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RUNNING HEAD: Power and Persuasion

Power and Persuasion:

Processes by Which Perceived Power Can Influence Evaluative Judgments

Abstract

The present review focuses on how power—as a perception regarding the self, the source of the message, or the message itself—affects persuasion. Contemporary findings suggest that perceived power can increase or decrease persuasion depending on the circumstances and thus might result in both short-term and long-term consequences for behavior. Given that perceptions of power can can produce different, and even opposite, effects on persuasion, it might seem that any relationship is possible and thus prediction is elusive or impossible. In contrast, the present review provides a unified perspective to understand and organize the psychological literature on the relationship between perceived power and persuasion. To accomplish this objective, the present review identifies distinct mechanisms by which perceptions of power can influence persuasion and it discusses when these mechanisms are likely to operate. In doing so, this article provides a structured approach for studying power and persuasion via antecedents, consequences, underlying psychological processes, and moderators. Finally, the article also discusses how power can affect evaluative judgments more broadly.

Keywords: power, attitudes, persuasion, evaluation, validation, elaboration, ELM

Power is recognized as a motivating force central to human interactions (Emerson, 1962; Thibaut & Kelley, 1959; Turner, 2005). Presently, the topic of power is a focus of substantial scientific interest. Among several major research publications, articles on power in the last five years are close to double those the previous five years (Galinsky, Rucker, & Magee, 2015). The current review explores and emphasizes the role of power in persuasion and *evaluative judgments* more generally. By evaluative judgments, we refer to people's attitudes or the overall degree to which they like or dislike any given object or concept, such as a person, place, or idea.

The study of power and its effects on persuasion has a long history in psychology. Early persuasion research was founded, in part, out of the motivation to understand wartime propaganda as a means of social control (e.g., Hovland, Lumsdaine, & Sheffield, 1949; McGuire, 1969). However, a consequence of this surge of interest is that the role of power in persuasion appears far more complex and less straightforward than represented by early research. Whereas early work demonstrated that persuasion was mostly enhanced as the recipient's power decreased relative to the source, contemporary findings suggest that a source's power can *either* increase or decrease persuasion (Briñol, Petty, Valle, Rucker, & Becerra, 2007; Galinsky, Magee, Gruenfeld, Whitson, & Liljenquist, 2008; Lammers, Dubois, Rucker, & Galinsky 2013; Min & Kim, 2013).

The developing interest in the relationship between power and persuasion, as well as potentially conflicting findings, makes it timely to provide a general framework as to the critical mechanisms by which power influences individuals' evaluations of people, objects, and issues. In fact, without an organizing framework, it might seem that the relationship between power and persuasion is in dire straights where any result can occcur and a priori prediction is difficult. In contrast, this review provides a conceptual framework to help researchers understand how power affects persuasion and the multiple processes by which it

can do so. The present review focuses on the perception of power whether that is the perceived power of the source (e.g., a message source that is seen as powerful relative to the recipient) as well as an individuals' perceptions of their own power (e.g., the sense of power they experience).

Percevied Power: Source Versus Recipient

Social power is often construed and defined as, "asymmetric control over valued resources in social relations," (Magee & Galinsky, 2008 p. 361; see also Fiske, 1993). This definition can be thought of as encompassing hierarchical and structural differences between two actors. However, within persuasion, power likely operates through the *perceived power* related to the source or the recipient. That is, whether or not some induction produces actual structural differences in power, if differences in power are nonetheless perceived to exist, then an impact on judgment can occur. With regard the source of a message, individuals might perceive a source to be powerful or powerless, and this perception can affect how they adjust their attitudes (Kelman, 1958). With regard to the recipient, people can perceive themselves to be relatively powerful or powerless. Indeed, in recent years a large body of research has arisen that suggests individuals' experience of a sense of power can affect their cogntion, motivation, and behavior. A sense of power can be thought of as a psychological experience or mindset with properties such as, but not limited to, agency and control (see Inesi et al., 2011; Rucker & Galinsky, 2in press; Rucker, Galinsky, & Dubois, 2012).

Evidence suggests that one can perceive oneself to be powerful or experience a sense of power due to actual differences in social power as well as inductions incidental to social power (e.g., Anderson, John, & Keltner, 2012; Galinsky, Rucker, & Magee, 2014; Galinsky, Gruenfeld, & Magee, 2003). For example, a sense of power can arise from the recall of past memories in which one had power, one's specific body postures (i.e., chest out, shoulders back), perceived differences in social support (i.e., majority vs minority popular opinion),

and being primed with power-related words (for reviews see Galinsky, Rucker, & Magee, 2015; Guinote & Vescio, 2010; Leltner & Robinson, 1996; Keltner, Gruenfeld, & Anderson, 2003). Research also finds that most people report they experience a sense of power frequently in their everyday life, regardless of whether they are in an actual position of power (Smith & Hofmann, 2016).

In this article, we focus our review on how a recipient's perception of a source's power, or their own power, affects persuasion. For simplicity, throughout the paper we the use the term *power* to capture any research broadly construed as exploring the perceived power of the source or recipient. We use the term "source power" to reference the perceived power of a source. We use the term "recipient power" to capture difference's in indivdiuals' perceptions of their own power or their own experience of feeling powerful (see Rucker & Galinsky, 2017). Because research on power and persuasion has recognized the importance of perceptions of both source and recipient power, the scope of our review emphasizes work that is plausibly connected to either or both constructs.

Power and Persuasion

Researchers first examined the role of power in persuasion over six decades ago. As noted already, the study of persuasion developed in part out of the motivation to understand and employ propaganda as a means of social control (see Briñol & Petty, 2012, for a historical review). Early work emphasized how a powerful source was more influential and led a relatively powerless audience to be more compliant (Festinger & Thibaut, 1951; French & Raven, 1959; Milgram, 1974).

Kelman (1958) was among the first to address the underlying process responsible for the impact of power. Specifically, Kelman proposed that powerful sources produced influence by invoking *compliance* – going along with the source solely because of ability of the source to monitor one's actions. In contrast, he proposed that expert sources produced

influence because of *internalization*—acceptance of the source's message because the source is thought to be credible, and attractive sources worked via *identification*—going along because of liking for the source. Whereas internalized influence was proposed to endure even if the source was no longer salient, identification effects remained only so long as the source was still liked, and compliance effects were postulated to be effective only so long as the source could monitor the recipient. An early conclusion that continues to be supported is that a powerful source is often more persuasive than a powerless source (e.g., Cialdini, 2001; Pfeffer, 1992; Yulk & Falbe, 1990), but as we discuss shortly, contemporary approaches hold that a powerful source can produce either relatively enduring (internalization) or ephemeral changes in evaluations depending on the mechanism by which the change is produced. Futhermore, unlike early portrayals of power (Kelman, 1958), the current review recognizes that power can at times *decrease* persuasion (Briñol et al. 2007; Dubois et al. 2016).

A critical limitation of current theorizing on the role of power in persuasion is the absence of a strong process-oriented, and coherent conceptual umbrella regarding the multiple processes by which power can influences evaluative judgments. Instead, contemporary conceptualizations of power have focused more broadly on the impact of individuals' sense of power on approach versus inhibition (Keltner et al., 2003), goal pursuit (Guinote, 2007a; Willis & Guinote, 2011), agentic versus communal orientations (Rucker, Galinsky, & Dubois, 2012), and psychological distance (Magee & Smith, 2013). Although these approaches are valuable in predicting how the experience of power transforms psychological outcomes beyond evaluative judgments, they do not explore the various proximal consequences of perceived power on persuasion and evaluative judgments more broadly.

Given that the available literature suggests that the perceived power of the source or recipient can increase or decrease persuasion depending on the circumstances, one potential danger is that, at present, it may appear impossible to predict *a priori* how power affects persuasion. This is problematic in our view, as a core aim of psychological research is to predict social behavior before it happens, and to understand the mechanisms involved. Although the perceived power of the source or recipient can exert a multitude of distinct effects, we provide the theoretical scaffolding to allow for *a priori* predictions as to how power will affect evaluative judgments in a given situation and by what psychological processes power is likely operating to influence persuasion outcomes.

Power Affects Persuasion and Evaluative Judgments via Multiple Cognitive Processes

In order to understand the fundamental processes by which perceived power can influence persuasion and individuals' evaluative judgments, we rely upon the Elaboration Likelihood Model (ELM) of persuasion (Petty & Cacioppo, 1986). Along with the heuristic-systematic model (HSM; Chaiken, Liberman, & Eagly, 1989), the ELM is an early example of what became an explosion of dual process and system theories that distinguished thoughtful from non-thoughtful determinants of judgment (see Sherman, Gawronski, & Trope, 2014). We focus on the ELM because of its emphasis on the elaboration construct and its recognition that psychological processes can operate through both primary and secondary cognition.

The ELM has proven useful in understanding many other persuasion variables that initially were thought to produce main effects (i.e., either increasing or reducing persuasion) but subsequently were shown to be more complex in their operation (Petty & Briñol, 2008). A proper integration of power research under the ELM umbrella allows for *a priori* predictions of when power will increase versus decrease persuasion as well asthe fundamental processes by which it does so. Moreover, as we will discuss, the ELM can be

used to understand how power affects evaluative judgments more generally, even when the context does not involve persuasion efforts.

The Elaboration Likelihood Model (ELM)

A core tenet of the ELM is that attitude change can result from different processes, depending upon the extent of elaboration—or thought—in which an individual engages. The level of elaboration is a function of two broad variables: (1) A person's *motivation*, and (2) a person's *ability* to think about an influence attempt. Many variables, both situational and individual differences, affect the motivation and ability that an individual has to engage in careful thinking. For example, the motivation to think increases as the personal relevance of the message increases, as people are held accountable for message evaluation, as people expect to discuss the issue with others, and as they increase in their need for cognition. The ability to process increases with multiple exposures to the message, as distractions are reduced, as the message becomes simpler to understand, and as intelligence increases (see Petty & Briñol, 2015; Petty & Wegener, 1998a, for reviews).

By adopting the perspective of the ELM, it is possible to organize and catalogue the distinct processes by which power can affect persuasion (see Figure 1). We propose that power influences persuasion and evaluative judgments through multiple processes, depending on the recipient's elaboration level. That is, in accord with the ELM, we argue that under lower elaboration conditions, power—whether it be perceptions of the source or the recipient— influences persuasion and evaluative judgments via a variety of low effort or "peripheral route" processes. As a brief example, source power might be used as a simple cue by audiences to infer that a message position is valid. Because powerful people may be perceived to have greater access to information, the messages they provide could be more accurate. However, when the likelihood of thinking is relatively high, power can affect persuasion outcomes via high effort or "central route" processes, such as influencing the

direction of the thoughts that come to mind or determining whether people rely on the thoughts they have generated. For example, a person who perceives a source as powerful might generate more favorable thoughts toward the source's proposal (e.g., such as an employee who wishes to please the boss). Source power might also influence attitudes by affecting the amount of thinking that takes place when it is not already constrained by other variables. People might, for instance, give more attention to a powerful source than a powerless source. If so, powerful sources would increase persuasion over powerless sources if their message was compelling but would reduce persuasion over powerless sources if their message was specious.

In short, consistent with the ELM, we suggest that perceived power of the source or recipient can affect persuasion through a finite set of processes that operate at different points along an elaboration continuum (i.e., at relatively low, medium, or high levels of thinking). Whether power influences attitudes by relatively high or low thinking mechanisms is important not only for understanding the extent of initial influence, but also whether that influence is consequential over time. In particular, the ELM holds that more thoughtful persuasion tends to persist longer over time, resist change better, and have a greater impact on thinking and behavior compared to the same degree of persuasion induced by less thoughtful means.

Primary and Secondary Cognition

In addition to its focus on elaboration level, the ELM also specifies thatpsychological processes can operate to affect thoughts, attitudes, and behaviors through primary cognition or secondary (metacognitive) processes. Primary thoughts are those that occur at a direct level of cognition and involve individuals' initial associations of an object with an attribute. For example, an individual might think, "Eating donuts is unhealthy." Following a primary thought, people can also generate thoughts at a second level that involve metacognitive

reflections on the first-level thoughts and the processes leading to them (Bless & Forgas, 2000; Briñol & DeMarree, 2012: Dunlosky & Metcalfe, 2009; Jost, Kruglanski, & Nelson, 1998). To illustrate, a metacognitive thought to "Eating donuts is unhealthy," might be, "And, I am confident this thought is correct."

We first review the processes by which power can influence persuasion and evaluative judgments by focusing on how power affects dimensions of primary cognition such as the number and direction (e.g., valence) of thoughts. Subsequently, we focus on metacognitive processes and discuss how power can influence persuasion and evaluative judgments by affecting how people feel and think about their own thoughts. In doing so, we both distinguish among the processes by which power operates, discuss the role of elaboration, and further specify the conditions under which various mechanisms are likely to operate.

POWER AND PRIMARY COGNITION

The ELM specifies four processes by which persuasion variables can influence persuasion via primary cognition. One important element of what process is likely to operate is the elaboration level of the message recipient. Variables can (1) serve as a simple cue when the likelihood of thinking is low, (2) serve as substantive evidence (i.e., an argument) when thinking is high, (3) affect the direction of processing by introducing a bias to favor or disfavor the advocacy when thinking is high, and (4) affect the amount of thinking that takes place when the extent of thinking is not constrained by other variables to be high or low.

It is critical to understand the multiple mechanisms by which power can affect attitudes along the elaboration continuum for several reasons. First, if power influences evaluative judgments via different processes in different circumstances, then power is capable of both increasing or descreasing persuasion. Second, the underlying process by which evaluative judgments are changed also has implications for the immediate and long-

term consequences of the persuasive attempt. As mentioned previously and illustrated in Figure 1, the more thoughtful the mechanism that is involved in producing persuasion, the more the resulting evaluative judgment is expected to be durable, resistant, and impactful on behavior over time or, in Kelman's (1958) terms, the more the adopted attitude is internalized (Petty, Haugtvedt, & Smith, 1995). Even if two different processes result in the same extent of influence at an initial point in time, the downstream consequences of this influence can differ substantially depending on the process by which attitude change occurred.

Next, we describe how and when power influences attitudes in each of these roles as determined by where along the elaboration continuum the persuasion is taking place as well as contextual factors. As appropriate, we distinguish between perceptions related to source power and recipient power.

Process 1: Power as a Simple Persuasive Cue

Perceptions of power are accompanied by normative appraisals of *valence* (i.e., it is often good to have power and it is typically a positive experience), *certainty* (i.e., it is often associated with perceptions of validity and rightness), an *approach orientation* (i.e., motor action toward an object), and *perceptions of agency*, *mastery and control*, among others (for reviews see Galinsky et al., 2015; Rucker et al., 2012). Many of these positive dimensions are linked and can be separately or jointly responsible for the effects that power has on evaluative judgments.

Although as just noted, power is generally viewed and experienced as positive, power can also be associated with negative appraisals for some people and situations. For example, power can sometimes include appraisals of negative *valence* (e.g., power is bad because it is associated with corruption and abuse; Lammers et al., 2011) and *uncertainty* (e.g., powerful people are sometimes wrong due to incompetence, carelessness, selfish myopia; See, et al., 2011). Power can also lead to an *avoidance orientation* (e.g., power can paralyze actors when

associated with ambivalence and conflict during decision making; Durso, Briñol, & Petty, 2016). Therefore, as we will note throughout this review, many of the effects described could vary depending on the particular associations and naïve theories that people hold about power.

As noted briefly in introducing the ELM, when thinking is low, due to diminished motivation or a lack of ability to elaborate on a message, power can affect evaluative judgments and persuasion by influencing persuasion in accord with its valence (positive or negative) as a simple cue or heuristic. For example, under low ability and motivation to think, source power may imply that the source is right or that his or her opinion has more weight than that of the messge recipient (i.e., "might makes right"; Kruglanski et al., 2005). This would increase the persuasiveness of the source. Alternatively, the sense of power of a recipient may lead to a simple attribution that inhibits persuasion (i.e., "I feel confident; I must be right."). Alternatively, depending on the meaning associated with power, it is possible for power, under low ability and motivation to think, to act as a simple negative cue implying that the power holder is wrong because, for some individuals and situations, power may be associated with incompetence and laziness (e.g., the *Peter Principle*; Peter & Hull, 1969). The central point is that, as a cue, power affects attitudes and judgments in accord with its positive or negative connotation for the target of influence and thus can either increase or decrease persuasion depending on whether the source or the recipient is more powerful and the meaning of power ascribed.

In addition to inferences of rightness or wrongness, people can make other positive or negative attributions related to power. An audience can infer high expertise from a powerful source and therefore be more persuaded by the position advocated by the source because of the heuristic that "expert sources are likely to be right," regardless of the strength of the arguments within the message. Or, conversely, if an audience feels powerful in comparison

to a source, the recipient'ssense of power might lead to the conclusion that one is right via the belief that the recipient seemingly possesses greater credibility or *epistemic authority* than the source (e.g., Kruglanksi et al., 2005).

In addition to attributions of expertise, power can also be associated with attractiveness. For example, people are more attracted to powerful, high-status individuals than they are to powerless, low-status individuals (Anderon, John, Keltner, & Kring, 2001; Bjornsdottir & Rule, 2017), and people who are perceived as more influential and powerful are rated as more attractive and physically larger, both by themselves and by others (Duguid & Goncalo, 2012). Similarly, people might hold the belief that if a person is powerful, she is valuable to her group, physically healthier than others, and does her job better (Anderson & Kilduff, 2009; Georgesen & Harris, 1998). All of these associations could serve as simple positive cues to influence.

As evidence that source power can serve as a simple cue in persuasion, Horcajo, Briñol, and Petty (2014) exposed participants to a message to change a university's institutional color. Participants' elaboration was manipulated by informing some participants that the proposal referred to their own university whereas others were told it referred to a remote university, a common induction of personal relevance shown to influence elaboration (e.g., see Petty & Cacioppo, 1979a). Furthermore, participants in the high-elaboration condition were explicitly encouraged to think carefully about the information provided by telling those participants that they were in a selected sample of students whose responses would directly affect the university's evaluation of the issue, whereas participants in the low-elaboration condition were simply told that they were in a sample of students being asked to complete the survey. Next, participants received a persuasive message containing either strong or weak arguments in favor of changing the unversity's institutional color.

Importantly, after processing the message, participants were either told the proposal came

from a more powerful source (i.e., one whose opinion was supported by a majority) or a less powerful source (i.e., one whose opinion was supported by a minority).²

Under low elaboration conditions (i.e., a remote university), Horcajo et al. (2014) found participants were more persuaded by the powerful source compared to the less powerful source regardless of whether the message arguments were strong or weak. This simple main effect of power under low thinking conditions is consistent with source power serving as a simple cue. This effect is also consistent with early portrayals of power that reported power to have a straightforward and positive effect on persuasion (Kelman, 1958). In contrast, under high elaboration conditions (i.e., when the situation was high in personal relevance and participants were motivated to think), power did not exert a main effect on persuasion but instead it validated the thoughts that participants had to the message, a point we will discuss in detail later in this review. In sum, under conditions in which people are unlikely to be thinking carefully about a message, source power serves as a simple cue and influences attitudes in accord with its valence.

Process 2: Power Can Serve As a Persuasive Argument

In accord with the ELM, when the amount of thinking is high, people determine their evaluative judgments by assessing the relevance of *all* information within the persuasion context that comes to mind. Under such conditions, people can use perceptions of the source's power or their own power as an argument for favoring or disfavoring an attitude object. For instance, a powerful source could lead a recipient to conclude that the source has particular abilities or personality attributes (e.g., ambition, assertiveness, social skills, confidence) that can serve as compelling arguments when forming certain evaluative judgments such as when picking a group leader (Eagly & Antonakis, 2015). Similarly, power might be viewed as a relevant argument when selecting a client or a customer, since power can signal that the person has resources and that he or she can "get things done." As an

illustration, Lammers et al. (2013) found that those induced to feel powerful were viewed as more persuasive by others.

Unlike power acting as a simple cue or heuristic, individuals using power as an argument would carefully consider whether it is relevant to the judgment at hand and whether it is a cogent or specious argument. For example, a person's perceived power might be compelling as an argument when the judgment is whether the person should be hired as a football coach—a position where leadership potential and dominance, a correlate of power, might be valued traits—but not as a food critic, where power might be viewed as insignificant. Note, however, when used as a simple cue when thinking is low, power could be equally effective in both of these situations because of its positive valence.

Process 3: Power Can Bias the Direction of Thinking during Persuasion

Another mechanism by which power can influence attitudes when thinking is high is by biasing the content and valence of the thoughts that people generate in response to a persuasive message. For example, as mentioned earlier, if people feel that they want to please a powerful source (e.g., their boss), they might be motivated to see the positive side of the message she presents. On the other hand, if people experience reactance in response to the source's power, then they might be motivated to counterargue the message that the source is presenting (Petty & Cacioppo, 1979b). That is, individuals might become biased because the source induces a motive to favor or oppose the advocacy, or because different thoughts become accessible due to the presence of power. We submit that, when power is positively valued, power should exert a general tendency to increase the generation of favorable thoughts in response to persuasive messages and reduce the generation of counterarguments. The opposite bias should be present when power is viewed negatively.

In an illustration of the compatibility of the recipient's sense of power with a positive bias, Förster and Stepper (2000) asked participants to stand upright (a powerful posture) or

kneel down on the floor (a comparably powerless posture) while they learned either positive or negative adjectives. Such "power postures," while not changing one's actual power, might still affect perceptions of power (e.g., Ranehill et al., 2015). The researchers found that performance on a secondary task was facilitated when power postures were compatible with the valence of the information (i.e., powerful posture with positive adjectives, and powerless posture with negative adjectives). These findings suggest that motor compatibility is less cognitively taxing than incompatibility. Further research has shown that powerful postures (upright position compared to a slumped posture) can facilitate recognition, recall, and evaluative judgments of positive materials (e.g., Stepper & Strack, 1993). In short, research suggests that power can facilitate thoughts and actions compatible with the valence of power, which will typically appear to be positive when the power is experienced by the individuals themselves.

Power might also bias thinking by increasing perceptions of the likelihood of positive relative to negative outcomes for the self when both consequences are possible. In one study, Anderson and Galinsky (2006) found participants who experienced a sense of power expressed greater optimism, specifically reporting that they were more likely to be the beneficiary of positive experiences and less likely to be the victim of negative consequences. As a result of this greater optimism, high-power participants were more likely to engage in risk-seeking behavior such as unsafe sex, suggesting a biased emphasis of the positive outcomes over the negative ones. Thus, the sense of power enhances positive evaluative judgments similar to the effects observed for positive emotions (Petty & Briñol, 2015). Of course, if power is experienced negatively, the biasing impact would likely reverse.

In addition to valence, Dubois, Rucker, and Galinsky (2016) suggested that those feeling powerful versus powerless are biased in how they weigh different types of arguments. Participants assigned to feel powerful weighed arguments related to competence

more heavily (e.g., that a chef is a world-renowned expert) compared to arguments related to warmth (e.g., that a chef is extremely sociable and friendly). Conversely, the opposite was true for those assigned to feel powerless. Participants who felt powerless weighed warmth arguments more than competence arguments. In a similar way, sources who felt powerful delievered more competence-based arguments, whereas sources who felt powerless delievered more warmth-based arguments. And, high-power audiences are more persuaded by competence arguments, whereas low-power audiences are more persuaded by warmth arguments. Thus, power has the potential to bias not only how people communicate or process persuasive arguments with respect to their valence (positive or negative) but also what they consider to be an argument, and what kinds of arguments are valued.³

Power can bias the content of the thoughts that come to mind in a number of other ways that may be important for persuasion, but have yet to be established. For instance, because power leads people to focus more on their goals, power can increase the accessibility and attention paid to information related to such goals (Guinote, 2007b; Pratto, 2016), and to any accessible information (Lammers & Burgmer, 2017). Power might therefore prime competence or warmth, positivity or negativity, rightness or pleasantness, competition or cooperation, and many other dimensions depending in part on individuals' idiosyncratic self-concepts and power associations. In addition, people in powerful (vs. powerless) roles can be predisposed to focus on information that supports their expectations, exhibiting a confirmatory bias (Copeland, 1994; Fischer, Fischer, Englich, Aydin, & Frey, 2011). Power is also hypothesized to increase abstract thought (Smith & Trope, 2006) and self-focus (Galinsky, Magee, Inesi, & Gruenfeld, 2006; Guinote, 2007a), consistent with a perspective arguing that power leads to an expectancy-confirming mindset (Magee & Smith, 2013). Importantly, according to the ELM, power would have these biasing effects on thoughts primarily when the persuasion context fosters thinking (i.e., high elaboration likelihood) and

not when thinking is low. Furthermore, biasing effects of variables are more likely when the information to be processed is somewhat ambiguous rather than very clear (e.g., Chaiken & Maheswaran, 1994).

In closing our discussion of biased processing, we note that if people believe that their judgments are somehow being biased or influenced by their power or someone else's, and they do not want this to occur, then they can adjust their judgments in a direction opposite to the expected bias (i.e., a correction effect; Wegener & Petty, 1997).

Process 4: Power Can Influence Amount of Thinking during Persuasion

The previous processes involved effects of power for primary cognition when elaboration or thinking was constrained to be relatively low or high. In this section, we discuss how power can influence how much people think during persuasion when elaboration is not already constrained to be very high or low by other variables. For example, if a message recipient feels powerful prior to processing a message, then power can affect the amount of elaboration that he or she engages in. One reason for this is that feeling powerful can signal that one's own views are already correct (e.g., power is associated with confidence; Anderson & Galinsky, 2006; Briñol et al., 2007), mitigating the need for further information processing. Within typical persuasion paradigms, when thinking is reduced, people are less influenced by strong arguments but more influenced by weak arguments than if thinking were high (e.g., Petty & Cacioppo, 1979a).

Several prior studies support the idea that message recipients who feel powerful pay less attention to incoming information compared to message recipients who feel powerless. For instance, early research revealed that body postures associated with power can reduce motivation and/or ability to think. In one of the earliest demonstrations that an audience's power posture might affect attitude change via the extent of thinking, Petty, Wells, Heesacker, Brock, and Cacioppo (1983) asked undergraduate students to wear and evaluate

headphones. Some participants were told to stand up straight while testing the headphones, whereas others were told to lie down. People in a standing posture often feel (and are perceived by others to feel) more powerful than people who are seated, slumped over, or lying down (Huang, Galinsky, Gruenfeld, & Guillory, 2011 Schubert, Waldzus, & Seibt, 2008). If people who are standing feel more powerful than people who are seated or reclined, then this may predispose standing people to feel more confident, thereby reducing their motivation to process information compared to individuals in a reclined position (Hall, Coats, & LeBeau, 2005; Locke & Anderson, 2015).

To examine differences in information processing, Petty et al. (1983) had students listen to an audio message advocating a tuition increase. The cogency of the arguments contained in the message was manipulated to be strong or weak. Varying the quality of the arguments is a long-standing methodological approach to examine the amount of thinking in which participants engage (Petty, Wells, & Brock, 1976. To the extent that participants elaborate on the merits of the arguments, they should be more polarized in response to the argument quality manipulation – that is, they should better recognize the flaws in the weak arguments and the virtues in the strong ones. Consistent with the interpretation that power postures can affect amount of thinking, Petty et al. (1983) found that reclining participants (i.e., those presumably feeling *less* powerful) were differentially persuaded by the strong and weak arguments, but standing participants were not. These results are consistent with the idea that feeling more powerful—here, by standing versus reclining—can reduce the extent to which participants will think about persuasive messages.

In another study examining the role of recipient power on persuasive message processing (Briñol et al., 2007, Experiment 2), participants were first randomly assigned to feel relatively powerful or powerless using a role-playing task that required one person to be the manager and the other to be the subordinate (Kipnis, 1972). After the power

manipulation, the extent to which participants processed information was assessed by varying the quality of the arguments contained within a persuasive message about a new mobile phone, and measuring the impact of the arguments on attitudes, similar to the procedure used by Petty et al. (1983). The attitudes of participants assigned to play the role of the boss were less influenced by the quality of the arguments presented than were the attitudes of participants assigned to play the employee role, consistent with the notion that the experience of power can reduce information processing. Subsequent research has conceptually replicated these findings by showing that power increases the confidence with which people hold and express their opinions, leading power-holders to ignore the advice provided by others (and thus reducing accuracy in their subsequent judgments; See, Morrison, Rothman, & Soll, 2011, see also Ledgerwood, Trope, & Chaiken, 2010).

To conclude, power can influence the depth of information processing in situations where individuals must decide how carefully to process a persuasive attempt and when thinking is not constrained by other variables to be high or low. However, it is important to note that those with power can be motivated to elaborate on information when the situation prompts them to do so.⁵ For example, just as individuals who have little interest in a topic can be motivated to think by other means (Petty, Cacioppo, & Heesacker, 1981), individuals feeling powerful can be motivated to think more than they would otherwise. One instance of this occurs when power is accompanied by a focus on one's personal responsibility (e.g., Magee, 2009) or perceived duties (Rucker, Hu, & Galinsky, 2014). In these cases, power can increase thinking. Consistent with this idea, Min and Kim (2013) found that when given a goal to process information, high power people exhibited more processing than those with low power.⁶

THE IMPACT OF POWER ON SECONDARY COGNITION

In addition to the four mechanisms of attitude change focused on primary or firstorder cognition just described, power can also affect whether or not people use their thoughts
by influencing what people think about them. This general idea is referred to as the *self- validation hypothesis* (Petty, Briñol, & Tormala, 2002). The key tenet of this hypothesis is
that generating or having thoughts is not always sufficient for thoughts to impact judgment.

At least when being deliberative, people must also believe that their thoughts are correct
(cognitive validation) or feel good about them (affective validation) in order for those
thoughts to inform subsequent judgments and behavior. Thoughts that are perceived as
inaccurate or disliked are mentally discarded, and thus have little or no influence on
individuals' judgments.

Because self-validation involves secondary or meta-cognition, self-validation requires a level of elaboration that is sufficiently high for individuals to both generate thoughts and to consider their validity. We describe research on self-validation organized around the content of the primary cognitions that are subsequently validated by power.

Process 5: Power Can Validate Thoughts in Response to Persuasive Messages

As noted, an association exists between power and confidence (Anderson & Galinsky, 2006). Support for this association comes from research showing that people who possess power often act as if they are confident (e.g., expressing their opinions in public; Guinote et al., 2002; Guinote et al., 2012), and people who lack power act as if they are doubtful (e.g., speaking more passively and showing more hesitations, Holtgraves & Lasky, 1999; Hosman & Siltanen, 2011).

Given the link between power and confidence, Briñol et al. (2007) introduced and tested the idea that feeling powerful can lead people to feel confident in their thoughts in response to a persuasive message and therefore rely upon their thoughts more. In contrast, Briñol et al. proposed that feeling powerless can lead people to doubt their thoughts and

therefore mentally discard them. Because validation requires *both* high elaboration and the presence of thoughts to be metacognitively reflected upon, power is more likely to affect persuasion via self-validation processes when power is salient *after* participants have already processed a message and formed their thoughts. As noted earlier, when the experience of power comes before a message it can affect the amount or direction of the thoughts that individuals generate.

Briñol and colleagues (2007, Experiment 2) tested these ideas empirically by first presenting participants with strong or weak arguments for a new cell phone. This manipulation of argument quality prompted participants to generate primarily positive (i.e., when arguments were strong) or negative (i.e., when arguments were weak) thoughts about the new product. After participants generated the thoughts, but before providing their attitudes towards the product, participants' feelings of power were manipulated. Specifically, participants were instructed to recall either two incidents in their lives in which they had power over another person (feeling powerful condition), or in which someone else had power over them (feeling powerless condition). Relative to those induced to feel powerless, those induced to feel powerful reported greater confidence in their thoughts about the new cell phone. As a consequence, and consistent with the self-validation hypothesis, their attitudes polarized in the direction of the thoughts generated when participants felt powerful compared to powerless. These effects were only present under high elaboration conditions and when power followed thought generation.⁷

Having demonstrated that power can determine the extent of persuasion by affecting thought confidence in response to a persuasive message, researchers have begun to examine whether power can validate thoughts in other kinds of situations, and thus whether other evaluative judgments and social psychological phenomena beyond persuasion can benefit

from considering power as a cause of self-validation. Next, we review how power validates other cognitions, such as self-related thoughts and thoughts about other people.

Power Validates Thoughts Affecting Self-Evaluation

Perhaps one of the most common and important evaluative judgments that individuals form and change over time is toward themselves—that is, their self-esteem. Work on self-esteem provides evidence of a link between power and a broader range of evaluative judgments. For instance, Briñol, Petty, and Wagner (2009) instructed participants, as part of a presumed graphology study, to write down their best or worst qualities (i.e., thought-direction manipulation). Participants did so while either sitting with their backs erect, and pushing their chests out (i.e., a relatively powerful posture) or while sitting slouched forward with their backs curved (a powerless posture; Ranehill et al., 2015). Then, participants completed a measure of self-esteem. Consistent with the self-validation hypothesis, the thoughts generated about the self only affected self-esteem in the confident posture. Importantly, changes in self-esteem were mediated by differences in participants' confidence about the self-beliefs (thoughts) that they had listed. This pattern of findings reveals that people do not necessarily feel poorly about themselves after listing negative self-relevant thoughts when they are in powerless postures because the powerless posture undermines use of the thoughts.

The preceding example also demonstrates a unique implication of the self-validation logic: "Adding" doubt due to feeling powerless can ironically lead to an overall reduction in negative feelings about the self when the doubt invalidates one's primary negative cognitions. Research in other domains has documented that body postures associated with power can influence individuals' reliance on whatever mental content is activated at the moment (Briñol, Petty, & Requero, 2017).8

Power Validates Thoughts about Other People during Social Evaluation

Power can also validate the thoughts people hold towards others. In an empirical demonstration of this, Briñol, Petty, and Stavraki (2012) first had participants read the vita of a job candidate. The vita was composed of either strong or weak credentials, to produce primarily positive or negative thoughts, respectively. After receiving the vita, but before reporting their evaluation of the candidate, participants were induced to feel either powerful or powerless using the episodic recall task (Galinsky et al., 2003). Finally, participants rated the candidate on general evaluative dimensions (i.e., bad-good).

In accord with the self-validation hypothesis, participants induced to feel powerful relied more on their thoughts and reactions to the vita in forming impressions of the job candidate compared to participants who felt powerless. Participants induced to feel powerful were more extreme in their judgments, rating the favorable (unfavorable) candidate more positively (negatively) than participants induced to feel powerless. Notably, this enhanced impact of resume quality on the evaluations of participants induced to feel powerful was expected because power was made salient *after* people processed the resume. If power was instead salient *before* receipt of the resume, power would likely have affected the extent of information processing as explained earlier (Briñol et al., 2007). For example, if the job candidate was already known to participants induced to feel powerful, then feelings of power could have reduced the impact of resume quality on judgment by validating the power holder's pre-existing opinion about the candidate and reducing resume scrutiny. However, if the job candidate was unfamiliar, then participants induced to feel powerful might increase information processing by making the responsibility for the decision salient, which would increase the impact of resume quality.

Research on self-validation has replicated and extended these findings from social evaluation to social behavior (DeMarree, Loersch, Briñol, Petty, Payne, & Rucker, 2012). In one study, DeMarree, Briñol, and Petty (2014) first activated prosocial or antisocial mental

content using a memory task in which participants had to recall past personal experiences in which they either helped or hurt another person. Participants' power was then manipulated using a word completion task in which they had to complete words associated with high power (e.g., dominate, boss, supremacy, influence, supervisor, superior) or low power (e.g., obedience, insignificant, subordinate, weak, employee, inferior; see Chen et al., 2001). Subsequently, high power, relative to low, led participants to imagine greater anticipated prosocial behavior in the future, but only when people were instructed to remember past instances of behaving prosocially. This research suggests that self-validation can accommodate apparently contradictory sets of results. Specifically, from a self-validation perspective, it is sensible that power can either increase (e.g., Keltner et al., 2003; Lammers, et al., 2011; Yap, et al., 2013) or decrease (e.g., Howard, et al., 2007; Karremans & Smith, 2010) anti-social behavior depending on the dominant thoughts of participants induced to feel powerful.

Power Validates Attitudinal Ambivalence

Given that the confidence associated with feeling powerful can be applied to any cognition, an interesting case concerns people in powerful roles who experience attitudinal ambivalence. Recent research in the domain of attitudes and persuasion suggests that increasing confidence in conflicting evaluative reactions can increase feelings of ambivalence (DeMarree, Briñol, & Petty, 2015), increase attitudinal instability (Luttrell, Petty, & Briñol, 2016), and prompt careful deliberation about persuasive messages relevant to the object of ambivalence (Clarkson, Tormala, & Rucker, 2008). Indeed, one of the main consequences of attitudinal ambivalence is that it tends to produce deliberation (Briñol, Petty, & Wheeler, 2006; Johnson, Petty, Briñol, & See, 2017) and *inaction* (van Harreveld, van der Pligt, & de Liver, 2009). Following the self-validation logic, if power validates individuals' ambivalent thoughts, then individuals feeling powerful should behave more in accordance with their

ambivalence. This magnification effect from validation translates into powerful people acting *less* decisively and more *slowly* than powerless people, the opposite of the typical decisive action associated with being powerful (e.g., Galinsky et al., 2003).

Two recent experiments tested the interaction between power and attitudinal ambivalence. Durso, Briñol, and Petty (2016) had participants in each study read information about an employee whose behavior was either consistent (entirely good or entirely bad) or mixed (both good and bad). Subsequently, participants were induced to feel powerful or powerless. Next, participants indicated the extent to which they preferred action versus inaction in making decisions about the employee. Finally, regardless of the extent to which they reported wanting to delay their decision about the employee, the participants were required to make a final call to promote or fire that person, and the time invested in making that decision was recorded.

Consistent with the self-validation hypothesis and much prior research, for univalent decisions, feeling powerful (compared to powerless) was associated with faster decision making. However, in contrast to prior work on power and action, for ambivalent decisions, feeling powerful led to relatively *slower* decision making. That is, among participants who received mixed information, those who were made to feel powerful were more likely to prefer *inaction* when making their decision and they acted more *slowly* than those feeling powerless. In sum, when individuals' thoughts were ambivalent, power validated these conflicting reactions, which ironically caused power to lead to *inaction*. These studies can be informative as to the conditions under which feeling powerful leads to more versus less action (Hirsh, Galinsky, & Zhong, 2011).

Power Validates Metacognitions

Power can also can validate metacognitions. Perhaps the most studied metacognition is the subjective ease with which people think that their thoughts come to mind (Schwarz,

Bless, Strack, Klumpp, Rittenauer-Schatka, & Simons, 1991). People can generate similar thoughts (or process similar information) with varying perceptions of the relative ease or difficulty in doing so. In general, thoughts that are accompanied by a feeling of ease are more influential in subsequent judgments and behaviors than thoughts accompanied by a feeling of difficulty. Furthermore, research suggests that under high thinking conditions, ease of thought generation leads to greater thought use because ease enhances thought confidence (Tormala, Petty, & Briñol, 2002; Tormala, et al., 2007).

Weick and Guinote (2008) conducted a study that included both a power and an ease induction.. In this research, Weick and Guinote examined whether subjective ease would lead participants to make more gender stereotype-consistent judgments. Participants were asked to list few (i.e., two) or many (twelve) characteristics on which they believed women and men were different as a manipulation of perceived ease (Schwarz et al., 1991). Then, participants indicated their relative agreement with a series of gender-typed attributions about women and men. Consistent with prior research on ease-of-retrieval, participants agreed more with stereotypical attributions based on gender when generating few (versus many) gender-typical thoughts. Interestingly, however, the authors induced high or low power prior to the ease induction and found that the standard ease of retrieval effect was more pronounced for participants who were led to feel powerful versus powerless.

This finding is consistent with several interpretations, one of which would be that feeling powerful could have validated the confidence that stemmed from ease thereby enhancing thought use in the easy condition. Consistent the self-validation logic, recent research has also shown that feelings of high (vs. low) power are associated not only with the greater use of cognition and metacognition, but also with more reliance on affective and bodily sensations (Jouffre, 2015; Lammers & Imhoff, 2016). Furthermore, feeling powerful can also influence the amount of fluency people experience in processing social relationships

(Zitek & Tiedens, 2012), and thereby affect persuasion through other processes (see Briñol, Tormala, & Petty, 2013, for a comprehensive review on ease and persuasion).

Importantly, given that in this research power was induced before thought generation a more likely interpretation is that power could have changed the amount of thought in which people engaged. For example, if high power reduced thinking, then ease operating as a heuristic would be more likely in line with the original interpretation of ease effects (Schwarz et al., 1991). Also, if low power enhanced thinking (given that it preceded rather than followed thought generation), then it could be that low power increased reliance on the substance of the thoughts which would attenuate the ease effect.

POWER AND PROCESSES

As should be clear from our review so far, the relationship between power and persuasion is complex. Despite this complexity, the link between power and persuasion, as well as evaluative judgments more broadly, can be understood via a finite set of cognitive and metacognitive processes depicted in Figure 1.

At the level of primary cognition, we have argued that the process by which evaluative judgments are influenced by power—be it source power or a recipients perceived or experienced power—is determined by the amount of elaboration in which people engage. When elaboration is low, power is prone to serve as a simple cue or heuristic allowing people to evaluate something as positive or negative, depending on whether power is predominantly associated with positive or negative meanings. When elaboration is high, however, power can affect persuasion through several more thoughtful processes. Power can serve as an argument for persuasion when power is a relevant and compelling feature of the attitude object, or power can affect the type and direction of thoughts people generate. When elaboration is not constrained to be low or high, power can determine the amount of thinking in which people engage. Finally, under high elaboration, power can also affect metacognitive processes by

causing people to be more confident in their pre-existing views or in their primary thoughts and reactions to a persuasive message.

It is notable that the multiple roles described in this review for power fit well with past research that has integrated other variables in the persuasion context. Thus, the same roles we have argued apply to power have also been applied to other source variables such as expertise (Briñol & Petty, 2009). More surprisingly, perhaps, these very same roles have proven useful in understanding more distal variables such as the emotions a message recipient is experiencing (Petty & Briñol, 2015) as well as embodiment more generally (Briñol et al.,, 2009). Just as power can serve as a simple cue when thinking is low, or can bias thinking or validate thoughts when thinking is high, or affect the extent of thinking when it is unconstrained, so too have these same effects been observed for a diversity of other variables.

One might erroneously conclude that a multiple-roles perspective suggests that everything is possible and thus predictive validity remains elusive. Our view is quite the contrary. That is, by understanding that a single psychological variable can exert multiple roles within a persuasion context, with varying antecedents and consequences, it is possible to ascertain when various processes are more versus less likely to operate and thus to predict what outcome will emerge in a particular situation (cf. Petty & Wegener, 1998a). In addition, the fact that these roles have been observed for a diversity of variables also makes it more plausible that they would apply to the variable of power as well.

SEPARATING PROCESSES

Given that power can affect persuasion and evaluative judgments through multiple processes, a natural concern is how researchers can explain and test the effects of power on persuasion in a given context. Fortunately, systematic methods exist to identify the fundamental process by which an effect of power on persuasion is operating. For example,

the effects of power on judgment can be predicted *a priori* based on contextual factors, such as the general levels of elaboration as well as the order in which events occur. To examine the methods for systematically separating the processes by which power influences attitudes and persuasion, we introduce both moderation and mediation approaches.

Moderation Approaches to Testing Process: Manipulations of Elaboration

One means to test for a particular process is to manipulate elaboration and the quality of the arguments in a communication. Because different processes operate at distinct levels of elaboration, researchers can manipulate elaboration to isolate and understand the nature of an underlying effect. Similarly, researchers can use manipulations of argument quality to understand if a variable is acting as a simple cue or in a more thoughtful role.

In an experiment varying elaboration, power, and argument quality, Briñol and Petty (2017) placed participants in a low or high personally relevant situation to manipulate individuals' motivation to think. Participants in the high elaboration condition were told they were in a select sample of students whose responses would directly affect the company about which they would read. In contrast, participants in the low elaboration condition were told that they were in a very large sample of students being asked to complete the survey and that their responses would be averaged with those from other students (e.g., Horcajo et al., 2014; Petty et al., 1980; Tormala et al., 2002). The message was composed of either strong or weak arguments about the firm. After reading and thinking about this information, participants listed their thoughts in response to the company. Next, a sense of power was manipulated by asking participants to recall either incidents in their lives in which they had power over another person, or in which someone else had power over them (Galinsky et al., 2003). Finally, participants' attitudes towards the company were assessed.

Briñol and Petty (2017) found that power interacted with elaboration and argument quality to influence attitudes. When thinking was high, being induced to feel powerful

increased the impact of participants' message-related thoughts compared to those induced to feel powerless. That is, the attitudes of participants' feeling powerful were more affected by argument quality than were the attitudes participants' feeling powerless. Under high thinking, feeling powerful led people to have confidence in their thoughts to the message. In contrast, under low elaboration conditions, feeling powerful led to more persuasion compared to feeling powerless, regardless of argument quality, suggesting that one's experienced power served as a simple positive cue that can be associated with positive feelings (see also Horcajo, Briñol, & Petty, 2014, described earlier, for a conceptually equivalent manipulation potentially affecting participants' sense of power). By manipulating elaboration and argument quality along with power, the authors observed different outcomes consistent with the ELM—power and argument quality interacted under high elaboration, but power exerted a main effect under low elaboration.

Moderation Approaches to Testing Process: Manipulations of Timing

As alluded to earlier, the time at which power is made salient can systematically alter the process by which it affects persuasion. Power is more likely to influence judgments by a process of thought validation when introduced after, rather than before, individuals generate their thoughts. Inducing an experience of power after a message allows for people to reflect upon their existing thoughts about the message, whereas inducing power before a message might affect individuals' likelihood of processing the message.

Briñol and colleagues (2007) provide support for the idea that different processes occur when power precedes rather than follows a message. The authors manipulated the order in which power was induced relative to a persuasive appeal that contained strong and compelling arguments for a new cell phone. When power was induced *after* the message, and elaboration conditions were set to be high, people who experienced power relied more on their thoughts (which were primarily positive) to inform their evaluative judgments,

compared to people who felt powerless. Thus, power led to increased persuasion. However, when power was induced *before* the message, and elaboration conditions were not set to be particularly high or low, powerful individuals were less persuaded by compelling arguments compared to powerless individuals. This finding indicates that a sense of power can decrease information processing when its induction precedes a persuasive message.

Put differently, prior to processing information, individuals must decide how carefully they will process a message. When power is induced at this stage, it can increase confidence in one's existing view and thus reduce subsequent information processing, thereby decreasing the persuasive impact of strong messages. In contrast, when power is induced *after* a message, when the amount of processing has already occurred (i.e., thoughts have already been generated), power increases persuasion to strong arguments because powerful people are more reliant on their positive thoughts. These findings suggest that the same power induction can have different—and even opposite—effects in persuasive settings, depending on when power is manipulated due to the particular psychological process operating.

Mediational Approaches to Testing Process

In addition to identifying moderators such as elaboration, argument quality, and timing, persuasion research has developed mediators of attitude change that can be used to understand how power affects persuasion. Measuring both the type of thoughts that participants generate as well as participants' confidence in those thoughts can help assess the underlying processes involved in attitude change. When a variable affects persuasion by increasing individuals' amount of thinking, this process should result in a shift in the proportion of message-relevant thoughts that are consistent with the message. That is, the valence of thoughts becomes more congruent with the quality of the message (strong or weak) as thinking increases. If a variable affects the direction of thoughts, and these thoughts become more or less positive independent of the nature of the message, then this can indicate

biased processing. Alternatively, if a variable affects persuasion by validating participants' thoughts, then differences should be observed in participants' self-reported confidence in their thoughts and this should mediate persuasion. In contrast, if a variable has no effect at all on message-relevant thoughts or thought confidence, then this can signal that the variable is serving as a peripheral cue (see Petty, Schumann, Richman, & Strathman, 1993).

As an example of how variables can be measured to inform process, Horcajo, Petty, and Briñol (2010, Experiment 2) conducted an experiment in which participants were first assigned to receive a message that argued the institutional color of participants' university flag should be changed. The message came from a powerful source (i.e., one whose opinion was supported by a majority) or a relatively powerless source (i.e., one whose opinion was supported by a minority). The powerless source increased the argument quality effect on attitudes relative to the powerful source, which suggests that the powerless source led to greater thinking by the audience. Furthermore, as predicted, the argument quality effect obtained for attitudes was mediated by a change in the profile of message-consistent thoughts. Participants generated more message-consistent thoughts to the minority source, indicating that greater elaboration had occurred in response to the low power source.

In this experiment, source power preceded information processing and elaboration was not set to be high. However, were source power to follow conditions of high information processing, it is possible that source power would affect an audience's thought confidence rather than thought favorability. That is, thought confidence should be the underlying mediator rather than thought valence and extremity. In a test of this hypothesis, Horcajo et al. (2010) exposed participants to a persuasive message composed of either strong or weak arguments about the organizational regulations of a new company. After participants processed the message, the communication was attributed to either a powerful source (i.e., a person whose position was supported by the majority) or a less powerful source (i.e., a person

whose position was supported by a minority). The powerful source increased the confidence with which the audience held their thoughts in response to the message compared to the less powerful source. As a consequence, the powerful source increased the impact of argument quality on attitudes compared to the less powerful source. Importantly, the confidence with which participants held their thoughts mediated the effects of source power on attitudes, whereas the favorability of the thoughts did not.

Taken together, these studies reveal that thought favorability and thought confidence can be measured to help examine the underlying process by which power affects persuasion in a given context.

CONCLUSIONS AND FUTURE DIRECTIONS

The power literature is growing steadily, with a number of papers appearing at the intersection of power and persuasion. Despite this growth, as well as the early historical interest in power and persuasion, the psychological processes by which power can affect persuasion has not received close scrutiny. The present paper offers guidance in the form of a multi-process perspective. We have suggested and provided evidence that power—whether attached to the source, recipient, or either's experience— affects persuasion through multiple and distinct processes related to being used as a simple cue, as a compelling argument, affecting the content of thoughts, influencing the amount of thinking, and by validating thoughts. We have also specified conditions that make the operation of each of these processes more likely. As described throughout, specifying moderating conditions—such as extent of elaboration and timing—is critical for understanding the effects of power on evaluative judgments through both primary and secondary cognition. Such conditions provide a means of predicting when different process will operate as opposed to suggesting that any process is possible in any situation.

In addition, we have suggested that the ELM provides a framework for understanding the effects of power on evaluative judgemnts that extent beyond the persuasion context. Most notably, we revealed how a self-validation process can be used to understand the effects of power on various evaluative judgments related to both the self and to others. Before concluding our review, we examine some final considerations relevant to the effects of power on both persuasion and evaluative judgments that stem from our multi-process perspective.

Consequences of Persuasion through Power

The process by which power affects persuasion and evaluative judgments merits an additional consideration. In particular, does the process by which an evaluative judgment is formed ultimately matter? First, as illustrated throughout the review, it is clear that the process by which power operates affects whether more or less persuasion occurs. For example, power as a simple cue might enhance persuasion, but if it increases message processing and the arguments are weak, then it might decrease persuasion. Moreover, the specific processes by which power affects persuasion have additional consequences.

As illustrated in Figure 1, considerable prior work documents that attitudes formed under high elaboration conditions tend to be more persistent over time, more resistant to change, and more influential on thought and behavior than attitudes formed under low elaboration (Petty et al., 1995). Thus, even if power produces the same degree of persuasion by serving as a simple cue under low thought conditions, and by enhancing the processing of strong arguments under high thought conditions, the latter attitude change can be anticipated to be more consequential. This fact indicates that the process by which power affects persuasion may be of additional importance with regard to whether attitudes affect subsequent thinking and behavior. Unfortunately, to date, very little research has directly examined this idea, which makes this a crucial question for future research.

One notable exception is reported by Goodwin and colleagues (2000, Experiment 4). These authors found that participants assigned to act as (powerful) bosses, compared to (powerless) assistants, were more likely to persist in initially stereotype-consistent judgments despite learning new, potentially individuating information about relevant targets of evaluation. That is, participants appeared to form stronger, more persistent judgments toward the targets that were less susceptible to countervailing information when they were in a powerful compared to a powerless role. This interpretation is consistent with the finding that participants feeling powerful will pay more attention and spend more time reading initial information than participants feeling powerless when power is associated with responsibility (e.g., Magee, 2009). Indeed, the authors speculated that power primed accountability in this research. If participants who were feeling more powerful (vs. powerless) were thoughtfully stereotyping, then they would be less persuaded by individuating information that ran counter to available stereotypic information (see also Chen, Ybarra, & Kiefer, 2004; Wegener, Clark, & Petty, 2006).

An alternative account for these results comes from a self-validation mechanism. From a metacognitive perspective, participants feeling powerful versus powerless might have formed an initial stereotype with equivalent underlying levels of elaboration, but the increased confidence associated with greater feelings of power could have led the former group to believe that their stereotypical judgment was more valid compared to the latter group. As noted, power increases confidence (Briñol et al., 2007) and judgments held with more confidence are more likely to be resistant to change (Rucker, Tormala, Petty, & Briñol, 2014). As we have noted throughout this review, researchers could disentangle these two interpretations by manipulating argument quality, recording participants' thoughts, and measuring thought confidence.

In addition to these findings, future research should examine the broader consequences of power as a means of persuasion. Work conducted by Kipnis suggests that using one's power as a social influence strategy can sometimes have undesirable side effects, compared to influencing others by alternative strategies such as rhetoric. For example, Kipnis and colleagues (Kipnis, 1984; Kipnis, Schmidt, & Wilkinson, 1980; O'Neal, Kipnis, & Craig, 1994; Rind & Kipnis, 2002) have shown that when people rely on their power alone to influence others, they feel worse about themselves, worse about the persuasive attempt, and worse about the recipient, compared to when they convince others by generating arguments and using other strategies of impression formation without relying largely on their power. Of course, an individual can make his or her power salient in addition to providing strong message arguments, and this could lead the audience that feels comparably powerless to engage in enhanced information processing. Because of the multiple processes by which power can affect attitudes, future research should examine evaluations of the source, the recipient, and the relationship between them when power is salient. The effects of power as a social influence strategy obtained by Kipnis would likely reverse as a function of the different naïve theories and associations that people connect with power across various situations (see also Howard, Blumstein, & Schwartz, 1986).

The Meaning and Basis of Power

For most people in most situations, it seems that possessing power would have a clear and positive association. Indeed, the overwhelming evidence suggests that the possession of power largely is a positive psychological state. Indeed, power affords control and agency (see Rucker, Galinsky, & Dubois, 2012). Research further suggests that those who possess power often strive to defend and maintain it (Mead & Maner, 2012) whereas those who lack power often strive to obtain it (Rucker & Galinsky, 2008; 2009).

However, as noted earlier, the meaning associated with power can vary across individuals, situations, and cultures. For example, power can be associated with harassment and be perceived as undesirable, or could be associated with compassion and helping others rather than dominating them (Chen et al., 2001). Similarly, power can be perceived to be legitimate or illegitimate (Hays & Goldstein, 2015; Lammers et al., 2008; Willis, Guinote, & Rodríguez-Bailón, 2010) or stable versus unstable (Sligte, de Dreu, & Nijstad, 2011). Diffrences in associations with power can have important cognitive and behavioral consequences (e.g., creativity; Sligte et al., 2011). Power can have variable value for different individuals, since people differ in their dispositional "sense of power" as well as their desire or need for power (McClelland, 1975) and motivation toward objective and subjective power (Anderson, John, & Keltner, 2012; Chen, Langner, & Mendoza-Denton, 2009).

Feelings of power can also vary within the same individual as a function of whether it is assessed with an explicit or an implicit measure, and discrepancies between those assessments can be consequential in terms of well-being (Brunstein, Schultheiss, & Grässmann, 1998) and how powerful others perceive an individual to be (Hofer, Busch, Chasiotis, & Kiessling, 2006). Importantly, explicit-implicit discrepancies can lead individuals to a state of implicit ambivalence associated with increased information processing (Petty, et al., 2006) and subsequent attitude change when the message involves power in some way (Briñol, et al., 2006). We argue that if the meaning and the basis associated with power changes, then the effect of power on subsequent attitudes could also change (Briñol, Rucker, & Petty, 2015; Cesario & McDonald, 2012; Garrison, Tang, & Schmeichel, 2016; Schubert; 2004; see Briñol, Petty, Santos, & Mello, in press, for a recent review). For example, if people feel guilty about possessing power, they may have doubts about their attitudinal position, which could produce uncertainty that might lead to different outcomes on persuasion (Chen et al., 2009). Similarly, if people do not like power, this

negative association might reduce persuasion through a variety of process such as serving as a simple negative cue (under low thinking) or biasing processing in an unfavorable way (under high thinking). These mark important directions for future research that could further explain the multifaceted role of power in persuasion.

Compensatory Displays of Power

Although many studies find that a sense of power can stem directly from being placed in a structurally powerful role, sometimes people are motivated to feel powerful as a result of being placed in a state of low power. That is, emerging research alludes to the possibility that in some cases those who are, or feel, powerless might perceive or act in ways that are more characteristic of the powerful such as by showing greater confidence in their thoughts. Work by Gal and Rucker (2010), for example, demonstrates that individuals who are highly uncertain sometimes assert greater confidence in order to reaffirm or support their position or belief. Given that power exerts many of its effects through heightened confidence, to the extent that the powerless sometimes respond to their absence of power by acting more confidently, like those who are uncomfortably uncertain (Gal & Rucker, 2010; Morrison, 2011), they may produce behavioral outcomes typically associated with the powerful. And, if those who compensate observe their own behavior, they may ultimately infer that they are, in fact, powerful and confident (Bem, 1967).

People who feel powerless might sometimes act in a way to signal to themselves or others that they are powerful. For example, Rucker and Galinsky (2008) found that participants who wereled to feel powerless showed a desire for status objects to symbolically satiate their need for power. Relatedly, when people engage in such "compensatory displays," this may sometimes make them feel powerful. As a consequence, people who feel that they lack power may either pretend to be powerful, or otherwise come to express greater confidence than they "actually" possess (see also, Dubois et al., 2010; 2012). Of note, this

can affect their evaluative judgments towards status items (i.e., they are viewed as more favorable because of their ability to sate indivduals' desire for power).

Future research is required to better understand the circumstances that will motivate compensatory displays of power and when such displays affect participants' actual confidence. For example, Rucker, Galinsky, and Dubois (2012) suggest that individuals with high chronic feelings of power may be prone to view feeling powerless as a threat, whereas those accustomed to feeling powerless may be relatively unmarred by being put into a low power position or being reminded of their lack of power. Perhaps most importantly, compensatory displays of power might serve the same multiple roles as direct displays of power. For example, not only might compensatory confidence be able to affect use of thoughts, but it might also serve as a simple cue, bias thinking, serve as an argument, and affect the extent of thinking under the appropriate circumstances.

Given that feelings of power can result from compensatory responses from low power or more directly from actual, structural differences between people, or even from other more incidental sources (e.g., momentary, expansive posture), future research might examine the potential differences between the antecedents of power. So far, most of the studies conducted in the domain of power and persuasion have shown similar outcomes regardless of the procedure by which participants were induced to experience power. Therefore, we conclude that the same insights revealed in this review could be potentially informative for other domains of social judgment and behavior beyond persuasion in which felt power might be induced differently.

Powerful Messages

Throughout this review we have described how variation in individuals' perception of power whether it be from a message source or as a recipient of a message affects persuasion and the process by which it does so. Power can also be viewed as a property of the message

itself.⁹ Although not falling under the conventional definition of power in the sense that perceiving differences in resources between two parties need not be involved, one can still consider power-related words capable of affecting one's perception of the source's power (e.g., assumptions that a message with powerful words must come from a powerful person) and the recipient's power (e.g., using powerful words to express thoughts can give people a sense of power). In fact, some of the studies covered in this review manipulated the sense of power by having people unscramble sentences with powerful or powerless words.

Of most relevance to persuasion, some research has directly compared messages that use powerful language (e.g., clear, direct, assertive, confident, dominant, extreme) with messages that contain relatively powerless linguistic marks (e.g., hesitations, interruptions, hedges, and tag questions). Furthermore, some properties of words such as abstraction are also associated with sense of power (see Wakslak, Smith, & Han, 2014). In general, powerful linguistic styles can increase the persuasiveness of speakers and their proposals compared to powerless styles (Holtgraves & Lasky, 1999; Hosman, Huebner, & Siltnen, 2002; Ng & Bradac, 1993). However, as was the case for the sense of power felt by an audience or the power associated with the source, the ELM suggests that the psychological processes mediating the effect of powerful language on attitude change can be organized into a finite set that operate at different points along an extent of thinking (elaboration) continuum.

First, linguistic markers of power have been found to act as simple cues to persuasion especially for individuals reporting low (vs. high) issue involvement (Buunk, Blanton, Schuurman, & Siero, 2005). That is, receiving a message containing powerful language might lead low involvement people to heuristically conclude that the position advocated by the powerful external source is valid and should be adopted.

Second, if thinking is not set to be high or low by other variables, messages involving powerful language can affect the amount of thinking, and therefore interact with argument

quality. Indeed, messages with less powerful langauge have been found to influence attitude change by increasing the extent to which people think about the proposal (as shown by increasing argument quality effects) particularly when powerless language induces uncertainty in the audience or violates initial expectations (Craig & Blankenship, 2011; Karmarkar & Tormala, 2010). Furthermore, Blankenship and Holtgraves (2005) have shown that a powerless style increases message processing (as revealed by greater argument quality effects) under relatively moderate and low thinking conditions, where people still have enough room to be motivated to process by the context. However, the very same powerless linguistic markers can disrupt message processing (as illustrated by reduced argument quality effects) under conditions in which participants are already motivated to think. This is the same pattern as shown for other linguistic devices, such as the use of rhetorical questions, which increases thinking when it ordinarily would be low, but reduces thinking when it ordinarily would be high (Petty, Heesacker, & Cacioppo, 1981).

Third, when the likelihood of thinking is relatively high, the power embedded in a message can impact persuasion by other processes. For example, powerful (vs. powerless) speech styles bias people's thoughts in a positive manner consistent with the idea that powerful markers are associated with validity (Blankenship & Holtgraves, 2005; Hosman & Siltman, 2011; Hosman, Huebner, & Siltanen, 2002). Furthermore, when thinking is high, a powerful message linguistic style can be evaluated as evidence if it provides diagnostic information about the merits of an attitudinal object, such as when powerful language is used in judging the extent to which the source is a strong political leader, a credible, trustworthy, competent communicator, or even an attractive, romantically desired person (Erickson, Lind, Johnson, & O'Barr, 1978; Murphy et al., 2015). Also, as noted previously, if people believe that their judgments are somehow being biased or inappropriately influenced by the powerful

style conveyed in the message, and they do not want this to occur, they can correct their judgments in a direction opposite to the expected bias.

In addition to these possibilities relevant to primary cognition, messages with powerful language might impact what people think about the validity of their thoughts under high thinking conditions. For example, if people were induced to express their thoughts to a persuasive message in powerful rather than powerless language, then this could influence persuasion by validation processes. That is, thoughts expressed in powerful language could be seen as more valid than those expressed in powerless language which would magnify the correspondence between the thoughts generated and the ultimate evaluative judgments that individuals express toward the object, person, or issue.

FINAL REMARKS

Power is a fundamental dimension of social relations. The gravity of power seems so strong that it influences individuals' thoughts and behaviors in a multitude of ways. Despite the plethora of research on the effects of power on persuasion and evaluative judgments, the underlying processes have not always been clear and, in some cases, findings appear in opposition. The present theoretical perspective helps to resolve potential inconsistencies via a multi-process account of the effects of power on persuasion and evaluative judgment more broadly. Specifically, this review explicates the general conditions under which perceptions of power can influence people's evaluative judgments, the distinct processes involved, and even to what extent the evaluative judgements that result from power are likely to be consequential. We hope that the theoretical, process-oriented framework we described, inspires a new wave of research on psychological power that answers when, how, and why power exerts such widespread and important effects on individuals' personal and social psychological outcomes.

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Footnotes

- ² We view this induction as a potential example of source power because numerical majorities are likely perceived as having more power than numerical minorities. Also, social support could be perceived by audiences as a valued resource and thus fits with the definition of power (i.e., Magee & Galinsky, 2008). For recent research relating differences in numerical status with a sense of power, see Vorauer & Quesnel (2017).
- ³ As detailed later in this review, biased processing is only one mechanism by which matching competence arguments to power can influence persuasion. For example, if elaboration is not constrained to be high or low, high power recipients might process competence-based messages more carefully because they are more interested in this dimension. This is consistent with the idea that matching aspects of the person and the situation can influence attitudes by affecting the *amount* of processing (e.g., Petty & Wegener, 1998b; see Teeny, Briñol and Petty, 2017, for a review on the underlying processes of matching in persuasion).
- ⁴ Indeed, children learn that taller siblings and peers, as well as their parents, are able to coerce them physically (Ellyson & Dovidio, 1985). Metaphorical evidence further suggests that power equals up, such as when someone has a high status, or is up in the hierarchy, he or she has control over and can oversee others who have lower status (Schwartz, Tesser, & Powell, 1982).
- ⁵ Power can increase performance in some mental tasks, for example, by decreasing procrastination (Judge & Bono, 2001), by improving executive functioning in tasks that require self-regulation (Egan & Hirt, 2015; DeWall, Baumeister, Mead, & Vohs, 2011), by promoting creativity (Galinsky, Magee, Gruenfeld, Shitson, & Liljenquist, 2008) and abstract thinking (Magee & Smith, 2013), and by facilitating task switching (Jiang, Zhan, & Rucker, 2014). To the extent a persuasion paradigm includes some of these elements, the dominant effect of power reducing information processing when elaboration is unconstrained could vary.
- ⁶ This body of work has also shown that what powerful people consider to be relevant can change as a function of the particular situation they are in (Guinote, 2007c). In general, it could be said that power increases the dominant tendency so if a processing goal were made salient, high power individuals would engage in more thinking.
- ⁷ In the self-validation studies on power just described, thoughts were coded for their level of abstraction. No differences in abstraction were obtained across power conditions. Therefore, it seems unlikely that an explanation based on level of abstraction could adequately account for the results obtained. Also importantly, in these experiments, the power induction *followed* the generation of thoughts. Tus the actual thoughts generated should be of a similar level of abstraction. Atlhough abstraction does not provide a plausible account for self-validation effects, we have noted throughout our review that there is a link between abstract thinking and power that can potentially be explored in future work in persuasion. As described, an abstract mindset could potentially influence the *content* or the *amount* of thoughts people generate in response to persuasion depending on the circumstances.
- ⁸ One critical moderator of self-validation is timing. As explained earlier, power postures are likely to influence the amount of thinking when they are introduced before thinking takes place (e.g., Briñol et al., 2007; Riskind & Gotay, 1982). However, power postures have been shown to influence the use of thoughts when introduced after thinking (Briñol, et al., 2007; Riskind, 1984). When the posture and the generation of thoughts take place at the very same time, then both processes are possible, and which one is more likely to operate is likely to depend on other variables such as how much motivation and ability to think people have in the situation. Processing is more likely to be affected under moderate conditions of elaboration, whereas validation or biasing thoughts is more likely to occur under high elaboration conditions.
- ⁹ Another way in which power can related to persuasive message is by considering the relationship between choice and feelings of power. Merely giving people the opportunity to choose whether or not they want to receive a persuasive message, to what extent the message is pro-attitudinal or counter-attitudinal, and how they

¹ In fact, in some persuasion studies, source credibility is manipulated by varying features of the source related to power. For example, Petty, Cacioppo, and Goldman (1981) manipulated source credibility by describing the source as a tenured Princeton professor heading a governmental organization versus a local high school class, a variation that could have differed in perceptions of source power along with expertise.

would like the persuasive arguments to be delivered can be all potential means to increase feelings power and therefore to influence persuasion.