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Bullseye!

How Power Improves Motor Performance

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Abstract

Power makes people think, feel, and behave in ways that help them to maintain and increase power. Thus far, the mechanisms underlying power's beneficial effects on goal pursuit have been investigated predominantly on a cognitive level. The present research tested whether power influences goal pursuit in an even more fundamental way, namely by improving actual behavior on motor-based tasks. Furthermore, we suggest that this effect is produced by changes in perceptual goal representation. Consistent with our assumptions, Experiment 1 found that individuals primed with high-power outperformed control participants on a golf-putting task. In Experiment 2, individuals receiving a high-power prime outperformed individuals receiving a low-power prime on a dart-throwing task. Moreover, high-power primed participants represented the focal goal (a dart board) in greater goal-relevant detail, which mediated the effect of power on motor performance. Taken together, these findings suggest that power shapes performance in more fundamental ways than previously assumed.

Word count abstract: 150

Power is a genuinely social construct. It is a relational concept referring to the relative standing of at least two individuals. Scholars have defined power as an individual's ability to influence others (e.g., Vescio, Gervais, Snyder, & Hoover, 2005), or to control others' valued outcomes (e.g., Fiske, 1993). More specifically, Galinsky, Gruenfeld, and Magee (2003) define power as an individual's ability to control resources – one's own and others' – without social interference.

Power can stem from various sources (French & Raven, 1959), and recent research has begun to disentangle the psychological underpinnings of different conceptualizations of power (Lammers, Stoker, & Stapel, 2009). Having or lacking power has been found to affect a host of psychological variables and processes. Power shapes how people think (e.g., Smith & Trope, 2006; Guinote, 2007a), how they feel (e.g., Langner & Keltner, 2008), and how they behave (e.g., Smith & Bargh, 2008; Maner, Kaschak, & Jones, 2010). In fact, it seems that having power encourages people to think, feel, and behave in ways that help them to gain and preserve power. For instance, powerful individuals are more likely to take action (Galinsky et al., 2003) and to successfully pursue their goals (Guinote, 2007b). In accordance, lacking power impairs performance on complex cognitive tasks (Smith, Jostmann, Galinsky, & van Dijk, 2008).

In the present article, we focus on how social power affects an individual's goal striving, more specifically, how it influences motor-driven action upon goals, that is, actual behavior on motor-based tasks.

Power and Goal Pursuit

The effects of power on goal pursuit can be described in terms of *goal content* or in terms of *goal striving* (see Willis & Guinote, 2011, for a recent overview). More specifically, power affects what kind of goals individuals pursue (e.g., approach-related goals) as well as the way they pursue these goals (e.g., persistency during goal striving). Particularly relevant for the present research are the effects of power on goal striving, that is, the impact of power on how individuals pursue their goals.

Previous findings document that power has a characteristic signature on the way powerful individuals pursue their goals. For instance, Guinote (2007b) has shown that participants primed with power (vs. powerlessness) were faster in setting as well as initiating their goals. Besides accelerated responses during goal striving, the attentional selectivity documented for high power individuals also increases prioritization. Power promotes focused behavior aimed at attaining one focal goal among many other goals and desires (see also Guinote, 2010a, for an overview). This increased prioritization also enhances persistency during goal striving in the face of obstacles (Guinote, 2007b; DeWall, Baumeister, Mead, & Vohs, 2011).

Consistently, effective goal pursuit is enhanced by focused attention and increased accessibility of goal-related constructs (Förster, Liberman, & Higgins, 2005). Precisely these processes are facilitated under conditions of elevated power, that is, powerholders display greater attentional selectivity (Guinote, 2007a) as well as increased accessibility of goal-related constructs (Slabu & Guinote, 2010).

These findings are consistent with recent research demonstrating how power enables focus on internal cues, and disregard of external influences in a variety of tasks like, for instance, creative idea generation (Galinsky, Magee, Gruenfeld, Whitson, & Liljenquist, 2008). Because power protects individuals from social influence, powerholders experience greater freedom when acting upon salient goals. Those in power, for example, are more likely to act in accordance with bodily cues like hunger (Guinote, 2010b), internal states (Weick & Guinote, 2008) or goals afforded by the current situation (Guinote, 2008).

In short, powerful individuals process more extensively information that is relevant to the primary constructs activated in the situation, and process irrelevant information less extensively (Guinote, 2007c). This facilitates goal pursuit – no matter if goals are arising from internal or external sources.

Power and Motor Performance

Although past research has established that power affects attention (Guinote, 2007a) as well as action (Galinsky et al., 2003), little is known about how power influences actual motor performance and its link to perception. We suggest that some components of the perception-action cycle are affected by the actor’s level of power. More specifically, we propose that powerful individuals store goal-relevant perceptual information in more accurate detail, which in turn improves their motor performance.

Successful performance on goal-directed motor tasks (e.g., playing miniature golf or throwing darts) draws on perceptual input. Sensory information, for example, a dart board, is first encoded and stored in memory and then transformed into action that is directed at the focal goal, for example, throwing a dart to hit the center of a dart board (e.g., Jeannerod, 1988). The transformation of sensory information into goal-directed action requires executive functioning, which in turn is affected by power (i.e., updating, inhibiting, planning; Smith et al., 2008). This suggests that power may indeed influence central components of the perception-action cycle and may thus shape basic motor performance.

Which elements of the perception-action cycle may contribute to the hypothesized performance-enhancing effect of power? We suggest that representing more accurate details of the focal goal contributes to the superior motor performance of powerful individuals. Encoding and storing perceptual information in a detailed manner provides individuals with a rich basis of goal-relevant information that they can use in the course of action and in the face of performance feedback. Consistently, recent findings have demonstrated the beneficial effects of goal visualization on performance (Cheema & Bagchi, 2011). In addition, mental simulation has been shown to facilitate goal pursuit via individuals' enhanced ability to visualize outcomes (Pham & Taylor, 1999). In sum, these findings point to the importance of perceptual information – either self-generated via mental simulation or provided by situational cues – for successful goal pursuit and performance. Furthermore, past research has established that having power enhances the ability to inhibit peripheral information and to focus attention on the task at hand (Guinote, 2007a). Moreover, Slabu and Guinote (2010) have recently suggested increased accessibility of goal-related compared to goal-unrelated constructs as a cognitive mechanism to explain facilitated goal pursuit among powerful individuals.

Taken together, these findings suggest that – in line with our reasoning – having power may help individuals to make better use of goal-related perceptual information, which in turn may facilitate motor performance.

The Present Research

In the current research, we examine whether and how power influences goal pursuit and performance by improving goal-directed motor behavior. To test this possibility, we had participants perform two separate motor tasks, a golf-putting task (Experiment 1) and a dart-throwing task (Experiment 2). Both tasks require goal-directed action that involves actual visuo-motor coordination. We hypothesized that participants in high-power priming conditions would outperform participants in low-power priming and control priming conditions in these tasks, that is, power was expected to facilitate actual goal-directed motor performance (Experiments 1 and 2).

We further expected that high-power primed participants would concentrate more on, and thus represent more accurate details of the focal goal than would low-power primed and control participants. This more detailed, accurate representation of the focal goal, we reasoned, should contribute to the beneficial effects of power on goal-directed motor behavior (Experiment 2).

Experiment 1: Hole in One!

In our first experiment, we set out to demonstrate that elevated social power indeed promotes actual motor behavior directed at a focal goal. To this end, we experimentally induced elevated power and subsequently had participants complete a golf-putting task.

We hypothesized that elevated social power would improve motor performance, such that participants in a high-power priming condition would exhibit superior performance on the golf-putting task compared to participants in a control priming condition.

Method

Participants and design. Forty-one undergraduates (23 women, 18 men; $M_{\text{Age}} = 23.20$, $SD = 3.19$) were run individually and offered to choose between a bar of chocolate and a coffee coupon as compensation. They were randomly assigned to either a high-power priming or a control priming condition.

Materials and procedure. Upon informed consent, participants worked on two ostensibly unrelated tasks. First, as part of a task on autobiographical memory, participants underwent an experiential power priming procedure (Galinsky et al., 2003, Exp. 2). Participants in the *high-power priming* condition were asked to recall and describe a situation in which they had power over someone else. Participants in the *control priming* condition were asked to recall and describe a situation from the previous day in which they had interacted with another person.

Participants then proceeded with a second ostensibly unrelated task on psycho-motor coordination. Here, the experimenter first explained the rules of the golf-putting task. To increase motivation and to ensure successful induction of a focal goal, participants were told that they could earn one additional item of candy for each successful putt. From a distance of 150 cm, participants performed two practice putts, followed by eight experimental putts (Figure 1).

Subsequently, participants responded to a manipulation-check item by indicating how much they were in charge of the situation they recalled and described earlier on a scale ranging from 0 (= *not at all in charge*) to 8 (= *absolutely in charge*). In order to control for a priori experiences with miniature golf, participants were further asked to estimate how often they play miniature golf (1 = *almost never* to 5 = *more than several times per week*), when they played it the last time (1 = *about a week ago* to 4 = *more than a year ago*), and how well they thought they could play this game (0 = *not at all* to 8 = *very well*). Finally, participants were thanked, handed their compensation and dismissed.

Results and Discussion

Two participants were excluded from further data analyses for not following the rules of the golf-putting task, and three participants for being suspicious about the relation of the two tasks[1]. The number of successful putts on the eight experimental trials served as our central dependent measure (see Damisch, Stoberock, & Mussweiler, 2010, for a similar procedure).

Motor performance. Consistent with our prediction, a *t*-test for independent samples on the mean number of successful experimental putts revealed that participants in the high-power priming condition ($M = 3.28$, $SD = 1.41$) indeed scored more successful putts than did participants in the control priming condition ($M = 2.28$, $SD = 1.41$), $t(34) = 2.13$, $p = .04$, $d = .71$[2].

Manipulation-check and control variables. Participants in the high-power priming condition (*M* = 5.72, *SD* = 1.36) reported being more in charge of the situation they recalled in their essays than did participants in the control priming condition (*M* = 4.11, *SD* = 2.37), $t(34) = 2.50$, $p = .02$, $d = .83$, suggesting that our power manipulation was successful. Separate *t*-tests for independent samples revealed no a priori differences between the two priming conditions on any of the control variables, that is, how often participants play miniature golf ($p = .64$), when they played it the last time ($p = .50$), and how well they thought they could play this game ($p = .86$).

In sum, the findings of Experiment 1 indicate that elevated power indeed facilitates goal-directed motor performance. These findings extend previous research on the beneficial effects of power on goal pursuit by demonstrating that merely recalling an incident in which one had power over someone else is sufficient to enhance performance on a basic motor task.

Experiment 2: Bullseye!

In Experiment 2, we sought to extend these findings in four important ways. First, we included a high-power priming as well as a low-power priming condition to rule out the possibility that merely thinking about the concept of power is sufficient to produce the obtained performance improvement. Second, using a semantic power priming in Experiment 2 rules out the alternative explanation that the control priming condition in Experiment 1 (recall of the previous day vs. an unspecified time frame in the high-power priming condition) might have been cognitively more demanding and might thus have negatively affected performance. Third, we controlled for the effects of affect and self-efficacy, which may have contributed to the results of Experiment 1. Finally and most importantly, we examined a potential mechanism underlying the performance benefits of power. More specifically, we tested whether representing more accurate details of the focal goal does indeed contribute to this effect. To do so, we had participants complete a semantic power priming procedure, after which they performed a dart-throwing task. Before engaging in the dart-throwing task, we asked participants to draw a dart board. These drawings served as our measure of participants' perceptual representation of the focal goal.

We predicted that participants in the high-power priming condition would exhibit superior performance on the dart-throwing task than would participants in the low-power priming condition, thus replicating the results from Experiment 1. Furthermore, we expected that high-power primed participants would represent more accurate details of the focal goal (i.e., the dart board) than would low-power primed participants. Finally, we hypothesized that perceptual goal representation would mediate the effect of elevated social power on motor performance.

Method

Participants and design. Forty-seven undergraduates (22 women, 25 men, $M_{\text{Age}} = 25.21$, $SD = 2.73$) were run individually and offered to choose between a bar of chocolate and a coffee coupon as compensation. They were randomly assigned to either a high-power priming versus low-power priming condition.

Materials and procedure. Upon informed consent, participants worked on two ostensibly unrelated experimental tasks. First, as part of a language perception task, they solved a word-search puzzle that served as a semantic priming procedure of power (e.g., Chen, Lee-Chai, & Bargh, 2001). The puzzle consisted of a 17 × 19 matrix composed of letters. The matrix contained a total of twelve words that were located horizontally and vertically embedded within random letters. Participants were instructed to find and circle twelve pretested words. In both priming conditions, the puzzle contained six words that were unrelated to power (e.g., "rain"). In the *low-power priming* condition, six additional words were related to powerlessness (e.g., "serve"), whereas in the *high-power priming* condition, six additional words were related to elevated power (e.g., "influence").

Next, ostensibly as part of a psycho-motor coordination task, participants received written instructions introducing the focal goal of this task (i.e., to hit the center of a dart board). Prior to performing the dart-throwing task, participants' self-efficacy beliefs were measured on four rating items (e.g., "I am confident that I will achieve a good result on the upcoming dart-throwing task"; Cronbach's $\alpha = .89$) on a scale from 0 (= *not at all*) to 8 (= *absolutely*). Moreover, we asked participants to draw a dart board. Participants were provided with a square piece of paper and a pencil. These drawings served as our measure of participants' perceptual representation of the focal goal (Figure 2a).

After participants completed their drawings, the experimenter explained the rules of the dart-throwing task. Similar to the procedures of Experiment 1, participants were told that they could double their compensation for each "bullseye" they would hit. From a distance of 237 cm, participants again performed two practice throws, followed by three experimental throws (Figure 2b).

We again measured several control variables. More specifically, affect was measured with the self-assessment-manikins (Lang, Bradley, & Cuthbert, 2008). Three items assessed overall mood, arousal and dominance[3] on scales from 1 (= *good mood/high arousal/low dominance*) to 5 (= *bad mood/low arousal/high dominance*). Two additional items assessed participants' self-reported motivation (i.e., "How motivated were you to achieve a good result on the dart-throwing task?") and participants' self-reported effort (i.e., "How much effort did you put into achieving a good result on the dart-throwing task?") on scales ranging from 0 (= *not at all motivated/no effort at all*) to 8 (= *very motivated/very much effort*). A priori experiences with dart throwing were assessed on one additional item (i.e., “How often do you usually throw darts?”) on a scale from 0 (= *never*) to 4 (= *every day*). Upon answering the control questions, participants were thanked, handed their compensation and dismissed.

Results and Discussion

Motor performance. Performance scores on the dart-throwing task were coded from 0 (missed the board) to 10 (“bullseye”), that is, higher scores reflecting better performance. As predicted, a *t*-test for independent samples on the mean performance score of experimental throws revealed that participants in the high-power priming condition ($M = 5.97$, $SD = 1.37$) indeed scored higher than did participants in the low-power priming condition ($M = 4.61$, $SD = 2.27$), $t(38.16) = 2.50$, $p = .02$, $d = .73$.

Perceptual goal representation. To assess the goal-relevant detail of participants’ dart board drawings, we had two independent coders (Cronbach’s $\alpha = .83$), who were blind to experimental conditions, rate the drawings on a scale from 0 (= *not detailed at all*) to 8 (= *very detailed*)[4]. Coders were instructed to take into consideration goal-related relevance as well as accuracy when judging how detailed the participants' drawings were. For example, the font of the numbers would be a detail that is not goal-relevant, whereas the different components of the dart board and their relative proportion to each other would be details that are goal-relevant.

In line with our hypothesis, a *t*-test for independent samples on the mean detail rating revealed that high-power primed participants ($M = 4.55$, $SD = 1.76$) provided drawings in greater goal-relevant detail than did low-power primed participants ($M = 3.33$, $SD = 1.70$), $t(37) = 2.22$, $p = .03$, $d = .71$ (Figure 3).

We next tested whether perceptual goal representation mediated the effect of power on motor performance. Bias-corrected bootstrapping analysis (Preacher & Hayes, 2008) indicated that the indirect effect through detail of perceptual goal representation was reliable. Using 5,000 resamples, the analysis revealed a point estimate of 0.32 for the indirect effect and a 95% confidence interval around the indirect effect ranging from 0.01 to 1.11, thus indicating significant mediation ($p < .05$). A test of the reverse mediational pattern – that motor performance mediated the relationship between power and perceptual goal representation – was not reliable, 95% CI [-.005, 1.10].

Control variables. Separate *t*-tests for independent samples indicated no reliable differences between the two power priming conditions on the measured control variables, that is, self-efficacy beliefs ($p = .21$), mood ($p = .21$), arousal ($p = .67$), dominance ($p = .98$), self-reported motivation ($p = .41$), effort ($p = .70$) and prior experience with dart throwing ($p = .71$).

Overall, the findings of Experiment 2 again demonstrate that elevated power facilitates goal-directed motor performance. Furthermore, results of the mediation analysis suggest that representing more accurate details of the focal goal appears to be one route through which power enhances performance on motor tasks.

General Discussion

Previous research on power has relied on cognitive tasks to examine differences in performance as a function of power (e.g., Guinote, 2007b; Smith et al., 2008). Little attention has been given to basic motor performance and the perception-action cycle. Filling these empirical gaps, our research demonstrates that power affects performance in a very fundamental way. Using two different instantiations of power as well as two different motor tasks, we show that merely activating elevated power engendered superior goal-directed motor performance. Furthermore, our results suggest a potential mediator for this superior motor performance of powerholders, that is, a more detailed perceptual representation of goal-relevant information.

Alternative explanations. In order to explain the beneficial effect of power on motor performance, we proposed and demonstrated that accurate detail of perceptual goal representation may be a mediating variable. One might wonder if the label *detail* fully captures what we propose as the explanatory mechanism. We explicitly instructed the coders to take into consideration goal-related relevance and accuracy when judging the detail of the drawings to ensure an adequate and comprehensive assessment of participants' perceptual goal representation. In addition, we tried to disentangle the effects of the coders' detail ratings from the mere density of information that participants provided in their drawings by statistically controlling for the latter. Using a grid containing cells of 0.5 cm × 0.5 cm in size, we determined the overall information density of each drawing. To do so, we assessed the number of cells in the grid that were covered by the drawing (see Figure 4, for a schematic illustration). A maximum density of information for a particular drawing would indicate that each cell of the grid was covered by the participant's drawing. Because this measure ignores goal relevance of the information, a mere increase of this quantitative measure of information density does not necessarily reflect a higher degree of detail. Analyses revealed that this new measure of mere information density was not affected by priming condition ($p = .59$) nor did it predict motor performance on the dart-throwing task ($p = .47$). Furthermore, when entering information density into an analysis of covariance (ANCOVA) with priming condition as a between-subjects factor, the predicted main effect of power priming on the detail ratings remained significant, $F(1, 37) = 4.94$, $p = .03$, $\eta_p^2 = .12$. This suggests that our measure of perceptual goal representation – that is, the coders' ratings – goes beyond mere density of information that fails to consider aspects of goal-related relevance and accuracy.

Some of the present findings may seem to be at odds with previous research. For instance, past research suggests that elevated power is associated with greater psychological distance, and thus leads to more abstract information processing (Smith & Trope, 2006; see also Lammers, Galinsky, Gordijn, & Otten, 2012). Our results, on the other hand, show that powerful individuals processed goal-relevant information (i.e., the dart board) in more accurate perceptual detail. How can this seeming inconsistency be resolved? According to construal level theory (e.g., Trope & Liberman, 2010) as well as Smith and Trope (2006), abstract thinking entails a focus on primary aspects of a stimulus and extraction of the gist of a stimulus pattern. Therefore, focusing on goal-relevant detail does not contradict abstract thinking. Quite the contrary, thinking abstractly and extracting the gist of a given stimulus configuration may very well aid goal-directed behavior, because it enables individuals to focus on the central aspects of the situation that may be goal-relevant. Thus, the present findings are actually very much in line with previous research demonstrating a bidirectional link between power and abstract information processing (Smith and Trope, 2006; Smith, Wigboldus, & Dijksterhuis, 2008).

We have suggested accurate detail of perceptual goal representation as a psychological mechanism explaining the effects of power on motor performance. However, motivational processes may also have been at play. Previous work has shown that people engage in superstitious behavior when lacking power (Whitson & Galinsky, 2008), and that activating superstitions in turn improves performance – including performance on motor tasks (Damisch et al., 2010). Assuming that “keeping one’s fingers crossed” may conceptually be related to having or restoring power, a prominent candidate to explain our findings would be self-efficacy beliefs. In fact, Damisch and colleagues (2010) have shown that changes in perceived self-efficacy beliefs can account for the performance-enhancing effects of superstitions. More specifically, increased task persistence was demonstrated to constitute one mean by which self-efficacy improved performance. However, past research in the domain of power has repeatedly ruled out this alternative motivational explanation. For example, Anderson & Galinsky (2006) have demonstrated that the effects of power on risk taking are mediated by optimistic risk perceptions and *not* by self-efficacy beliefs as coded in the participants' power essays. Further, Slabu & Guinote (2010) have ruled out self-reported generalized self-efficacy beliefs as an alternative account to explain the effects of power on accessibility of active goals. In the present research, we had participants indicate their perceived self-efficacy beliefs on four *task-specific* rating-items *prior* to engaging in the dart-throwing task (Experiment 2). Additionally, participants answered two rating-items concerned with general motivation during the dart-throwing task. Consistent with previous literature (e.g., Anderson & Galinsky, 2006; Slabu & Guinote, 2010), our power priming did not affect perceived task-specific self-efficacy beliefs, nor did it affect self-reported motivation. Taken together, the present findings cannot be fully understood in terms of motivational processes. However, additional research is needed to address the more complex interplay between perceptual and motivational processes in explaining the effects of power on performance.

Practical implications. Finally, the present findings may also have some important practical implications. In the domain of sports, research within the action-specific account of perception has established that people perceive their environment in terms of their ability to act in it (e.g., Witt, 2011; Witt, Linkensauger, & Proffitt, 2012). For instance, softball players who performed better than others also judged the ball as bigger (Witt & Proffitt, 2005). Such action-specific effects on perception have also been demonstrated for other sports, such as throwing darts (Wesp, Cichello, Gracia, & Davis, 2004) or golfing (Witt & Sugovic, 2010). More importantly, research on the reverse relationship – that is, looking at performance as a function of manipulated perception – has yielded results consistent with ours (Witt et al., 2012). Our findings further extend this research by showing that besides target size, other dimensions of the target may also affect goal-directed action upon this target. However, it is of course conceivable that certain performance-related situations may yield a disadvantage for the powerful who represent the focal goal with more accurate detail. For example, performance in team-based sports like football, basketball, or soccer may suffer from merely focusing on the focal goal at hand, because players then may not be able to concentrate on the processes of interpersonal coordination that are required in team-based sports. However, aspects of this interpersonal coordination may themselves become focal goals, which in turn could involve performance advantages for those concentrating on them.

Furthermore, our findings may have important implications in organizational contexts. Research in the domain of goal setting and goal commitment has demonstrated that people tend to perform better when asked to meet a *specific* goal compared to unspecific (“do your best”) or no goals at all (Locke, Shaw, Saari, & Latham, 1981). In line with research on the beneficial effects of goal visualization mentioned earlier (Cheema & Bagchi, 2011), our findings suggest a novel route by which “empowering” employees in organizations may facilitate their goal-directed performance. A heightened sense of power may enable them to concentrate more on the focal goal, hence resulting in a goal representation that is characterized by more accurate detail, which in turn should promote performance directed at the focal goal.

Conclusion

Even though the effects of power on goal pursuit are well established, surprisingly little research has focused on actual behavior or on explanatory processes that help to understand the beneficial impact of power on performance. The present research provides first evidence that power affects basic components of the perception-action cycle. We demonstrated that elevated social power indeed facilitates actual goal-directed motor behavior. In addition, we were able to show that power shapes the perception of goal-relevant details, which in turn affects motor performance directed at the focal goal. We believe that it is an intriguing avenue for future research to further investigate the processes by which power affects other components of the perception-action cycle. Among other questions, future research could explore how those in power incorporate feedback during goal striving, and how this in turn may affect their overall performance.

In conclusion, past research has made clear that power alters how individuals construe and approach the world. Here, we extend this line of research by demonstrating how power affects the way we perceptually construe our goals, and thereby can change our actual motor behavior directed at these goals. Taken together, the present research suggests that elevated social power affects performance in more fundamental ways than was previously assumed.

Footnotes

[1] Including these participants in our analyses did not change the pattern of results.

[2] Additional analyses on gender-effects (Experiments 1 and 2) as well as results of a pretest (word-grid power priming used in Experiment 2) are reported in the supplementary online materials.

[3] Note that we did not expect participants in the high-power priming condition to report a higher level of dominance than participants in the low-power priming condition as the semantic priming procedure we used operates outside of conscious awareness (see Lammers, Stapel, & Galinsky, 2010, for a similar reasoning).

[4] Two participants failed to complete the drawing task. Six drawings were excluded, because participants did not follow instructions (i.e., they did not use the materials provided to them). Including these drawings in our analyses did not change the pattern of results.

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Figure captions

Figure 1. Illustration of the golf-putting task (Experiment 1). Participants performed putts from a distance of 150 cm.

Figure 2a. Illustration of the drawing task (Experiment 2). Prior to engaging in the dart-throwing task, participants were asked to draw a dart board on a square piece of paper.

Figure 2b. Illustration of the dart-throwing task (Experiment 2). Participants performed throws from a distance of 237 cm.

Figure 3. Two dart board drawings selected from the sample. The left drawing illustrates a low-detailed drawing in the low-power priming condition, whereas the right drawing illustrates a high-detailed drawing in the high-power priming condition.

Figure 4. Schematic illustration of the information density measure used in Experiment 2. The total number of cells affected by a participant's drawing served as indicator of information density of the drawing.