

Power Increases Situated Creativity

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Abstract

The present paper examined whether power was linked with situated creativity. We proposed that powerful (vs. powerless) people engage in creative thought when creativity contributes to contextual goals but avoid creative thought when creativity impedes contextual goals. Extending the Situated Focus Theory of Power (Guinote, 2007a; 2010) to creativity, we suggested that powerful people are better able to achieve situational goals because they can flexibly focus on cues that indicate what is required for success in a given context. Across three experiments, we found that powerful (vs. powerless) people engaged in more creative thinking when creativity facilitated contextual goals. This was not the case when creativity hindered contextual goals. Further, neither affect (Experiment 2) nor effort (Experiments 1 and 3) contributed to these effects. However, local processing undermined creativity for powerful people, indicating that processing style may contribute to the link between power and situated creativity. These findings suggest that powerful people flexibly vary creativity in line with the situation.

Keywords: Creativity, power, goals, global processing

Power Increases Situated Creativity

Creativity is defined as the process of producing something that is both novel (i.e., original and unexpected) and useful (i.e., relevant to the goals of the situation and meeting task constraints; e.g., Amabile, 1983; 1996; Nijstad, De Dreu, Rietzschel, & Baas, 2010; Paulus & Nijstad, 2003; Runco & Charles, 1993; Sternberg & Lubart, 1996; 1999). Creative thought is often an asset for individuals and groups across a broad range of domains (Sternberg & Lubart, 1996). In particular, creative thinking is frequently an important skill for powerful actors.

Social power is conceptualized as the potential to influence others in psychologically meaningful ways (French & Raven, 1959; Keltner, Gruenfeld, & Anderson, 2003). Powerful people have more control over their own and others' outcomes (Fiske, 1993; Thibaut & Kelley, 1959) and are less dependent on others (Emerson, 1964) than powerless people. Creative thinking may be beneficial for powerful people, for example, when a CEO provides a vision for employees, a mediator works out a compromise between two conflicting parties, or a mentor offers a solution for a mentee.

Powerful people may generate better visions, compromises, and solutions because power fundamentally enhances people's thinking (Guinote, 2007a; Keltner, et al. 2003). Powerful (vs. powerless) individuals are better able to pay attention to the big picture; they can adopt a more global (vs. local) attentional focus (Förster, 2009; Förster, Friedman, Özelsel, & Denzler, 2006; Guinote, 2007b; Smith & Trope, 2006). At the same time, the distinction between global and local processing is important to understanding psychological processes in many domains (see Förster, 2012), including creativity (Förster, Epstude, & Özelsel, 2009). For example, training participants to focus on the global configuration of stimuli (e.g., focusing on the Gestalt of a map or focusing on the big letters constituted by small letters in a Navon-like task [1977]) causes

more creative thinking (e.g., Friedman, Fishbach, Förster & Werth, 2003; Förster & Friedman, 2010). Given the link between global processing and both power and creativity, we argue that power may promote creativity because power facilitates a global attentional focus (Förster, 2009, 2012; Förster & Dannenburg, 2010). This suggestion is consistent with two recent papers in which powerful people were more creative (Galinsky, Magee, Gruenfeld, Whitson, & Liljenquist, 2008; Sligte, De Dreu, & Nijstad, 2011), but has not been directly tested.

Importantly, the Situated Focus Theory of Power (Guinote, 2007a, 2010) suggests that powerful people are better able to think variably and flexibly across different situations, as well as use a wider range of thought processes, depending on goals of the context (Guinote, 2007b; 2007c, Slabu & Guinote, 2010). For example, although they are better able to focus on the global big picture, powerful people are also capable of attending to details (i.e., local information) and think narrowly, when the task requires that they do so (Guinote, 2007b). Additionally, powerful (vs. powerless) people set goals and initiate goal-directed action faster, act more consistently with opportunities for goal pursuit, and persist longer when difficulties arise (Guinote, 2007c). Thus, although powerful people may use global information processing and creative thought when required by the situation, they may also refrain from doing so, when goals demand alternative information processing strategies.

Applied to this work, we propose that when creativity enhances goal pursuit, powerful people will be better able to use creative thinking to facilitate goal pursuit than their powerless counterparts. Yet, powerful people should not apply creative thought when goals demand attention to local information, and creativity is unnecessary. Specifically, we propose, for the first time, that power is linked with *situated creativity*. That is, powerful (vs. powerless) people

should engage in more or less creative thought depending on whether goals require creative thought or not.

This perspective provides a novel integration of research on power (Keltner et al., 2003), creativity (Galinsky, et al., 2008; Sligte, et al., 2011), goals (Guinote, 2007c), and information processing (Förster, 2009; Guinote, 2007a; 2010). Specifically, it considers *when* and *why* powerful people are more creative than their powerless counterparts. More generally, the present examination provides insights into the greater variability of powerful people's thoughts (Overbeck & Park, 2001; 2006), judgments (Weick & Guinote, 2008), and behaviors (Galinsky, Gruenfeld, & Magee, 2003; Vescio, Gervais, Snyder, & Hoover, 2005), which promotes superior performance across multiple domains compared to powerless people.

Overview and Hypotheses

We hypothesized that powerful (vs. powerless) people will engage in more creative thinking only when creativity advances goal pursuit, and not when creativity hinders it. That is, powerful people can engage in more creative thinking (or not) because they are better able to flexibly focus on active cues about what the situation requires. To test these hypotheses, we conducted three experiments in which we manipulated power and goal-relevant cues and measured creative thinking. We initially examined the link between power and creativity by examining whether power contributes to goal-related, creative thinking (Experiment 1), when creativity is useful. One implication of our situated creativity hypothesis is that powerful people may engage in *less* creative thinking when creativity is detrimental to goal pursuit, for example when contextual cues call for attention to detail. This was examined in Experiment 2 using subtle cues and in Experiment 3 by introducing local processing objectives. Because positive affect has been linked to both power (Anderson & Berdahl, 2002) and creativity (Baas, De Dreu, &

Nijstad, 2008), we also explored whether power increased creativity through affect (Experiment 2). Finally, we examined effort as an alternative explanation for the creativity effects (Experiments 1 and 3).

Experiment 1

Experiment 1 examined whether power increased creative thinking in a context where creativity enhanced goal attainment but was not directly required. Specifically, we examined whether powerful people were more capable of creative thinking in an open-ended task than powerless people, without giving them information about the necessity of creativity. This aspect of the study was important because past research has not examined whether power can lead to creative thinking when creativity is useful, but not explicitly required.

Power was manipulated and participants were then presented with a work scenario where they imagined being employed at a restaurant and creating a menu with corresponding recipes. This scenario was chosen because it gave participants freedom to choose their responses, and creative menu items are often viewed as an asset in restaurants.

Creativity was assessed using independent ratings of blind coders. Because powerful individuals are more goal-focused than powerless individuals (Guinote, 2007c), we also examined participants' effort and elaboration as indirect measures of goal attainment in the situation. If creative thinking facilitates goal attainment and powerful individuals can better engage in thought processes that facilitate goal pursuit, then powerful (vs. powerless) individuals should provide more creative responses.

Method

Participants

Thirty-eight (32 women) undergraduates from a university in the United Kingdom completed the experiment individually for course credit.

Procedure

Participants provided informed consent and were randomly assigned to a high or low power condition (Galinsky et al., 2003). We utilized a widely accepted manipulation of social power (e.g., Anderson & Galinsky, 2006; DeCelles, DeRue, Margolis, & Ceranic, 2012; Duguid & Goncalo, 2012; Galinsky et al., 2003; Guinote, 2007b; Johnson & Lammers, 2012; Scheepers, de Wit, Ellemers, & Sassenberg, 2012; Smith & Trope, 2006) that maps onto classic and current conceptualizations of social power (Fiske, 1993; French & Raven, 1959; Thibaut & Kelley, 1959; Keltner et al., 2003). Participants in the high power condition were asked to recall a situation in which they had power over another person and participants in the low power condition were asked to recall a situation in which another person had power over them. As a manipulation check, participants indicated whether they felt in charge of the situation, using a 9-point scale (1 = *not at all*, 9 = *very much*).

As part of an alleged separate study, participants imagined preparing the specials for a single day at a restaurant; they prepared a special three-course meal and described the recipes in detail. Participants' responses were rated by two coders who were blind to condition, using 9-point scales (1 = *not at all*, 9 = *very much*). Coders rated how creative the entire meal was (inter-rater correlation: $r = .57$) and how much effort was required to cook the meal ($r = .49$). Finally, participants were thoroughly debriefed.

Results and Discussion

An independent-samples *t*-test confirmed the effectiveness of the power manipulation; Powerful participants felt more in charge of the situation ($M = 7.45$, $SD = 1.19$) than powerless participants ($M = 3.22$, $SD = 1.11$), $t(36) = 11.26$, $p < .001$, $\eta_p^2 = .78$.

Independent-samples *t*-tests revealed that as hypothesized, powerful participants generated more creative recipes ($M = 5.10$, $SD = 2.16$) than powerless participants ($M = 3.72$, $SD = 1.86$), $t(36) = 2.10$, $p = .04$, $\eta_p^2 = .11$. Powerful participants also generated recipes requiring more effort ($M = 4.45$, $SD = 1.61$) than powerless participants ($M = 2.81$, $SD = .91$), $t(36) = 3.81$, $p = .001$, $\eta_p^2 = .29$. Finally, powerful participants ($M = 189.95$, $SD = 68.13$) elaborated their recipes (described them with more words) marginally more than powerless participants ($M = 144.44$, $SD = 78.49$), $t(36) = 1.91$, $p = .06$, $\eta_p^2 = .09$.

To examine whether the effect of power on creativity was moderated by effort, we conducted a regression analysis where we entered power, effort (centered), and the power X effort interaction as predictors of creativity. The power X effort interaction was not significant, $F(1,33) = 2.57$, $p = .12$, $\eta_p^2 = .07$, but the effect of power remained significant even when controlling for effort and its interaction with power, $F(1,33) = 4.44$, $p = .04$, $\eta_p^2 = .12$.

In a context where creativity was useful, but not explicitly required, powerful (vs. powerless) people spontaneously responded more creatively. Powerful people also outperformed powerless people on other indicators of successful goal attainment, generating more effortful and elaborate meals than powerless people. There was no evidence, however, that effort moderated the effect of power on creativity. This suggests that powerful individuals use creative thought as a tool for goal pursuit. One question that remains is whether powerful people are indiscriminately creative or whether they engage in creative thinking only when it facilitates goals. Although Experiment 1 is suggestive because powerful people responded in many ways

that contributed to goal pursuit in the restaurant situation (e.g., providing more creative, effortful, and elaborate recipes), to directly examine this question, we varied the extent to which creativity contributed to goals in Experiments 2-3.

Experiment 2

In Experiment 2, we examined the situated nature of powerful people's creativity by providing cues indicating that creativity was incongruent with the contextual goals. Participants were either provided with no information regarding the usefulness of creativity in the situation (neutral condition), as in Experiment 1, or subtle cues indicating that common (non-creative) responses were required in the situation (low creativity). We expected that powerful people would respond more creatively in the neutral (vs. low creativity) condition. We also expected powerful people to respond more creatively than powerless people in the neutral condition, but we expected these differences to be eliminated in the low creativity condition. Finally, we measured affect, which has been linked to both power (Anderson & Berdahl, 2002) and creativity (Baas, et al., 2008), to examine whether affect may contribute to these effects.

Method

Participants

One hundred and seventy-one (90 women) undergraduates from a U.S. university participated in classroom settings with 20-30 people for course credit.

Procedure

Participants were randomly assigned to a power (high, low, control) X situational cue (neutral, low creativity) between participants design. The power manipulation was the same as in Experiment 1, except that a control condition was also included in which participants recalled a

situation from the previous day to determine whether power enhances the ability to flexibly think creatively or powerlessness undermines this ability.

We also used a new measure to assess creativity. Following the power manipulation, we asked participants to complete the generative cognitive task (Rubin, Stoltzfus, & Wall, 1991) in which they imagined pitching new product names to a marketing firm. They were asked to provide 3 novel pasta, nuclear elements, and pain reliever names. To manipulate the usefulness of creativity within this context, we introduced a subtle cue indicating that creativity was incongruent with the contextual goals of the situation. In the *low creativity* condition, participants were given examples of products that were familiar and common (pastas: *spaghetti, lasagna, fettuccini, rotini, pastina, rigatoni*; nuclear elements: *radon, plutonium, argon, carbon, radium, uranium*; and pain relievers: *tylenol, anacin, aspirin, bufferin, panadol, midol*). In this condition, non-creative names were congruent with the contextual goals of the situation. In the *neutral* condition, no examples were given.

Participants also completed a modified version of the Positive and Negative Affect Scale (Watson, Clark, & Tellegen, 1988), indicating the degree to which they felt 26 positive and negative emotions on 5-point scales (1 = *not at all*, 5 = *extremely*). Although power and creativity are generally theorized to be associated with more positive emotions and less negative emotions (Anderson & Berdahl, 2002; Baas et al., 2008; Keltner et al., 2003), this is not uniformly true. For example, some studies show that negative, activating emotions (e.g., fear, anxiety) contribute to more creativity than negative, deactivating emotions (e.g., sadness, boredom, Baas et al., 2008). Similarly, power is associated with specific positive emotions (e.g., self-awareness emotions such as pride, Schmid Mast, Jonas, & Hall, 2009) and approach-related negative emotions (e.g., anger, Keltner et al., 2003). To determine whether power produced more

creativity due to specific emotions, we examined pride, enthusiasm (interested, excited, strong, enthusiastic, determined, active, alert, inspired, attentive, $\alpha = .89$), anxiety (frustrated, irritable, jittery, upset, fearful, nervous, afraid, scared, $\alpha = .89$), sadness, boredom, shame (guilty, ashamed, $r = .62$), and anger (hostile, angry, mad, $\alpha = .74$).

As a manipulation check, participants were asked to think about the situation they described at the outset and indicate who had more power in general and over the outcome of the interaction on a 7-point scale (1 = *other[s]*, 7 = *me*) following the creativity task. A mean power score was created ($r = .38$). Finally, participants were thoroughly debriefed.

Product labels on the generative cognitive task were coded for creativity as in previous research (Galinsky et al., 2008). Because most pasta names end in “ti,” “na,” or “ni” (e.g., *spaghetti*, *lasagna*; *rigatoni*), each name that ended in something other than “ti,” “na,” or “ni” was given one point. Similarly, because most nuclear elements end in “on” or “um” (e.g., *carbon*, *radium*), each label that ended in something other than “on” or “um” was given one point. Finally, because most pain relievers end in “ol” or “in” (e.g., *tylenol*, *aspirin*), each label that ended in something other than “ol” or “in” was given one point. A mean creativity score was generated by averaging the novel responses for the pasta, nuclear element, and pain reliever names with higher scores indicating more creativity.

Results and Discussion

Power scores were submitted to a power (high, low, control) X situational cue (low creativity, neutral) between participants ANOVA. A main effect of power, $F(2,164) = 29.66$, $p < .0001$, $\eta_p^2 = .27$, was the only significant effect to emerge from this analysis (all other $ps > .74$). Post-hoc tests revealed that power participants reported having more power during the interaction and over the outcome ($M = 5.19$, $SD = .85$) than control participants ($M = 4.26$, $SD =$

1.27), and powerless participants ($M = 3.16$, $SD = 1.41$). Control participants also reported having more power than powerless participants, all $ps < .0001$.

Creativity scores were submitted to a power (high, low, control) X situational cue (low creativity, neutral) between participants ANOVA. A main effect of situational cue, $F(1,165) = 108.04$, $p < .0001$, $\eta_p^2 = .40$, revealed that participants were more creative in the neutral condition ($M = 1.95$, $SD = 0.71$) than the low creativity condition ($M = 0.90$, $SD = 0.69$). The hypothesized power X situational cue interaction, $F(2, 165) = 7.05$, $p = .001$, $\eta_p^2 = .08$ emerged. Follow-up pairwise comparisons revealed that powerful people were more creative than powerless people or control people in the neutral condition (Table 2). This difference was eliminated in the low creativity condition with powerful people responding similarly creatively to powerless people. Furthermore, pairwise comparisons revealed significant differences between the neutral and low creativity conditions in the low power, control, and high power conditions, but the difference between neutral and low creativity was largest in the powerful condition.

Finally, to examine whether different emotions mediated the relation between power and creativity, the indirect effects between power (dummy coded with powerful as the comparison) and creativity through pride, enthusiasm, anxiety, sadness, boredom, shame, and anger were examined. We followed recent mediation recommendations (Mallinckrodt, Abraham, Wei, & Russell, 2006; see also Preacher & Hayes, 2008) and used 10,000 bootstrap samples to estimate the model and examine the significance of indirect effects. We examined the bootstrapped unstandardized indirect path coefficients, standard errors, and 95% bias-corrected confidence intervals (Williams & MacKinnon, 2008). The indirect effects are considered significant and indicate mediation if the 95% confidence interval does not contain zero. The confidence intervals

for all of the emotions contained zero, and thus were not significant mediators of the power-creativity relation (Table 2).

Consistent with hypotheses, powerful people were more or less creative depending on the goal and the contextual cues. They were more creative when creativity was useful, and less creative when contextual cues highlighted familiarity. Furthermore, when no cues were present and creativity could enhance goal attainment powerful people were more creative than powerless people as in Experiment 1. Extending Experiment 1, control participants responded similarly to powerless participants, but less creatively than powerful participants in the neutral condition, indicating that power increases creativity (rather than powerlessness decreases creativity). Finally, the results indicated that emotions did not contribute to these effects. These findings provide additional support for our suggestion that powerful people have a greater ability to be creative than powerless people, but they may or may not use this ability depending on whether creativity contributes to or impedes contextual goals. We again tested this possibility in Experiment 3 by introducing indirect situational cues outside of the goal domain.

Experiment 3

In Experiment 3, we examined the situated nature of powerful people's creativity by priming participants with a local information processing style incongruent with creativity (Friedman et al., 2003). Because creativity requires global processing, local processing interferes with creativity (Förster, 2012; Förster & Dannenburg, 2010). If powerful (vs. powerless) people more easily and flexibly deploy information processing strategies that are activated in the context, then they should be less creative when a local (vs. neutral) attentional focus is introduced. We also examined the role of power on effort and the relation between effort and creativity.

Method

Participants

Three hundred sixty participants (244 women, 111 men, 5 gender unreported) from the United States, United Kingdom, and Australia participated in an online study using Amazon's Mechanical Turk for payment.

Procedure

Participants were randomly assigned to a power (high, low, control) X situational cue (local focus, neutral) between participants design. The procedure was exactly the same as Experiment 2 with two exceptions. First, the same power manipulation check was used as in Experiment 2, but came immediately after the power manipulation. Second, no creativity cues were provided within the context of the marketing task. Instead, local attentional focus was introduced using a modified Navon letter task (Förster & Higgins, 2005; Gervais, Vescio, Förster, Maass, & Suitner, 2012; Navon, 1977) immediately before the marketing generative cognitive task in an ostensibly unrelated study. Participants saw a sample item followed by a series of 16 large red or blue alphabet letters comprised of the same or different small alphabet letters. All participants were shown one large alphabet letter on each computer screen, but local focus participants indicated which small alphabet letter was shown whereas neutral participants indicated the letter color. The position of answer choices was counterbalanced for each trial. As a manipulation check, participants indicated how likely it was that they categorized the letters based on the small alphabet letter on a 7-point scale (1 = *not at all likely*, 7 = *extremely likely*). A mean creativity score was created with higher scores indicating more creativity as in Experiment 2. Additionally, participants were asked to generate 1-3 names (rather than 3 names as in Experiment 2). Thus, we created an effort score by averaging the number of responses

participants gave across category with higher scores indicating more effort to consider whether powerful people were more creative because they were providing more responses.

Results and Discussion

Power scores were submitted to a power (high, low, control) ANOVA. As expected, the effect of power was significant, $F(2, 356) = 167.65, p < .001, \eta_p^2 = .49$. Post-hoc analyses indicated that powerful participants had more power during the interaction and over the outcome ($M = 5.80, SD = 1.37$) compared to control participants ($M = 4.06, SD = 1.47$), and powerless participants ($M = 2.34, SD = 1.32$) ($ps < .0001$). Control participants also reported more power than powerless participants ($p < .0001$).

Likelihood to classify the letters based on small alphabet letter was submitted to a power (high, low, control) X situational cue (local focus, neutral) ANOVA. The effect of situational cue was significant, $F(1,349) = 1049.37, p < .001, \eta_p^2 = .75$, with local focus participants more likely to classify items based on the small alphabet letter ($M = 6.58, SD = 1.10$) compared to neutral focus participants ($M = 1.76, SD = 1.63$). Neither the effect of power nor the interaction with situational cue was significant ($ps > .05$).

Creativity scores were submitted to a power (high, low, control) X situational cue (local focus, neutral) ANOVA. Only the hypothesized power X situational cue interaction was significant, $F(2, 353) = 6.14, p < .01, \eta_p^2 = .03$. Follow-up pairwise comparisons revealed that powerful participants were more creative in the neutral condition than the local focus condition (Table 3). Interestingly, powerless participants were less creative in the neutral focus condition than the local focus condition. No differences emerged for control participants between local focus and neutral conditions. Thus, powerful participants were less creative when the local focus (vs. neutral) cue was introduced, whereas powerless participants were actually more creative

when situational cues were not conducive to creativity. As well, follow-up pairwise comparisons revealed that powerful people were more creative than powerless people and control people in the neutral condition, but less creative than powerless and control people in the local focus conditions.

Effort scores were submitted to a power (high, low, control) X situational cue (local focus, neutral) ANOVA. As with creativity scores, only the power X situational cue interaction was significant, $F(2, 354) = 3.84, p < .05, \eta_p^2 = .02$ (Table 3). Pairwise comparisons revealed that powerful participants generated marginally more ideas in the neutral (vs. local) focus condition. Powerless participants generated fewer total ideas in the neutral (vs. local) focus condition. Thus, powerful participants tended to exert more effort on the task when the neutral focus (vs. local) cue was introduced, whereas powerless participants exerted more effort when situational cues were not conducive to creativity. As well, powerful people exerted more effort than powerless people and control people in the neutral condition, but this difference was eliminated in the local condition with participants exerting similar effort regardless of power. We also conducted a multiple regression analysis in which we entered power (dummy coded with high power as the comparison), effort (centered), and situational cue (dummy coded), all 2-way interactions, and the 3-way interaction. The power X effort X situational cue interaction was not significant, $F(2,347) = .43, p = .65, \eta_p^2 = .00$, but the power X situational cue interaction remained significant even when controlling for the effect of effort and its interactions (2-way and 3-way) with power and situational cue, $F(2,347) = 3.04, p = .049, \eta_p^2 = .02$.

Together, these findings provide further evidence that power increases situated creativity. When a contextually induced processing style was incongruent with creativity (local processing), powerful people were less creative and tended to exert less effort on the creative task than in the

neutral condition. The same pattern did not emerge for powerless people. Furthermore, when controlling for effort, powerful people were afforded a creative advantage in the neutral, but not local focus, condition indicating that as in Experiment 1 effort alone cannot explain the creativity effects.

General Discussion

This work tested our suggestion that compared to powerless people, powerful people can flexibly use creative thinking, depending on goals in the situation. The results directly supported the situated creativity hypothesis; powerful people provided more creative responses than powerless and control people for the tasks requiring creativity. Specifically, in Experiment 1 and the neutral conditions in Experiments 2-3, powerful people were more creative than powerless people when they simply completed a task that benefitted from creativity (generating new menus at a restaurant or novel product labels in marketing). This was not the case, however, when creativity was incongruent with contextual cues. Powerful people responded in non-creative ways when subtle examples suggested that familiar, non-creative responses were advantageous (Experiment 2), or when a local processing focus, which interferes with the global processing required for creativity, was introduced (Experiment 3). Powerful people were more creative and used this ability more variably than control people, whereas powerless and control people were similarly creative, suggesting that power enhances people's ability to flexibly think creatively, but powerlessness does not necessarily undermine creative abilities. Interestingly, powerful people were actually less creative than (rather than equally creative to) powerless people when local processing was introduced, indicating that, at least in some situations, powerful individuals may provide even less creative responses than their powerless counterparts when situational cues are incongruent with creativity.

This work extends power and creativity research in several directions. It contributes to a small literature showing that powerful (vs. powerless) people have a greater capacity to be creative under stable power conditions (e.g., Förster, 2009; Galinsky et al., 2008; Sligte et al., 2011). Ours is the first work to show that this ability is used in situated ways. Powerful people may engage in creative thinking when it facilitates active goals, but also use non-creative responses when creativity impedes goals. This provides valuable insight into when and why powerful people are more creative than their powerless counterparts.

Furthermore, Experiment 3 provides evidence that powerful people are more creative because they can process information more globally (Smith & Trope, 2006), which is required for creativity (Friedman et al., 2003). When we introduced local (vs. neutral) processing objectives, which should interfere with the subsequent creativity task (Schooler, 2002; Schooler, Fiore, & Brandimonte, 1997), powerful people responded less creatively. This suggests that processing style may be one explanation why powerful people are more creative than powerless people.

Extending the Situated Focus Theory of Power to the creativity domain, we found that powerful people did not use their superior creativity skills indiscriminately. They were able to use this ability (or not), depending on situational cues. Thus, although powerful (vs. powerless) people wield more social influence, they are also more influenced by the social situation when it is adaptive. Furthermore, the greater flexibility of powerful individuals' creativity is consistent with past findings demonstrating that, compared to powerless people, powerful people are more flexible in the means used to attain goals (Guinote, 2007c), perceive others (Vescio et al., 2005), make judgments (Weick & Guinote, 2008), and engage in action (Galinsky et al., 2003), but

extends this notion to creativity. It provides a much-needed understanding of the processes that underlie the goal-related thinking of powerful people.

We also examined whether emotions may explain the relation between power and creativity because previous research shows that both power (Anderson & Berdahl, 2002) and creativity (Bass et al., 2008) have been linked to affect. However, none of the measured emotions mediated the power-creativity link. Future research could further examine this possibility, utilizing expanded emotion measures (e.g., pride and respect, Schmid Mast et al., 2009).

Finally, future studies should further disentangle the impact of social power, which involves the ability to influence or control other people in relationships compared to personal power, which involves one's own agentic capacity and does not necessarily include a relational component (Overbeck, 2010; Overbeck & Park, 2001). This work examined social power, but it is possible that personal power may have an even stronger pattern of effects.

Relatedly, it is possible that participants' responses to the power manipulation we used were related to legitimacy (e.g., fair and just roles, Spears, Greenwood, de Lemus, & Sweetman, 2010). Given that legitimacy has been identified as a core component of social power (French & Raven, 1959; Winter, 2010), the effects of power on creativity may be most pronounced in legitimate power roles (e.g., bosses vs. employees, teachers vs. students). Illegitimate power roles (e.g., a corrupt politician, a wrongly convicted CEO) may be viewed as less stable from the perspective of both powerful and powerless actors (Jost & Banaji, 1994), and thus should be related to less capacity for creative thought for powerful people or more capacity for creative thought for powerless people in these roles (Sligte, et al., 2011, see also Spears et al., 2010 for summary of differences and similarities between power and legitimacy). Although we used a

widely accepted manipulation of social power, future research should further examine both the diverging and converging effects of social power, personal power, and legitimacy.

In closing, creativity is a valuable commodity for many people across contexts (Sternberg & Lubart, 1996). Powerful positions may require vision and creativity (e.g., a CEO needs creative vision for the company), even if creativity is not explicitly part of the job description. As a result, creative people may naturally acquire such leadership positions (Reiter-Palmon & Illies, 2004). Nevertheless, this research suggests that simply experiencing state power paired with contextual goals may elicit more or less creativity, regardless of formal roles.

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Table 1

Creativity as a Function of Power and Situational Creativity Cue in Experiment 2

	Low Power	Control	High Power
Neutral	1.89 (.64) _a	1.76 (.75) _a	2.53 (.56) _c
Low Creativity	0.82 (.63) _{bd}	1.10 (.69) _b	0.76 (.71) _d

Note. Means are presented with standard deviations in parentheses. Means within rows and within columns with different subscripts significantly differ from one another in the follow-up pairwise comparisons, $ps < .05$.

Table 2

Bootstrap Analysis of Magnitude and Significance of Indirect Effects of Emotions for Power and Creativity Relation

Predictor	Mediator	Criterion	<i>B</i>	<i>SE</i>	95% Confidence	
					Lower bound	Upper bound
Power 1	Pride	Creativity	.000	.012	-.024	.024
Power 2	Pride	Creativity	.000	.005	-.010	.010
Power 1	Enthusiasm	Creativity	.002	.014	-.026	.029
Power 2	Enthusiasm	Creativity	-.001	.008	-.017	.015
Power 1	Anxiety	Creativity	.005	.008	-.011	.022
Power 2	Anxiety	Creativity	.030	.038	-.045	.105
Power 1	Sadness	Creativity	.003	.008	-.012	.018
Power 2	Sadness	Creativity	.000	.005	-.010	.009
Power 1	Boredom	Creativity	.000	.005	-.011	.011
Power 2	Boredom	Creativity	-.007	.030	-.065	.051
Power 1	Shame	Creativity	-.009	.010	-.029	.010
Power 2	Shame	Creativity	-.061	.046	-.152	.029
Power 1	Anger	Creativity	.002	.008	-.014	.018
Power 2	Anger	Creativity	.002	.010	-.010	.013

Note. Confidence intervals that do not contain zero are considered significant (Mallinckrodt et al., 2006). Power 1 (dummy code: high = 0, control = 0, low = 1) and Power 2 (dummy code: high = 0, control = 1, low = 0).

Table 3

Creativity and Effort as a Function of Power and Situational Creativity Cue in Experiment 3

	Low Power	Control	High Power
<u>Creativity</u>			
Neutral	2.14 (1.01) _a	2.25 (.97) _a	2.59 (.76) _c
Local Focus	2.53 (.72) _b	2.52 (.73) _{ab}	2.21 (.95) _d
<u>Effort</u>			
Neutral	8.11 (1.76) _a	8.35 (1.73) _{ac}	8.52 (1.44) _{b+}
Local Focus	8.70 (.95) _c	8.63 (1.02) _c	7.93 (2.35) _{c+}

Note. Means are presented with standard deviations in parentheses. Means within rows and within columns with different subscripts significantly differ from one another in the follow-up pairwise comparisons, $ps < .05$, + $p < .07$