

Whether power holders construe their power as responsibility or opportunity influences their tendency to take advice from others

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Summary

Empirical evidence suggests that power elicits a generic tendency to disregard advice. We examined different responses power holders may show in their tendency to take advice depending on the construal of power. We report a field study and an experiment among managers and other powerful professionals (Studies 1 and 2) and an experiment in which participants were assigned to a powerful role (Study 3). Across studies, we found a higher tendency to take advice among those who construed their power as a responsibility rather than as an opportunity. This effect of the construal of power on advice taking was mediated by a heightened perceived value of advice, not by decreased confidence in own judgments or sense of power. Accordingly, the increase in advice taking when power was construed as a responsibility was observed regardless of whether the advice came from subordinates (Study 1), expert advisors (Study 2), or a less powerful teammate (Study 3). This highlights the relevance of considering how power holders construe their power in order to understand their tendency to take advice from others. Copyright © 2017 John Wiley & Sons, Ltd.

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People in powerful positions often need to make difficult decisions with uncertain outcomes that can have far-reaching consequences for themselves and others. Business leaders, for example, may have to decide whether to dismiss hundreds of employees to secure the long-term viability of the organization. Similarly, judges may have to decide whether or not to reduce a defendant's sentence, weighing the punishment for offenses made against chances of successful reintegration in society. Although in many such cases other people are willing to give advice, it has been documented that those with the power to actually make the decision often ignore or discard the opinions of others (Briñol, Petty, Valle, Rucker, & Becerra, 2007; Fast, Sivanathan, Mayer, & Galinsky, 2012; See, Morrison, Rothman, & Soll, 2011; Tost, Gino, & Larrick, 2012). This tendency to disregard (valid) advice can make power holders susceptible to suboptimal decision making (e.g., Larson, Christensen, Franz, & Abbott, 1998; Vroom & Yetton, 1973); it can cause power holders, for instance, to miss out on vital information and may lead them to waste opportunities to benefit from alternative, perhaps superior, viewpoints (See et al., 2011).

Despite the general tendency among people in powerful positions to disregard advice, in reality, there is a range of responses that powerful individuals can show when they receive advice. In fact, rather than entirely shutting themselves off from advice, power holders are often actually quite willing to solicit advice from others. Even if they

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sometimes mainly do this for political purposes, many power holders have a genuine interest in such advice and do incorporate it in their decision making. The question thus is what may prompt a power holder either to embrace or to ignore advice from others. In this paper, we argue that whether those in power take advice from others may depend on whether the powerful (are led to) predominantly construe—that is, perceive—their power as an opportunity or as a responsibility. Specifically, we test the prediction that the tendency to take advice from others during decision making will be greater when power holders construe their power predominantly in terms of responsibilities (rather than opportunities).

The Construal of Social Power as Responsibility and/or Opportunity

Social power can be defined as the relative control someone has over the outcomes of oneself and others (Fiske & Berdahl, 2007), which typically comes with the potential to elicit desired behaviors in others (Tost, 2015; also Dépret & Fiske, 1993; Emerson, 1962; Fiske, 2010; Keltner, Gruenfeld, & Anderson, 2003; Thibaut & Kelley, 1959). Someone can derive social power from one or a variety of sources, such as the potential to punish or reward or the possession of critical expertise or information (e.g., French & Raven, 1959; see Elias, 2008, and Raven, 1993, for a more extensive review of the different sources of social power). Social power may operate in different ways. In addition to downward control (e.g., of a supervisor over subordinates), social power may also imply upward control (e.g., of subordinates over their supervisors) or lateral control (e.g., the power two co-workers hold over each other). Here, we focus on power as a downward control of supervisors over subordinates.

When it comes to influencing others, powerful individuals can employ one or more of their sources of power. Often, the source they use in their attempt to influence others depends on their position within an authority relationship. More formal forms of power (e.g., the potential to reward or punish) are typically important for influencing subordinates, while personal power is more important for influencing peers and bosses (e.g., the possession of valuable expertise or information; Yukl & Falbe, 1990, 1991; Yukl & Tracey, 1992).

We propose that, relatively independent of the nature and basis of their power, power holders may come to construe their power in different ways, primarily focusing on the opportunities or the responsibilities associated with their position. For an understanding of how people come to construe social power differently, an important distinction to be made is between structural and psychological power (Tost, 2015). *Structural power* refers to the objectively demonstrable control of valued resources (e.g., the potential to punish or reward or the possession of critical expertise or information). *Psychological power*, instead, is multifaceted and refers to the following: (i) a conscious evaluation of the extent to which one has the ability to influence others (i.e., sense of power) and (ii) a (unconscious) cognitive network of concepts associated with power. It is this latter cognitive network of concepts associated with power that determines how power holders come to construe their power (Tost, 2015). That is, the association of power with opportunity-related and/or responsibility-related concepts within an individual's cognitive network will determine how they will construe the power they (feel to) have.

Indeed, recent research suggests that the subjective association of power with opportunity and responsibility may differ across individuals and situations (e.g., Sassenberg, Ellemers, & Scheepers, 2012; Scholl, Sassenberg, Scheepers, Ellemers, & De Wit, 2016). That is, sometimes people construe their power predominantly in terms of opportunities, predominantly focusing on how their power enables them to do what they find important, to perform certain tasks, to achieve specific goals (which may be contextually or personally determined; Guinote, 2007, 2010), or to make certain decisions (which may be self-serving or for the common good; Overbeck & Park, 2001). Yet, in other contexts, power may be construed predominantly in terms of responsibilities. In this case, power holders construe their power predominantly in terms of how it makes them have to take care of certain tasks or do what they feel (contextually or personally determined) is needed, such as achieving specific

goals or making decisions on behalf of themselves or others (Sassenberg, Ellemers, Scheepers, & Scholl, 2014).¹

Importantly, one-and-the same task or goal that a power holder aims to achieve can be construed in terms of opportunities as well as responsibilities. Chief executive officers, for example, may construe their role in terms of how it enables them to achieve certain goals or do things, such as being able to have a final say in decision making (i.e., as an opportunity). Yet, they may also frame these same goals and tasks as requirements that they feel they need to fulfill or take care of (i.e., responsibility). In principle, the construal of power as responsibility and opportunity can both be salient at the same time and, thus, can be considered as two orthogonal constructs. In the current work, however, we focus on the difference between these two construals and their implications for advice taking of power holders. That is, we examine the consequences for the tendency to take advice when one of the two power construals is more salient and, thereby, leads power holders to construe their power predominantly in terms of either opportunities or responsibilities.

Prior research has revealed that the way in which people primarily construe their power influences the attractiveness of power (Sassenberg et al., 2012), the power holder's beliefs about the appropriate use of power (Gordon & Chen, 2013; Lee-Chai, Chen, & Chartrand, 2001) as well as the willingness to take risks when in power (Anderson & Galinsky, 2006). In the present research, we speak to the emerging interest in power, social influence, and advice taking (e.g., Pitesa & Thau, 2013; See et al., 2011; Tost et al., 2012; Tost, Gino, & Larrick, 2013). We do so by examining whether individuals' construal of their power primarily as an opportunity or a responsibility shapes their tendencies to take advice from others. Specifically, we test the prediction that the tendency to take advice in decision making increases when those in power construe their power predominantly in terms of responsibilities (rather than opportunities).

We contend that the impact of the construal of power is a factor of particular interest to power holders' advice-taking tendencies, because the construal may be more susceptible to interventions that aim to increase tendencies to take advice, compared to other mechanisms that are known to relate to willingness to take advice (e.g., overconfidence and competitiveness; See et al., 2011; Tost et al., 2012). The aim of the current research, therefore, is to offer a first direct test of whether the dominance of one type of construal (i.e., responsibility) over the other (i.e., opportunity) shapes the behaviors of powerful individuals. Specifically, we predict that those who (generally or situationally) construe their power predominantly as responsibility (vs. opportunity) will be more likely to take others' advice. In addition, we explore two possible underlying mechanisms: the confidence people have in their own ideas and the value they attach to input that others provide.

Power Construal and Advice Taking

An individual's tendency to take advice from others can be elicited by a variety of factors, including characteristics of the decision, the advisor, and traits of the recipient of the advice (see Bonaccio & Dalal, 2006, for an overview). For example, people are less likely to accept advice when they think the decision will be easy (Gino & Moore, 2007) or when advisors seem to be lacking relevant knowledge or skills or simply do not appear self-assured (Harvey & Fischer, 1997; Sniezek & Van Swol, 2001; Soll & Larrick, 2009; Van Swol & Sniezek, 2005; Yaniv, 2004).

¹In line with Tost (2015), we argue that how people construe their power is determined by this cognitive network of power-related concepts. Where we differ from Tost (2015) is that we do not assume a positive association between an individual's sense of power and their sense of responsibility, which she defines as "a feeling of obligation to act in ways that benefit others" (p. 46). Although we agree that for some individuals, a greater sense of power will mean a greater feeling of responsibility, we would argue (as Tost actually also acknowledge on pp. 46–47) that for many people this will not be the case. That is, for some people, also just a slight sense of power may already elicit a very strong feeling of responsibility. Others instead may feel hardly any sense of responsibility despite a very strong sense of power and instead primarily focus on the opportunities associated with their position. So, in contrast to Tost (2015), we consider individuals' sense of power and their construal of power as responsibility as orthogonal constructs that operate independently of each other. For that reason, we argue that it might be more informative to look at their interactive effects on behavior (as we do in Study 1).

Although these may all be perfectly legitimate reasons to discard advice from others, problems may arise when social power lowers individuals' tendency to take advice across the board, for instance, leading them to disregard valid advice from experts (See et al., 2011; Tost et al., 2012). We argue that one of the factors that may make power holders more open to the advice of others is the way in which they construe their power. Specifically, we predict that power holders are more likely to take others' advice when they predominantly construe their power as a responsibility (vs. opportunity).

We further propose that there are two possible reasons for this effect that correspond to two mechanisms through which the construal of power might affect advice-taking tendencies: (i) through affecting the confidence power holders have in their own judgments and (ii) through affecting the value they attach to others' advice they receive. Our focus on these two mechanisms follows research showing that a heightened/lowered confidence, as well as the (lack of) value placed in others' needs and contributions, not only plays a fundamental role in explaining many of the behavioral effects of possessing a high (vs. low) power position (e.g., Fast et al., 2012; Kipnis, 1972, 1976) but are also key determinants of individuals' tendency to overweigh their own opinion relative to the advice they receive from others (e.g., Bonaccio & Dalal, 2006; See et al., 2011; Tost et al., 2012).

Thus, the first mechanism through which the construal of power might affect powerful individuals' tendency to take advice is by making people who construe power in terms of responsibilities feel less confident in their own judgments. Past research has shown that power tends to be related to (over)confidence and that this may cause people to more easily discount the viewpoints of others (Briñol et al., 2007) and be less susceptible to persuasion attempts and more prone to disregard advice (Galinsky, Magee, Gruenfield, Whitson, & Liljenquist, 2008; Mourali & Yang, 2013; See et al., 2011; Tost et al., 2012, 2013). Powerful people who construe their power in terms of responsibilities, however, are likely to be more vigilant (e.g., Anderson & Galinsky, 2006) and to deliberate more on the decisions they are facing (e.g., Rucker, Hu, & Galinsky, 2014). Such deliberation and more systematic, task-oriented thinking often lower the confidence individuals have in their own judgments (Ward, Lyubomirsky, Sousa, & Nolen-Hoeksema, 2003). Thus, it is possible that construing their power as responsibility (vs. opportunity) makes power holders less confident in their own judgments and less likely to assume they are right, which will lead them to demonstrate a greater tendency to take advice from others (Fast et al., 2012).

Hypothesis 1: Powerful individuals who construe their power predominantly as responsibility have a greater tendency to take advice than powerful individuals who construe their power predominantly as an opportunity.

Hypothesis 2: Confidence mediates the effect of construal of power on advice taking, such that powerful individuals tend to feel less confident in their own judgments when they construe their power predominantly as responsibility (rather than as opportunity), which, in turn, strengthens their tendency to take advice.

The second mechanism through which the construal of power as responsibility (rather than opportunity) might lead powerful individuals to take more advice is the value they attach to advice or, more generally, the input from others. We build on past research showing that, in addition to reducing confidence, a systematic task-oriented thinking style may increase individuals' appreciation of advice when approaching a decision (Feng & Lee, 2010). Further, Sassenberg et al. (2012) have observed that people are more hesitant and less excited to take on a position of power when they construe it as a responsibility (vs. opportunity) to do certain things. The same can be expected for those who are already in a power position. That is, power holders can be expected to be less enthusiastic and more reluctant to use their position of power when they construe their power predominantly in terms of how it makes them feel they need to take care of certain tasks, such as having to make a decision (i.e., responsibility), compared to when they construe their power predominantly in terms of how their power enables them to do certain things, such as being able to make a decision (i.e., opportunity). Such reluctance towards being in power when it is construed in terms of responsibilities may make power holders more appreciative of help, such as advice from others, as they may see the advice as something that alleviates their "burden" of

power. This should lead them to be more positively attuned towards the receipt of advice and to perceive advice as a more valuable input into the process of decision making. When people are construing their power predominantly as an opportunity, on the other hand, people might be less considerate towards others (e.g., Chen et al., 2001; Overbeck & Park, 2006), and advice from others could be considered as limiting their opportunity to make decisions freely. As a result, they may come to attach less value to receiving advice, which will make them less likely to consider advice that is provided and less inclined to change their judgments accordingly (De Hooge, Verlegh, & Tzioti, 2014). Hence, we hypothesize the following.

Hypothesis 3: The perceived value of advice mediates the effect of power construal on advice taking, such that powerful individuals tend to perceive advice as more valuable when they construe their power predominantly as responsibility (rather than as opportunity), which, in turn, strengthens their tendency to take advice.

In sum, the aim of the current work is to examine the influence of construing power predominantly as a responsibility (vs. an opportunity) on power holders' advice taking. In addition, we explore two possible mechanisms through which this influence can take place: through generating less confidence in one's own opinions and/or through raising the perceived value of the advice that others provide.

By examining the impact of the construal of power on power holders' tendency to take advice, our research extends earlier work on power, social influence, and advice taking in several ways. First, we extend earlier research on power and social influence by examining (individual and situational differences in) the reaction of the powerful to influence attempts from others, rather than examining how power holders themselves initiate attempts to influence other people (e.g., Raven, 1993). Second, our work extends recent studies on the association between power and advice taking—which demonstrated the difference in advice-taking tendencies between those with high and low power, but did not systematically address the heterogeneity in advice-taking tendencies among power holders themselves (e.g., See et al., 2011; Tost et al., 2012). Third, by addressing the heterogeneity among power holders in their responses towards the input from others, our work makes an important contribution to the power literature in general. That is, most studies, especially in the sociocognitive psychological literature, typically focus on universal effects of high (vs. low) power. Our work highlights important differences among those high in power in different states of mind and different situations. We examine how these differences can be attributed to the way power holders construe their power, thereby highlighting the need to move beyond basic differences between low-power and high-power positions per se. Fourth and finally, although prior research has established that opportunity and responsibility are both important components of power (Sassenberg et al., 2012), so far, the behavioral ramifications of these construals of power on people's openness to the opinions of others have not been systematically addressed. An important contribution of this work, therefore, is that it offers a systematic and direct test of the behavioral implications of the construal of power.

The Present Research

To examine whether the way those in power construe their position indeed affects their tendency to take advice, we conducted three studies (a field study and two experiments). These relied on a combination of different samples, methodologies, and measures to ensure both high external and internal validity of our findings. Across studies, we either measured (Study 1) or primed the salience of opportunities versus responsibilities (Studies 2 and 3) by asking participants to contemplate their own power position in terms of responsibilities versus opportunities (Study 2) or by framing their position in terms of responsibilities or opportunities (Study 3). In Studies 2 and 3, we also included a high-power control condition. Given that prior research has convincingly established that having versus lacking power impacts the tendency to take advice, we focused on powerful individuals only and examined how the construal of power affects their tendency to take advice (but see Study 1 for additional data on individuals with a

relatively low sense of power). All three studies tested our main prediction that powerful individuals who (were led to) construe(d) their power in terms of responsibilities (vs. opportunities and vs. control) would be more likely to take others' advice into account in making their final decisions (Hypothesis 1). In all three studies, we operationalized the tendency to take advice as the tendency to revise opinions, decisions, or estimates, in the direction of the advice given, which we measured with a subjective survey-based measure in Study 1 and an objective behavioral measure in Studies 2 and 3. We also examined the two mechanisms through which construal of power might impact on the tendency to take advice: confidence in one's own judgments (Hypothesis 2, examined in Studies 2 and 3) and perceived value of others' advice (Hypothesis 3, examined in Study 3).

Study 1

The goal of this field study was to examine, in a real-life setting (among supervisors holding a formal power position at work), whether power holders' tendency to construe power predominantly in terms of opportunities or responsibilities is indeed associated with their advice-taking tendencies. To overcome possible same-source common method bias, we relied on two different sources of data. We asked the power holders to rate their sense of power as well as their power construal. In addition, we asked the power holders' subordinates to rate the power holders' advice-taking tendencies.

We asked the supervisors (i.e., power holders) to rate not only their construal of power but also their sense of power. Although having a formal position of power (e.g., a leadership role) can be considered a reliable proxy for individuals' actual sense of power, this is not necessarily true. That is, some people in supervisory positions may occupy a formal power position but still experience little to no actual power (e.g., Anderson, John, & Keltner, 2012). Therefore, in this study, we considered individuals' subjective sense of power as an important boundary condition for our main prediction that supervisors' tendency to take advice would be associated with how they construe their power (Hypothesis 1). More specifically, we expected our main prediction to apply specifically to people who do feel powerful, because only the experience of high power renders the construal of power meaningful.

Following the preceding reasoning, in this first study, we anticipated an interaction between supervisors' construal of power and their subjective sense of power. Specifically, we expected that the construal of power should affect advice taking, provided that supervisors report having a relatively high sense of power. The way power is construed does not necessarily impact the responses of those with a low sense of power. That is, we expect that power holders who experience a strong sense of power and construe this power as a responsibility are more likely to take advice than power holders who experience a strong sense of power but construe this power in terms of an opportunity. Those with a low sense of power can be expected to display an overall tendency to take advice, irrespective of how they construe power, for example, because they generally tend to be less confident in their own judgments (e.g., Fast et al., 2012; See et al., 2011; Tost et al., 2012). Moreover, if people feel they actually have little power—despite their formal position in the organization—it might be more difficult for them to meaningfully construe this lack of power in terms of opportunities or responsibilities. As a result, the construal of power will be less important in shaping a low-power person's tendency to take advice.

Method

Participants

Potential participants for the study were approached through the social networks of two research assistants involved in this project. They were asked to participate in a research project entitled "Leadership and Team Outcomes." Participants were told that the purpose of the project was to investigate group dynamics that play out in the workplace.

Supervisors were identified as potential participants if they held a supervisory position over at least one subordinate. All participants learned that upon completion of the survey, they could choose to enter a lucky draw for a chance of winning \$50. In total, we approached 81 people in a supervisory position to participate, of whom 58 participated, achieving a response rate of 71.60%. One hundred five of their subordinates were also approached (with at least one subordinate per supervisor), of whom 64 participated, achieving a response rate of 60.95%. Eighteen participants (nine supervisors and nine subordinates) completed the survey, but their data were not included in the analyses because we did not have data from their subordinate–supervisor. One dyad was excluded because the subordinate failed to complete parts of the survey that were critical for testing our hypotheses.

In total, this left us with a dataset of 103 individuals, including 49 individuals who held a supervisory position at work (26 women; $M_{\text{age}} = 42$; range: 25–61) and 54 of their subordinates (35 women; $M_{\text{age}} = 36$; range: 20–63). For five supervisors, two subordinates participated. In this case, we calculated the average scores of the two subordinates before matching their data with those of their supervisor. Participants worked in a wide range of organizations and industries (e.g., manufacturing, health care, law, finance, and education) and were based in Australia (38.8%), Malaysia (51%), and Israel (10.2%). English is the official language in both Malaysia and Australia, and we, therefore, only applied an English version of the survey. The Israeli participants were required to understand the English language in order to participate. On average, supervisors had 4.68 years of tenure in their current position and were in charge of 15 people (the median number of subordinates was seven).

Procedure and measures

Participants completed an online survey that they could access from their own computer. Each participant received a private link to the survey. The survey sent out to the supervisors comprised measures different than the one sent out to the subordinates. In both cases, the first part of the survey contained background questions, such as age, gender, nationality, and tenure in current position. Supervisors were also asked to indicate how many people they had working for them. The second part of the survey contained the focal measures for supervisors and subordinates, respectively.

Measures completed by the supervisors. For the assessment of supervisors' construal of power, they were instructed to think about the power that their position provided and asked to indicate their general agreement to three statements, using bipolar 7-point scales. The construal of power as an opportunity represented the low endpoint of the scale, and the construal of power as a responsibility the high endpoint. Specifically, participants reacted to the following statements, with the italicized words indicating the low and high endpoints of the scales: "I tend to see my power in terms of the *opportunities* [*responsibilities*] to influence others (e.g., telling others what to do)," "I tend to see my power in terms of the *possibilities* [*obligations*] to make decisions," and "I tend to see my power in terms of the *opportunities* [*responsibilities*] to achieve certain goals" ($\alpha = .82$).² Hence, a high score indicates that people are construing their power predominantly as a responsibility (vs. opportunity), a low score indicates the construal of power predominantly as an opportunity (vs. responsibility), and the midpoint reflects a construal of power in which responsibility and opportunity are equally salient.

To assess supervisors' sense of power with regard to the supervisor–subordinate relationship, we applied Anderson and Galinsky's (2006) eight-item sense-of-power scale. Supervisors responded to statements such as "In my interactions with my subordinate, I can get him/her to listen to what I say" and "In my interactions with my subordinate, I can get him/her to do what I want." Participants responded using a 7-point response scale, where 1 = *strongly disagree* and 7 = *strongly agree* ($\alpha = .77$).

²One limitation of this measure is that there might be some ambiguity as to what the midpoint could mean (as it could mean that a person is high on both opportunity and responsibility, moderate on both, or low on both). Still, we chose this measurement rather than measuring opportunity and responsibility separately because it best matched our conceptualization of the construal of power predominantly as opportunity and responsibility.

Measures completed by the subordinates. To examine their supervisors' general tendency to take advice, we asked the subordinates to respond to five statements adapted from See et al. (2011, Study 1) and the Barriers to Help Seeking Scale (Mansfield, Addis, & Courtenay, 2005): "My supervisor is open to reconsidering his/her decisions based on input provided by me and other co-workers," "My supervisor factors in the opinions of me and other co-workers into his/her decision making process," "My supervisor does not like other people telling him/her what to do" (reverse coded), "My supervisor does not like feeling controlled by other people" (reverse coded), and "My supervisor likes to make his/her own decisions and not be too influenced by others" (reverse coded).³ Subordinates indicated their level of agreement with the statements using a 7-point response scale, where 1 = *strongly disagree* and 7 = *strongly agree* ($\alpha = .86$).

In addition, we wanted to control for the quality of the relationship between supervisors and their subordinates when examining support for our main prediction. This was carried out because the quality of the supervisor–subordinate relationship might color the subordinates' perception of their supervisor's advice-taking tendencies. To be able to control for this, we measured the overall quality of their relationship, by applying the seven-item leader–member exchange scale (Graen & Uhl-Bien, 1995). Subordinates responded to questions such as "How well does your supervisor understand your job problems and needs?" and "How would you characterize your working relationship with your supervisor?" using a 5-point scale (e.g., 1 = *not a bit* and 5 = *a great deal* or 1 = *extremely ineffective* and 5 = *extremely ineffective*, $\alpha = .84$). We also controlled for the gender of the subordinates and supervisors, as the supervisors' tendency to take advice might also partly depend on the gender of the source of the advice (Carli, Loeber, & Lafleur, 1995) and might be perceived differently by subordinates as a result of gender role expectations (Korabik, Baril, & Watson, 1993). In addition, we controlled for cultural background (Southeast Asian vs. Western) to control for possible cultural differences between the samples in terms of individuals' tendency to take advice. Likewise, we controlled for the age and tenure of both the subordinate and the supervisor, given that supervisors' own age and tenure, as well as that of their subordinates, are likely to be related to how knowledgeable a supervisor feels they and their subordinate are about the work they are assigned to do and, as such, are likely to affect their tendency to take advice (Bonaccio & Dalal, 2006; Feng & MacGeorge, 2006). Lastly, we controlled for the supervisors' number of subordinates, as this can be expected to be negatively related to supervisors' ability to interact with, and therefore to be exposed to, their subordinates' ideas, which ultimately will lead them to be less likely to take advice from others in their decision making.

Results

Table 1 shows the correlations and descriptive statistics for the variables included in the analysis. The results of hierarchical regression analyses predicting supervisors' tendency to take advice are reported in Table 2. In the first step, only the control variables were included, which showed that the supervisors' tendency to take advice was negatively related to their age and positively to the relationship quality with their subordinate⁴ and was higher for men than for women. Step 2 revealed no overall relation with sense of power or with the construal of power. Yet, as anticipated, Step 3 demonstrated that the relation of power construal with advice taking was qualified by an interaction with the supervisors' sense of power. This interaction is depicted in Figure 1.

We conducted simple slope analyses (Aiken & West, 1991) to further examine the interaction. As anticipated, supervisors who reported having a high sense of power were less likely to take advice when they tended to construe

³It could be argued that the latter two items focus more on preferred independence from others than the tendency to take advice. Accordingly, we ran all analyses with and without these two items included in our advice-taking measure. Results were identical. Therefore, we decided to include all five items in the advice-taking measure, as originally intended.

⁴Leader–member exchange has been linked to higher levels of interpersonal trust and friendship. Therefore, it could be argued that in addition to advice taking it may also affect and individuals' sense of power over their subordinates. Please note, however, that the zero-order correlation between sense of power and the leader–member exchange is nonsignificant, suggesting that a better (or worse) relationship with subordinates did not undermine power in this particular sample. In other words, a good (or bad) relationship between the power holder and the subordinate did not go at the expense of feelings of power in the power holder.

Table 1. Means, standard deviations, and correlation matrix (Study 1).

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11
1. Cultural background of dyad	1.49	.51											
<i>Subordinate</i>													
2. Tenure in current position	.29	.57	-.25 [†]										
3. Gender	1.65	.48	.11	.16									
4. Age	36.27	11.22	-.13	.57***	.01								
Supervisor													
5. Tenure in current position	.39	.50	.08	-.08	-.11	.15							
6. Gender	1.53	.50	.35*	-.02	.26 [†]	-.16	.31*						
7. Age	42.49	10.44	-.22	.21	.11	.36*	.40**	-.01					
8. Number of subordinates	.85	.48	-.16	.05	-.18	.21	-.07	-.09	.27***				
9. Relationship quality	3.86	.57	.16	-.06	-.16	-.12	-.11	.08	-.28 [†]	.18			
10. Sense of power	5.45	.70	.02	.22	-.23	-.08	.12	-.09	-.22	.06	.14		
11. Construal of power as responsibility (vs. opportunity)	4.10	1.23	-.26 [†]	.21	.11	.23	.08	.06	.36*	.05	-.24 [†]	-.19	
12. Advice taking	4.89	1.21	.23	-.08	-.01	-.15	-.11	-.13	-.53***	-.25 [†]	.43***	.08	-.13

Note: *N* = 49. Gender: 1 = man, 2 = woman; cultural background: 1 = Southeast Asian, 2 = Western.
 p* < .05; *p* < .01; ****p* < .001;
[†]*p* < .10; significance levels are two-tailed.

Table 2. Results of regression analysis of factors predicting advice taking (Study 1; $N = 49$).

	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>
Intercept	4.19**	1.55	4.88**	1.60	5.31**	1.55
<i>Control variables</i>						
Cultural background	0.34	0.31	0.48	0.32	0.56 [†]	0.31
Tenure of subordinate	0.16	0.32	0.38	0.37	0.46	0.36
Gender of subordinate	0.44	0.34	0.39	0.34	0.39	0.32
Age of subordinate	0.00	0.02	-0.01	0.02	-0.02	0.02
Tenure of supervisor	0.57	0.36	0.81*	0.39	0.81*	0.37
Gender of supervisor	-0.84*	0.34	-1.04**	0.35	-1.20**	0.35
Age of supervisor	-0.05**	0.02	-0.07***	0.02	-0.07***	0.02
Supervisor's number of subordinates	-0.40	0.34	-0.27	0.34	-0.16	0.33
Relationship quality	0.83**	0.27	0.87**	0.26	0.92***	0.26
<i>Main effects</i>						
Sense of power			-0.20	0.17	-0.24	0.17
Construal of power as responsibility (vs. opportunity)			0.21	0.15	0.15	0.15
<i>Two-way interaction</i>						
Sense of Power × Construal of Power ^a					0.26*	0.13
R^2	.50***		.54***		.59***	
ΔR^2			.044		.048*	

Note: $N = 49$. Gender: 1 = man, 2 = woman; cultural background: 1 = Southeast Asian, 2 = Western.

^aValues for sense of power and construal of power were standardized before calculating the interaction term.

* $p < .05$; ** $p < .01$; *** $p < .001$;

[†] $p < .10$, significance levels are two-tailed.

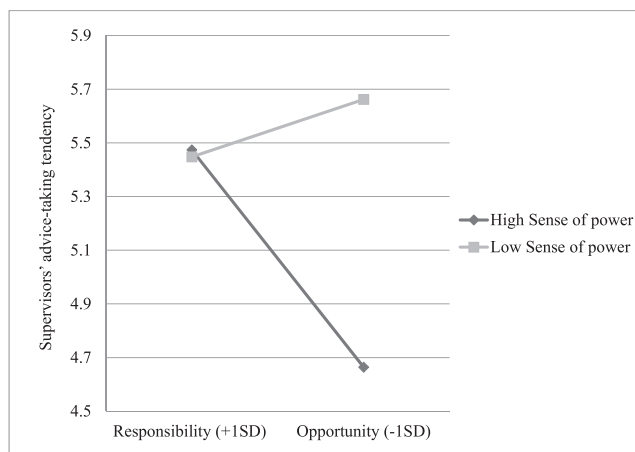


Figure 1. Supervisors' advice-taking tendency (rated by subordinates) with low ($-1 SD$) and high sense of power ($+1 SD$) and tendency to construe power in terms of opportunities ($-1 SD$) and responsibilities ($+1 SD$), when controlling for leader-member exchange and supervisors' age and gender

power in terms of opportunities (vs. responsibilities), $B = -0.40$, $p = .027$. When supervisors reported having a low sense of power, however, their tendency to take advice did not depend on how they construed their power, $B = 0.11$, $p = .621$. Put differently, supervisors were less likely to take advice when they had a high (vs. low) sense of power, yet only when they tended to construe their power in terms of opportunities, $B = -0.50$, $p = .030$, and not when they tended to construe their power in terms of responsibilities, $B = 0.01$, $p = .949$. Together, this suggests that a construal

of power in terms of opportunities (rather than responsibilities) reduces supervisors' tendency to take advice as perceived by their subordinates, yet only when they actually feel that they hold a position of power.⁵

Discussion

The results of Study 1 provide initial support for Hypothesis 1 and show that individuals in a supervisory position at work are less likely to take advice when they construe their power as an opportunity rather than as a responsibility, provided that they actually feel powerful. Importantly, for power holders who reported a relatively low sense of power, their conceptualization of power did not affect their tendency to take advice. The importance of the subjective sense of power reported by the supervisors in our sample allows us to relate our findings to previous studies that have demonstrated effects of (low vs. high) power on advice taking (See et al., 2011; Tost et al., 2012). That is, the current results replicate prior findings that high (vs. low) power reduces advice taking. However, they also extend these previous findings by showing that this effect of power is limited to those construing power as an opportunity, rather than as a responsibility. Importantly, the present study also demonstrates that a construal of power in terms of responsibilities may lead individuals who feel that they do have power to take advice to a similar degree as those who see themselves as having low power.

One of the major strengths of our first study is that it was not limited by same-source common method bias, as we included different sources to assess the dependent variable (advice taking, rated by subordinates) and the main predictor (construal of power, as indicated by supervisors). Another strength is that it examined our main prediction in a field context among actual power holders where the data reflected actual workplace behaviors, which is important for optimizing the external validity of the results.

Despite the strengths of Study 1 in examining real-life power positions, potential limitations of this first study are the low sample size and the correlational nature of the data. As a result, it is difficult to rule out our alternative explanation for our findings. For example, one could argue that third variables, such as an individual's self-interestedness (i.e., their motivation to use their power for their own welfare, rather than others') may lead them both to construe their power as an opportunity (vs. responsibility) and to ignore others and their advice. This, in turn, could account for the relationship between the construal of power and advice taking.

Similarly, one could argue that supervisors' actual competence or skills may have affected both the construal of power and advice taking and possibly account for the relationship between them. That is, less skilled managers might feel less confident and therefore take more advice; yet, at the same time, they might rather consider their power more as a responsibility, owing to their lack of skills. Because we did not assess supervisors' skill level in our initial study, we collected additional data in a sample of supervisors ($N = 36$) to specifically examine whether we could find any indications of a relation between supervisor's skill level and their construal of power. Participants for the study were approached through the social networks of two research assistants who were not involved in the original study. The sample of supervisors recruited was similar to the original sample, in terms of both demographic profile (i.e., $M_{\text{age}} = 45.28$, $SD = 14.45$, range: 23–65; 27 women; 50% Australian, 50% Southeast Asian) and the number of subordinates ($M = 7.00$, median = 5). Participants completed the same online survey as that in the original study, except for an additional measure of the supervisors' perceived skill level. We measured skill/competence by

⁵We obtain virtually the same results when the demographic variables not significantly related with the criterion variable are excluded from the regression analyses. In addition to our predicted effects, we also found significant effects for the age and gender of the supervisor on their advice-taking tendencies. One explanation for the effect of supervisors' age on advice taking is that, compared to younger supervisors, older supervisors may feel their age gives them a sense of superiority and knowledgeability in work-related domains, which may lower their tendency to take advice. One possible explanation for the impact of gender on advice-taking tendencies is that compared to men, women may face gender stereotypes in terms of being considerate of others' needs. Among subordinates, this may raise expectations that female supervisors should display a (relatively) high tendency to take advice. In line with work on expectancy violations (Bettencourt, Dill, Greathouse, Charlton, & Mulholland, 1996; Burgoon & Hale, 1988), violations of such gender role expectations about female supervisors' advice-taking tendencies may be particularly salient (Korabik et al., 1993) and, therefore, more likely to be remembered and reported and could lead in turn to lower overall reported advice-taking tendencies.

asking individuals to indicate their agreement with six items adapted from Mayer and Davis (1999) on a 7-point scale (ranging from 1 = *strongly disagree* to 7 = *strongly agree*), for example, “I am very capable of performing my job” and “I have the skills to perform my job effectively” ($\alpha = .96$). Analyses on this additional sample revealed that, although supervisors’ self-rated job skills were positively related to their sense of power ($r = .41, p = .012$), there was no relationship between skill level and the construal of power ($r = .011, p = .943$), suggesting that skilled power holders do not necessarily perceive their power more as an opportunity (vs. a responsibility) than less skilled power holders. These post hoc data alleviate concerns that the findings of Study 1 suffer from a confound between skill level and construal of power.

Still, these concerns call for additional data to further examine the robustness of our findings beyond this sample. More specifically, it calls for an experimental approach that allows us to cancel out such alternative explanations and to establish more conclusive support for our main prediction. Therefore, in Study 2, we designed an experimental paradigm to examine the causal link between the construal of power and advice taking under more controlled circumstances.

Study 2

In Study 2, we applied an experimental power-priming procedure and examined how this affected people’s tendency to take advice. We induced feelings of power among a sample of managers by asking them to talk about having high power at work in terms of either opportunities or responsibilities. We also examined whether power holders’ “default” tendency is to construe power in terms of the opportunities (rather than the responsibilities) provided by their role. This was realized by adding a control condition in which people were asked to talk about their power at work in general, without any reference to thinking specifically about opportunities or responsibilities.

Typically, power is more likely to be spontaneously construed in terms of opportunities (see also Sassenberg et al., 2012), and so our prediction was that advice taking would be higher in the responsibility condition, compared to both the opportunity and control conditions, but that there would be no difference between the opportunity and control conditions. Additionally, to move beyond self-report or peer-report measures, we implemented a more established and objective measure of advice taking from previous studies (e.g., See et al., 2011; Tost et al., 2012). Finally, we extended our examination in Study 2 by assessing participants’ confidence in their own judgments as a potentially relevant process variable, which might account for differences in advice taking by power holders under different conditions (Hypothesis 2).

Method

Participants and design

In total, 217 individuals in high-power positions (80 women; $M_{\text{age}} = 42$; range: 24–72) participated in this study voluntarily or in exchange for a chance to win €50. We conducted two waves of data collection, to recruit a sufficient number of individuals who held a formalized power position at work. The first wave of data collection was conducted in Chile ($N = 126$), the second one 5 months later in the Netherlands ($N = 91$). In both samples, participants were recruited through research assistants’ personal networks.⁶ Potential participants were identified as such if they held a powerful position at work, which meant that their position allowed them to have control over the

⁶Seven research assistants were involved in this study to identify and contact suitable participants for this research. Each of the research assistants was able to recruit, on average, roughly 30 participants, which we believe was a considerable but achievable goal. There was no overlap between the research assistants and the participants recruited among the three studies; so, none of these seven research assistants in Study 2 was involved in the recruitment of participants in either Study 1 or 3.

outcomes of one or more persons (Study 1). In the Chilean sample, participants participated without compensation, whereas in the Dutch sample participants had a chance to win €50.

Within both samples, participants were randomly assigned to an opportunity, responsibility, or control condition, to make sure that participants from one country were not overrepresented in certain experimental conditions. One of the research assistants was a native speaker of the Spanish language and was responsible for translating the materials from English to Spanish. Translation from English to Dutch was performed by the researchers. The surveys were only translated and not back-translated. The results, to be described later, were, however, similar in both samples; that is, including a control variable representing these two waves of data collection did not lead to a main effect or an interaction with the experimental conditions on the dependent measure. Together, the participants represented a wide range of organizations and industries (e.g., education, finance, health care, and mining). On average, participants had 8.18 years of tenure in a powerful position, and the median of the number of people they were in charge of was 14.⁷

Procedure

Participants completed an online survey, which they could access from their own computer. They were told that the project investigated what it means for people to fulfill a leadership position within their organization and that we would ask them to complete a set of questionnaires and tasks. The first part of the survey contained background questions (e.g., age, gender, and tenure). At this point and in order to make their high-power position salient and thus to induce a high sense of power in all participants, participants provided a first brief general description of how their position at work provided them with power. Power was defined as “having control over the outcomes of one or more persons.” Next, participants completed three estimation tasks. The first task involved estimating the costs of a luxurious all-inclusive vacation to Punta Cana in the Dominican Republic, including a return flight from London and 7-night stay in a five-star resort with a range of luxurious amenities during high season. No further details were given. The second task involved estimating the costs of a set of office furniture, portrayed on their computer screen and depicting a computer, desk, two chairs, and office appliances. Again, no further details were given. The third task was to estimate the average tuition fee for a Master of Business Administration degree in the United States.

After participants had provided their initial estimations, the construal of power was manipulated using a priming procedure adapted from Galinsky, Gruenfeld, and Magee (2003). We told participants that this part of the survey was about memory and recall of different types of past events. In the experimental conditions, participants were then asked to recall and describe in detail a recent experience at work in which they had had power. Power was again defined as “having control over one or more persons.” In the construal as a responsibility condition, it was further indicated that participants should recall a specific situation in which their power felt as a responsibility to them, for example, because they had to “meet certain expectations; because their decisions had important consequences for others; and/or because they were responsible for the adequate performance of their subordinates.” In contrast, in the construal as an opportunity condition, the text indicated that participants should recall a situation in which their power gave them certain opportunities, for example, because “it enabled them to carry out certain ideas and plans, to delegate certain tasks, or to get things done by others.” Participants in the control condition were asked to recall and describe their last working day, to reflect on which tasks they had performed, and to reflect on their most vivid memory of that day.

After completing the power construal manipulation, participants were again presented with the three estimation tasks. The description of the three tasks (i.e., the all-inclusive vacation, office furniture, and tuition fee) was again presented on their screen, together with the initial estimation they had made. Additionally, we displayed an estimation that was allegedly provided by someone who was said to have specific expertise on the topic of that particular estimation: an “employee of a travel company,” an “office decorator,” and a “Master of Business Administration professor.” As such, participants could optionally revise their estimations, benefiting from the expert information

⁷These two job-related characteristics were only measured in the first wave of data collection ($N = 126$) and were not related to our dependent measure nor were the participants' demographic characteristics (i.e., age and gender), all $ps \geq .652$. There also were no significant differences in any of these characteristics between experimental conditions (all $ps \geq .329$).

they had received—as to measure their tendency to take the others' advice. In the instructions, we did not specify whether the advisors would find out whether they [the participants] had taken their advice or not. After submitting their final estimations, participants completed a brief questionnaire asking them to indicate their confidence in the answers for each of the estimation tasks they had provided, after which they were debriefed.

Measurements

In line with prior studies (e.g., Harvey & Fischer, 1997; See et al., 2011; Tost et al., 2012), we operationalized the tendency to take advice as the extent to which individuals changed their initial estimation in deference of the estimation of the expert advisor. We quantified this by calculating the weight of advice (WOA) = (final estimation - initial estimation)/(advisor's estimation - initial estimation). This results in a ratio in which higher scores indicate a higher tendency to take advice. A ratio of 0 indicates that individuals have not changed their initial estimation and fully disregarded the advice, whereas a ratio of 1 conveys that the advice was adopted entirely, regardless of one's own initial estimation, resulting in the objectively correct final estimation. In case these calculations resulted in a WOA score of less than 0 or greater than 1 (because a participant's final estimation fell outside the range set by their own initial estimation and the expert advice), we followed the procedure described by Soll and Larrick (2009) and truncated the WOA ratio and then recoded the final score to respectively 0 or 1. Following common practice, we averaged participants' WOA ratios for the three types of estimations, to create an overall indicator of the tendency to take expert advice (following See et al., 2011).

We assessed participants' subjective confidence in the estimations they submitted after they had provided all their final estimations. For each of the three tasks, they rated how certain they were about the correctness of their final estimation on a scale from 0 (*not certain at all*) to 100 (*completely certain*), $\alpha = .71$.

Results

Participant attrition and handling of outliers

The data of 18 of the 217 participants were excluded from the analyses; the data for eight participants were excluded because they failed to provide one or more of their final estimates, for seven because we could not determine the experimental condition they had been allocated to, for two because they had taken more than 48 hours to complete the survey, and for one because during the priming procedure, he wrote "no wish for power over others" instead of telling about his powerful position. In addition, two participants were positive outliers in the opportunity condition, as their tendency to take advice was more than 2.5 standard deviations higher than average. We left them in the dataset because there were no signs of measurement error, nor could any of the other variables in our study account for this high tendency to take advice; yet we did modify their value to the second most extreme value (Tabachnick & Fidell, 1996). Including or excluding these outliers from the analyses did not alter the main findings.

Hypothesis testing

Table 3 reports the means and standard deviations of participants' tendency to take advice in each experimental condition. A one-way analysis of variance (ANOVA) on advice taking revealed the predicted effect of the construal of power, $F(2, 196) = 3.29, p = .039$ and $\eta_p^2 = .03$. In line with our prediction, contrast analyses (focal contrast: $-1 -1 2$; residual contrast: $1 -1 0$; for control vs. high power as opportunity vs. high power as responsibility) showed that the tendency to take advice was higher in the responsibility condition than in the opportunity and control conditions, $t(196) = 2.435, p = .016, d = 0.43$, whereas the tendency to take advice in the opportunity condition did not differ significantly from that in the control condition, $t(196) = 0.84, p = .40$.⁸ This is in line with the assumption

⁸A Levene's test revealed significant differences between the variances in the WOAs, $F(2, 196) = 6.77, p = .001$ (Levene, 1960). Therefore, we also ran a Brown-Forsythe test, which is robust to unequal variances (Tomarken & Serlin, 1986). The results were identical to the ANOVA reported in the main text.

Table 3. Means and standard deviations (between brackets).

	Study 2 (<i>N</i> = 199)	
	Advice taking	Confidence after advice
Opportunity	0.35 ^a (0.23)	75.62 (16.47)
Responsibility	0.47 ^b (0.32)	74.76 (16.33)
Control	0.39 ^a (0.26)	72.86 (18.84)

Note: Means within a column not sharing the same letter are significantly different from one another ($p < .05$, significance levels are two-tailed).

that it is, indeed, the “default tendency” for power holders to construe power in terms of the opportunities provided by their role.

Our experimental manipulations of the construal of power did not systematically affect participants’ self-reported confidence in the final estimations provided, $F(2, 195) = 0.45$, $p = .637$ and $\eta_p^2 = .00$ (see Table 3 for means and standard deviations). Indeed, contrast analyses showed that confidence ratings did not differ between the responsibility condition and the control and opportunity conditions, $t(195) = 0.20$, $p = .845$. Likewise, self-reported confidence did not differ significantly between the opportunity and control conditions, $t(195) = 0.93$, $p = .355$. Thus, the current findings do not offer evidence for the possibility that the tendency to take advice is increased by emphasizing the responsibilities (vs. opportunities) associated with power because this reduces participants’ confidence in their own estimations (Hypothesis 2).

Discussion

Study 2 revealed that professionals holding a position of power in one of a range of organizations and work contexts are more likely to take expert advice (which enables them to make correct decisions) when they are induced to construe their power in terms of responsibilities rather than opportunities. This provides additional support for our main prediction among a second sample of professionals and with procedures and measures that could inform interventions in practice. We also established that the tendency to take advice was significantly more pronounced in the responsibility condition than in the other two conditions. Indeed, the fact that we observed no differences in advice taking between the control condition and the opportunity condition suggests that construing power in terms of opportunities is the “default” tendency for power holders. In other words, emphasizing the responsibilities associated with power was found to increase the tendency by those in power to take advice compared to the control condition. In contrast, we found no evidence that emphasizing the opportunities implied in high power decreases advice taking.

As was the case in the first study, a major strength of the current study is also that the participants were all professionals holding positions of power at work. Extending Study 1, however, in the current study, we specifically instructed participants to think about the control they had in terms of the responsibilities or opportunities associated with their real-life power role—in other words, construal of power was induced situationally.

In contrast to our prediction, the findings of Study 2 showed that powerful individuals did not tend to feel less confident in their own judgments when they construe their power as a responsibility (rather than as opportunity). This suggests that a higher tendency to take advice among those who construe their power as a responsibility (vs. opportunity) may not be the result of a lower confidence in their own decisions but rather may be due to other reasons. On a cautionary note, however, given that we measured confidence after participants had provided their final estimation, their scores may actually have also been the result of a postdecisional rationalization of the estimation they submitted, instead of reflecting the actual confidence they had while making their judgments. In Study 3, we therefore decided to assess participants’ confidence in their estimations both before and after receiving advice, in addition to examining other possible mediating mechanisms (especially, the perceived value of others’ advice).

Study 3

In Study 3, we sought to replicate the results of Study 2 under even more controlled circumstances, to establish further support for the (causal) link between the construal of power and advice taking. Instead of priming participants to consider different aspects of their actual work experiences, we experimentally created teams comprising high-power roles that were construed in different ways.

In addition to creating a more controlled setup, we also improved several others aspects of the design, to deal with certain limitations to Studies 1 and 2. First, in principle, it could be argued that in Study 2, people in the responsibility condition were cued more strongly to think about others than people in the opportunity condition, which could have led to a heightened focus on others (relative to the self) among those in the responsibility condition. Therefore, we phrased the manipulation in such a way that in both the opportunity and responsibility conditions, participants' goals could include those of themselves and others. Second, whereas it might seem self-evident that people should be willing to take advice from experts (as in Study 2), it is less obvious that they should do this when the other person may have equal or even less expertise than themselves. Therefore, in Study 3, we examined whether emphasizing responsibilities may make people more open to valid advice, even when another team member without specific expertise on the task provides such advice.

Finally, in addition to improving our measure of confidence in Study 3 by assessing participants' confidence in their estimations both before and after receiving advice, we also included several other measures. First, we assessed participants' sense of power to check whether the procedure for role assignment, indeed, successfully induced subjective power and also to check whether the impact of the construal of power on advice-taking tendencies was not simply the result of a lower sense of power among those construing power as a responsibility (vs. opportunity; e.g., See et al., 2011; Tost et al., 2012). Second, in addition to confidence (and sense of power), we also included a measure of another potentially mediating variable, namely, the perceived value of advice. This allowed us to examine support for Hypothesis 3, stating that those construing high power as a responsibility would be more likely to adapt their judgments according to the advice they receive because they attach more value to the advice than those construing power as an opportunity. We also added measures for individuals' level of competitiveness to be able to cancel out a possible alternative mechanism (i.e., increased competitiveness as suggested by Tost et al., 2012) that may lead people who construe power as an opportunity (vs. responsibility) to take less advice.

Method

Participants and design

Seventy-five individuals (61 women, $M_{\text{age}} = 21$, $SD = 2.50$) participated in this study. Participants were recruited off and on campus of a large western European university and participated for payment (€10) or partial fulfillment of a course requirement. All participants received a powerful position and were then randomly assigned to the opportunity, responsibility, or control condition.

Procedure

We told participants that they would work on a team decision-making task together with another participant and that the purpose of the research was to examine how dyads perform on decision-making tasks under time pressure. In reality, the other participant was a confederate who was instructed to behave in such a way that we could ensure that the interaction during the estimation tasks was identical for all participants (see later discussion for more details). When participants arrived in the lab, they were first introduced to the confederate. All participants met with the same female confederate. After the introduction, both the participant and confederate were escorted to their own cubicle and were told that all further communication would take place via the computer and webcam. All further instructions and tasks were presented through the computer.

Induction of power role. Participants learned that they—together with the other participant—were going to complete three estimation tasks and, to increase their motivation, that the best-performing team would receive a €25 bonus. They were also told that each of the two team members had a specific role: One was going to be the “team captain” and determine the final solution and the other one was going to be the “advisor” and would provide advice to the team captain on the solution of the three estimation tasks. To determine who was going to be the team captain and who the advisor, participants were asked to complete an initial estimation task (i.e., estimating the number of marbles in two vases). We told them that based on their performance, we would determine who was assigned to which role. In fact, after they had given their estimations, all participants were told they were going to be “team captain” based on their “superior performance on the initial task.” To reinforce this procedure, when the scores of both participants appeared in the screen, the participant’s own solution always appeared closer to the correct answer than that of their team member (the confederate).

Manipulation of the construal of power. After participants were assigned to the role of team captain, we manipulated the construal of power via their further role description. In the control condition, participants only learned that “The team captain takes the final team decisions.” Participants received the following description in the opportunity condition (italicized) and responsibility condition (between brackets):

The team captain *has the opportunity to determine* [is responsible for] the final team decision. So, the team captain *has the possibility and liberty to determine* [has the task of determining] the final answer. If the team captain and the advisor have different opinions about the solution of a task, then the team captain *has the opportunity to take* [to take care of] the final decision. In addition, the team captain *will be able to determine how* [is responsible for distributing] the possible bonus of 25 euro between him/herself and the consultant is distributed. Hence, due to the position as team captain, *one has the ability to determine her/his own outcomes as well as those of his/her teammate* [the decisions of the team captain have important consequences for him/herself but also for his/her teammate].

Estimation tasks. Next, participants were asked to complete three estimation tasks, which we adapted to enhance their relevance to student participants. The first task was the same as in Study 2, so it involved estimating the costs of a vacation in the Dominican Republic, including a return flight from London and 7-night stay in a five-star resort with a range of luxurious amenities during high season. The second task involved estimating the costs of dorm room furniture, portrayed on their computer screen and depicting a computer, television, bed, chair, and so on. The third task was to estimate the total number of students at the university where the experiment took place, taking into account all the different faculties and all possible bachelor and master degrees. Participants were instructed to first study the tasks individually and to provide an initial estimation for each of the three tasks.

After they had given their initial estimations, the advisor was said to have the possibility to study the participants’ answers and respond with her advice via the webcam interface. Starting with the first estimation task, the advisor (i.e., the confederate) provided a personalized video (webcam) message in which she first clearly repeated the participant’s initial solution (hence, personalized) and then stated what she thought the answer should be. For each participant, the advice provided was detailed, identical, and motivated carefully with the same set of reasons, irrespective of the participant’s initial solution. As in Study 2, each estimation (i.e., advice) provided to the participants resembled the objectively correct score for that particular estimation task. This setup was used to standardize confederate responses across participants (see Greitemeyer & Schulz-Hardt, 2003, for a similar procedure).

Directly after they had received the response of the advisor to their initial estimations, participants were asked to make their final estimation. In the instructions we, again, did not specify if advisors would find out whether they [the participants] had taken the advice or not. The same procedure was then repeated for the second and third tasks, after which participants responded to a series of questions, including our manipulation checks and possible mediators.

Measures

Advice taking and participants’ confidence in the correctness of their estimations were assessed in the same way as in Study 2. Yet, this time, confidence was measured twice: right after participants provided all their initial estimations

and right after they provided all their final estimations. We assessed participants' perceived value of the advice with two items ("The advice I received from the advisor was valuable" and "The advice I received from the advisor was of high quality"), $r = .74$, $N = 72$, $p < 0.001$. For these two items, as well as all further measures, we asked participants to indicate their responses on 7-point Likert scales with *strongly disagree* (1) and *strongly agree* (7) as endpoints.

We checked participants' subjective sense of power as a result of the role assignment during the collaboration with two items based on Anderson and Galinsky's (2006) sense of power scale ("In my role as team captain, I had power" and "In my role as team captain, I had control over the outcomes of myself and my teammate"), $r = .49$, $N = 72$, $p < 0.001$. To assess whether the manipulation of the construal of power was successful, we included four items on which participants were asked to indicate to what extent they felt their position implied responsibility (i.e., "My position as team captain felt like a responsibility" and "Due to the power I had and the choices I made, my position as team captain had consequences for my teammate") or opportunity (e.g., "My position as team captain felt like an opportunity" and "My position as team captain made it easier to reach certain goals"). We reverse coded the opportunity items and then averaged them with the responsibility items to create a scale where higher ratings indicated that individuals were more likely to see their position predominantly in terms of responsibilities rather than opportunities (see also Scheepers, Ellemers, & Sassenberg, 2013). Finally, we measured competitiveness with 10 items from Smither and Houston's (1992) competitiveness index (e.g., "At this moment, I like competition"), $\alpha = .79$. All potential mediators as well as the manipulation checks were measured after the dependent variable to ensure that measuring them would not unintentionally activate/prime these factors across all three conditions and, thereby, prevent the observation of the intended main effect of the construal of power on advice taking.

Results

Participant attrition and manipulation checks

Three participants were excluded from the analyses: one because he was familiar with the setup of the study, one because she did not receive the reactions of the advisor, and one because she saw through our experimental setup and was an outlier on the dependent measure (i.e., greater than 2.8 *SDs* above the mean). Including or excluding this outlier from the analyses did not alter the main findings. Participants' reported sense of power indicated that the induction of power was successful. Across the three conditions, participants felt powerful; the average sense of power was significantly higher than the midpoint (4) of the rating scale ($M = 5.08$, $SD = 1.15$), $t(71) = 8.03$, $p < .001$, $d = 1.91$. There was no significant difference between the three conditions regarding sense of power, $F(2, 69) = 0.36$, $p = .699$ and $\eta_p^2 = .010$. This confirms that our role assignment manipulation successfully induced a relatively high sense of power and, similar to Study 2, excludes a possible alternative explanation for our main results, namely, that construing power as a responsibility simply makes people feel less powerful.

A one-way ANOVA revealed the intended effect of our manipulation of the construal of power, $F(2, 69) = 2.91$, $p = .061$ and $\eta_p^2 = .078$, with contrast analyses (focal contrast: $-1 -1 2$; residual contrast: $1 -1 0$; for control vs. high power as opportunity vs. high power as responsibility) showing that those in the responsibility condition ($M = 4.64$, $SD = 0.60$) construed their power more in terms of responsibilities (vs. opportunities) than those in the opportunity condition ($M = 4.26$, $SD = 0.64$) and those in the control condition ($M = 4.23$, $SD = 0.70$), $t(69) = 2.41$, $p = .019$. The construal of power did not differ significantly between the opportunity and control conditions, $t(69) = 0.17$, $p = .866$. This, again, suggests that opportunity (vs. responsibilities) is the default meaning of power but that power holders can be induced to construe power in terms of responsibilities.⁹

⁹Because we were still in the process of developing suitable items to check the effectiveness of this manipulation, we also explored the separate effects of the two opportunity and two responsibility items separately. The means patterns for these separate subscales were all in the predicted direction, $M_{\text{opportunity}} = 4.41$ (control condition), 4.52 (opportunity), 4.10 (responsibility), and $M_{\text{responsibility}} = 4.87$ (control), 5.04 (opportunity), 5.38 (responsibility). Nevertheless, the separate effects of the two items intended to assess the construal of power as an opportunity, and the items for the construal of power as a responsibility were not statistically reliable. In line with our intentions, the analysis of the full scale reported in the text shows that the manipulation in Study 3 did induce a relative dominance of one power construal over the other (i.e., responsibility [vs. opportunity] in the responsibility condition, and opportunity [vs. responsibility] in the opportunity condition).

Table 4. Means and standard deviations (between brackets).

	Study 3 ($N = 72$)				
	Advice taking	Confidence before advice	Confidence after advice	Perceived value of advice	Competitiveness
Opportunity	0.64 ^a (0.18)	59.93 (16.21)	71.19 (14.32)	6.20 ^a (0.65)	3.88 (0.79)
Responsibility	0.75 ^b (0.15)	56.33 (17.23)	75.13 (13.95)	6.54 ^b (0.53)	4.07 (0.99)
Control	0.58 ^a (0.20)	61.13 (15.64)	68.59 (16.73)	6.01 ^a (0.62)	3.97 (0.78)

Note: Means within a column not sharing the same letter are significantly different from one another ($p < .05$, significance levels are two-tailed).

Hypotheses testing

A one-way ANOVA on advice taking revealed the predicted effect of the construal of power, $F(2, 69) = 5.88$, $p = .004$ and $\eta_p^2 = .146$ (also Table 4). In line with expectations, contrast analyses (focal contrast: $-1 -1 2$; residual contrast: $1 -1 0$; for control vs. high power as opportunity vs. high power as responsibility) confirmed that the tendency to take advice was significantly higher in the responsibility condition than in both the opportunity condition and the control condition, $t(69) = 3.22$, $p = .002$. Furthermore, the tendency to take advice did not differ significantly between the opportunity and control conditions, $t(69) = 1.24$, $p = .219$, offering additional support for the notion that the generic tendency of those in power to ignore advice relates to the “default” construal of power as opportunity, instead of responsibility.

As in Study 2, our experimental manipulations of the construal of power did not systematically affect participants’ confidence in the correctness of their estimations, neither before, $F(2, 69) = 0.56$, $p = .572$ and $\eta_p^2 = .016$, nor after they received advice, $F(2, 69) = 0.33$, $p = .535$ and $\eta_p^2 = .032$ (also Table 4).¹⁰ Likewise, power construal did not affect participants’ self-reported competitiveness, $F(2, 69) = 0.29$, $p = .750$ and $\eta_p^2 = .008$.

Yet, a one-way ANOVA on participants’ perceived value of the advice revealed a significant effect of experimental condition, $F(2, 69) = 4.60$, $p = .013$ and $\eta_p^2 = .118$. Contrast analyses (focal contrast: $-1 -1 2$; residual contrast: $1 -1 0$; for control vs. high power as opportunity vs. high power as responsibility) confirmed that the perceived value of the advice was significantly higher in the responsibility condition than in both the opportunity condition and the control condition, $t(69) = 2.88$, $p = .005$. The perceived value of the advice did not differ significantly between the opportunity and control conditions, $t(69) = 1.02$, $p = .310$.

To examine whether the perceived value of advice mediated the effect of the experimental conditions on advice taking, we first conducted a series of regression analyses. In line with Hayes and Preacher (2014), we constructed two dummy variables for the three conditions, using power as responsibility as the reference category. In the first dummy variable, the value was set at 1 if a participant was in the opportunity condition and 0 otherwise. In the second dummy variable, the value was set at 1 if a participant was in the control condition and 0 otherwise. The responsibility condition was not explicitly coded, meaning that for both dummy variables, participants in the responsibility condition had a score of 0. As such, the responsibility condition functions as the reference category in the analysis, and the results in Table 5 reflect differences of the opportunity and control conditions relative to the responsibility condition.

As shown in Table 5, these analyses confirmed the following: (i) a contrast testing the responsibility versus opportunity conditions and a contrast testing the responsibility versus control conditions significantly predicted advice taking; (ii) these contrasts became less strong when the perceived value of advice was included as a predictor; and (iii) the perceived value of advice predicted advice taking. Following Hayes and Preacher (2014), we then tested the

¹⁰We also examined the statistical significance of the increase in confidence levels (so the difference between confidence levels before and after the advice was given) in each of the conditions of Study 3. The results showed that in all three conditions, confidence levels were significantly higher after (vs. before) the advice was given (all $ps < .001$). Importantly, this increase in confidence levels was not significantly different between the opportunity and responsibility conditions ($p = .91$) and therefore could not account for the different levels of advice taking between those constraining power as responsibility vs. opportunity.

Table 5. Results of hierarchical regression analysis of advice taking (Study 3; $N = 72$).

	Step 1	Step 2
Construal of power		
Opportunity (vs. responsibility)	−0.28*	−0.21
Control (vs. responsibility)	−0.43***	−0.32*
Perceived value of advice		0.29*
Total R^2	0.15	0.22
Model F change	5.88**	6.39*
ΔR^2		0.07*

Note: Reported values are standardized regression coefficients.

* $p < .05$; ** $p < .01$; *** $p \leq .001$, significance levels are two-tailed.

indirect effects of the two contrasts on advice taking simultaneously, through the perceived value of advice. Bootstrapped estimates of the indirect effects with 95% confidence ($n_{\text{boots}} = 5000$) were between -0.082 and -0.002 for the difference between the responsibility and opportunity conditions and between -0.100 and -0.012 for the difference between the responsibility and control conditions. Given that these indirect effects differ from 0 at the $p < .05$ level (Preacher & Hayes, 2004), they support the suggestion that construing power as a responsibility (vs. opportunity and control) enhances the tendency to take others' advice because it increases the perceived value of this advice.

Meta-analysis of the results of Studies 1–3

To assess the robustness of the support, we obtained for our main prediction—in view of the relatively small sample sizes applied in Studies 1 and 3 and with some effects being only marginally significant—we conducted a meta-analysis on the main results of all three studies. To calculate the pooled standardized difference in means, weighed for sample size, for the effect of high power as responsibility versus high power as opportunity on advice taking, we used the Comprehensive Meta-Analysis software package (CMA, version 3.3, Biostat, Englewood, NJ). Results revealed a significant effect across the data of the three studies: The pooled standardized difference in means was .45 [CI 0.18, 0.71], $Z = 3.292$, $p < .001$. This provides strong overall support for the prediction that individuals in powerful positions tend to take more advice when they construe their power predominantly in terms of responsibilities, rather than opportunities.

General Discussion

Across three studies, we found that the tendency of powerful people to take advice depends on their construal of power in terms of opportunities or responsibilities. In our first study, we examined professionals who held a supervisory position within their organization and their advice taking as it was perceived by their subordinates. We found that supervisors who experienced their work role as implying relatively high power were seen by their subordinates as being more inclined to take advice when the supervisors construed their power more as a responsibility than as an opportunity. In our second study, we found that those in power were more likely to take advice from an expert advisor after we had primed the salience of the responsibilities (vs. opportunities) associated with their power position. In Study 3, we replicated these results in a controlled lab experiment. Here, participants were placed in a powerful role, which was framed in terms of responsibilities or opportunities, while they received advice from a nonexpert.

Importantly, a comparison with a high-power control condition (in which neither responsibilities nor opportunities were made salient) revealed that the effect of construal of power is driven by an increased tendency to take advice by those who construe power in terms of responsibilities, rather than a lowered tendency to take advice by those who construe power in terms of opportunities. This suggests that power is spontaneously construed in terms of opportunities and that additional guidance is needed to make people consider the responsibilities associated with their power role (also Sassenberg et al., 2012).

Another important finding is that the perceived value of advice seems to be an important mechanism underlying the effect of the construal of power on advice taking. In our third study, we found that when powerful individuals construed power in terms of the responsibilities of their position (rather than the opportunities), they reported a greater perceived value of the advice. This, in turn, increased their tendency to take into account the advice provided. This suggests that becoming aware of the implications of one's own power (i.e., the construal of power as a responsibility) also raises awareness of the resources that others could provide for a (joint) agenda (e.g., information on others' perspectives). As a result, when those in power construe their power as a responsibility, this can benefit those low in power (i.e., greater voice in decisions) and enhance joint performance (i.e., when additional information is taken into account). No support was found for other mechanisms that might be considered relevant to the tendency of those in power to take advice. That is, we established no evidence that construal of power affected people's sense of power, competitiveness, or the confidence in one's own judgment.

One of the strengths of the current findings is that we also found support for our predictions among professionals, who were asked to report or contemplate the formalized power position they held in an organization (helping to optimize external validity; Studies 1 and 2). Our findings from outside the lab corroborate the observations we made among nonprofessionals in a more controlled lab study, in which we experimentally induced power (helping to optimize internal validity; Study 3). Overall, the findings, therefore, seem to generalize outside the context of the lab and also provide potentially useful guidelines for interventions to change the behavior of power holders in practice.

Another strength is that we were able to exclude the alternative explanation that participants in the responsibility condition simply felt less powerful than those in the opportunity condition and, therefore, displayed a lower tendency to take advice. Indeed, in Study 1, we established that people do need to feel they have power, before the construal of power as a responsibility or opportunity affects their tendency to take advice. Accordingly, one might argue that our manipulations might simply have caused those in the responsibility context to feel less powerful—because increasing the salience of possible (negative) consequences may have caused them to feel more constrained in their actions. Our third study confirmed, however, that our construal manipulation did not affect individuals' subjective sense of power—that is, power holders construing their power as responsibility experienced the same overall level of power as those construing their power as opportunity (and in the control condition). This substantiates our reasoning that the construal of high power—not perceived (level of) power per se—is key in the observed effect on advice taking.

Implications and future directions

The findings of the current studies have important practical and theoretical implications. With respect to the psychology of power, the current findings stress the importance of taking the construal of power into account and to move beyond the main effects of high versus low power that are often reported in the literature (also Anderson & Galinsky, 2006; Lee-Chai, Chen, & Chartrand, 2001; Sassenberg, Ellemers, Scheepers, & Scholl, 2014). Another implication is that our findings applied to a variety of samples, power roles, and collaborative contexts, in which advice may come from an expert or simply offers an alternative point of view provided by people without any specific expertise on the task. Our findings thus translate to situations in which the power holder has specific expertise as well as to situations where they function as “first among equals” or depend on expertise provided by others.

In real-life decision making, those holding a powerful position often have relevant experience and knowledge or additional information regarding the task at hand. In many situations, power holders will be

aware of their information advantage, causing them to be reluctant to take advice because they feel more knowledgeable than their subordinates. Nevertheless, Study 1 reveals that, even in those real-life decision-making situations in which individuals have acquired a supervisory position because of their experience and task-relevant expertise, those power holders construing power in terms of the responsibilities of their position tend to be less reluctant to take into account advice from others compared to those construing power in terms of the opportunities. Furthermore, in real life too, the expertise and experience of power holders may pertain to domains that are less relevant to the task at hand—as such, they likely often depend on specialist input or factual information from subordinates or external experts to make adequate decisions. The results of our second and third studies, in which power holders were confronted with correct expert information, showed that even under these conditions, power holders' tendency to adjust their decisions accordingly depended on how they were induced to construe their power.

Our findings also speak to the leadership literature, in particular Vroom and Yetton's (1973) normative model. This model suggests that when a leader has to make a task decision with important consequences for the work unit and a trustworthy subordinate has relevant information and expertise to improve the decision, a leader should consult with the subordinate and listen to suggestions for improving the decision. Indeed, empirical evidence shows that those who do so are the more functional leaders (Field, 1982; See et al., 2011). Study 3 mimicked such a situation, as participants were placed in a high-power position and had to make a decision with consequences for themselves and their team. Their subordinate (i.e., the confederate) was instructed to give a careful and detailed explanation of her estimates and as such was intended to be considered trustworthy—which we believe she was, as indicated by high appreciation of advice. In line with the Vroom and Yetton model, the overall tendency of the power holders to take advice was high in Study 3 ($WOA_{\text{overall}} = 0.65$), compared to that typically found in the literature when the trustworthiness of the advice giver is harder to assess ($WOA = 0.1\text{--}0.4$, see our second study and the experimental studies by See et al., 2011, and Tost et al., 2012). Importantly, our findings also show that, in these situations, there are still important differences in advice-taking tendencies that can be attributed to how leaders construe their power. More specifically, in one-and-the-same situation, leaders construing their power predominantly as responsibility will be more likely to listen to suggestions for improving the decision and, therefore, be more effective than those who predominantly construe their power as an opportunity. As such, the findings of Study 3 are consistent with the Vroom and Yetton (1973) normative model and extend it by offering an explanation of the variance that may still exist among leaders' advice-taking tendencies.

Our main aim in this paper was to show that differences in power construal matter for the tendency of powerful individuals' to take advice. The three studies reported here consistently show this is the case. One limitation of the current studies is that, especially in Study 1, we examined the construals of power as opportunity and responsibility as opposites of one continuum, rather than two separate indicators. Hence, our results speak specifically to how a predominant construal of power as a responsibility or an opportunity affects power holders' tendency to take advice. Yet, any task or goal of a power holder, such as increasing profits and securing own bonuses, can imply responsibilities as well as opportunities at the same time. Thus, conceptually, the construal of power as either an opportunity or a responsibility could, therefore, be considered as an orthogonal construct that may operate independently from the other. One area for future research is to measure and/or manipulate both power construals simultaneously and examine how they may interact in affecting the power holders' behavior. One particularly valuable avenue for future research would be to specifically examine what it means for laypersons to construe power as an opportunity or a responsibility and investigate, in a real-life setting, how both power construals work together in shaping power holders' behaviors.

Another area of future research is to further examine possible mediating mechanisms. Study 3 offers a first step in explaining the underlying processes, by showing the impact of the construal of power on the value that people place on advice, while changes in confidence levels did not account for the impact of the construal of power on advice taking. Future research might further examine this relation in more detail, for instance, by directly manipulating the value of advice (e.g., Jacoby & Sassenberg, 2011; Spencer, Zanna, & Fong, 2005) to have more confidence inferring causality and better cancel out potential inferences of unmeasured individual variability. Other possible

mediating mechanisms, in particular power holders' deliberation of information they receive from others during decision making, may be examined as well. Our results indicate that power holders' construal of power in terms of responsibilities (vs. opportunities) cause power holders to value advice more highly. One possible underlying reason for this could be that power holders, who usually deliberate less before making a decision (Scholl & Sassenberg, 2015), may deliberate more strongly and tend to process information more systematically once construing their power in terms of responsibility (e.g., Anderson & Galinsky, 2006; Rucker, Hu, & Galinsky, 2014). Possibly, such a relatively strong deliberation of different alternatives prior to making a decision might be responsible for making people more positively attuned towards the receipt of advice—as advice provides them with a clear direction towards a certain answer alternative and helps them to concretize their thoughts. Future research may examine more directly whether the construal of power in terms of responsibilities (vs. opportunities), indeed, increases deliberation over different decision alternatives beforehand, and whether this subsequently explains power holders' perceived value of advice, and tendency to take advice.

Another theoretically related and relevant mediating mechanism for future research to address is to what extent the construal of power affects power holders' perceived burden of power and subsequently how the receipt of advice may alleviate such a burden of power. The more strongly someone construes power as responsibility, the more likely they may be to experience their power as a burden in a more general sense. We would argue that, as a result of this, power holders will be more likely to come to appreciate and value advice—as they are more likely to see advice as something that helps to alleviate the burden of power. In other words, we would predict that the extent to which power holders view their position as a burden, for example, because the responsibilities power comes with are particularly cognitively accessible, predicts the perceived value of advice. This, however, should be verified by future research.

In this study, we focused solely on the impact of power construal on advice taking. We did not examine possible predictors of someone's construal of power and/or how it may interact with other characteristics that may shape a leader's tendency to take advice. One other area for future research, therefore, is to examine how the construal of power relates to aspects such as a leader's achievement, affiliation motivation, or values such as servant leadership and integrity. For example, given that leaders with a servant leadership style are strongly committed to the fate of others, they could be expected to have a higher tendency to take advice, if only because they will be relatively highly exposed to the ideas, objections, and advice from others during decision-making processes. Similarly, leaders with a strong affiliation motivation can be expected to have a higher tendency to take advice, for example, because they may feel that ignoring advice may threaten their relationship with others. The empirical question for future research to answer is whether the construal of power may explain, thus, mediate such effects, strengthen them, or operate independently.

Relatedly, another area for future research is to examine whether the effects of the construal of power on advice taking will hold across different authority relationships. In the current manuscript, we mainly focused on downward supervisor–subordinate relationships. Future research may examine whether the same effects can be found in situations where power operates upward or laterally (e.g., between peers). Likewise, future research may examine whether the effects may be more pronounced for certain power bases. Some power bases are more strongly linked to an individual's ability to make informed decisions (e.g., expert power compared to reward-based power). As a result, someone's basis of power may affect their general receptiveness to advice and possibly attenuate or strengthen the association between individuals' power construal and advice-taking tendencies.

Future research on power construal and advice taking may also examine possible gender differences. In Study 3, our confederate was a woman, as were most participants. This raises the question of whether and how our findings might have been different if we had also had a man as a confederate and/or more men as participants. To our knowledge, most studies applying a power-priming procedure tend to find parallel effects, regardless of participant gender. This also applies to our earlier work (Sassenberg et al., 2012) and the current study. Whereas the number of men is too small to reliably test for a statistical difference, across conditions, the means pattern for men, $M = 0.51$ (control), 0.69 (opportunity), 0.78 (responsibility), was similar to that for women, $M = 0.59$ (control), 0.64 (opportunity), 0.74

(responsibility). As this point, therefore, we have little reason to believe that gender was a relevant factor in obtaining these results. Specifically, we consider it unlikely that either a man as confederate and/or a larger proportion of men as participants would have changed the conclusion we derived from Study 3. In fact, we note the consistency of our main findings across the three studies, even though a majority of participants in Studies 1 and 2 were male. In this sense, our data would suggest that these findings are generalizable across different man–woman and subordinate–supervisor relationships. Yet, we note that the present research was not specifically designed to examine gender effects.

A final area for future research is to further examine the extent to which our findings speak to both an individuals' sense of power and their structural power. In line with Tost (2015), we have suggested that individuals' psychological power includes both their sense of power and an unconscious cognitive network of concepts associated with power. Moreover, we argued that the cognitive network of concepts associated with power is what determines whether people come to construe their power predominantly as an opportunity or as a responsibility. We contend that the construal of power could be relevant to both structural and sense of power, as both forms of power can activate an individuals' cognitive network of power-related concepts. However, when it comes to structural power, the impact of the construal of power on advice taking may be especially likely to be relevant when structural power is combined with a relatively high sense of power. That is, especially when structural power is combined with a high sense of power, the activation of a cognitive network of power-related concepts becomes more likely and relevant. Future research could further examine to what extent our findings are either more likely to occur among high-power individuals who in addition to high structural power also have a (relative) high sense of power, or instead limited to them, and so not occurring among power holders with high structural power but a (relatively) low sense of power (as suggested by the findings of Study 1).

To conclude, the present studies offer an optimistic picture concerning power holders' advice taking. That is, history abounds with examples of poor decision making among powerful individuals. Power is, therefore, often thought of as something that is destructive and increases individuals' attention to their own preferences, rather than to the environment (Pitesa & Thau, 2013). The current findings offer a less pessimistic view—they open up the possibility to design interventions directed at preventing irresponsible behavior of power holders and at curbing the tendencies among those in power not to take advice.

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References

- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA: Sage.
- Anderson, C., & Galinsky, A. D. (2006). Power, optimism, and risk-taking. *European Journal of Social Psychology, 36*, 511–536. doi: 10.1002/ejsp.324.
- Anderson, C., John, O. P., & Keltner, D. (2012). The personal sense of power. *Journal of Personality, 80*, 313–344. doi: 10.1111/j.1467-6494.2011.00734.x.
- Bettencourt, B. A., Dill, K. E., Greathouse, S., Charlton, K., & Mulholland, A. (1996). Evaluations of in-group and outgroup members: The role of category-based expectancy violation. *Journal of Experimental Social Psychology, 33*, 244–275. doi: 10.1006/jesp.1996.1323.
- Bonaccio, S., & Dalal, R. S. (2006). Advice taking and advice giving in decision making: An integrative review of the literature. *Organizational Behavior and Human Decision Processes, 101*, 127–151. doi: 10.1016/j.obhdp.2006.07.001.
- Briñol, P., Petty, R. E., Valle, C., Rucker, D. D., & Becerra, A. (2007). The effects of message recipients' power before and after persuasion: A self-validation analysis. *Journal of Personality and Social Psychology, 93*, 1040–1053. doi: 10.1037/0022-3514.93.6.1040.
- Burgoon, J. K., & Hale, J. L. (1988). Nonverbal expectancy violations: Model elaboration and application to immediacy behaviors. *Communication Monographs, 55*, 58–79.
- Carli, L. L., Loeber, C. C., & Laffleur, S. J. (1995). Nonverbal behavior, gender, and influence. *Journal of Personality and Social Psychology, 68*, 1030–1041. doi: 10.1037//0022-3514.68.6.1030.
- Chen, S., Lee-Chai, A. Y., & Bargh, J. A. (2001). Relationship orientation as a moderator of the effects of social power. *Journal of Personality and Social Psychology, 80*, 173–187. doi: 10.1037/0022-3514.80.2.173.
- De Hooze, I. E., Verlegh, P. W. J., & Tzioti, S. C. (2014). Emotions in advice taking: The roles of agency and valence. *Journal of Behavioral Decision Making, 27*, 246–258. doi: 10.1002/bdm.1801.
- Dépret, E., & Fiske, S. T. (1993). Social cognition and power: Some cognitive consequences of social structure as a source of control deprivation. In G. Weary, F. Gleicher, & K. L. Marsh (Eds.), *Control motivation and social cognition* (pp. 176–202). New York, NY: Springer-Verlag.
- Elias, S. (2008). Fifty years of influence in the workplace: The evolution of the French and Raven power taxonomy. *Journal of Management History, 14*, 267–283. doi: 10.1108/17511340810880634.
- Emerson, R. M. (1962). Power–dependence relations. *American Sociological Review, 27*, 31–41.
- Fast, N. J., Sivanathan, N., Mayer, N. D., & Galinsky, A. D. (2012). Power and overconfident decision making. *Organizational Behavior and Human Decision Processes, 117*, 249–260. doi: 10.1016/j.obhdp.2011.11.009.
- Feng, B., & Lee, K. J. (2010). The influence of thinking styles on responses to supportive messages. *Communication Studies, 61*, 224–238. doi: 10.1080/10510971003604000.
- Feng, B., & MacGeorge, E. L. (2006). Predicting receptiveness to advice: Characteristics of the problem, the advice-giver, and the recipient. *Southern Communication Journal, 71*, 67–85. doi: 10.1080/10417940500503548.
- Field, R. (1982). A test of the Vroom–Yetton normative model of leadership. *Journal of Applied Psychology, 67*, 523–532. doi: 10.1037/0021-9010.67.5.523.
- Fiske, S. T. (2010). Interpersonal stratification: Status, power, and subordination. In S. T. Fiske, D. T. Gilbert, & G. Lindzey (Eds.), *Handbook of social psychology* (5th ed., pp. 941–982). New York, NY: Wiley.
- Fiske, S. T., & Berdahl, J. (2007). Social power. In A. W. Kruglanski, & E. T. Higgins (Eds.), *Social psychology: Handbook of basic principles* (2nd ed., pp. 678–692). New York: Guilford.
- French, J. R. P. Jr., & Raven, B. (1959). The bases of social power. In D. Cartwright (Ed.), *Studies in social power* (pp. 150–167). Ann Arbor, MI: Institute for Social Research.

- Galinsky, A. D., Gruenfeld, D. H., & Magee, J. C. (2003). From power to action. *Journal of Personality and Social Psychology*, 85, 453–466. doi: 10.1037/0022-3514.85.3.453.
- Galinsky, A. D., Magee, J. C., Gruenfeld, D. H., Whitson, J. A., & Liljenquist, K. A. (2008). Power reduces the press of the situation: Implications for creativity, conformity, and dissonance. *Journal of Personality and Social Psychology*, 95, 1450–1466. doi: 10.1037/a0012633.
- Gino, F., & Moore, D. A. (2007). Effects of task difficulty on use of advice. *Journal of Behavioral Decision Making*, 20, 21–35. doi: 10.1002/bdm.539.
- Gordon, A. M., & Chen, S. (2013). Does power help or hurt? The moderating role of self–other focus on power and perspective-taking in romantic relationships. *Personality and Social Psychology Bulletin*, 39, 1097–1110. doi: 10.1177/0146167213490031.
- Graen, G. B., & Uhl-Bien, M. (1995). Relationship-based approach to leadership: Development of leader–member exchange (LMX) theory of leadership over 25 years: Applying a multi-level multi-domain perspective. *The Leadership Quarterly*, 6(2), 219–247. doi: 10.1016/1048-9843(95)90036-5.
- Greitemeyer, T., & Schulz-Hardt, S. (2003). Preference-consistent evaluation of information in the hidden profile paradigm: Beyond group-level explanations for the dominance of shared information in group decisions. *Journal of Personality and Social Psychology*, 84, 322–339. doi: 10.1037/0022-3514.84.2.322.
- Guinote, A. (2007). Behavior variability and the situated focus theory of power. In W. Stroebe, M. Hewstone (Eds.), *European Review of Social Psychology* (pp. 256–295). New York: Wiley. doi: 10.1080/10463280701692813
- Guinote, A. (2010). The situated focus theory of power. In A. Guinote, & T. Vescio (Eds.), *The social psychology of power*. Guilford Press.
- Harvey, N., & Fischer, I. (1997). Taking advice: Accepting help, improving judgment, and sharing responsibility. *Organizational Behavior and Human Decision Processes*, 70, 117–133. doi: 10.1006/obhd.1997.2697.
- Hayes, A. F., & Preacher, K. J. (2014). Statistical mediation analysis with a multicategorical independent variable. *British Journal of Mathematical and Statistical Psychology*, 67, 451–470. doi: 10.1111/bmsp.12028.
- Jacoby, J., & Sassenberg, K. (2011). Interactions do not only tell us when, but can also tell us how: Testing process hypotheses by interaction. *European Journal of Social Psychology*, 41, 180–190. doi: 10.1002/ejsp.762.
- Keltner, D., Gruenfeld, D. H., & Anderson, C. (2003). Power, approach, and inhibition. *Psychological Review*, 110, 265–284.
- Kipnis, D. (1972). Does power corrupt? *Journal of Personality and Social Psychology*, 24, 33–41. doi: 10.1037/h0033390.
- Kipnis, D. (1976). *The power holders*. Chicago, IL: University of Chicago.
- Korabik, K., Baril, G. L., & Watson, C. (1993). Managers' conflict management style and leadership effectiveness: The moderating effects of gender. *Sex Roles*, 29, 405–420.
- Larson, J. R. Jr., Christensen, C., Franz, T. M., & Abbott, A. S. (1998). Diagnosing groups: The pooling, management, and impact of shared and unshared case information in team-based medical decision making. *Journal of Personality and Social Psychology*, 75(1), 93–108.
- Lee-Chai, A. Y., Chen, S., & Chartrand, T. L. (2001). From Moses to Marcos: Individual differences in the use and abuse of power. In A. Y. Lee-Chai, & J. A. Bargh (Eds.), *The use and abuse of power* (pp. 57–74). Philadelphia, PA: Psychology Press.
- Levene, H. (1960). Robust tests for equality of variances. In I. Olkin, S. G. Ghurye, W. Hoeffding, W. G. Madow, & H. B. Mann (Eds.), *Contributions to probability and statistics: Essays in honor of Harold Hotelling* (pp. 278–292). Stanford, CA: Stanford University Press.
- Mansfield, A. K., Addis, M. E., & Courtenay, W. (2005). Measurement of men's help seeking: Development and evaluation of the barriers to help seeking scale. *Psychology of Men & Masculinity*, 6(2), 95–108. doi: 10.1037/1524-9220.6.2.95.
- Mayer, R. C., & Davis, J. H. (1999). The effect of the performance appraisal system on trust for management: A field quasi-experiment. *Journal of Applied Psychology*, 84, 123–136. doi: 10.1037/0021-9010.84.1.123.
- Mourali, M., & Yang, Z. (2013). The dual role of power in resisting social influence. *Journal of Consumer Research*, 40, 539–554. doi: 10.1086/671139.
- Overbeck, J. R., & Park, B. (2001). When power does not corrupt: Superior individuation processes among powerful perceivers. *Journal of Personality and Social Psychology*, 81, 549–565. doi: 10.1037/0022-3514.81.4.549.
- Overbeck, J. R., & Park, B. (2006). Powerful perceivers, powerless objects: Flexibility of powerholders' social attention. *Organizational Behavior and Human Decision Processes*, 99, 227–243. doi: 10.1016/j.obhdp.2005.10.003.
- Pitesa, M., & Thau, S. (2013). Compliant sinners, obstinate saints: How power and self-focus determine the effectiveness of (un)ethical social influences. *Academy of Management Journal*, 56, 636–658. doi: 10.5465/amj.2011.0891.
- Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods, Instruments, & Computers*, 36, 717–731. doi: 10.3758/BF03206553.
- Raven, B. H. (1993). The bases of power: Origins and recent developments. *Journal of Social Issues*, 49, 227–251. doi: 10.1111/j.1540-4560.1993.tb01191.x.
- Rucker, D. D., Hu, M., & Galinsky, A. D. (2014). The experience versus the expectations of power: A recipe for altering the effects of power on behavior. *Journal of Consumer Research*, 41(2), 381–396. doi: 10.1086/676598.

- Sassenberg, K., Ellemers, N., & Scheepers, D. (2012). The attraction of social power: The influence of construing power as opportunity versus responsibility. *Journal of Experimental Social Psychology, 48*, 550–555. doi: 10.1016/j.jesp.2011.11.008.
- Sassenberg, K., Ellemers, N., Scheepers, D., & Scholl, A. (2014). “Power corrupts” revisited: The role of construal of power as opportunity or responsibility. In J.-W. van Prooijen, & P. A. M. van Lange (Eds.), *Power, politics, and paranoia: Why people are suspicious about their leaders* (pp. 73–87). Cambridge, UK: Cambridge University Press.
- Scheepers, D., Ellemers, N., & Sassenberg, K. (2013). Power in group contexts: The influence of group status on promotion and prevention decision making. *British Journal of Social Psychology, 52*, 238–254. doi: 10.1111/j.2044-8309.2011.02063.x.
- Scholl, A., & Sassenberg, K. (2015). Better know when (not) to think twice: How social power impacts prefactual thought. *Personality and Social Psychology Bulletin, 41*, 159–170. doi: 10.1177/0146167214559720.
- Scholl, A., Sassenberg, K., Scheepers, D., Ellemers, N., & de Wit, F. R. C. (2016). *A matter of focus: Power-holders feel more responsible after adopting a cognitive other-focus, rather than a self-focus*. *British Journal of Social Psychology*, doi: 10.1111/bjso.12177.
- See, K. E., Morrison, E. W., Rothman, N. B., & Soll, J. B. (2011). The detrimental effects of power on confidence, advice taking, and accuracy. *Organizational Behavior and Human Decision Processes, 116*, 272–285. doi: 10.1016/j.obhdp.2011.07.006.
- Sniezek, J. A., & Van Swol, L. M. (2001). Trust, confidence, and expertise in a judge advisor system. *Organizational Behavior and Human Decision Processes, 84*, 288–307. doi: 10.1006/obhd.2000.2926.
- Smither, R. D., & Houston, J. M. (1992). The nature of competitiveness: The development and validation of the competitiveness index. *Educational and Psychological Measurement, 52*, 407–418.
- Soll, J. B., & Larrick, R. P. (2009). Strategies for revising judgment: How (and how well) people use others’ opinions. *Journal of Experimental Psychology: Learning, Memory, and Cognition, 35*, 780–805. doi: 10.1037/a0015145.
- Spencer, S. J., Zanna, M. P., & Fong, G. T. (2005). Establishing a causal chain: Why experiments are often more effective than mediational analyses in examining psychological processes. *Journal of Personality and Social Psychology, 89*, 845–851. doi: 10.1037/0022-3514.89.6.845.
- Tabachnick, B. G., & Fidell, L. S. (1996). *Using multivariate statistics* (3rd ed.). New York: Harper Collins.
- Thibaut, J. W., & Kelley, H. H. (1959). Power and dependence. In J. W. Thibaut, & H. H. Kelley (Eds.), *The social psychology of groups* (pp. 100–125). New York, NY: Wiley.
- Tomarken, A. J., & Serlin, R. C. (1986). Comparison of ANOVA alternatives under variance heterogeneity and specific noncentrality structures. *Psychological Bulletin, 99*, 90–99. doi: 10.1037/0033-2909.99.1.90.
- Tost, L. P. (2015). When, why, and how do power holders “feel the power”? Examining the links between structural and psychological power and revising the connection between power and responsibility. *Research in Organizational Behavior, 35*, 29–56. doi: 10.1016/j.riob.2015.10.004.
- Tost, L. P., Gino, F., & Larrick, R. P. (2012). Power, competitiveness, and advice taking: Why the powerful don’t listen. *Organizational Behavior and Human Decision Processes, 117*, 53–65. doi: 10.1016/j.obhdp.2011.10.001.
- Tost, L. P., Gino, F., & Larrick, R. P. (2013). When power makes others speechless: The negative impact of leader power on team performance. *Academy of Management Journal, 56*, 1465–1486. doi: 10.5465/amj.2011.0180.
- Van Swol, L. M., & Sniezek, J. A. (2005). Factors affecting the acceptance of expert advice. *British Journal of Social Psychology, 44*, 443–461. doi: 10.1348/014466604X17092.
- Vroom, V. H., & Yetton, P. W. (1973). *Leadership and decision-making*. Pittsburgh: University of Pittsburgh Press.
- Ward, A. H., Lyubomirsky, S., Sousa, L., & Nolen-Hoeksema, S. (2003). Can’t quite commit: Rumination and uncertainty. *Personality and Social Psychology Bulletin, 29*, 96–107. doi: 10.1177/0146167202238375.
- Yaniv, I. (2004). Receiving other people’s advice: Influence and benefit. *Organizational Behavior and Human Decision Processes, 93*, 1–13. doi: 10.1016/j.obhdp.2003.08.002.
- Yukl, G., & Falbe, C. M. (1990). Influence tactics and objectives in upward, downward, and lateral influence attempts. *Journal of Applied Psychology, 75*, 132–140. doi: 10.1037/0021-9010.75.2.132.
- Yukl, G., & Falbe, C. M. (1991). Importance of different power sources in downward and lateral relationships. *Journal of Applied Psychology, 76*, 416–423. doi: 10.1037/0021-9010.76.3.416.
- Yukl, G., & Tracey, J. B. (1992). Consequences of influence tactics used with subordinates, peers, and the boss. *Journal of Applied Psychology, 77*, 525–535. doi: 10.1037/0021-9010.77.4.525.