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Flipping the Switch: Power, Social Dominance, and Expectancies of Mental Energy Change

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Abstract

Research suggests that high levels of interpersonal power can promote enhanced executive functioning capabilities. The present work explored whether this effect is contingent upon expectancies concerning power's downstream cognitive consequences. Study 1 showed that social dominance orientation (SDO) predicted idiosyncratic expectancies of mental energy change toward interpersonal power. Study 2 showed that SDO moderated the executive functioning changes associated with interpersonal power and that this moderation effect was contingent upon changes in perceived mental depletion. Study 3 showed that directly manipulating expectancies of mental energy change concerning interpersonal power moderated the executive functioning consequences of power and that this moderation effect was contingent upon SDO and changes in perceived mental depletion. Together, the present findings underscore the importance of expectancies and individual differences in understanding the effects of interpersonal power.

Keywords

power, executive functioning, social dominance orientation, individual differences, expectancies, self-regulation

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In the modern world, power and status are outcomes that many individuals strive for in their everyday lives (van Dijke & Poppe, 2006). These strivings seem relatively justified, as empirical work continues to uncover beneficial effects arising from the obtainment and enactment of interpersonal power. For instance, situational inducements of power predict higher action tendencies (Galinsky, Gruenfeld, & Magee, 2003), greater creativity (Galinsky, Magee, Gruenfeld, Whitson, & Liljenquist, 2008), decreased procrastination (Judge & Bono, 2001), and improved goal attainment (Guinote, 2007a). Thus, although power is associated with various negative moral and social consequences (Bargh & Raymond, 1995; Galinsky, Magee, Inesi, & Gruenfeld, 2006), it nonetheless appears to elicit improved cognitive and behavioral performance.

One process by which interpersonal power may facilitate these improved performance outcomes is via changes in executive functioning. Generally speaking, executive functioning refers to an individual's ability to control and regulate cognitive processes (Baddeley, 1986). From this broad definition, a host of evidence suggests that power moderates executive functioning capabilities. For one, power leads to direct increases in verbal and visual information processing (Guinote, 2007a; Smith, Jostmann, Galinsky, & van Dijk, 2008; Willis, Rodríguez-Bailón, & Lupiáñez, 2011). In addition, power has been shown to increase self-regulatory performance (DeWall, Baumeister, Mead, & Vohs, 2011; Guinote, 2007b; Slabu & Guinote, 2010)—performance that is strongly reliant upon underlying executive functioning capabilities (Hofmann, Schmeichel, & Baddeley, 2012; Schmeichel, 2007). Finally, power can broaden one's overall construal level (Lammers, Galinsky, Gordijn, & Otten, 2008; Magee & Smith, 2013)—a cognitive change that improves performance on tasks requiring executive functioning output (Fujita, Trope, Liberman, & Levin-Sagi, 2006; Schmeichel & Vohs, 2009).

Thus, an examination of current empirical research suggests that higher levels of interpersonal power are likely to benefit an individual's transient executive functioning capabilities. However, other work within this domain has consistently demonstrated that power's effects are moderated by individual difference factors, particularly factors that are associated with differential perceptions and enactments of interpersonal power. In an attempt to bridge these converging

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lines of inquiry, the present research explores the role of individual differences in moderating the executive functioning impact of interpersonal power. Specifically, we test whether social dominance orientation (SDO), an individual difference associated with differential perceptions of powerful roles and tasks, moderates the executive functioning changes conventionally observed following a power-altering experience.

SDO, Expectancies, and Executive Functioning

Social-psychological research suggests that the consequences of interpersonal power are strongly contingent upon relevant individual differences. For instance, researchers have demonstrated that person-level variability in power motivation (Magee & Langer, 2008), personal dominance (Maner & Mead, 2010), relationship orientation (Chen, Lee-Chai, & Bargh, 2001), dispositional anxiety (Maner, Gailliot, Menzel, & Kunstman, 2012), and approach/avoidance tendencies (Sassenberg, Ellemers, & Scheepers, 2012) can each moderate the effects of an experimental power manipulation. These findings suggest that power's psychological impact varies according to idiosyncratic beliefs and preferences that influence one's perceptions of powerful and/or powerless roles. One factor known to influence perceptions of interpersonal power is SDO (Pratto, Sidanius, Stallworth, & Malle, 1994).[1] High SDO individuals legitimize status differential as a necessary and important part of effective group organization, and thus value powerful social roles to a greater extent than their low SDO counterparts. For instance, higher SDO is associated with a more positive evaluation of powerful roles (Altemeyer, 1998), especially roles that seek to maintain—rather than attenuate—the status quo within a particular group context (Sidanius, Pratto, Sinclair, & van Laar, 1996). Relatedly, high SDO individuals tend to view power in more personalized terms (Torelli & Shavitt, 2010), perceiving its obtainment as a means for enhancing status and prestige, rather than benefiting and helping others. Finally, high SDO predicts increased obtainment and exploitation of interpersonal power in a variety of contexts (Hing, Bobocel, Zanna, & McBride, 2007; Pratto et al., 1994).

In the present work, we reasoned that the positive link between SDO and evaluations of power could lead to SDO moderating the executive functioning consequences of interpersonal power. That is, although power has been demonstrated to modulate executive functioning performance, we anticipated this modulatory effect to be most pronounced among high SDO individuals. Consistent with such reasoning, previous work indicates that individual differences predictive of power-relevant perceptions moderate power's downstream consequences. For instance, Maner and colleagues (2012) showed that low anxiety individuals expected power-inducing actions to be more rewarding than did high anxiety individuals. Furthermore, they showed that these expectancies mediated the downstream influence of interpersonal power, such that low anxiety participants showed greater evidence of conventional power-driven effects (e.g., greater willingness for risk-taking, greater sexual attraction to a partner) due to anxiety's influence on perceptual experience.

Thus, individual differences that alter the evaluation of power can promote differential expectancies, as well as differential perceptual and behavioral responses, in power-relevant contexts. Given our interest in power's cognitive effects, the present work focuses on expectancies pertaining specifically to cognitive functioning. Recent work has begun exploring personal beliefs regarding *expectancies of mental energy change* (i.e., lay theories concerning an experience's positive or negative impact on cognitive functioning) and has demonstrated that these expectancies are idiosyncratic, malleable, and predictive of individual-level executive functioning performance (Clarkson, Hirt, Chapman, & Jia, 2011; Job, Dweck, & Walton, 2010; Martijn, Tenbült, Merckelbach, Dreezens, & de Vries, 2002). For instance, the executive functioning decrements that typically occur after extensive cognitive exertion (e.g., Schmeichel, 2007) are greatly attenuated when individuals are predisposed or manipulated to perceive their initial exertion as mentally restorative (Job et al., 2010). Such findings demonstrate that the same stimulus can be perceived as differentially beneficial for cognitive performance and further suggest that these perceptual differences influence subsequent executive functioning output (see also Atlas, Wager, Dahl, & Smith, 2009; Meissner et al., 2011).

Overview

Given that (a) individual differences moderate power's consequences, (b) SDO moderates power's evaluation, and (c) expectancies of mental energy change moderate executive functioning performance, we hypothesized that SDO and expectancies of mental energy change should moderate the executive functioning influence of interpersonal power. Accordingly, the present work explores the relationship between SDO, expectancies of mental energy change, and executive functioning performance within the context of interpersonal power. We examined the extent to which (a) SDO predicts expectancies toward power's restorative cognitive effects, (b) SDO moderates executive functioning performance following a power manipulation, and (c) experimentally manipulated expectancies of interpersonal power moderate executive functioning performance following a power manipulation.

In Study 1, we predicted that high SDO individuals would hold stronger expectancies toward the cognitive effects of power-altering experiences than would low SDO individuals (Nisbett & Wilson, 1977). In Study 2, we predicted that high SDO individuals would show more evidence of executive functioning change following an experimental power manipulation than would low SDO individuals. In Study 3,

we predicted individuals who read information about the restorative effects of power would be more likely to show the conventional positive relationship between power and executive functioning performance than would individuals who read information about the depleting effects of power (Atlas et al., 2009; Meissner et al., 2011). Given the role of subjective depletion in mediating the relationship between expectancies of mental energy change and executive functioning performance (Clarkson et al., 2011; Muraven, Gagne, & Rosman, 2008), Studies 2 and 3 further predicted that the potential moderating influences of SDO and expectancies on executive functioning performance would be explained by changes in perceived mental depletion.

Study 1

Our initial premise is that higher levels of SDO lead to more polarized expectancies concerning the downstream consequences of interpersonal power. To formally examine this premise, Study 1 presented a series of power-inducing and power-reducing experiences, and asked participants about their expectancies of mental energy change resulting from each experience, as well as their confidence toward each of these expectancies. We hypothesized that high SDO would be associated with stronger expectancies concerning the mentally restorative effects of high power and the mentally depleting effects of low power. In addition, we hypothesized that high SDO would predict greater confidence in these expectancies.

Method

Participants. A total of 74 Indiana University undergraduates (30 male; M_{age} = 19.07, SD_{age} = 1.61) participated for partial course credit.

Materials

SDO. SDO was measured using an index established by Pratto et al. (1994). This index asks participants their level of agreement on a scale of 1 (*strongly disagree*) to 7 (*strongly agree*), with a series of statements concerning the necessity and moral correctness of social inequality (e.g., "Some groups of people are simply not the equals of others") or social equality (e.g., "If people were treated more equally we would have fewer problems in this country"; reverse scored). Responses were averaged to form a reliable index of SDO (n = 14; α = .93).[2]

Expectancies of power-relevant experiences. Participants were presented with a series of power-inducing (e.g., managing a group, being a leader) and power-reducing (e.g., following orders, losing control) experiences and were asked to predict the effect that such an experience would have on their mental energy level using a scale ranging from 1 (*very mentally depleting*) to 7 (*very mentally restorative*), with 4 (*neither restorative nor depleting*) as a scalar midpoint. Because they were not significantly correlated (r = .17, *ns*), items for power-inducing (n = 8; α = .75) and power-reducing (n = 3; α = .73) experiences were combined into separate subscales. Participants were also asked to provide their confidence toward each expectancy using a scale ranging from 1 (*not at all confident*) to 7 (*very confident*). These responses were again divided into separate subscales pertaining to power-inducing (α = .84) and power-reducing (α = .85) tasks.

Expectancies of other tasks. Participants were also asked about their expectancies concerning the mental energy impact of several other experiences, including affirming the self, studying for a test, and consuming an energy drink. These items were again supplemented by confidence assessments. All items utilized the same scales as the power-relevant experiences mentioned above.

Procedure. Participants were invited to a study concerning one's personality and personal opinions. Upon consenting to the study and entering individual computer cubicles, participants were presented with a series of scalar-response items. Specifically, participants first answered questions pertaining to SDO, and were then asked a series of questions regarding their expectations about how certain power-inducing and power-reducing experiences would impact their mental energy levels. Upon completing these questions, participants were debriefed and dismissed.

Results

Power-inducing experiences. First, we examined beliefs toward power-inducing tasks and found that these tasks were believed to be generally restorative, such that the grand mean (M = 4.83, SD = 1.02) fell significantly above the scalar midpoint (4), $t(73) = 6.97$, $p < .001$, 95% confidence interval (CI) = [0.60, 1.07]. Next, we assessed the relationship between SDO and perceptions of power-inducing tasks by conducting a linear regression to predict expectancies as a function of SDO. As anticipated, SDO significantly predicted one's expectancies of power-inducing tasks: Higher SDO scores corresponded with stronger beliefs about the restorative potential of interpersonal power, β = .41, $t(73) = 3.84$, $p < .001$, 95% CI = [0.16, 0.51], $R^2 = .17$. Finally, we assessed the relationship between SDO and confidence in these expectancies. In line with predictions, SDO positively predicted participants' expectancy confidence toward power-inducing tasks: Higher SDO scores corresponded with increased confidence, β = .23, $t(73) = 2.00$, $p = .05$, 95% CI = [0.00, 0.36], $R^2 = .05$.

Power-reducing experiences. Next, we examined beliefs toward power-reducing tasks and found that these tasks were believed to be generally depleting, with the grand mean (M = 3.04,

SD = 1.47) falling significantly below the scalar midpoint (4), $t(73) = -5.61$, $p < .001$, 95% CI = [−1.30, −0.62]. We then conducted a linear regression predicting expectancies as a function of SDO. Contrary to predictions, SDO did not significantly predict one's expectancies of power-reducing tasks, $\beta = .01$, $t(73) = 0.06$, $p = .95$, 95% CI = [−0.26, 0.28], $R^2 = .00$. However, consistent with the findings for power-inducing tasks, SDO positively predicted people's expectancy confidence toward power-reducing tasks, such that high SDO participants were more confident in their expectancies than were low SDO participants, $\beta = .30$, $t(73) = 2.64$, $p = .01$, 95% CI = [0.08, 0.60], $R^2 = .09$.

Supplemental analyses. Finally, to ensure that SDO was not simply related to (a) higher expectancies of mental restoration for every experience or (b) increased expectancy confidence irrespective of topic domain, we assessed the relationship of SDO to our expectancy and confidence data for power-irrelevant experiences. As predicted, SDO was unrelated to beliefs about the restorative effects of other experiences, such as affirming the self ($r = .04$, $p = .71$), studying for a test ($r = .12$, $p = .31$), or consuming a caffeinated beverage ($r = .04$, $p = .72$) and it was unrelated to confidence in these beliefs (all rs < ±.04, ps > .75).

Discussion

Study 1 provides preliminary evidence for a relationship between SDO and expectancies of mental restoration toward interpersonal power. Specifically, high SDO individuals were more extreme in their belief that power-inducing experiences provide mental restoration. These findings correspond with past research on the association between SDO and the evaluation of interpersonal power (e.g., Altemeyer, 1998) while expanding the scope of this evaluation to expectancies of cognitive functioning. That is, just as high SDO individuals perceive power-inducing experiences more positively overall, they also expect such experiences to benefit their cognitive capabilities to a greater extent.

Contrary to predictions, expectancies concerning power-reducing tasks did not differ as a function of SDO. Both high and low SDO individuals equally endorsed the notion that low power experiences are mentally depleting. Nonetheless, high SDO individuals reported greater confidence in their expectancies concerning these low power experiences, suggesting that their expectancies are relatively more robust than their low SDO counterparts.

Study 2

Research indicates that expectancies influence the executive functioning consequences of a given stimulus (e.g., Clarkson et al., 2011; Martijn et al., 2002) and that these expectancy-driven effects are mediated by alterations in perceived mental depletion (Clarkson et al., 2011; Muraven et al., 2008). It follows that if high SDO individuals report stronger expectancies concerning power's cognitive influences (Study 1), these individuals should be more likely to exhibit changes in cognitive functioning when exposed to an experimental power manipulation. To examine this notion, we tested whether SDO could moderate the subjective (i.e., perceived mental depletion) and objective (i.e., Stroop inhibition) cognitive effects of a power role manipulation. We predicted that high SDO individuals would experience greater discrepancies in perceived mental depletion and Stroop performance as a function of their manipulated level of interpersonal power.

Method

Participants. A total of 91 Indiana University undergraduates (59 male; $M_{age} = 19.30$, $SD_{age} = 1.06$) participated in a two-session experiment for partial course credit. Participants were randomly assigned to a powerful role, a powerless role, or a neutral control condition. Six participants were removed prior to analysis for either failing to complete the second session of the protocol ($n = 4$) or for failing to follow instructions on the Stroop task ($n = 2$), leaving a final sample of 85 participants.

Materials

SDO. Participants completed the same SDO scale utilized in Study 1 ($\alpha = .86$).

Power manipulation. To manipulate one's sense of interpersonal power, we adapted a behavioral manipulation used in numerous studies on interpersonal power (e.g., Galinsky et al., 2003). Specifically, we asked participants to complete a problem-solving activity with an ostensible partner in an adjacent room. Each partner was designated a specific role in the activity, which was purportedly determined by analyzing their personality responses provided in the first experimental session. In reality, the assignment to each role was randomized, with half of the participants assigned to the leader role (i.e., high power), and half assigned to the follower role (i.e., low power).

The problem-solving activity required matching one of five picture options with an exemplar picture, such that the exemplar and selected answer shared an underlying spatial relationship. We utilized this task because it represents a novel problem-solving paradigm with many plausible answer options. All participants were informed that they would work with an opposite-role partner in an adjacent cubicle and that their team's objective was to get as many correct answers as possible. On each problem, participants were presented with one highlighted answer option that represented the opinion of their partner, who seemingly viewed the problem immediately beforehand. In the leader condition, participants were informed that their "follower" partner had suggested a potential answer, but that it was their job to select the final answer

for each problem. In the follower condition, participants were informed that their "leader" partner had selected a potential answer, and their job was to suggest their personal answer preference, with the final choice ultimately decided upon by the leader. In reality, there was no partner suggesting answers, as the answer choice was preprogrammed to be either the correct answer (50% of trials) or the most common incorrect answer (50% of trials; based on a previous pilot test). Participants were informed that they would receive performance feedback at the end of the experiment.

Perceived power. To assess the power manipulation's efficacy, participants completed a state assessment of power (e.g., "To what extent do you feel powerful?") on a scale ranging from 1 (*not at all*) to 9 (*very much*).

Perceived depletion. Participants completed a series of three items to assess their current level of perceived mental depletion (e.g., "How mentally exhausted do you now feel?" "How well can you concentrate right now?" [reverse coded]). These items were provided on a scale ranging from 1 (*not at all*) to 9 (*very much*), and were combined to form a reliable index of perceived mental depletion ($\alpha = .88$).

Executive functioning task. To measure executive functioning performance, we employed a computerized Stroop paradigm. This paradigm requires participants to name the font color of a series of words in which the font color and word name are either congruent (e.g., the word "red" printed in red font) or incongruent (e.g., the word "red" printed in blue font). Executive functioning impairments are most pronounced on incongruent trials, such that lower executive functioning ability predicts slower responses and/or greater errors on incongruent relative to congruent trials. Upon completing a set of practice trials, participants completed 48 Stroop trials (24 congruent, 24 incongruent). The accuracy (incongruent error rate: $M = .05$, $SD = .04$; congruent error rate: $M = .01$, $SD = .02$) and latency (incongruent reaction time: $M = 796.86$ ms, $SD = 164.26$ ms; congruent reaction time: $M = 669.12$ ms, $SD = 123.42$ ms) of each response were electronically recorded and grouped by trial type.

Given that executive functioning decrements can be identified using either Stroop latency (e.g., Inzlicht & Gutsell, 2007) or Stroop error (e.g., Smith et al., 2008) data, we utilized both latency and error metrics to assess executive functioning performance. Before computing either metric, we excluded trials with latencies less than 200 ms or greater than 2000 ms, as well as trials with latencies greater than three standard deviations above a participant's mean response time (Kane & Engle, 2003). *Stroop latency interference* was calculated by subtracting the mean response time on incongruent trials from the mean response time on congruent trials, using only trials for which the participant provided a correct response. *Stroop error interference* was calculated by subtracting the mean error rate on incongruent trials from the mean error rate on congruent trials.

Procedure. Participants were invited to a multisession study on the relationship between personality and cognition. In the first session, participants completed a measure of SDO, as well as several filler measurements. In the second session (2-4 weeks later), participants were exposed to a power manipulation, an assessment of perceived power, an assessment of perceived mental depletion, and a Stroop task. The control group performed the entirety of the experimental procedure except for the power manipulation.

Results

We utilized moderated multiple regression to assess the independent and interactive influences of the power manipulation and SDO on our dependent measures of interest. In our primary analysis, we tested the effects of power condition (1 = high power, 0 = control, −1 = low power), SDO (mean-centered), and the SDO × Condition interaction term, with main effects assessed in an initial block and the interaction effect assessed in a subsequent block. Upon determining any main effects and interactions as a function of our primary analysis, we utilized secondary dummy codings for experimental condition to determine the effects of high power (1 = high power, 0 = control, 0 = low power) and low power (0 = high power, 0 = control, 1 = low power), respectively. The results from all regression equations can be found in Table 1.

Perceived power. The only effect to emerge in the primary regression predicting perceived power was a main effect of condition, such that perceived power was positively related to power condition, $\beta = .24$, $t(89) = 2.32$, $p = .02$, 95% CI = [0.07, 0.85] (all other effects, $ps > .43$). To determine the extent to which each condition produced changes in perceived power, we conducted two post hoc regressions that contrasted (a) the perceived power of our high power condition versus the other two experimental conditions, and (b) the perceived power of our low power condition versus the other two experimental conditions. The first regression showed only a main effect of condition, with high power participants reporting greater perceived power than participants in the other two conditions, $\beta = .23$, $t(89) = 2.20$, $p = .03$, 95% CI = [0.08, 1.49]. The second regression also showed only a main effect of condition, with low power participants reporting less perceived power than participants in the other two conditions, $\beta = -.21$, $t(89) = -1.98$, $p = .05$, 95% CI = [−1.45, −0.01]. Together, these results support the efficacy of the experimental power manipulation and further show that perceptions of power did not vary as a function of SDO.

Perceived depletion. The primary regression predicting perceived depletion showed a marginal main effect of condition, such that high power predicted less perceived depletion,

Table 1. Regression Equations From Study 2.

	Perceived power			Perceived depletion			Stroop interference		
	β	*F*	ΔR^2	β	*F*	ΔR^2	β	*F*	ΔR^2
Contrast 1									
Step 1									
SDO	.08	2.98†	.06	.05	1.91	.04	.03	2.22	.05
Condition	.24*	—	—	−.19†	—	—	−.21*	—	—
Step 2									
SDO × Condition	.05	2.06	.01	−.29**	4.21**	.09	−.26*	3.71*	.07
Contrast 2									
Step 1									
SDO	.10	2.71†	.06	.03	2.95†	.06	.02	1.94	.04
Condition	.23*	—	—	−.24*	—	—	−.20†	—	—
Step 2									
SDO × Condition	.07	1.90	.01	−.33*	4.41**	.07	−.21†	2.26†	.03
Contrast 3									
Step 1									
SDO	.07	2.24†	.06	.06	0.67	.02	.05	1.70	.04
Condition	−.21*	—	—	.11	—	—	.19†	—	—
Step 2									
SDO × Condition	−.02	1.48	.00	.28*	2.11†	.05	.32**	3.34**	.07

Note. Standardized beta weights (β) of SDO, Condition, and the SDO × Condition interaction on the dependent measures of interest in Study 2. *F* and ΔR^2 refer to the overall effect of the model at each step. Stroop interference is based on latency data. Contrast 1: 1 = high power, 0 = control, −1 = low power. Contrast 2: 1 = high power, 0 = control, 0 = low power. Contrast 3: 0 = high power, 0 = control, 1 = low power. SDO = social dominance orientation.
†$p \leq .10$. *$p \leq .05$. **$p \leq .01$.

β = −.20, $t(89) = -1.90$, $p = .06$, 95% CI = [−0.86, 0.02]. However, this main effect was qualified by a significant SDO × Condition interaction, β = −.29, $t(89) = -2.91$, $p = .01$, 95% CI = [−1.05, −0.20] (all other effects, *p*s > .64). To interpret this interaction, we analyzed the simple slopes of high (+1 *SD*), medium (0 *SD*), and low (−1 *SD*) SDO participants separately as a function of condition. Among high and medium SDO participants, there was a significant negative effect of power, such that higher power predicted less perceived depletion, high SDO β = −.54, $t(89) = -3.49$, $p = .001$, 95% CI = [−1.78, −0.49]; medium SDO β = −.22, $t(89) = -2.21$, $p = .03$, 95% CI = [−0.90, −0.05]. Among low SDO participants, however, there was no effect of power, β = .09, $t = 0.63$, $p = .53$, 95% CI = [−0.41, 0.78]. These results show that the effects of the power manipulation on perceived mental depletion were contingent upon SDO, with a negative relationship between power and perceived depletion emerging most clearly at higher levels of SDO.

To determine the extent to which each condition produced changes in perceived mental depletion, we conducted two post hoc regressions that contrasted the perceived mental depletion of the high and low power conditions, respectively, versus the other two experimental conditions. The first regression showed a main effect of condition, such that high power participants reported less mental depletion than participants in the other two conditions, β = −.25, $t(89) = -2.38$, $p = .02$, 95% CI = [−1.72, −0.15]. This main effect was qualified by a significant SDO × Condition interaction, β = −.33, $t(89) = -2.64$, $p = .01$, 95% CI = [−1.72, −0.24]. Simple slopes again showed a significant negative effect of power among high, β = −.53, $t(89) = -3.60$, $p = .001$, 95% CI = [−3.12, −0.90] and medium, β = −.26, $t(89) = -2.55$, $p = .01$, 95% CI = [−1.70, −0.18] SDO participants, but no effect of power among low SDO participants, β = .02, $t(89) = 0.12$, $p = .91$, 95% CI = [−0.42. 1.72]. The second regression showed no main effect of condition ($p > .29$) but did show a significant SDO × Condition interaction, β = .28, $t(89) = 2.22$, $p = .03$, 95% CI = [0.09, 1.65]. Simple slopes showed a positive effect of power among high SDO participants, β = .36, $t(89) = 2.36$, $p = .02$, 95% CI = [0.22, 2.56], and no effect of power among medium, β = .12, $t(89) = 1.16$, $p = .25$, 95% CI = [−0.34, 1.27], and low, β = −.12, $t(89) = -0.80$, $p = .43$, 95% CI = [−1.59, 0.68], SDO participants. Together, these supplemental analyses show that high power led to decreases in perceived mental depletion, and low power led to increases in perceived mental depletion. Furthermore, they show that these effects are most pronounced at higher levels of SDO.

Stroop performance

SDO/Stroop relationship. First, to ensure that SDO was not inherently related to Stroop performance, we correlated SDO and our Stroop interference metrics within the control condition. As expected, there was no statistical relationship between SDO and Stroop latency interference ($r = -.19$, *ns*)

or Stroop error interference (r = .28, *ns*) when no power manipulation was present.

Stroop latency interference. The primary regression predicting Stroop latency interference showed a main effect of condition, such that high power predicted less Stroop latency interference, β = −.22, $t(89) = -2.07$, p = .04, 95% CI = [−53.00, −1.12]. However, as with the perceived depletion data, this main effect was qualified by a significant SDO × Condition interaction, β = −.26, $t(89) = -2.53$, p = .01, 95% CI = [−57.79, −6.97] (all other effects, ps > .73). Simple slopes showed a negative effect of power among high, β = −.51, $t(89) = -3.32$, p = .001, 95% CI = [−102.39, −25.61], and medium, β = −.24, $t(89) = -2.34$, p = .02, 95% CI = [−55.02, −4.52], SDO participants, but no effect of power among low SDO participants, β = .04, $t(89) = 0.25$, p = .80, 95% CI = [−30.82, 39.72]. Thus, consistent with the perceived depletion data above, these results suggest that the beneficial effects of power were most (least) pronounced among high (low) SDO participants.

To determine the extent to which each condition produced changes in Stroop latency interference, we conducted post hoc regressions that contrasted the Stroop latency interference of our high and low power conditions, respectively. The first regression showed a marginal main effect of condition, such that high power participants exhibited somewhat lower Stroop latency interference than participants in the other two conditions, β = −.20, $t(89) = -1.94$, p = .06, 95% CI = [−92.17, 1.23]. However, this effect was qualified by a marginal SDO × Condition interaction, β = −.22, $t(89) = -1.67$, p = .10, 95% CI = [−83.10, 7.16]. Simple slopes showed a negative effect of power among high, β = −.39, $t(89) = -2.56$, p = .01, 95% CI = [−154.57, −19.39], and medium, β = −.21, $t(89) = -2.01$, p = .05, 95% CI = [−93.08, −0.60], SDO participants, but no effect of power among low SDO participants, β = −.03, $t(89) = -0.20$, p = .84, 95% CI = [−71.97, 58.55]. The second regression also showed a marginal effect of condition, such that low power participants exhibited somewhat greater Stroop latency interference than participants in the other two conditions, β = .19, $t(89) = 1.81$, p = .08, 95% CI = [−4.40, 91.10]. However, this effect was again qualified by a SDO × Condition interaction, β = .32, $t(89) = 2.53$, p = .01, 95% CI = [12.29, 102.35]. Simple slopes showed a positive effect of power among high, β = .47, $t(89) = 3.12$, p = .002, 95% CI = [38.39, 173.59], and medium, β = .20, $t(89) = 1.95$, p = .05, 95% CI = [−0.95, 91.78], SDO participants, but no effect of power among low SDO participants, β = −.07, $t(89) = -0.46$, p = .65, 95% CI = [−80.43, 50.11]. Together, these supplemental analyses show that high power led to decreased Stroop latency interference and that low power led to increased Stroop latency interference. Furthermore, they show such effects to be most pronounced at higher levels of SDO.

Stroop error interference. The primary regression predicting Stroop error interference showed only an SDO × Condition interaction, β = −.26, $t(89) = -2.51$, p = .01, 95% CI = [−0.72, −0.08] (all other effects, ps > .19). Simple slopes showed a marginal negative effect of power among high SDO participants, β = −.30, $t(69) = -1.89$, p = .06, 95% CI = [−0.94, 0.03]; no effect of power among medium SDO participants, β = −.02, $t(69) = -0.20$, p = .84, 95% CI = [−0.35, 0.29]; and a marginal positive effect of power among low SDO participants, β = .26, $t(69) = 1.77$, p = .08, 95% CI = [−0.05, 0.84].

The post hoc regression of our high power condition versus the other two experimental conditions revealed only a significant SDO × Condition interaction, β = −.33, $t(89) = -2.55$, p = .01, 95% CI = [−1.27, −0.16]. Simple slopes showed a significant negative effect of power among high SDO participants, β = −.30, $t(89) = -2.01$, p = .05, 95% CI = [−1.67, −0.01]; no effect of power among medium SDO participants, β = −.03, $t(89) = -0.30$, p = .77, 95% CI = [−0.65, 0.48]; and a marginal positive effect of power among low SDO participants, β = .24, $t(89) = 1.65$, p = .10, 95% CI = [−0.14, 1.47]. The second regression contrasting our low power condition versus the other two experimental conditions revealed only a marginal SDO × Condition interaction, β = .23, $t(89) = 1.81$, p = .07, 95% CI = [−0.05, 1.09]. Simple slopes showed no effect of power among high, β = .17, $t(89) = 1.16$, p = .25, 95% CI = [−0.36, 1.36]; medium, β = −.02, $t(89) = -0.17$, p = .87, 95% CI = [−0.64, 0.54]; or low (β = −.21, $t(89) = -1.44$, p = .16, 95% CI = [−1.43, 0.23], SDO participants. As such, although the Stroop error data conceptually replicates the interactive effects obtained with the Stroop latency data, the pattern of findings is relatively weaker overall.

Mediation. Given the similar interaction effects obtained for both perceived depletion and Stroop interference, we assessed the extent to which changes in perceived depletion mediated the SDO × Condition interaction on each Stroop interference metric.

Stroop latency interference. Experimental condition marginally predicted perceived depletion, β = −.20, $t(89) = -1.90$, p = .06, and significantly predicted Stroop latency interference, β = −.29, $t(89) = -2.91$, p = .01, and both of these effects were moderated by SDO—perceived depletion, β = −.29, $t(89) = -2.91$, p = .01; Stroop latency interference, β = −.26, $t(89) = -2.53$, p = .01. In addition, perceived depletion significantly predicted Stroop latency interference, β = .38, $t(89) = 4.32$, p = .001, 95% CI = [12.60, 34.04]. Critically, when perceived depletion was included in the regression predicting Stroop latency interference as a function of the SDO × Condition interaction, the effect of the interaction term was reduced to nonsignificance, β = −.16, $t(89) = -1.57$, p = .12, 95% CI = [−43.98, 4.02], whereas the effect of perceived depletion was not, β = .34, $t(89) = 3.26$, p = .002, 95% CI = [7.70, 31.84]. To corroborate these findings, we conducted bootstrapping analyses and determined the 95% CI of

this indirect effect did not include zero [−27.46, −2.79]. This result provides suggestive evidence that perceived depletion mediated the effects of our SDO × Condition interaction on Stroop latency interference.

Stroop error interference. The analysis of the Stroop error interference data yielded no evidence that perceived depletion mediated the effects of the Power × SDO interaction. Although the Power × SDO interaction significantly predicted perceived depletion, β = −.29, $t(89) = -2.91$, $p = .01$, and Stroop error interference, β = −.26, $t(89) = -2.51$, $p = .01$, perceived depletion did not significantly predict Stroop error interference, β = .01, $t(89) = 0.06$, $p = .95$, 95% CI = [−0.14, 0.15]. As such, the indirect effect of the interaction term remained statistically reliable when perceived depletion was included in the model, β = −.24, $t(89) = -2.24$, $p = .03$, 95% CI = [−0.72, −0.04].

Discussion

Study 2 replicates and expands previous work on the executive functioning impact of interpersonal power. We found a main effect of power on executive functioning (i.e., high power led to less Stroop interference effects than did low power), conceptually replicating previous findings on the relation between power and executive functioning (e.g., Guinote, 2007a; Smith et al., 2008). Furthermore, by utilizing a no power control condition, we were able to jointly determine that high power benefitted executive functioning performance and low power undermined executive functioning performance in the same experimental context. In addition to these executive functioning effects, we also found a main effect of power on perceived mental depletion, such that high power predicted less perceived mental depletion than did low power. This finding extends the scope of power's psychological consequences to perceptual depletion, a construct known to influence executive functioning consequences (e.g., Clarkson et al., 2011). As such, it would appear that part of power's influence on cognitive functioning arises due to immediate changes in subjective fatigue.

Importantly, Study 2 found also that these subjective and cognitive effects of power were moderated by individual differences in SDO. That is, just as high SDO predicts stronger expectancies of mental restoration toward interpersonal power (Study 1), high SDO also predicts dampened feelings of perceptual depletion following a power-inducing experience. Furthermore, mediational analyses suggest that this dampened experience of perceptual depletion affords greater effectiveness on a challenging executive functioning task. Given that expectancies often affect cognitive and behavioral outcomes via corresponding perceptual modulation (Meissner et al., 2011), these findings are consistent with the presumed role of expectancies in the relationship between power and SDO.

Study 3

Studies 1 and 2 suggest that individual differences in SDO moderate power's subsequent influence on executive functioning via perceptual means. However, these studies resorted to measuring power-relevant expectancies (Study 1) and their corresponding effects (Study 2) within separate studies. To overcome this limitation, and to explore the direct influence of expectancies on executive functioning performance, Study 3 experimentally manipulated expectancies of mental energy change concerning interpersonal power. In particular, we orthogonally manipulated power and expectancies toward power, and then examined whether situation-level variability in expectancies yields similar perceptual and performance consequences as person-level variability in SDO (Study 2).

In addition to exploring the effect of experimentally manipulated expectancies, we made two notable changes to the experimental paradigm from Study 2. For one, we used an experiential writing task, rather than role assignment, to manipulate interpersonal power. Second, we used a behavioral assessment, rather than a cognitive assessment, of executive functioning performance. Overall, we predicted that participants induced to believe that their current state is restorative would show higher levels of executive functioning performance, and that these effects would be mediated by changes in perceived mental depletion. As in Study 2, a measurement of SDO was included to assess whether our effects were moderated by SDO.

Method

Participants. A total of 80 undergraduates (24 male; M_{age} = 18.79, SD_{age} = 1.12) participated in the present experiment for partial course credit.

Materials

Power manipulation. To manipulate one's sense of power, participants were exposed to a widely used experiential writing task (e.g., Smith et al., 2008). Specifically, participants wrote for 5 min about an experience in which they controlled one or more people (i.e., high power), or were controlled by one or more people (i.e., low power).

Expectancy manipulation. Following the writing task, participants were presented with a series of screens in which they ostensibly learned about recent research concerning power's cognitive effects. In one version (i.e., power is restorative), participants read information—and accompanying fictitious citations—suggesting that high power is associated with increased mental energy and improved cognitive performance. They further read that low power is associated with decreased mental energy and diminished cognitive performance. In the other version (i.e., power is depleting), participants learned the same information, but in this case,

they read about the restorative nature of low power and the depleting nature of high power.

Perceived depletion. Participants completed the same perceived depletion items as in Study 2 (α = .82).

Anagram task. As our measure of executive functioning performance, participants were asked to complete two open-ended anagrams, which required unscrambling sets of 7 letters (e.g., L C R A E W G) to form three-or-more letter English words, using no letter more than once in any particular word. For each anagram, participants were given as much time as they wanted to come up with consecutive solutions, during which the computer tracked their responses and total time on the task. When unable to produce any more correct responses, participants were allowed to quit the task by clicking the Escape key on the keyboard. This type of open-ended persistence task is commonly used to index self-regulatory exertion, with better performance evidenced by more correct responses and/or more time spent on the task (e.g., Baumeister, Bratslavsky, Muraven, & Tice, 1998; Egan, Hirt, & Karpen, 2012). Because total responses and total time were strongly correlated in the present dataset ($r = .72$, $p < .001$), we elected to combine these metrics into a single index of anagram performance by averaging participant *z* scores for these two performance indices.

SDO. Participants completed the same SDO items as in Studies 1 and 2 (α = .91).

Procedure. Participants completed an experiential writing task to manipulate interpersonal power. Subsequent to this writing task, participants read information on the purported link between power and mental energy, which served to manipulate their expectancies of mental energy change concerning interpersonal power. Finally, participants completed assessments of perceived mental depletion, executive functioning, and SDO before being debriefed and dismissed from the study.[3]

Results

We utilized moderated multiple regression to assess the influence of the power manipulation, the expectancy manipulation, and SDO on our dependent measures of interest. First, our power and expectancy manipulations were recoded into dummy variables (i.e., high power = 1, low power = −1; power is restorative = 1, power is depleting = −1) and SDO was mean-centered. Main effects were assessed in an initial block, two-way interactions were assessed in a subsequent block, and the three-way interaction was assessed in a final block. All results concerning these regression equations can be found in Table 2.

Perceived depletion. The overall regression predicting perceived depletion showed a significant two-way interaction between power and expectancy, β = .25, $t(79) = 2.25$, $p = .03$, 95% CI = [0.05, 0.88], a significant two-way interaction between power and SDO, β = .29, $t(79) = 2.62$, $p = .01$, 95% CI = [0.10, 0.73], and a significant three-way interaction between power, expectancy, and SDO, β = −.29, $t(79) = -2.73$, $p = .01$, 95% CI = [−0.72, −0.11]. No other effects were significant (all *p*s > .48). For ease of interpretation, we discuss the three-way interaction as a function of one's SDO level, which was dichotomized using a median split (see Figure 1, top panel).[4]

Table 2. Regression Equations From Study 3.

	β	*F*	ΔR^2
Perceived mental depletion			
Step 1			
SDO	−.08	0.21	.01
Power	.03	—	—
Expectancy	−.04	—	—
Step 2			
SDO × Power	.29*	2.16*	.14
SDO × Expectancy	−.01	—	—
Power × Expectancy	.25*	—	—
Step 3			
SDO × Power × Expectancy	−.29**	3.08**	.08
Anagram performance			
Step 1			
SDO	−.04	0.67	.03
Power	.15	—	—
Expectancy	.07	—	—
Step 2			
SDO × Power	.33**	2.83*	.16
SDO × Expectancy	−.10	—	—
Power × Expectancy	.23*	—	—
Step 3			
SDO × Power × Expectancy	−.21†	3.06**	.04

Note. Standardized beta weights (β) of SDO, Power, Expectancy, and all higher order interactions on the dependent measures of interest in Study 3. *F* and ΔR^2 refer to the overall effect of the model at each step. SDO = social dominance orientation.
†*p* ≤ .10. *p ≤ .05. **p ≤ .01.

For low SDO participants, there was a significant interaction between power and expectancy, $F(1, 41) = 13.25$, $p = .001$, $\eta_p^2 = .23$. Post hoc comparisons showed that low SDO participants reported mental depletion levels that matched the feedback they received concerning power's effects. Thus, when primed with high power, they reported less mental depletion when power was described as restorative rather than depleting, $t(18) = 2.64$, $p = .02$, 95% CI = [0.43, 3.77], $d = 1.18$. Conversely, when primed with low power, they reported less mental depletion when power was described as depleting rather than restorative, $t(20) = -2.49$, $p = .02$, 95% CI = [0.29, 3.31], $d = 1.10$. For high SDO participants, there was no interaction between power and expectancy, $F(1, 37) = 0.44$, $p = .51$, $\eta_p^2 = .01$. Instead, there was only a marginal main effect of power, such that high SDO individuals tended

to report less mental depletion when primed with high, rather than low, power, $F(1, 37) = 3.34$, $p = .07$, $\eta_p^2 = .09$.

Anagram performance. The overall regression predicting anagram performance showed a significant two-way interaction between power and expectancy, $\beta = .23$, $t(79) = 2.12$, $p = .04$, 95% CI = [0.01, 0.41], a significant two-way interaction between power and SDO, $\beta = .33$, $t(79) = 3.08$, $p = .003$, 95% CI = [0.08, 0.38], and a marginal three-way interaction between power, expectancy, and SDO, $\beta = -.21$, $t(79) = -1.94$, $p = .06$, 95% CI = [−0.29, 0.00]. No other effects were significant (all ps > .21). Again, we discuss the three-way interaction as a function of SDO, dichotomized via median split (see Figure 1, bottom panel).

For low SDO participants, there was a significant two-way interaction between power and expectancy, $F(1, 41) = 8.93$, $p = .01$, $\eta_p^2 = .19$. Post hoc comparisons indicated that high power participants exhibited better anagram performance when they read that power was restorative rather than depleting, $t(18) = 2.81$, $p = .01$, 95% CI = [0.29, 1.98], $d = 1.27$. Conversely, low power participants exhibited relatively equivalent anagram performance, regardless of whether they read that power was depleting or restorative, $t(20) = 1.27$, $p = .22$, 95% CI = [−0.27, 1.13], $d = 0.56$. For high SDO participants, there was no interaction between power and expectancy on anagram persistence, $F(1, 37) = 0.18$, $p = .67$, $\eta_p^2 = .01$. Instead, there was only a significant main effect of power, such that high SDO individuals exhibited better anagram performance when primed with high, rather than low, power, $F(1, 37) = 6.46$, $p = .02$, $\eta_p^2 = .16$.

Mediation. Given the emergence of Power × Expectancy × SDO interactions for both perceived depletion and anagram performance, we assessed the extent to which changes in perceived depletion mediated the interactive effects observed on anagram performance. Although the Power × Expectancy interaction term significantly predicted perceived depletion, $\beta = .25$, $p = .03$, 95% CI = [0.05, 0.88], and anagram performance, $\beta = .23$, $p = .04$, 95% CI = [0.01, 0.41], these effects were either significantly (perceived depletion, $\beta = -.29$, $p = .01$, 95% CI = [−0.72, −0.11]) or marginally (anagram performance, $\beta = -.21$, $p = .06$, 95% CI = [−0.29, 0.00]) qualified by SDO. Furthermore, perceived depletion significantly predicted anagram performance ($\beta = .57$, $p < .001$, 95% CI = [0.19, 0.37]). Critically, when perceived depletion was included in the overall regression predicting anagram performance, the effect of the 3-way interaction term became nonsignificant ($\beta = -.07$, $p = .48$, 95% CI = [−0.19, 0.09]), whereas the effect of perceived depletion remained significant ($\beta = .46$, $p = .001$, 95% CI = [0.13, 0.33]). These findings, combined with a bootstrapping of the 95% CI around the indirect effect [−0.22, −0.04], offer suggestive evidence that the Power × Expectancy × SDO interaction was contingent upon changes in perceived depletion.

Discussion

Study 3 provides additional evidence for the role of expectancies in the executive functioning impact of interpersonal power. Manipulating expectancies of mental energy change toward interpersonal power altered the downstream consequences of an experimental power manipulation. Specifically, individuals who read about the mentally *restorative* potential of power exhibited decreased perceptual depletion and enhanced executive functioning performance when exposed to a high, as opposed to low, power manipulation. However, this pattern of effects was reversed among individuals who read about the mentally *depleting* potential of power. Together, these findings suggest that low power can facilitate mental restoration and high power can facilitate mental depletion when expectancy information explicitly supports such possibilities.

Consistent with previous work showing that lay beliefs can moderate expectancy effects (e.g., Handley et al., 2009), Study 3 also demonstrated that the efficacy of this expectancy information was contingent upon one's level of SDO. Specifically, high SDO individuals were relatively resistant to the influence of the expectancy information and consistently demonstrated perceptual and behavioral responses indicative of high power being mentally restorative. In contrast, low SDO individuals were relatively susceptible to the influence of the expectancy information and consistently demonstrated perceptual and behavioral responses corresponding to the match between their current state and the expectancy information provided. As such, low SDO individuals showed assimilation to both positive and negative expectancy information concerning power's cognitive effects, whereas high SDO individuals did not.[5] Taken in conjunction with Study 2, these findings imply that power-driven changes in cognitive functioning are both more robust and more persistent among high SDO participants.

Finally, we again found that the cognitive effects of power were contingent upon changes in perceived mental depletion (see also Study 2). In particular, perceived mental depletion partially mediated the interactive effects of power, expectancies, and SDO, such that participants experiencing less subjective mental fatigue following the power manipulation exhibited higher levels of executive functioning performance. This result suggests a pronounced role for perceptual depletion in power's downstream consequences, and suggests that this role is relatively pronounced when expectancy information is made salient within the situational context.

General Discussion

Taken together, the results of the present work offer a novel perspective on the relationship between interpersonal power and executive functioning. Although numerous empirical findings illustrate a positive association between power and cognitive capability, the present work suggests a pivotal role

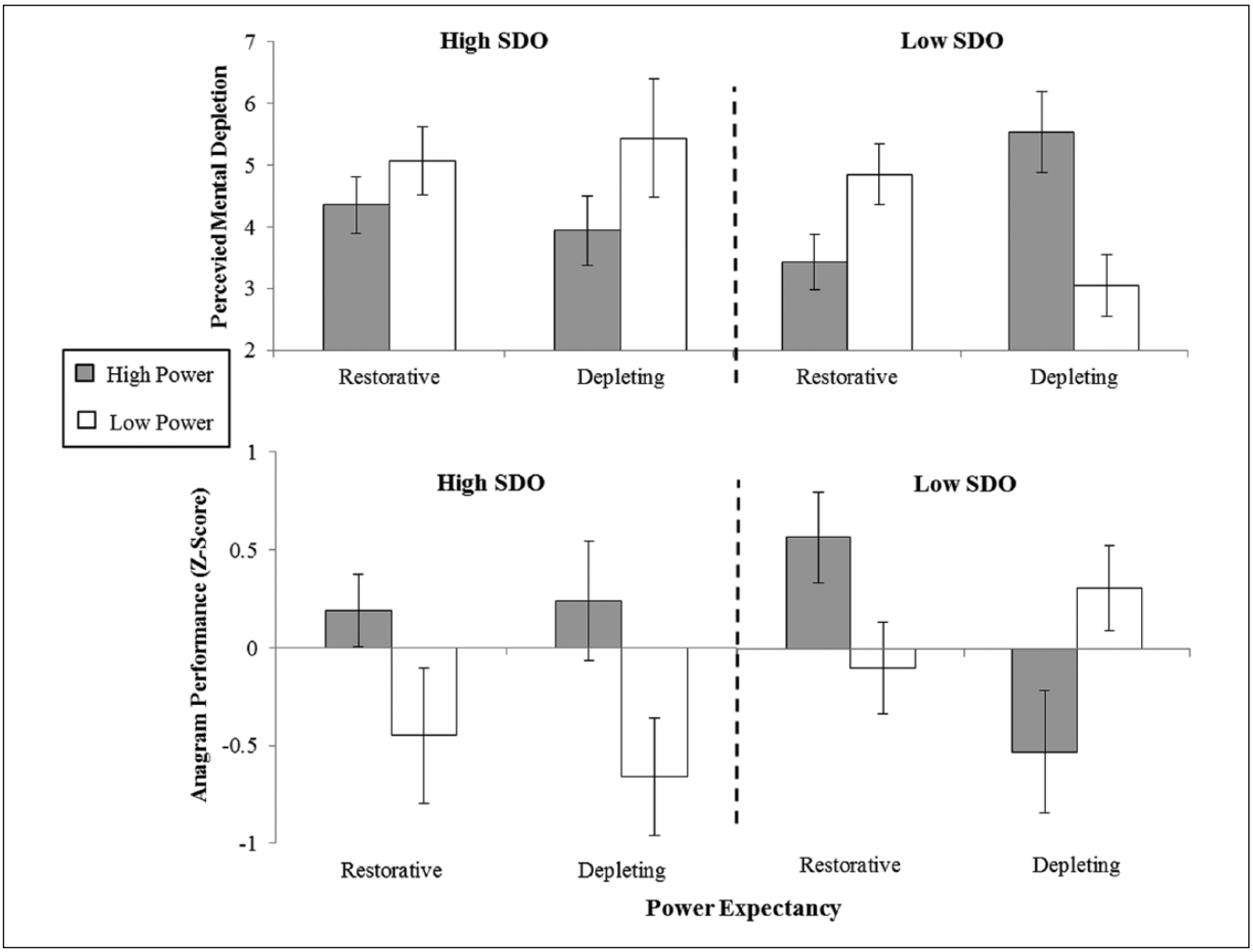

Figure 1. Perceived mental depletion (top panel) and anagram performance (bottom panel) as a function of power, expectancy, and SDO in Study 3.

Note. Error bars indicate standard error. Power expectancy refers to the information participants read about the effects of high interpersonal power. SDO = social dominance orientation.

for expectancies within the operation of these effects. Following from work demonstrating that expectancies affect the consequences of various psychological stimuli (Meissner et al., 2011), including consequences relevant to executive functioning performance (Job et al., 2010), our results demonstrate that expectancies affect the executive functioning consequences of interpersonal power. Simply put, individuals who most strongly expected power to alter cognitive ability were those individuals most likely to experience power-driven changes in executive functioning.

Study 1 showed that SDO predicted one's expectancies concerning power's mentally restorative effects, as well as one's confidence in these expectancies. In particular, high SDO individuals held stronger beliefs and greater confidence toward the restorative potential of power-inducing experiences and held greater confidence in the depleting potential of power-reducing experiences. Following from these findings, Study 2 found that high SDO individuals exhibited greater discrepancies in executive functioning performance as a function of an experimental power manipulation, and further found that this effect was mediated by changes in perceived mental depletion. Finally, Study 3 showed that SDO not only moderates the impact of interpersonal power, but also moderates the extent to which external expectancies influence power's consequences. Specifically, when participants were provided with information concerning the purported cognitive effects of high and low power, high SDO individuals were relatively unaffected by this information in terms of their subsequent perceptual and behavioral responses. Overall then, high SDO appears to promote more extreme expectancies concerning power's cognitive influence (Study 1), more robust cognitive change following a power-altering experience (Studies 2 and 3), and more psychological resistance to information that undermines power's seemingly beneficial nature (Study 3).

Implications

The present work expands emerging research on the contextualized nature of power by suggesting that power-driven effects are modulated by expectancies. Although there has been extensive inquiry into the influence of both individual and situational factors in the operation of interpersonal power, little work has focused upon the role of expectancies in power's downstream consequences (but see Maner et al., 2012). Given the plethora of work on expectancy effects both inside and outside the domain of social psychology, we argue that expanding expectancy research to the arena of interpersonal power offers a novel perspective to consider the development, strength, and generalizability of power's psychological influence. This psychological influence is clearly attributable to a multitude of perceptual, cognitive, and behavioral mechanisms (e.g., Guinote, 2010; Magee & Smith, 2013), and the inclusion of expectancies within this arena offers a meaningful theoretical addition to an already fruitful domain of scientific inquiry.

Outside the domain of interpersonal power, our work underscores the importance of expectancies in the emergence of mental depletion and mental restoration effects. Although much theoretical work suggests that cognitive and behavioral inhibition relies upon a limited set of physiological resources (e.g., Baumeister, Vohs, & Tice, 2007), the present work offers another example of psychological processes altering inhibitory responding in the absence of presumed physiological differences (e.g., Job et al., 2010; Martijn et al., 2002). Specifically, our findings highlight the presence of expectancies that are specific to mental energy change, and emphasize the predictive and malleable nature of such expectancies within self-regulatory contexts. When taken in conjunction with emerging theoretical perspectives on the importance of perceptual and motivational states in understanding effortful responding (Inzlicht & Schmeichel, 2012; Kruglanski et al., 2012; Kurzban, Duckworth, Kable, & Myers, 2013), it becomes increasingly paramount for researchers to explore the operation of energetical expectancies among experiences known to elicit executive functioning and/or self-regulatory change.

Limitations and Future Directions

The present work finds that expectancies modulate power's downstream consequences, and thus future work may benefit from considering how such expectancies are generated, maintained, and/or strengthened. As we noted in the introduction, expectancies concerning power could represent the transference of one's general evaluations to a more specific attribute, such that individuals who value power apply this general valuation to various individual-level outcomes. Alternatively, these expectancies could represent experiential learning, such that individuals who exert less high-level cognitive processing when immersed in a powerful position come to form more optimistic expectancies concerning the mental consequences of power-related tasks. Yet another possibility is these expectancies represent the relative fit between one's typical and assigned social roles, such that individuals with greater experience in powerful positions expect power-inducing roles to be less mentally taxing and/or more mentally restorative. We reason that each of these possibilities plays a meaningful role in the emergence of differential expectancies among different SDO populations.

In addition to investigating the establishment and malleability of power-related expectancies, it remains to be seen how such expectancies interact with other perceptual factors to moderate the consequences of interpersonal power. For instance, the *stability, legitimacy*, and *threat* of a powerful position have been shown to modulate conventional power-driven effects (Fragale, Overbeck, & Neale, 2011; Lammers et al., 2008; Maner & Mead, 2010). From these findings, it stands to reason that high SDO individuals may not only expect power to facilitate mental restoration; they may also perceive their power as more stable, more legitimate, and/or less threatened than do low SDO individuals. Importantly, these perceptual discrepancies could inform potential interactions between individual differences and interpersonal power, such that populations who perceive a powerful role more positively may expend fewer cognitive resources monitoring, strengthening, and/or defending this role—thus increasing the possibility for such experiences to elicit mental restoration.

Conclusion

With the centrality of power relations in personal, professional, and cultural structures, it follows that individuals hold expectancies about the value and consequences of powerful and powerless experiences. The present work offers support for this perspective and suggests that expectancies of cognitive restoration and depletion are an important component of power's downstream consequences. As researchers continue to investigate the influence of expectancies within the domain of interpersonal power, we believe that both academics and organizations will be better equipped to understand the nuanced psychological influences of power within various social hierarchies.

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Notes

1. Social dominance orientation (SDO) has often been theorized as pertaining solely to intergroup phenomena (Pratto, Sidanius, Stallworth, & Malle, 1994; Sidanius, Pratto, Sinclair, & van Laar, 1996), but there is ample work to suggest that its influence is applicable to intragroup contexts, such as those implicated within interpersonal power dynamics (Dovidio, Saguy, & Shnabel, 2009). For instance, SDO predicts the valuation of particular positions within constrained group settings (Altemeyer, 1998), favoring the self over other individuals (Duckitt, 2001), and the exploitation of power in dyadic contexts (Hing, Bobocel, Zanna, & McBride, 2007).
2. Given theoretical debate on the relation between various components of the SDO scale (see Jost & Thompson, 2000), we also analyzed our data using the *group-based dominance* and *opposition to equality* subscales separately. These analyses revealed the same overall pattern of data reported in the main text; as such, the present work reports results according to one's total SDO score.
3. Given the possibility that the power and/or expectancy manipulations could have altered SDO, we conducted a post hoc 2 × 2 ANOVA assessing the extent to which our experimental manipulations affected SDO scores. This analysis revealed no significant effects (Fs < 1.88, ps > .17).
4. We also conducted simple slopes analyses on the present data by splitting the dataset according to the expectancy manipulation, and then analyzing the effect of power at high (+1 *SD*) and low (−1 *SD*) levels of SDO. For the perceived depletion data, when the expectancy information suggested that power was mentally *restorative*, both high, β = .30, $t(39) = 1.28$, $p = .21$, 95% CI = [−0.28, 1.23], and low, β = .37, $t(39) = 1.60$, $p = .12$, 95% CI = [−0.16, 1.33], SDO participants showed a nonsignificant positive effect of power on perceived mental depletion. However, when the expectancy information suggested that power was mentally *depleting*, high SDO participants continued to show a nonsignificant positive effect of power, β = .33, $t(39) = 1.59$, $p = .12$, 95% CI = [−0.20, 1.60], whereas low SDO participants now showed a significant negative effect of power, β = −.66, $t(39) = −3.40$, $p = .002$, 95% CI = [−2.26, −0.57]. For the anagram performance data, when the expectancy information suggested that power was mentally *restorative*, high SDO participants showed a significant positive effect of power on anagram performance, β = .51, $t(39) = 2.28$, $p = .03$, 95% CI = [0.05, 0.84], whereas low SDO participants showed a nonsignificant positive effect, β = .28, $t(39) = 1.26$, $p = .22$, 95% CI = [−0.15, 0.63]. However, when the expectancy information suggested that power was mentally *depleting*, high SDO participants continued to show a significant positive effect of power, β = .44, $t(39) = 2.08$, $p = .05$, 95% CI = [0.01, 0.84], whereas low SDO participants now showed a significant negative effect of power, β = −.56, $t(39) = −2.84$, $p = .01$, 95% CI = [−0.94, −0.16]. Both sets of results suggest that high SDO participants were less affected by the expectancy information manipulation.
5. An alternative possibility is that high SDO participants are simply more resistant to explicit expectancy information, regardless of whether this information implicates interpersonal power. To explore this possibility, we exposed an independent sample of participants ($N = 70$) to information about the purportedly depleting effects of either interpersonal power or positive mood, and assessed the perceived believability of this information (i.e., How believable do you find the evidence in this passage?) on a scale ranging from 1 (*not at all*) to 9 (*very much*). Moderated linear regression showed a significant main effect of SDO, β = −.30, $t(69) = −2.57$, $p = .01$, 95% CI = [−0.52, −0.07], which was qualified by a significant SDO × Condition interaction, β = −.28, $t(69) = −2.42$, $p = .02$, 95% CI = [−0.50, −0.05]. In the interpersonal power condition, SDO negatively predicted perceived believability, β = −.53, $t(34) = −3.56$, $p = .001$, 95% CI = [−0.89, −0.24], but in the positive mood condition, SDO was statistically unrelated to perceived believability, β = −.02, $t(34) = −.10$, $p = .92$, 95% CI = [−0.34, 0.31]. These findings suggest that high SDO participants are more skeptical of information undermining the restorative potential of interpersonal power than are low SDO participants, but are equally skeptical of information undermining the restorative potential of other states irrelevant to power (e.g., positive mood).

Supplemental Material

The online supplemental material is available at http://pspb.sagepub.com/supplemental.

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