politics, or other administrative domains, powerholders face various challenges. Organizational managers deal with crises tied to finances, public relations, or legal issues. Educational leaders handle problems concerning the equity or the quality of higher education. EU leaders manage the refugee crisis and work on the Brexit.

As the above examples show, the challenges to powerholders are common and multifaceted. They can be objective: for example, power illegitimacy linked to unfairness or incompetence, instability due to coalition formations against powerholders, inability to meet organizational targets, and reputation disrepute. These represent actual threats to control. Threats can also be related to subjective perceptions: parents and teachers may feel that they have no authority, and people with an anxious or submissive personality may find themselves lacking a sense of power. Yet all of these situations have a core element in common: they involve uncontrollability about power related outcomes, in particular the ability to influence others and events. Threats create discrepancies between role-based expectations or desires (to be powerful and in charge) and the current circumstances (an uncertain and unpredictable future) (Jonas et al., 2014).

What happens, then, when powerholders are threatened? According to the situated focus theory of power (Guinote, 2007b, 2010), powerholders engage more unequivocally on the most salient aims and desires, and thus act in a situated manner. A great deal of work has shown that when threats to control are high, restoring control has priority (Bukowski, Fritsche, Guinote, & Kofta, 2016), and we argue that this is

accepted by Social and Personality Psychology Compass

also the case for powerholders. Typically, threats immediately activate the alarm system (BIS), leading to a cascade of defensive responses that aim at protecting individuals from harm. These responses include anxious arousal, heightened vigilance, avoidance of threatening stimuli and situations, and disengaging from ongoing behavior (Corr, DeYoung, & McNaughton, 2013; Jonas et al., 2014). For example, cognitive dissonance threats enhance ACC neural activity, an indicator of BIS activation (Kitayama, Chua, Tompson, & Han, 2013). Other studies on mortality salience found that participants exhibited BIS-related reactions immediately after death reminders: They turned attention to positive information and denied their likelihood of an early death (e.g., DeWall & Baumeister, 2007; Greenberg, Arndt, Simon, Pyszczynski, & Solomon, 2000).

Will threats affect powerholders' in a similar manner? Powerful people have unique tools at their disposal. They have more resources and possess control over others. Given these means, they may be less sensitive to mundane existential threats. Power may thus initially act as a buffer against everyday threats (Muhlberger, Jonas, & Sittenthaler, 2016). For example, when powerful people face constraints on one of their choices for their primary goal (e.g., swimming for doing sports), they can quickly turn their attention to alternative choices (e.g., jogging; see Muhlberger et al., 2016, for a review).

When threats affect control and ability to exercise power, however, they undermine the aims of power roles and power advantages. We propose that under these circumstances, power leads to BIS activation and a change in BAS tone towards

accepted by Social and Personality Psychology Compass

negative affect (e.g., frustration, anger) and defensive behavioral approach, including the use of coercive power. Powerholders then experience stress and engage in poor decision making.

This claim is supported by findings in several fields. For example, a meta-analysis of 151 studies (Judge, Colbert, & Ilies, 2004) found that the relationship between intelligence and quality of leadership is significant only when leaders have low levels of stress (based on the belief that they can respond to demands and challenges). High uncertainty and stress are disruptive of this relationship. Under high levels of stress, leaders are unable to recruit abstract concepts and plan how to solve crises because their attention is diverted to the stressors (Thompson, 2010). During crises such as being in an unstable position, powerholders shift attention processing. For instance, they rely on local processing (processing of details rather than the broader structures; Navon, 1977), and lack cognitive flexibility and creativity (Sligte, Dreu, & Nijstad, 2011).

If threats to power activate BIS, powerholders, who are typically in an approach state, may experience a BIS-BAS conflict – that is, a conflict between approach- and inhibition-related motivation and behavior. The defensive strategies of powerholders could therefore entail BIS-related vigilance, passive avoidance, but also unique defensive approach behaviors, particularly power assertion to maintain the hierarchy.

As we have noted earlier, threats to power involve discrepancies between subjective expectations regarding the exercise of power and the current circumstances of powerful individuals. Particularly important are discrepancies between a desire to

accepted by Social and Personality Psychology Compass

possess power and control and a fear of being in an insecure power position, or lacking the authority necessary to fulfill the demands of power roles. In the following, we will turn to specific threats that objectively or subjectively undermine a powerholder's sense of being in charge and in control. These threats can be divided into two types. One type of threats stems from the social environment, for instance, variability, instability and illegitimacy of power relations. The other type stems from the predispositions of the individual, such as anxiety, and power motivation, or poor fit between power roles and attributes of the person, such as incompetence, perceptions of low power, and trait submissiveness (see Figure 1).

External Threats to Power

Power hierarchies can advance collective interests and satisfy a human's basic need for order and predictability (Fiske, 2004; Leavitt, 2003; Magee & Galinsky, 2008). Stable and enduring power relations are often formed on the basis of merit, competence or social agreement (e.g., legitimacy; Ridgeway & Berger, 1986; Willis, Guinote, & Rodriguez-Bailon, 2010). In these cases, the privileged positions of powerholders are perceived as deserved, and challenges are less likely to occur. For example, a company assigns high power managerial positions to those who prove themselves to be competent. With a potent and effective managerial team, the company can grow and become successful, and typically employees are willing to follow the rules and demands set by the powerful. However, this ideal scenario is not always met.

Power holders are not always competent to carry out their jobs, and even

accepted by Social and Personality Psychology Compass

competent power holders may face uncertainty given the dynamic organizational and external environments that characterize human societies. For instance, powerful leaders can be challenged by competitive or highly competent subordinates (Maner & Mead, 2010; Mead & Maner, 2012). Similarly, high power positions can be perceived as unfair, resulting from inappropriate power distributions (e.g., nepotism). Unfair or illegitimate power is often subject to opposition. Under these circumstances, power becomes potentially unstable and powerholders feel threatened (e.g., Mead & Maner, 2012; Smith, Jost, & Vijay, 2008; Willis & Guinote, 2011).

A great deal of research has shown that the powerful are motivated to maintain their privileged power positions (Fiske, 2010; Fiske & Berdahl, 2007; Sidanius & Pratto, 1999; Sidanius, Pratto, van Laar, & Levin, 2004). Powerholders avoid relinquishing power after they obtain it, a phenomenon particularly observed in Western countries (Ratcliff & Vescio, 2013). The desire to maintain power and the status quo is integrated in various research traditions on social hierarchies, such as the power as control theory (Fiske, 1993; Fiske & Depret, 1996), the system justification theory (Jost & Banaji, 1994; Jost, Banaji, & Nosek, 2004), and social dominance theory (Sidanius & Pratto, 1999; Sidanius et al., 2004).

When faced with power threats, therefore, the maintenance of power should emerge as the primary goal of powerholders (Willis & Guinote, 2011). Powerholders should then attempt to restore their subjectively threatened power, and they can do so via the unique means at their disposal – power-related means.

Changes in the subjective experiences and behavior of powerholders under threat

accepted by Social and Personality Psychology Compass

are consistent with the situated focus theory of power (Guinote, 2007b, 2010). Accordingly, powerholders act more unequivocally in line with their salient goals (e.g., in a situated manner) than powerless individuals. In line with this theory, here we posit that a discrepancy between power roles and the potential of power loss activates the primary goal of maintaining or reasserting power. Furthermore, we argue that power affects defense means used to restore control. Powerholders typically tend to use a varied means at their disposal to attain goals (Guinote, 2007a; Willis & Guinote, 2011). In the present context, they will resort to power itself to reinforce existing hierarchical differences. Below, we will begin by discussing external threats related to instability and illegitimacy of power in more detail. We will then discuss threats associated with the person.

Power Instability

Research on non-human primate species was the first to investigate the influence of instability in power hierarchies. For instance, the dominance relationships of Barbary macaques are unstable (Berghanel, Ostner, and Schulke, 2011). Physically inferior macaques can destabilize an existing dominance relationship and achieve high ranking positions by soliciting support from other individuals. Studies such as this showed very different results compared to those obtained in stable power hierarchies.

More generally, animal and human studies indicate that potential loss of control produces stress in those at the top of the hierarchy (Knight & Mehta, 2017; Sapolsky & Share, 2004, Scheepers, 2009). Typically, when hierarchies are unstable alpha males experience higher levels of stress than alpha males in stable hierarchies

accepted by Social and Personality Psychology Compass

(Gesquiere et al., 2011). According to a meta-analysis of humans studies (Starcke & Brand, 2016), stress increases risk-taking because it orients attention to immediate and potentially high rewards and interferes with executive control and a systematic consideration of all the options.

Research conducted with humans found that unstable power increases the stress levels of powerholders and decreases BAS activation (Maner, Gailliot, Butz, & Peruche, 2007; Jordan et al., 2011). Power instability *per se*, or in interaction with dispositional factors of powerholders, influences their ways of thinking and acting, particularly their risk-taking. Maner, Gailliot et al. (2007) assigned participants to a powerful (manager) or powerless (subordinate) role and manipulated the stability of those roles. In the stable condition, participants were informed that their roles would not change regardless of their task performance. In the unstable condition, participants were told that the assigned roles could be altered depending on their task performance. The study showed that when powerful individuals occupy an unstable power position and face potential loss of control, they tend to change their usual risk-taking orientation and become conservative and scrupulous (see also Hiemer & Abele, 2012). A recent study on moral behavior (Kim, Shin, & Lee, 2017) found that power instability breaks the link between power and approach-related unethicality. Given that power is associated with asymmetric control over valuable resources and outcomes of others, powerholders are more likely to conduct unethical behavior such as lying (Lammers, Stapel, & Galinsky, 2010), and sexual harassment (Bargh, Raymond, Pryor, & Strack, 1995), but this only occurs when their power position is

accepted by Social and Personality Psychology Compass

unstable. Power instability increases perceptions of risk, which then leads to more ethical behavior among powerful individuals (Kim et al., 2017).

Nevertheless, the evidence that power instability can decrease risk-taking in the powerful is inconsistent. A reversed pattern was found by Jordan et al. (2011). In their studies, when power was perceived as unstable, powerful individuals showed increased risk preferences in various decision making tasks. Despite such apparent contradictions, the findings can be reconciled by considering the interaction between power stability and the distinct dispositions of powerholders, such as power motivation and stress tolerance, issues that will be discussed later. Together, the results suggest that unstable power is associated with the prospect of losing power, thus creating physiological stress in the powerful.

One of the reactive defences of powerholders in unstable hierarchies concerns the ways they think about and interact with the powerless. Georgesen and Harris (2006) examined the joint effects of expectation about subordinates and power stability on the ways powerholders perceive and treat their subordinates. Participants were assigned either to a powerful (boss) or a powerless (employee) role in dyads. They were informed that their roles could be either altered (unstable condition) or would stay the same (stable condition). When the power position was unstable, bosses holding negative expectation regarding subordinates, unlike those with positive expectations, treated the subordinates more negatively during interactions. They evaluated them negatively and allocated them a small amount of prize money. However, when bosses were in a stable power condition, their expectations did not

accepted by Social and Personality Psychology Compass

impact the interactions with subordinates (see also Vescio, Snyder, & Butz, 2003). These findings dovetail with the notion that the motivation to maintain power triggers negative stereotypes and perceptual biases towards the powerless – attributing negative traits to them and therefore viewing them as deserving of their disadvantaged positions.

With perceived threats to power, powerholders in unstable power hierarchies respond with power assertion to maintain their power. This tendency is especially enhanced in individuals who are highly motivated to have power. For example, Maner and Mead (2010) found that under an unstable leadership condition, leaders with high dominance motivation displayed increased formidability and coercive control over ingroup members who threatened their power. They excluded a competent group member or did not assign him to a position with ingroup influence (e.g., director), so that they could prevent the member from gaining prestige and threatening their authority. Similarly, another study by Mead and Maner (2012) showed that power instability caused leaders who were high in dominance motivation to protect their power by seeking proximity to an ingroup competitor, whom they could thereby monitor and control.

Power Illegitimacy

Power can be fairly or unfairly afforded or grabbed. Power legitimacy is defined as the extent to which power differences within social hierarchies are subjectively perceived as fair and just (e.g., on the basis of the powerholders' inputs and abilities; Major & Schmader, 2001; Spear, Greenwood, De Lemus, & Sweetman, 2010; Tost,

accepted by Social and Personality Psychology Compass

2011). Power is illegitimate when people believe that the process of acquiring or distributing power is unfair (e.g., on the basis of nepotism; Spear et al., 2010). If people view a powerholder as legitimate, they feel obligated to follow and support the powerholder (Tost, 2011; Tyler, 1997); otherwise, they are reluctant to obey and may challenge the powerholder's privilege. Legitimacy is thus a critical determinant of the endurance and stability of a power hierarchy. Illegitimacy of power differentials decreases powerholders' sense of control, leading them to feel threatened and alarmed. This in turn motivates them to maintain the status quo and preserve their power and control.

Several studies suggest that power illegitimacy activates BIS and triggers reactive approach motivation. This can be seen in basic measures of approach motivation, during goal pursuit, in moral reasoning, social behavior and perceptions (Lammers, Galinsky, Gordijn, & Otten, 2008; Lammers, Stoker et al., 2010; Willis, et al., 2010; Willis & Rodriguez-Bailon, 2010; Rodriguez-Bailon, et al., 2000).

In two studies, Lammers and his colleagues (2008) manipulated power and legitimacy by asking participants to recall a past event in which they were either powerful or powerless, and felt that the power relation was either legitimate or illegitimate. In another study, legitimacy was manipulated by assigning participants to different power roles (manager or subordinate) ostensibly on the basis of their leadership skills measured by a prior questionnaire. In contrast, illegitimacy was manipulated by role assignments that did not match participants' competencies. Powerful participants were approach-oriented in self-reported BAS/BIS measures,

accepted by Social and Personality Psychology Compass

negotiations and organizational decision-making, but only when their power position was legitimate. When their power position was illegitimate, the powerful displayed a general inhibition tendency.

Power legitimacy also affects how powerful people pursue goals (Willis & Rodriguez-Bailon, 2010). When power is legitimate and secure, powerful individuals have great freedom and an increased sense of control. As a result, they can focus primarily on pursuing their own goals. In contrast, power illegitimacy decreases powerholders' sense of control, and therefore the approach tendency towards their own desires and aims. Meanwhile, the illegitimately powerful are motivated to prove that they deserve power and privilege. They rely on a behavioral strategy: being kind to others and fulfilling their obligation and responsibility associated with their high power roles. Lammers, Galinsky, Gordijn, and Otten (2012) found that power illegitimacy reverses the effect of power on self-sufficient approach tendency, and promotes altruism among powerful people.

Similarly, power illegitimacy changes moral behavior and reasoning (Lammers, Stapel et al., 2010). It decreases powerholders' immoral approach behavior, such as cheating and stealing. Under illegitimacy, moral hypocrisy – typically defined as applying rigorous moral standards on others but less strict standards on oneself (Valdesolo & DeSteno, 2007, 2008), is reduced among powerful people. Lammers, Stapel et al. (2010) suggested that illegitimacy signals instability and potential loss of power, consequently motivating the powerful to maintain their ascendancy. Besides, powerful individuals are reluctant to act freely and wield their power because they

accepted by Social and Personality Psychology Compass

feel their advantage is undeserved. This explanation can be partly supported by the evidence showing that powerful individuals experience guilt, unease, and fear when the power relationship is unexplained or illegitimate (Smith, Jost et al., 2008; Weber, Mummendey, & Walduz, 2002).

As with power instability, people with illegitimate power also resort to cognitive strategy to justify the current power structure and elevate the legitimacy and security of their high power positions. They stereotype the powerless and think them as deserving of low power positions (Rodriguez-Bailon et al., 2000). Rodriguez-Bailon et al. (2000) assigned participants to a legitimate or illegitimate power position, allegedly on the basis of their leadership ability. They found that when the legitimacy of power positions was ambiguous (when no reason was given to explain the role assignment), powerful participants paid more attention to negative stereotype-consistent information about the powerless than do legitimately powerful participants. The effect of illegitimate power on stereotyping and derogations of subordinates was also mediated by feelings of threats driven by the insecure power situation.

Another study investigated the role of legitimacy on the ingroup favoritism of powerful groups (Hornsey, Spears, Cremers, and Hogg, 2003). Power was manipulated by providing participants with information about the composition of a university senate. In the high power condition, participants from the same department (e.g., social-science students) were informed that the university senate, with high executive power, included 8 out of 10 faculty members from their department. In the

accepted by Social and Personality Psychology Compass

low power condition, participants were told that the senate included 8 of 10 faculty members from the other department (e.g., math-science). Legitimacy was manipulated by informing participants whether the makeup of the senate was representative (legitimate condition) or unrepresentative (illegitimate condition) of the departmental proportion. The study found that illegitimately powerful groups exhibited strong ingroup bias and great discrimination towards the powerless outgroup. In contrast, legitimately powerful groups did not show an ingroup preference. They did not have to justify their dominant position via ingroup bias as their position was legitimate and secure. By viewing the powerless as inferior and undeserved and by discriminating against them, people with illegitimate high power could justify and rationalize their privilege and defend themselves against forces of change.

Summary

To summarize, power typically triggers approach when powerholders' position is secure and stable. However, in insecure situations, such as when power is unstable or illegitimate, powerholders may lose the control that they desire. This activates BIS and increases threat vigilance. Simultaneously, threats change the valence of approach emotions towards negativity, in particular anger (e.g., Guinote, 2017) and trigger disruptive approach behavior (e.g., aggression, Fast & Chen, 2009) among powerful people. This may include the use of coercive means in domains where powerholders can assert power to maintain the status quo.

By and large, these findings are consistent with the threat and defense literature showing compensatory reactions to many kinds of everyday threats (e.g., Jonas et al.,

accepted by Social and Personality Psychology Compass

2014; Bukowski et al., 2016). Powerholders show BIS-related attention. However, they are prone to unique reactive approach following threat, in an attempt to maintain power. They rely on unique defense means, such as derogation of subordinates and authoritarianism. We will now discuss the role of dispositions on the motivational orientation of powerholders.

Power, Behavioral Approach, and the Person

Even though powerholders are in charge, their inner experiences of power can vary. Some in the high echelons may feel in charge and believe they have what it takes to exercise power. Others may feel incompetent, inadequate, or lacking control over subordinates. The latter experiences create discrepancies between subjective feelings of control and their social role. Evidence indicates that when powerholders' perceptions of the self are not consistent with their power roles, they feel insecure and threatened (e.g., Fast & Chen, 2009; Bugental, 2010). Here we posit that subjective lack of power among the powerful can activate BIS, create BAS-BIS conflicts, and induce defensive reactions in similar ways to external threats to power. We will discuss the roles of anxiety, trait dominance or the motivation to have power, competence beliefs, and subjective perceptions of low power.

Anxiety

Anxiety, defined as an unpleasant feeling or state of inner turmoil and worry about future threats (Seligman, Walker, & Rosenhan, 2001), is linked to a discrepancy between perceived demands and the ability to control or respond to the demands (see the demand-control-support model of stress; Karasek, 1979). Anxiety is the emotion

accepted by Social and Personality Psychology Compass

most closely related to behavioral inhibition (e.g., Muris, 2006; Clauss & Blackford, 2012; Viana & Gratz, 2012). The robust associations between anxiety and inhibition, on the one hand, and power and approach, on the other hand, raise the question: what happens when chronically anxious individuals acquire power? The evidence suggests that powerholders' dispositional anxiety modulates the extent to which they are approach-oriented (Maner et al., 2012). Furthermore, trait anxiety interacts with context to determine motivation. For example, under stressful circumstances (e.g., an unstable power condition), anxious powerholders become particularly defensive (Jordan et al., 2011).

High levels of anxiety lead to an array of responses typical for BIS (e.g., Barlow, 2002; Ohman, 1986). These include risk-averse decision-making (Raghunathan & Pham, 1999; Maner & Schmidt, 2006; Maner, Richey et al., 2007), pessimistic appraisals (Barlow, 2002; Maner & Schmidt, 2006), and biases towards perceiving ambiguous information as threatening (Mathews & MacLeod, 2002; Stober, 1997; Viana & Gratz, 2012). These tendencies have also been observed in anxious people in positions of authority. Maner and his colleagues (2012) demonstrated that anxiety dampens the effect of power on approach motivation. Specifically, high power participants who were low in trait anxiety engaged in risk-taking behavior and disinhibited sexual attention towards a confederate. For those who were high in anxiety, however, high power no longer triggered approach behavior.

Closely related to trait anxiety is the individuals' tolerance of stressful situations, or their ability to endure distressing situations. Low tolerance to stressors triggers a

accepted by Social and Personality Psychology Compass

propensity to experience anxiety in the presence of stressors (Leyro, Zvolensky, & Bernstein, 2010). Powerholders with low stress tolerance are typically approach-oriented, for instance, they take more risks than those with high stress tolerance (Jordan et al., 2011). Stress intensifies automatic and pre-existing dominant decision-making preferences (e.g., risk-taking in a high power condition; Porcelli & Delgado, 2009). However, for those who have a high power motivation, a distressing power condition triggers the primary goal of maintaining their power, thus promoting conservative action.

Trait Dominance and Power Motivation

Individuals who appear in powerful roles often desire power; that is, they have a dominant predisposition. Dominant people are assertive and display forceful behavior directed at enhancing control in social encounters (Buss & Craik, 1980; Wiggins, 1979; Winter, 2010). Dominance is the trait that can best predict the attainment of power and influence, alongside extraversion (see Guinote & Chen, 2017, for a review). Dominant individuals speak more and make direct eye contact during interactions. They actively seek status and leadership, and feel comfortable in high power roles (e.g., Anderson & Kilduff, 2009a; Chen, Langner, & Mendoza-Denton, 2009; see also Guinote & Chen, 2017). Because power is often afforded on the basis of competence and ability to advance collective goals, dominant people can signal competence through confident and assertive communication (Anderson & Kilduff, 2009a).

Even though dominant people more easily acquire power and are approach-oriented (Guinote, 2017), extreme motivation to possess power can trigger

accepted by Social and Personality Psychology Compass

defensive exercises of power and vigilance to the potential power loss (Scheepers & Ellemers, 2005). For instance, Maner, Gailliot et al. (2007) found that when power is at stake, powerful individuals with high power motivation make conservative decisions and avoid risks. Hiemer and Abele (2012) found that this is not the case when power is stable. Under stable power conditions, the higher the power motivation is, the more likely powerholders are to take risks. In this case, high power is regarded as a reward for those high in power motivation and thus activating approach-related behavior (e.g., risk-taking).

Experiences of Incompetence

In groups and organizations, power is most frequently afforded to individuals who are competent and have expertise (Magee & Galinsky, 2008). People in authority positions are thus expected to possess superior abilities that can help advance collective goals (Anderson & Kilduff, 2009b; Cuddy, Fiske, & Glick, 2008; Keltner, 2010). However, these expectations are not met when powerholders lack the necessary skills. Powerholders' incompetence signals they are not able to exercise power effectively, and may consequently lack control and influence.

Drawing on the self-discrepancy theory (Higgins, 1987), it has been argued that a discrepancy between powerholders' actual self (not being capable and skillful) and their ought self (being highly competent) should threaten their self-worth (Fast, 2009; Fast & Chen, 2009; Fast, Burris, & Bartel, 2014). Consistent with this notion, several experimental studies have demonstrated that powerholders who feel incompetent attempt to compensate for their threatened ego by denigrating others, displaying

accepted by Social and Personality Psychology Compass

hubris, and engaging in aggressive behavior (Cho & Fast, 2012; Fast, 2009; Fast & Chen, 2009). In organizational contexts, managers with low perceived ability feel personally threatened and exhibit ego defensive management. They are averse to employees' voice, evaluate subordinates negatively, and are reluctant to change or improve their leadership (Fast et al., 2014; Paglis & Green, 2002). Furthermore, the defense of powerful individuals to ego threats can be mitigated by affirmations of their self-worth. For example, Fast and Chen (2009) showed the aggressiveness of powerholders was eliminated when their leadership aptitude or relevant values were affirmed. Similarly, denigration by supervisors was alleviated when their sense of social worth was boosted by receiving gratitude expressions from subordinates (Cho & Fast, 2012). Thus a decrease in self-worth seems to play a role in powerholders' negative attitudes towards subordinates. In the present (more broad and distal) framework, threats to the self activate BIS, and are followed by reactive approach strategies to restore powerholders' privileged hierarchical position.

Subjective Perceptions of Low Power

Being competent and capable of advancing the interests of groups and organizations is a frequent antecedent of power affordance (Anderson & Kilduff, 2009b; Cuddy et al., 2008; Keltner, 2010). People are often appointed to power positions based on their competencies, or because of their experience and seniority. This does not, however, mean that these people desire power, or that their personal predispositions fit well with the expectations associated with power roles (e.g., being assertive, decisive, and making task-related demands from others). Another type of

accepted by Social and Personality Psychology Compass

discrepancy occurs when people have power but experience a lack of it (Bugental, 2010; Chen et al., 2009; Schmid Mast & Hall, 2003). Throughout all these circumstances, there are incongruences between the person – their desires, dispositions or perceptions – and the demands of power roles. These incongruences hinder effective exercises of power, and they too can activate BIS in the absence of external threats.

Consistent with this notion, a wave of research on parent-child and teacher-student relationships has revealed that authority insecurity and perceptions of low power induce arousal, negative affect, and punitive power assertion (see Bugental, 2010, for a review). For instance, parents who believe they do not have power are highly reactive to dominance comparisons within family interactions (Bugental, Lyon, Krantz, & Cortez, 1997). When facing authority challenges posed by children, they easily experience negative affect and make efforts to regain control (Bugental et al., 1993).

Power-defensive tactics used by parents with low perceived power include coercive control, verbal derogation, physical abuse, and safety neglect towards the children (Bugental, Blue, & Cruzcosa, 1989; Bugental & Happaney, 2000, 2004). Put differently, subjectively powerless parents use the power they have at their disposal as a defense tool to reassert power.

The use of coercive force as a means of restoring a sense of power among powerholders who subjectively lack power is also observed in teaching relationships. When their authority positions are challenged, teachers with low perceived power are

accepted by Social and Personality Psychology Compass

more likely to show control-oriented perceptions (e.g., to think students should follow their instructions) and to exert punitive force (e.g., to provide negative evaluation gratuitously to students; Bugental & Lewis, 1999; Bugental, Lewis, Lin, Lyon, & Kopeikin, 1999). Moreover, Bugental et al. (1999) found that these defenses are driven by a state of autonomic arousal (elevated heart rates and more electrodermal activity). As posited here, power threats trigger anxious states, and this is followed by coercive defense to reassert power.

Dispositional and Role Power Unfit

More broadly, research has also investigated the consequences of a discrepancy between dispositional dominance and actual power for self-expression. Chen et al. (2009) showed that when a person's dispositional dominance mismatched his or her position power (e.g., a dominant individual holding a powerless role), the person had fewer approach-related authentic expressions than when the person's dispositional and position power matched (e.g., a dominant individual in a powerful position). These findings are consistent with the notion that approach tendencies driven by high position power also depend on the person (e.g., power motivation; Maner, Gailliot et al., 2007). Approach tendencies diminish when people have low perceived power.

Summary

To summarize, various predispositions can present powerholders with discrepancies between their habitual responses, identity and ideals on the one hand, and their power roles on the other. Dispositions characterized by anxiety are associated with an active BIS (Gray & McNaughton, 2000), which conflicts with the

accepted by Social and Personality Psychology Compass

approach opportunities afforded by power. A strong motivation to possess power (e.g., trait dominance) sensitizes individuals to signs of power instability and potential power loss. Experiences of incompetence conflict with social expectations related to high power roles. Finally, subjective perceptions of low power conflict with the actual power demands of powerholders.

Across situations such as these, powerholders experience inconsistencies between the expectations of their roles and their actual self. This experience of threat activates BIS and reactive, negatively-valenced BAS, including anger and the use of punitive means to reassert power. Crucially, powerholders' BIS-BAS conflicts are associated with a primary goal of power maintenance.

Conclusions

Since Keltner et al.'s (2003) approach theory of power, considerable evidence supports the notion that power triggers approach motivation seen across affective experiences, cognition and actions. More recently, it has been suggested that power triggers a particular type of approach motivation linked to goal pursuit, and involving high activation or energy levels, wanting or clarity of focus, and seeking salient aims and desires (Guinote, 2017). This research has primarily focused on rewards, opportunities, and the positive experiences that often accompany power. Here, instead, we examined a darker side of power, when powerholders face objective or subjective threats to influence and control. We posit that objective and subjective threats to the exercise of power and control will activate BIS, create BIS-BAS conflicts, and lead to negative, reactive BAS among powerholders.

accepted by Social and Personality Psychology Compass

We reviewed work on external challenges to powerholders and the power structure, in particular instability and illegitimacy of power. We then reviewed subjective states and beliefs of the individual, including anxiety, power motivation, experiences of incompetence, and subjective perceptions of low power. Regardless of whether threats are objective and associated with the power structure or are linked to dispositions and fit between powerholders and their roles, powerholders respond in a remarkably similar manner. They show concerns with power threats, and BIS-BAS conflicts. This, on the one hand, can trigger some of the common BIS-related behaviors, including increased vigilance, avoidance motivation, and behavioral inhibition. On the other hand, given an activation of BAS due to power, BIS-BAS conflicts emerge and can be seen in a negatively-valenced reactive approach motivation. This is characterized by the negative emotions of frustration and anger, and related emotive goals such as inducing punishment. Thereby, threatened powerholders engage in authoritarian and coercive practices of power that aim at maintaining the status quo. In addition, they threatened power holders rely on stereotypes and negative perceptions of subordinates that warrant their superior positions in the hierarchy.

BIS-BAS conflicts can vary in the dominance of BIS or BAS activations. We found that in some cases defensive responses due to BIS activation dominate (e.g., decreased self-sufficient approach orientation and increased altruism under power illegitimacy; Lammers et al., 2012), whereas in other circumstances, reactive approach is the primary strategy that powerful people use to defend the status quo

accepted by Social and Personality Psychology Compass

(e.g., derogation of the powerless under power illegitimacy; Rodriguez-Bailon et al., 2000). This variability depends on the person and the situation. For example, power instability interacts with dispositional factors such as power motivation or stress tolerance to determine whether threatened powerholders are risk-taking or risk-avoidant (Jordan et al., 2011; Maner, Gailliot et al., 2007). These findings are consistent with the situated focus theory of power (Guinote, 2007b, 2010). It indicates the effects of power on powerholders are context-specific, varying with powerholders' primary goals as a function of the person and the situation. Here we show that the nature of the power relation, the dispositions of the person, and the subsequent primary goal of powerholders (e.g., maintaining or enhancing control) determine power holders' basic motivational orientation – BIS, BAS, or some form of BIS-BAS conflict.

This article has conceptual implications for the domains of approach-avoidance motivation, as well as power. A great deal of research has shown that threats lead to BIS-related states. For instance, mortality salience, threats to self-worth, and uncertainty trigger BIS-related defensive strategies, such as attentional vigilance, avoidance motivation (e.g., Greenberg et al., 2000; Proulx & Heine, 2009; Wichman, Brunner, Weary, 2008; see Jonas et al., 2014, for a review). At the same time it was initially hypothesized that threats such as these would decrease the activation of the BAS, as BAS and BIS were seen as negatively related systems (Corr, 2002; Gray, 1987; Keltner et al., 2003).

The findings discussed in this article are, however, more consistent with the

accepted by Social and Personality Psychology Compass

notion that BIS and BAS are orthogonal (e.g., Berkman et al., 2009; Jonas et al., 2014; McGregor et al., 2010), and that individuals can experience conflicts between BAS and BIS tendencies, and can use reactive BAS, such as the use of punishment, to reduce threats and the BIS. Indeed, when powerholders face threats and challenges, they are still in charge, and can use power as defense means. Instead of experiencing predominantly either anxiety, typical for the BIS, or positive approach and enthusiasm, typical for the BAS, threats change the tone of BAS among powerholders. Reactive BAS among powerholders is accompanied by negative emotions, retaliation and aggression. Power affords therefore unique self-regulatory tendencies, and can be guided by positive or negative affectivity.

Power has been associated with approach motivation, and powerlessness with avoidance motivation (Keltner et al., 2003). However, the evidence discussed here suggests a more nuanced view of how power affects motivation. In particular, it calls for a consideration of the role of external circumstances, as well as subjective levels of control and influence. Subjective experiences of power and anxiety can affect perceived ease of power exercise. The present framework explains both powerholders' reward and positive approach behavior, as well as the dark side of power and leadership, linked to excessive control, ignorance or stereotyping of subordinates, and abuse of power (Winter, 2010; Furham, 2013). This is one reason why in policy making and in organizations power is difficult to grasp; it is often admired but also feared.

accepted by Social and Personality Psychology Compass

References

Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In J. Kuhl, & J. Beckman (Eds.), *Action-control: From cognition to behavior* (pp. 11-39). Heidelberg, Germany: Springer.

Ajzen, I. (2002). Perceived behavioral control, self-efficacy, locus of control, and the theory of planned behavior. *Journal of Applied Social Psychology*, *32*, 665-683. doi: 10.1111/j.1559-1816.2002.tb00236.x

Alcaro, A., Huber, R., & Panksepp, J. (2007). Behavioral functions of the mesolimbic dopaminergic system: an affective neuroethological perspective. *Brain Research Reviews*, *56*, 283-321. doi: 10.1016/j.brainresrev.2007.07.014

Anderson, C., & Berdahl, J. L. (2002). The experience of power: examining the effects of power on approach and inhibition tendencies. *Journal of Personality and Social Psychology*, *83*, 1362-1377. doi: 10.1037/0022-3514.83.6.1362.

Anderson, C., & Galinsky, A. D. (2006). Power, optimism, and risk-taking. *European Journal of Social Psychology*, *36*, 511-536. doi: 10.1002/ejsp.324

Anderson, C. & Kilduff, G. J. (2009a). Why do dominant personalities attain influence in face-to-face groups? The competence-signaling effects of trait dominance. *Journal of Personality and Social Psychology*, *96*, 491-503. doi: 10.1037/a0014201

Anderson, C., & Kilduff, G. J. (2009b). The pursuit of status in social groups. *Current Directions in Psychological Science*, *18*, 295-298. doi: 10.1111/j.1467-8721.2009.01655.x

accepted by Social and Personality Psychology Compass

Armitage, C. J., & Conner, M. (1999). The theory of planned behavior: assessment of predictive validity and perceived control. *British Journal of Social Psychology, 38*, 35-54. doi: 10.1348/014466699164022

Bargh, J. A., Raymond, P., Pryor, J. B., & Strack, F. (1995). Attractiveness of the underling: An automatic power-sex association and its consequences for sexual harassment and aggression. *Journal of Personality and Social Psychology, 68*, 768-781. doi: 10.1037//0022-3514.68.5.768

Barlow, D. H. (2002). *Anxiety and its disorders: The nature and treatment of anxiety and panic* (2nd ed.). New York: The Guilford Press.

Baumeister, R. F. (1999). The nature and structure of the self: An overview. In R. F. Baumeister (Ed.), *The self in social psychology* (pp. 1-20). Philadelphia: Psychology Science.

Berghanel, A., Ostner, J., & Schulke, O. (2011). Coalitions destabilize dyadic dominance relationships in male barbary macaques (macaca sylvanus). *Behaviour*, 148, 1256-1274. doi: 10.1163/000579511X600628

Berkman, E. T., Lieberman, M. D., & Gable, S. L. (2009). BIS, BAS, and response conflict: testing predictions of the revised reinforcement sensitivity theory. *Personality and Individual Differences, 46*, 586-591. doi: 10.1016/j.paid.2008.12.015

Berridge, K. C. (2007). The debate over dopamine's role in reward: the case for incentive salience. *Psychopharmacology, 191,* 391-431. doi: 10.1007/s00213-006-0578-x

accepted by Social and Personality Psychology Compass

Boksem, M. A. S., Smolders, R., & Cremer, D. D. (2012). Social power and approach-related neural activity. *Social Cognitive and Affective Neuroscience, 7,* 516-520. doi: 10.1093/scan/nsp006

Brinol, P., Petty, R. E., Valle, C., Rucker, D. D., & Becerra, A. (2007). The effects of message recipients' power before and after persuasion: a self-validation analysis. *Journal of Personality and Social Psychology, 93,* 1040-1053. doi: 10.1037/0022-3514.93.6.1040

Bruijn, G. J. D., Wiedemann, A., & Rhodes, R. E. (2014). An investigation into the relevance of action planning, theory of planned behavior concepts, and automaticity for fruit intake action control. *British Journal of Health Psychology, 19,* 652-669. doi: 10.1111/bjhp.12067

Bugental, D. B. (2000). Acquisition of the algorithms of social life: A domain-based approach. *Psychological Bulletin, 126,* 187-219. doi: 10.1037//0033-2909.126.2.187

Bugental, D. B. (2010). Paradoxical power manifestations: Power assertion by the subjectively powerless. In A. Guinote, & T. K. Vescio (Eds.), *The social psychology of power* (pp. 209-230). New York: The Guilford Press.

Bugental, D. B., Blue, J., Cortez, V., Fleck, K., Kopeikin, H., Lewis, J., & Lyon, J. (1993). Social cognitions as organizers of autonomic and affective responses to social challenge. *Journal of Personality and Social Psychology, 64,* 94-103. doi: 10.1037/0022-3514.64.1.94

Bugental, D. B., Blue, J., & Cruzcosa, M. (1989). Perceived control over caregiving

accepted by Social and Personality Psychology Compass

outcomes: implications for child abuse. *Developmental Psychology*, *25*, 532-539. doi: 10.1037/0012-1649.25.4.532

Bugental, D. B., & Happaney, K. (2000). Parent– child interaction as a power contest. *Journal of Applied Developmental Psychology*, *21*, 267-282. doi: 10.1016/S0193-3973(99)00038-6

Bugental, D. B., & Happaney, K. (2004). Predicting infant maltreatment in low-income families: the interactive effects of maternal attributions and child status at birth. *Developmental Psychology*, *40*, 234-243. doi: 10.1037/0012-1649.40.2.234

Bugental, D. B., & Lewis, J. C. (1999). The paradoxical misuse of power by those who see themselves as powerless: how does it happen? *Journal of Social Issues*, *55*, 51-64. doi: 10.1111/0022-4537.00104

Bugental, D. B., Lewis, J. C., Lin, E., Lyon, J., & Kopeikin, H. (1999). In charge but not in control: the management of teaching relationships by adults with low perceived power. *Developmental Psychology*, *35*, 1367-1378. doi: 10.1037/0012-1649.35.6.1367

Bugental, D. B., Lyon, J. E., Krantz, J., & Cortez, V. (1997). Who's the boss? differential accessibility of dominance ideation in parent–child relationships. *Journal of Personality and Social Psychology*, *72*, 1297-1309. doi: 10.1037/0022-3514.72.6.1297

Bukowski, M., Fritsche, I., Guinote, A., & Kofta, M. (2016). Coping with lack of control in a social world: an introduction. In M. Bukowski, I. Fritsche, A.

accepted by Social and Personality Psychology Compass

Guinote, & M. Kofta (Eds.), *Coping with Lack of Control in a Social World* (pp. 12-23). New York: Psychology Press.

Burger, J. M. (1989). Negative reactions to increases in perceived personal control. *Journal of Personality and Social Psychology, 56*, 246-256. doi: 10.1037/0022-3514.56.2.246

Buss, D. M., & Craik, K. H. (1980). The frequency concept of disposition: dominance and prototypically dominant acts. *Journal of Personality, 48*, 379-392. doi: 10.1111/j.1467-6494.1980.tb00840.x

Carver, C. S., & Harmon-Jones, E. (2009). Anger is an approach-related affect: evidence and implications. *Psychological Bulletin, 135*, 183-204. doi: 10.1037/a0013965

Carver, C. S., & White, T. L. (1994). Behavioral inhibition, behavioral activation, and affective responses to impending reward and punishment: the BIS/BAS scales. *Journal of Personality and Social Psychology, 67*, 319-333. doi: 10.1037/0022-3514.67.2.319

Chen, S., Langner, C. A., & Mendozadenton, R. (2009). When dispositional and role power fit: implications for self-expression and self–other congruence. Journal of *Personality and Social Psychology*, *96*, 710-727. doi: 10.1037/a0014526

Chen, S., Lee-Chai, A. Y., & Bargh, J. A. (2001). Relationship orientation as a moderator of the effects of social power. *Journal of personality and social psychology*, *80*, 173-187. doi: 10.1037//0022-3514.S0.2.173

Cho, Y., & Fast, N. (2012). Power, Defensive Denigration, and the Assuaging Effect

accepted by Social and Personality Psychology Compass

of Gratitude Expression. *Journal of Experimental Social Psychology*, *48*, 778-782. doi: 10.1016/j.jesp.2011.12.016

Clauss, M. J. A., & Blackford, J. U. (2012). Behavioral inhibition and risk for developing social anxiety disorder: a meta-analytic study. *Journal of the American Academy of Child and Adolescent Psychiatry*, *51*, 1066-1075. doi: 10.1016/j.jaac.2012.08.002

Corr, P. J. (2002). J. A. Gray's reinforcement sensitivity theory: Tests of the joint subsystems hypothesis of anxiety and impulsivity. *Personality and Individual Differences*, *33*, 511-532. doi: 10.1016/S0191-8869(01)00170-2

Corr, P. J., & Cooper, A. J. (2016). The reinforcement sensitivity theory of personality questionnaire (RST-PQ): development and validation. *Psychological Assessment*, *28*, 1427-1440. doi: 10.1037/pas0000273

Corr, P. J., DeYoung, C. G., & McNaughton, N. (2013). Motivation and personality: A neuropsychological perspective. *Social and Personality Psychology Compass*, *7*, 158-175. doi: 10.1111/spc3.12016

Cote, S., Kraus, M. W., Cheng, B. H., Oveis, C., Van der Lowe, I., Lian, H., & Keltner, D. (2011). Social power facilitates the effect of prosocial orientation on empathic accuracy. *Journal of personality and social psychology*, *101*, 217-232. doi: 10.1037/a0023171

Cuddy, A. J. C, Fiske, S. T., & Glick, P. (2008). Warmth and competence as universal dimensions of social perception: The stereotype content model and the BIAS map. *Advances in Experimental Social Psychology*, *40*, 61-149. doi:

accepted by Social and Personality Psychology Compass

10.1016/S0065-2601(07)00002-0

Davidson, R. J. (1992). Emotion and affective style: Hemispheric substrates. *Psychological Science*, *3*, 39-43. doi: 10.1111/j.1467-9280.1992.tb00254.x

Davidson, R. J., Ekman, P., Saron, C. D., Senulis, J. A., & Friesen, W. V. (1990). Approach-withdrawal and cerebral asymmetry: Emotional expression and brain physiology: I. *Journal of Personality and Social Psychology*, *58*, 330-341. doi: 10.1037/0022-3514.58.2.330

Dean, L., Willis, F., & Hewitt, J. (1975). Initial interaction distance among individuals equal and unequal in military rank. *Journal of Personality and Social Psychology*, *32*, 294-299. doi: 10.1037/0022-3514.32.2.294

DeWall, C. N., & Baumeister, R. F. (2007). From terror to joy: Automatic tuning to positive affective information following mortality salience. *Psychological Science*, *18*, 984-990. doi: 10.1111/j.1467-9280.2007.02013.x

DeWall, C. N., Baumeister, R. F., Mead, N. L., & Vohs, K. D. (2011). How leaders self-regulate their task performance: evidence that power promotes diligence, depletion, and disdain. *Journal of Personality and Social Psychology*, *100*, 47-65. doi: 10.1037/a0020932

Fast, N. J. (2009). *Power, incompetence, and hubris*. Unpublished Manuscript.

Fast, N., Burris, E., & Bartel, C. (2014). Managing to Stay in the Dark: Managerial Self-Efficacy and the Aversion to Employee Voice. *Academy of Management Journal*, *57*, 1013-1034. doi: 10.5465/amj.2012.0393

Fast, N., & Chen, S. (2009). When the Boss Feels Inadequate: Power, Incompetence,

accepted by Social and Personality Psychology Compass

and Aggression. *Psychological Science, 20*, 1406-1413. doi: 10.1111/j.1467-9280.2009.02452.x

Fast, N. J., Gruenfeld, D. H., Sivanathan, N., & Galinsky, A. D. (2009). Illusory control: A generative force behind power's far-reaching effects. *Psychological Science, 20*, 502-508. doi: 10.1111/j.1467-9280.2009.02311.x

Fast, N. J., Sivanathan, N., Mayer, N. D., & Galinsky, A. D. (2012). Power and overconfident decision-making. *Organizational Behavior and Human Decision Processes, 117*, 249-260. doi: 10.1016/j.obhdp.2011.11.009

Festinger, L. (1957). *A theory of cognitive dissonance*. Stanford, CA: Stanford University Press.

Fiske, S. T. (1993). Controlling other people: the impact of power on stereotyping. *American Psychologist, 48*, 621-628. doi: 10.1037/0003-066X.48.6.621

Fiske, S. T. (2004). *Social beings: A core motives approach to social psychology*. New York: Wiley.

Fiske, S. T. (2010). Interpersonal stratification: Status, power, and subordination. In S. Fiske, D. T. Gilbert, & G. Lindzey (Eds.), *Handbook of social psychology* (5th ed., pp. 941-982). Hoboken, NJ: John Wiley.

Fiske, S. T., & Berdahl, J. (2007). Social power. In A. Kruglanski, & E. T. Higgins (Eds.), *Social Psychology: A Handbook of Basic Principles* (2n ed., pp. 678-692). New York: Guilford.

Fiske, S. T., & Depret, E. (1996). Control, interdependence and power: understanding social cognition in its social context. *European Review of Social Psychology, 7*,

accepted by Social and Personality Psychology Compass

31-61. doi: 10.1080/14792779443000094

French, J. R. P., & Raven, B. (1959). The bases of social power. In D. Cartwright (Ed.), *Studies in social power* (pp. 150–167). Ann Arbor, MI: University of Michigan Press.

Furnham, A. (2013). *The dark side of leadership management derailment*. Unpublished Manuscript.

Galinsky, A. D., Gruenfeld, D. H., & Magee, J. C. (2003). From power to action. *Journal of Personality and Social Psychology, 85*, 453-466. doi: 10.1037/0022-3514.85.3.453

Georgesen, J., & Harris, M. J. (2006). Holding onto power: effects of powerholders' positional instability and expectancies on interactions with subordinates. *European Journal of Social Psychology, 36*, 451-468. doi: 10.1002/ejsp.352

Gesquiere, L. R., Learn, N. H., Simao, M. C. M., Onyango, P. O., Alberts, S. C., & Altmann, J. (2011). Life at the top: rank and stress in wild male baboons. *Science, 333*, 357-360. doi: 10.1126/science.1207120

Gobel, M. S., Kim, H. S., & Richardson, D. C. (2015). The dual function of social gaze. *Cognition, 136*, 359-364. doi: 10.1016/j.cognition.2014.11.040

Gray, J. A. (1987). *The psychology of fear and stress*. Cambridge: Cambridge University Press.

Gray, J. A. (1991). Neural systems, emotion, and personality. In J. Madden IV (Ed.), *Neurobiology of learning, emotion, and affect* (pp. 273-396). New York: Raven Press.

accepted by Social and Personality Psychology Compass

Gray, J. A. (1994). Three fundamental emotion systems. In P. Ekman, & R. J. Davidson (Eds.), *The nature of emotion: Fundamental questions* (pp. 243-247). New York: Oxford University Press.

Gray, J. A., & McNaughton, N. (2000). *The Neuropsychology of Anxiety: An Enquiry into the Function of the Septo-Hippocampal System* (pp. 83-91). Oxford, UK: Oxford University Press.

Greenberg, J., Arndt, J., Simon, L., Pyszczynski, T., & Solomon, S. (2000). Proximal and distal defenses in response to reminders of one's mortality: Evidence of a temporal sequence. *Personality and Social Psychology Bulletin*, *26*, 91-99. doi: 10.1177/0146167200261009

Guinote, A. (2007a). Power and goal pursuit. *Personality and Social Psychology Bulletin*, *33*, 1076-1087. doi: 10.1177/0146167207301011

Guinote, A. (2007b). Behaviour variability and the situated focus theory of power. *European Review of Social Psychology*, *18*, 256-295. doi: 10.1080/10463280701692813

Guinote, A. (2010). The Situated Focus Theory of Power. In A. Guinote, & T. K. Vescio (Eds.), *The Social Psychology of Power* (pp. 141-173). New York, NY: Guilford Press.

Guinote, A. (2017). How Power Affects People: Activating, Wanting and Goal Seeking. *Annual Review of Psychology*, *68*, 353-381. doi: 10.1146/annurev-psych-010416-044153

Guinote, A., & Chen, S. (2017). Power as active self: From acquisition to the

accepted by Social and Personality Psychology Compass

expression and use of power. In K. Deaux, & M. Snyder (Eds.), *Oxford Handbook of Personality and Social Psychology* (2nd edition, in press). New York: Oxford University Press.

Guinote, A., Cotzia, I., Sandhu, S., & Siwa, P. (2015). Social status modulates prosocial behavior and egalitarianism in preschool children and adults. *Proceedings of the National Academy of Sciences of the United States of America*, *112*, 731-736. doi: 10.1073/pnas.1414550112

Guinote, A., Judd, C. M., & Brauer, M. (2002). Effects of power on perceived and objective group variability: evidence that more powerful groups are more variable. *Journal of Personality and Social Psychology*, *82*, 708-721. doi: 10.1037//0022-3514.82.5.708

Guinote, A., & Vescio, T. K. (2010). Power in social psychology. In A. Guinote & T. K. Vescio (Eds.), *The social psychology of power* (pp. 1-16). New York: The Guilford Press.

Guinote, A., Weick, M., & Cai, A. (2012). Does power magnify the expression of dispositions? *Psychological Science*, *23*, 475-482. doi: 10.1177/0956797611428472

Hall, J. A., Coats, E. J., & LeBeau, L. S. (2005). Nonverbal behavior and the vertical dimension of social relations: A meta-analysis. *Psychological Bulletin*, *131*, 898-924. doi: 10.1037/0033-2909.131.6.898

Harmon-Jones, E., Lueck, L., Fearn, M., & Harmon-Jones, C. (2006). The effect of personal relevance and approach-related action expectation on relative left

accepted by Social and Personality Psychology Compass

frontal cortical activity. *Psychological Science*, *17*, 434-440. doi: 10.1111/j.1467-9280.2006.01724.x

Hiemer, J., & Abele, A. E. (2012). High power=motivation? low power=situation? the impact of power, power stability and power motivation on risk-taking. *Personality and Individual Differences*, *53*, 486-490. doi: 10.1016/j.paid.2012.04.008

Higgins, E. T. (1987). Self-discrepancy: A theory relating self and affect. *Psychological Review*, *94*, 319-340. doi: 10.1037/0033-295X.94.3.319

Higgins, E. T. (1997). Beyond pleasure and pain. *American Psychologist*, *52*, 1280-1300. doi: 10.1037//0003-066X.52.12.1280

Holtgraves, T., & Lasky, B. (1999). Linguistic power and persuasion. *Journal of Language and Social Psychology*, *18*, 196-205. doi: 10.1177/0261927X99018002004

Hornsey, M. J., Spears, R., Cremers, I., & Hogg, M. A. (2003). Relations between high and low power groups: the importance of legitimacy. *Personality and Social Psychology Bulletin*, *29*, 216-227. doi: 10.1177/0146167202239047

Inesi, M. E. (2010). Power and loss aversion. *Organizational Behavior and Human Decision Process*, *112*, 58-69. doi: 10.1016/j.obhdp.2010.01.001

Jonas, E., Mcgregor, I., Klackl, J., Agroskin, D., Fritsche, I., & Holbrook, C., et al. (2014). Threat and defense: from anxiety to approach. *Advances in Experimental Social Psychology*, *49*, 219-286. doi: 10.1016/B978-0-12-800052-6.00004-4

Jordan, J., Sivanathan, N., & Galinsky, A. D. (2011). The role of stress in the

accepted by Social and Personality Psychology Compass

interactive effect of power and stability on risk-taking. *Administrative Science Quarterly*, *56*, 530-558. doi: 10.1177/0001839212441928

Jost, J. T., & Banaji, M. R. (1994). The role of stereotyping in system-justification and the production of false consciousness. *British Journal of Social Psychology*, *33*, 1-27. doi: 10.1111/j.2044-8309.1994.tb01008.x

Jost, J. T., Banaji, M. R., & Nosek, B. A. (2004). A decade of system justification theory: Accumulated evidence of conscious and unconscious bolstering of the status quo. *Political Psychology*, *25*, 881-919. doi: 10.1111/j.1467-9221.2004.00402.x

Judge, T. A., Colbert, A. E., & Ilies, R. (2004). Intelligence and leadership: a quantitative review and test of theoretical propositions. *Journal of Applied Psychology*, *89*, 542-552. doi: 10.1037/0021-9010.89.3.542

Karasek, R. A. (1979). Job demands, job decision latitude, and mental strain: implications for job redesign. *Administrative Science Quarterly*, *24*, 285-308. doi: 10.2307/2392498

Keltner, D., Gruenfeld, D. H., & Anderson, C. (2003). Power, approach, and inhibition. *Psychological Review*, *110*, 265-284. doi: 10.1037/0033-295X.110.2.265

Keltner, D. (2010). The Power Paradox. In D. Keltner, J. Marsh, & J. A. Smith (Eds.), *The Compassionate Instinct* (pp. 213-222). New York, NY: W. W. Norton & Company.

Kim, J., Shin, Y., & Lee, S. (2017). Built on stone or sand: the stable powerful are

accepted by Social and Personality Psychology Compass

unethical, the unstable powerful are not. *Journal of Business Ethics*, *144*, 1-11. doi: 10.1007/s10551-015-2840-9

Knight, E. L., & Mehta, P. H. (2017). Hierarchy stability moderates the effect of status on stress and performance in humans. *Proceedings of the National Academy of Sciences of the United States of America*, *114*, 78-83. doi: 10.1073/pnas.1609811114

Kitayama, S., Chua, H. F., Tompson, S., & Han, S. H. (2013). Neural mechanisms of dissonance: An fMRI investigation of choice justification. *Neuroimage*, *69*, 206-212. doi: 10.1016/j.neuroimage.2012.11.034

Kraus, M. W., Chen, S., & Keltner, D. (2011). The power to be me: power elevates self-concept consistency and authenticity. *Journal of Experimental Social Psychology*, *47*, 974-980. doi: 10.1016/j.jesp.2011.03.017

Kraus, M. W., Piff, P. K., & Keltner, D. (2009). Social class, sense of control, and social explanation. *Journal of Personality and Social Psychology*, *97*, 992-1004. doi: 10.1037/a0016357

Lammers, J., Galinsky, A. D., Gordijn, E. H., & Otten, S. (2008). Illegitimacy moderates the effects of power on approach. *Psychological Science*, *19*, 558-564. doi: 10.1111/j.1467-9280.2008.02123.x

Lammers, J., Galinsky, A. D., Gordijn, E. H., & Otten, S. (2012). Power increases social distance. *Social Psychological and Personality Science*, *3*, 282-290. doi: 10.1177/1948550611418679

Lammers, J., Stapel, D. A., & Galinsky, A. D. (2010). Power increases hypocrisy:

accepted by Social and Personality Psychology Compass

Moralizing in reasoning, immorality in behavior. *Psychological Science*, *21*, 737-744. doi: 10.1177/1948550611418679

Lammers, J., Stoker, J. I., Rink, F., & Galinsky, A. D. (2016). To have control over or to be free from others? The desire for power reflects a need for autonomy. *Personality and Social Psychology Bulletin*, *42*, 498-512. doi: 10.1177/0146167216634064

Lammers, J., Stoker, J. I., & Stapel, D. A. (2010). Power and behavioral approach orientation in existing power relations and the mediating effect of income. *European Journal of Social Psychology*, *40*, 543-551. doi: 10.1002/ejsp.702

Langer, E. J. (1983). *The psychology of control*. Beverly Hills, CA: Sage.

Leavitt, H. J. (2003). Why hierarchies thrive. *Harvard Business Review*, *81*, 96-102. 141.

Lefcourt, H. M. (1982). *Locus of control: Current trends in theory and research* (2nd ed.). Hillsdale, NJ: Erlbaum.

Lewis, S. K., Ross, C. E., & Mirowsky, J. (1999). Establishing a sense of personal control in the transition to adulthood. *Social Forces*, *77*, 1573-1599. doi: 10.1093/sf/77.4.1573

Leyro, T. M., Zvolensky, M. J., & Bernstein, A. (2010). Distress tolerance and psychopathological symptoms and disorders: a review of the empirical literature among adults. *Psychological Bulletin*, *136*, 576-600. doi: 10.1037/a0019712

Magee, J. C., & Galinsky, A. D. (2008). Social hierarchy: The self-reinforcing nature of power and status. *The Academy of Management Annals*, *2*, 351-398. doi:

accepted by Social and Personality Psychology Compass

10.1080/19416520802211628

Magee, J. C., Galinsky, A. D., & Gruenfeld, D. H. (2007). Power, propensity to negotiate, and moving first in competitive interactions. *Personality and Social Psychology Bulletin*, *33*, 200-212. doi: 10.1177/0146167206294413

Major, B., & Schmader, T. (2001). Legitimacy and the construal of social disadvantage. In J. T. Jost & B. Major (Eds.), *The psychology of legitimacy: Emerging perspectives on ideology, justice, and intergroup relations* (pp. 176-204). Cambridge: Cambridge University Press.

Maner, J. K., Gailliot, M. T., Butz, D. A., & Peruche, B. M. (2007). Power, risk, and the status quo: does power promote riskier or more conservative decision making? *Personality and Social Psychology Bulletin*, *33*, 451-462. doi: 10.1177/0146167206297405

Maner, J. K., Gailliot, M. T., Menzel, A. J., & Kunstman, J. W. (2012). Dispositional anxiety blocks the psychological effects of power. *Personality and Social Psychology Bulletin*, *38*, 1383-1395. doi: 10.1177/0146167212453341

Maner, J. K., Kaschak, M. P., & Jones, J. L. (2010). Social power and the advent of action. *Social Cognition*, *28*, 122-132. doi: 10.1521/soco.2010.28.1.122

Maner, J. K., & Mead, N. L. (2010). The essential tension between leadership and power: when leaders sacrifice group goals for the sake of self-interest. *Journal of Personality and Social Psychology*, *99*, 482-497. doi: 10.1037/a0018559

Maner, J. K., Richey, J. A., Cromer, K., Mallott, M., Lejuez, C. W., Joiner, T. E., & Schmidt, N. B. (2007). Dispositional anxiety and risk-avoidant decision-making.

accepted by Social and Personality Psychology Compass

Personality and Individual Differences, *42*, 665-675. doi: 10.1016/j.paid.2006.08.016

Maner, J. K., & Schmidt, N. B. (2006). The role of risk avoidance in anxiety. *Behavior Therapy*, *37*, 181-189. doi: 10.1016/j.beth.2005.11.003

Mathews, A., & MacLeod, C. (2002). Induced processing biases have causal effects on anxiety. *Cognition and Emotion*, *16*, 331-354. doi: 10.1080/02699930143000518

Mcgregor, I., Nash, K., Mann, N., & Phills, C. E. (2010). Anxious uncertainty and reactive approach motivation (RAM). *Journal of Personality and Social Psychology*, *99*, 133-147. doi: 10.1037/a0019701

Mead, N. L., & Maner, J. K. (2012). On keeping your enemies close: Powerful leaders seek proximity to ingroup power threats. *Journal of Personality and Social Psychology*, *102*, 576-591. doi:10.1037/a0025755

Min, D., & Kim, J. H. (2013). Is power powerful? power, confidence, and goal pursuit. *International Journal of Research in Marketing*, *30*, 265-275. doi: 10.1016/j.ijresmar.2012.12.001

Mittal, C., & Griskevicius, V. (2014). Sense of control under uncertainty depends on people's childhood environment: a life history theory approach. *Journal of Personality and Social Psychology*, *107*, 621-637. doi: 10.1037/a0037398

Muhlberger, C., Jonas, E., & Sittenthaler, S. (2016). *Uncontrollability, reactance, and power: power as a resource to regain control after freedom threats*. Unpublished Manuscript.

accepted by Social and Personality Psychology Compass

Muris, P. (2006). The pathogenesis of childhood anxiety disorders: considerations from a developmental psychopathology perspective. *International Journal of Behavioral Development, 30*, 5-11. doi: 10.1177/0165025406059967

Navon, D. (1977). Forest before trees: The precedence of global features in visual perception. *Cognitive Psychology, 9*, 353-383. doi: 10.1016/0010-0285(77)90012-3

Notani, A. S. (1998). Moderators of perceived behavioral control's predictiveness in the theory of planned behavior: A meta-analysis. *Journal Of Consumer Psychology, 7*, 247-271. doi: 10.1207/s15327663jcp0703_02

Ohman, A. (1986). Face the beast and fear the face: Animal and social fears as prototypes for evolutionary analyses of emotion. *Psychophysiology, 23*, 123-145. doi: 10.1111/j.1469-8986.1986.tb00608.x

Overbeck, J. R., Neale, M. A., & Govan, C. L. (2010). I feel, therefore you act: Intrapersonal and interpersonal effects of emotion on negotiation as a function of social power. *Organizational Behavior and Human Decision Processes, 112*. 126-139. doi:10.1016/j.obhdp.2010.02.004

Overbeck, J. R., & Park, B. (2006). Powerful perceivers, powerless objects: flexibility of power holders' social attention. *Organizational Behavior and Human Decision Processes, 99*, 227-243. doi: 10.1016/j.obhdp.2005.10.003

Paglis, L. L., & Green, S. G. (2002). Leadership self-efficacy and managers' motivation for leading change. *Journal of Organizational Behavior, 23*, 215-235. doi: 10.1002/job.137

accepted by Social and Personality Psychology Compass

Porcelli, A. J., & Delgado, M. R. (2009). Acute stress modulates risk taking in financial decision making. *Psychological Science*, *20*, 278-283. doi: 10.1111/j.1467-9280.2009.02288.x

Proulx, T., & Heine, S. J. (2009). Connections from Kafka: Exposure to meaning threats improves implicit learning of an artificial grammar. *Psychological Science*, *20*, 1125-1131. doi: 10.1111/j.1467-9280.2009.02414.x

Raghunathan, R., & Pham, M. T. (1999). All negative moods are not equal: motivational influences of anxiety and sadness on decision making. *Organizational Behavior and Human Decision Processes*, *79*, 56-77. doi: 10.1006/obhd.1999.2838

Ratcliff, N. J., & Vescio, T. K. (2013). Benevolently bowing out: the influence of self-construals and leadership performance on the willful relinquishing of power. *Journal of Experimental Social Psychology*, *49*, 978-983. doi: 10.1016/j.jesp.2013.06.003

Reid, S. A., & Ng, S. H. (1999). Language, power, and intergroup relations. *Journal of Social Issues*, *55*, 119-139. doi: 10.1111/0022-4537.00108

Ridgeway, C. L., & Berger, P. (1986). Expectations, legitimation, and dominance behavior in task groups. *American Sociological Review*, *51*, 603-617. doi: 10.2307/2095487

Rodriguez-Bailon, R., Moya, M., & Yzerbyt, V. (2000). Why do superiors attend to negative stereotypic information about their subordinates? Effects of power legitimacy on social perception. *European Journal of Social Psychology*, *30*,

accepted by Social and Personality Psychology Compass

651-671. doi: 10.1002/1099-0992(200009/10)30:5<651::AID-EJSP13>3.0.CO;2-O

Rothbaum, F., Weisz, J. R., & Snyder, S. S. (1982). Changing the world and changing the self: A two-process model of perceived control. *Journal of Personality and Social Psychology, 42*, 5-37. doi: 10.1037/0022-3514.42.1.5

Rotter, J. B. (1966). Generalized expectancies for internal vs. external control of reinforcements. *Psychological Monographs, 80*, 1-28. doi: 10.1037/h0092976

Salamone, J. D., & Correa, M. (2002). Motivational views of reinforcement: implications for understanding the behavioral functions of nucleus accumbens dopamine. *Behavioral Brain Research, 137*, 3-25. doi: 10.1016/S0166-4328(02)00282-6

Salamone, J. D., & Correa, M. (2012). The mysterious motivational functions of mesolimbic dopamine. *Neuron, 76*, 470-485. doi:10.1016/j.neuron.2012.10.021

Sapolsky, R. M., & Share, L. (2004). A pacific culture among wild baboons: Its emergence and transmission. *PLoS Biology, 2*, E104. doi: 10.1371/journal.pbio.0020106

Scheepers, D. (2009). Turning social identity threat into challenge: Status stability and cardiovascular reactivity during inter-group competition. *Journal of Experimental Social Psychology, 45*, 228-233. doi: 10.1016/j.jesp.2008.09.011

Scheepers, D., de Wit, F., Ellemers, N., & Sassenberg, K. (2012). Social power makes the heart work more efficiently: Evidence from cardiovascular markers of challenge and threat. *Journal of Experimental Social Psychology, 48*, 371-374.

accepted by Social and Personality Psychology Compass

doi:10.1016/j.jesp.2011.06.014

Scheepers, D., & Ellemers, N. (2005). When the pressure is up: The assessment of social identity threat in low and high status groups. *Journal of Experimental Social Psychology, 41*, 192-200. doi: 10.1016/j.jesp.2004.06.002

Schmid Mast, M., & Hall, J. A. (2003). Anybody can be a boss but only certain people make good subordinates: behavioral impacts of striving for dominance and dominance aversion. *Journal of Personality*, *71*, 871-892. doi: 10.1111/1467-6494.7105007

Seligman, M. E. P., Walker, E. F., & Rosenhan, D. L. (2001). *Abnormal psychology* (4th ed.). New York: W. W. Norton & Company.

Sidanius, J., & Pratto, F. (1999). *Social dominance: An intergroup theory of social hierarchy and oppression*. New York, NY: Cambridge University Press.

Sidanius, J., Pratto, F., van Laar, C., & Levin, S. (2004). Social dominance theory: Its agenda and method. *Political Psychology, 25*, 845-880. doi: 10.1111/j.1467-9221.2004.00401.x

Skinner, E. A. (1995). *Perceived control, motivation, and coping*. Newbury Park, CA: Sage.

Skinner, E. A. (1996). A guide to constructs of control. *Personality Processes and Individual Differences*, *71*, 549-570. doi: 10.1037/0022-3514.71.3.549

Sligte, D. J., Dreu, C. K. W. D., & Nijstad, B. A. (2011). Power, stability of power, and creativity. *Journal of Experimental Social Psychology*, *47*, 891-897. doi: 10.1016/j.jesp.2011.03.009

accepted by Social and Personality Psychology Compass

Smith, P. K., & Bargh, J. A. (2008). Nonconscious effects of power on basic approach and avoidance tendencies. *Social Cognition, 26,* 1-24. doi: 10.1521/soco.2008.26.1.1

Smith, P. K., Jost, J. T., & Vijay, R. (2008). Legitimacy crisis? behavioral approach and inhibition when power differences are left unexplained. *Social Justice Research, 21,* 358-376. doi: 10.1007/s11211-008-0077-9

Smith, P. K., Jostmann, N. B., Galinsky, A. D., & Van Dijk, W. W. (2008). Lacking power impairs executive functions. *Psychological Science, 19,* 441-447. doi: 10.1111/j.1467-9280.2008.02107.x

Spears, R., Greenwood, R. M., De Lemus, S., & Sweetman, J. (2010). Legitimacy, social identity and power. In A. Guinote & T. Vescio (Eds), *The social psychology of power* (pp. 251-283). New York: Guilford.

Starcke, K., & Brand, M. (2016). Effects of stress on decisions under uncertainty: a meta-analysis. *Psychological Bulletin, 142,* 909-933. doi: 10.1037/bul0000060

Stober, J. (1997). Trait anxiety and pessimistic appraisal of risk and chance. *Personality and Individual Differences, 22,* 465-476. doi: 10.1016/S0191-8869(96)00232-2

Sutton, S. K., & Davidson, R. J. (1997). Prefrontal brain asymmetry: a biological substrate of the behavioral approach and inhibition systems. *Psychological Science, 8,* 204-210. doi: 10.1111/j.1467-9280.1997.tb00413.x

Tiedens, L. Z., Ellsworth, P. C., & Mesquita, B. (2000). Sentimental stereotypes: Emotional expectations for high-and low-status group members. *Personality and*

accepted by Social and Personality Psychology Compass

Social Psychology Bulletin, 26, 560-575. doi: 10.1177/0146167200267004

Thompson, H. L. (2010). *The stress effect: Why smart leaders make dumb decisions – and what to do about it*. San Francisco: Jossey-Bass.

Tost, L. P. (2011). An integrative model of legitimacy judgments. *Academy of Management Review*, *36*, 686-710. doi: 10.5465/amr.2010.0227

Tost, L. P., Gino, F., & Larrick, R. P. (2012). Power, competitiveness, and advice taking: Why the powerful don't listen. *Organizational Behavior and Human Decision Processes*, *117*, 53-65. doi: 10.1016/j.obhdp.2011.10.001

Tyler, T. R. (1997). The psychology of legitimacy: A relational perspective on voluntary deference to authorities. *Personality and Social Psychology Review*, *1*, 323-345. doi: 10.1207/s15327957pspr0104_4

Valdesolo, P., & DeSteno, D. (2007). Moral hypocrisy: Social groups and the flexibility of virtue. *Psychological Science*, *18*, 689-690. doi: 10.1111/j.1467-9280.2007.01961.x

Valdesolo, P., & DeSteno, D. (2008). The duality of virtue: Deconstructing the moral hypocrite. *Journal of Experimental Social Psychology*, *44*, 1334-1338. doi: 10.1016/j.jesp.2008.03.010

van Dijke, M., & Poppe, M. (2006). Striving for personal power as a basis for social power dynamics. *European Journal of Social Psychology*, *36*, 537-556. doi: 10.1002/ejsp.351

Vescio, T. K., Snyder, M., & Butz, D. A. (2003). Power in stereotypically masculine domains: a social influence strategy x stereotype match model. *Journal of*

accepted by Social and Personality Psychology Compass

Personality and Social Psychology, *85*, 1062-1078. doi: 10.1037/0022-3514.85.6.1062

Viana, A. G., & Gratz, K. L. (2012). The role of anxiety sensitivity, behavioral inhibition, and cognitive biases in anxiety symptoms: structural equation modeling of direct and indirect pathways. *Journal of Clinical Psychology*, *68*, 1122-1141. doi: 10.1002/jclp.21890

Weber, U., Mummendey, A., & Walduz, S. (2002). Perceived legitimacy of intergroup status differences: its predictions by relative ingroup prototypicality. *European Journal of Social Psychology*, *32*, 449-470. doi: 10.1002/ejsp.102

Wichman, A. L., Brunner, R. P., & Weary, G. (2008). Immediate and delayed effects of causal uncertainty inductions on uncertainty accessibility. *Journal of Experimental Social Psychology*, *44*, 1106-1113. doi: 10.1016/j.jesp.2007.12.002

Wiggins, J. S. (1979). A psychological taxonomy of trait-descriptive terms: The interpersonal domain. *Journal of Personality and Social Psychology*, *37*, 395-412. doi: 10.1037/0022-3514.37.3.395

Wilkinson, D., Guinote, A., Weick, M., Molinari, R., & Graham, K. (2010). Feeling socially powerless makes you more prone to bumping into things on the right and induces leftward line bisection error. *Psychonomic Bulletin and Review*, *17*, 910-914. doi: 10.3758/PBR.17.6.910

Willis, G. B., & Guinote, A. (2011). The effects of social power on goal content and goal striving: a situated perspective. *Social and Personality Psychology Compass*,

accepted by Social and Personality Psychology Compass

5, 706-719. doi: 10.1111/j.1751-9004.2011.00382.x

Willis, G. B., Guinote, A., & Rodriguez-Bailon, R. (2010). Illegitimacy improves goal pursuit in powerless individuals. *Journal of Experimental Social Psychology*, *46*, 416-419. doi: 10.1016/j.jesp.2009.10.009.

Willis, G. B., & Rodriguez-bailon, R. (2010). When subordinates think of their ideals: power, legitimacy and regulatory focus. *Spanish Journal of Psychology*, *13*, 777-787. doi: 10.1017/S1138741600002432

Winter, D. G. (2010). Power in the person: Exploring the motivational underground of power. In A. Guinote & T. K. Vescio (Eds.), *The social psychology of power* (pp. 113-140). New York: The Guilford Press.

Wojciszke, B., & Struzynska–Kujalowicz, A. (2007). Power influences self-esteem. *Social Cognition*, *25*, 472-494. doi: 10.1521/soco.2007.25.4.472.

Young, R. C., Keltner, D., Londahl, E. A., Capps, L. M., & Tauer, J. T. (1999). The pleasures of talking trash: Development, social status, and teasing. In E. A., Mannix, M. A. Neale, & C. P. Anderson (Eds.), *Affect and Groups* (pp. 45-64). Oxford: JAI Press.

accepted by Social and Personality Psychology Compass

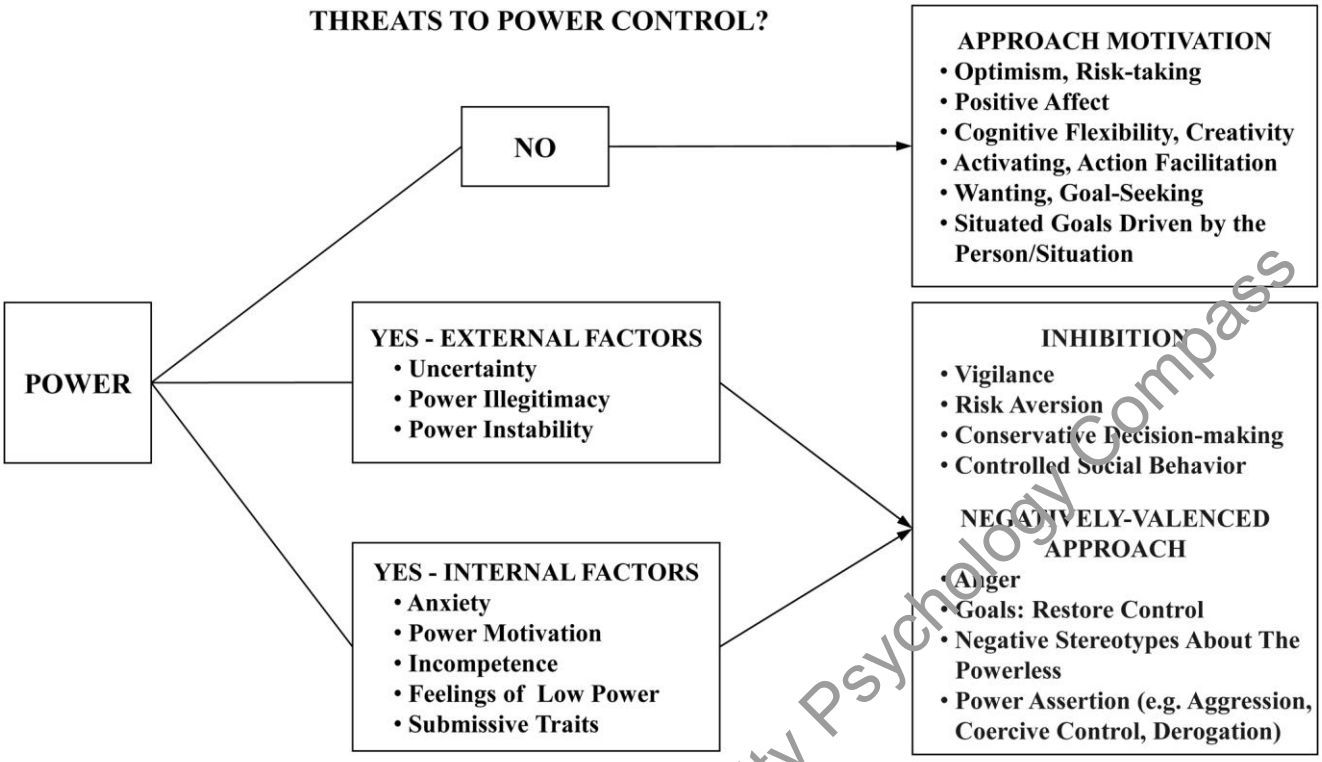

Figure 1. A Model of Power, Threats to Control, and Approach Motivation

accepted by Social and Personality Psychology Compass