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Power can increase but also decrease cheating depending on what thoughts are validated☆

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ABSTRACT

Prior research has shown that power is associated with cheating. In the present research, we showcase that higher power can increase but also decrease cheating, depending on the thoughts validated by the feelings of power. In two experiments, participants were first asked to generate either positive or negative thoughts about cheating. Following this manipulation of thought direction, participants were placed in either high or low power conditions. After the two inductions, cheating was measured using different paradigms – assessing cheating intentions in relationships (Study 1) and over reporting performance for monetary gain (Study 2). Relative to powerless participants, those induced to feel powerful showed more reliance on the initial thoughts induced. Consequently, the effect of the direction of the thoughts on cheating was greater for participants with high (vs. low) power. Specifically, high power increased cheating only when initial thoughts about cheating were already favorable but decreased cheating when it validated unfavorable cheating relevant thoughts.

1. Introduction

Various popular media often present cases of people in high power positions being involved in all kinds of cheating behaviors, from prominent politicians such as the 42nd and 45th presidents of the United States, William (Bill) Clinton and Donald Trump, to senators and congressmen like John Ensign, John Edwards and Mark Souder, to prestigious and well-respected businessmen such as Mark Hurd, Hewlett-Packard's CEO and Harry Stonecipher, Boeing's CEO, who were involved in scandals involving extramarital affairs. In addition to cases of infidelity, lying and breaking the law seem commonplace for people in high power positions. For instance, UK Prime Minister, Boris Johnson, was caught hosting parties while the rest of the country was under a mandated COVID -19 lockdown (which ultimately led to his resignation) and prominent U.S. politicians such as California governor Gavin Newsome were also seen violating Covid policy.

Beyond this anecdotal evidence, research findings consistently support the association between feeling powerful and engaging in various types of cheating. For example, Lammers, Stapel, and Galinsky (2010) showed that participants induced to feel high (vs. low) power cheated more, as indicated by lying about the number obtained after the roll of dice, to increase their chances to win a lottery in an experimental study. In another experiment, Yap, Wazlawek, Lucas, Cuddy, and Carney (2013) first induced participants to feel high vs. low power. Participants were then promised $4 as compensation for their participation, but instead they were "accidentally" handed $8. Participants' cheating behavior was assessed in this paradigm based on whether they took this undeserved extra money without informing the researcher. As predicted, results revealed that participants assigned to the high power condition were significantly more likely to take the extra money compared to those in the low power condition. The authors replicated these results using other paradigms such as cheating on the results of a test. In sum, there is a consistent link in experimental studies between induced feelings of power and increased dishonest behavior, such as cheating to earn money

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(Lammers et al., 2010), breaking the rules of the study to gain money (Yap et al., 2013), telling lies (Boles, Croson, & Murnighan, 2000; Carney, Cuddy, & Yap, 2015), and being hypocritical (Lammers et al., 2010).

Mirroring research conducted using experimentally induced power, naturally occurring power has been also associated with cheating (Lammers et al., 2010; Lammers & Maner, 2016; Lammers, Stoker, Jordan, Pollmann, & Stapel, 2011; Leonidou, Aykol, Hadjimarcou, & Palihawadana, 2018; Yap et al., 2013). For instance, Lammers et al. (2011) found that participants higher in an organizational hierarchy engaged more in infidelity and reported having higher intentions to engage in infidelity in the future. Similarly, possessing a higher social class was associated with increased cheating behavior such as lying to obtain economic rewards (Dubois, Rucker, & Galinsky, 2015).

There are several possible interpretations of the documented association between power and cheating. First, power has been associated with acting impulsively (Anderson & Berdahl, 2002; Magee, Galinsky, & Gruenfeld, 2007), and also with an action orientation more generally, without considering the potential consequences of behavior (Galinsky, Gruenfeld, & Magee, 2003). Second, due to its association with confidence and pleasantness, power has been related to a reduction in thinking in general, not only about the consequences of actions but also about everything else (Briñol, Petty, Valle, Rucker, & Becerra, 2007a). This reduced thinking due to feeling powerful is consistent with the idea that powerful people act more impulsively. Third, power has been associated with cheating because power increases self-focus, neglecting the needs and feelings of others (Guinote, 2017). If power leads to cheating by reducing empathy, then the power-cheating effect should be especially likely to emerge in social settings. Fourth, power might lead to cheating because it introduces psychological distance (Lammers et al., 2011; Lee & Tiedens, 2001), making powerful people treat others as mere means to their ends. Fifth, power has been shown to prime greed (Piff, Stancato, Côté, Mendoza-Denton, & Keltner, 2012), making powerful people more likely to cheat because they have more incentive to do so. If power increases thoughts about greed, this might compensate for other potential thoughts that might be in the opposite direction.

Importantly, prior theories about the association between power and cheating would not expect power to interact with the nature of thoughts (pro or anti-cheating), but instead to mostly produce a main effect of power. For instance, if power produces more cheating through impulsivity (Anderson & Berdahl, 2002; Magee et al., 2007), then feeling powerful would just lead to more impulsive behavior and produce more cheating (an impulsive behavior) irrespective of the content of the thoughts about cheating at that time. Similarly, if power leads to lower levels of thinking (Briñol et al., 2007), then the direction of the thoughts about cheating would not be expected to make a difference in guiding cheating behavior. Finally, if power always leads to more selfish thoughts or more thoughts about greed (Piff et al., 2012), it should similarly induce more cheating regardless of other thoughts that are momentarily activated.

All of these prior accounts explain the effect of power on cheating based on the capacity of feelings of power to change either the amount of thinking (e.g., being less deliberative and more impulsive) or the nature of the thoughts people have (e.g., more thoughts about greed or about oneself). In past research, feelings of power preceded thinking and thus power had the capacity to affect that thinking. Indeed, power can increase impulsivity and affect the accessibility, the content, and amount of thinking, but that role of power is more likely to occur when feelings of power precede (rather than follow) the generation of thoughts (Briñol et al., 2007). In contrast, in the present research, we examine the impact of power when it follows thinking. Thus, we will keep the amount and nature of initial thoughts constant throughout the current experiments. Specifically, we will first have participants generate positive or negative thoughts about cheating, and then, after generating these thoughts, they will be assigned to different power conditions. As described next, under these circumstances, we propose that power will serve as a magnifier of whatever mental content is induced in people's minds. In particular, according to the self-validation theory (SVT; Briñol et al., 2007; Briñol & Petty, 2022), the confidence and pleasantness that emerge from power (Anderson & Galinsky, 2006; Gonzaga, Keltner, & Ward, 2008) can be misattributed to whatever thoughts are currently available in a person's mind, magnifying their impact on judgment and behavior.

Illustrating the SVT approach, DeMarree et al. (2012) conducted a set of studies showing that the incidental confidence stemming from feeling powerful can validate people's goals of either competition or cooperation, depending on which goal was made salient at the moment. For instance, in one study, participants were first primed with the goal to cooperate or compete and were subsequently asked to think of a past time in which they had high or low power. Power can validate mental contents (such as cooperation or competition) available in mind because it is associated with confidence (Briñol et al., 2007; see Briñol, Petty, Durso, & Rucker, 2017, for a review on self-validation by power). For the dependent variables, participants were involved in two economic decision-making tasks (i.e., the dictator game, Bolton, Katok, & Zwick, 1998; trust game, Berg, Dickhaut, & McCabe, 1995). High (vs. low) power validated previously primed goals increasing the impact of those goals on subsequent behavior. As a consequence, there was more goal congruent behavior (i.e., cooperative or competitive) in the economic tasks among individuals made to feel powerful than powerless. For participants induced to feel low power, goal primes did not impact task behavior. These findings showed that the feeling of perceived validity coming from power can magnify whatever mental content is accessible at the time, both increasing and decreasing cooperation or competition depending on what type of thoughts (e.g., goals) are validated to begin with (see, DeMarree, Briñol, & Petty, 2014; Hirsh, Galinsky, & Zhong, 2011, for additional examples).

According to SVT, the confidence that is misattributed to thoughts can emerge from incidental variables beyond power. For example, in recent research on vocal confidence by Guyer et al. (2023), participants were first asked to generate either positive or negative thoughts about a new campus policy. After this thought listing task, participants were told that their help was needed to test the sound quality of a recording device designed to register only a particular vocal tone, and were then randomly assigned to the high vs. low vocal pitch conditions. Consistent with previous research showing that low pitch is associated with confidence (Guyer et al., 2021; Guyer, Fabrigar, & Vaughan-Johnston, 2019; Jiang & Pell, 2017; Van Zant & Berger, 2020), results showed that when participants expressed their thoughts using low (vs. high) pitch, those thoughts had a greater impact on their attitudes towards the proposal. Beyond vocal pitch, participants also used their thoughts more in informing their attitudes when the low (vs. high) pitch sound came from the keyboard used to type their thoughts, and when it came from background noise.

Previous SVT findings have also demonstrated that perceptions of thought validity can be affected by a wide variety of incidental inductions beyond power and pitch, such as manipulations of feeling prepared or not (Carroll, Briñol, Petty, & Ketcham, 2020), being happy rather than sad (Huntsinger, 2013), being ready to attack (Blankenship, Nesbit, & Murray, 2013), nodding one's head vertically rather than horizontally (Briñol & Petty, 2003), being self-affirmed or not (Briñol, Petty, Gallardo, & DeMarree, 2006; Santos & Rivera, 2015), perceiving the thoughts as internally rather than externally originated (Gascó, Briñol, Santos, Petty, & Horcajo, 2018), and many others (see Briñol & Petty, 2022, for a review). These studies have shown that inductions following thinking can affect the perceived validity of whatever mental content is available at the time, including thoughts that are completely irrelevant to the nature of the induction.

In accord with this logic, we predicted that power would validate whatever people are induced to think about cheating, enhancing the impact of those initial thoughts on cheating-relevant behavior. As a result, we hypothesized that power would increase cheating behavior but only when initial thoughts about cheating were induced to be favorable. In contrast, when initial thoughts towards cheating would be manipulated to be unfavorable, we expect higher power to *reduce* cheating behavior. Specifically, in this later case, power was expected to increase the perceived validity of anti-cheating thoughts, making people more likely to act on them, thereby reducing cheating behavior. In the present research, we explore these predictions on cheating behavior by manipulating both the direction of initial thoughts about cheating and the subsequent levels of induced power.

Before moving to the present studies, it is important to note that previous findings on power and cheating are conceptually consistent with the idea that the effects of power can be moderated by other variables. For instance, prior research shows that power can lead to both increased and decreased unethical behavior depending on momentarily activated self vs. others-beneficial mindsets (Lammers, Galinsky, Dubois, & Rucker, 2015). Specifically, power increased unethical behavior when a self-beneficial mindset was subsequently activated but decreased unethical behavior when participants were led to focus on the others beneficial mindset following the power induction (Dubois et al., 2015). Additionally, previous research has shown that power can increase cheating behavior but only when a gain (vs. a loss) mindset is manipulated following the power induction. In the gain mindset power increased cheating, but in the loss mindset condition, high vs. low power did not affect cheating (Kim & Guinote, 2022a, 2022b; Lammers et al., 2010). Moreover, power has been found to either increase or decrease cheating as a function of other variables such as responsibility (Sassenberg, Ellemers, & Scheepers, 2012) and chronic moral identity (Chen, Lee-Chai, & Bargh, 2001; DeCelles, DeRue, Margolis, & Ceranic, 2012; Guinote, Weick, & Cai, 2012; Hirsh et al., 2011; for a review, see Lammers et al., 2015). In most of these studies, power was induced prior to manipulating different thoughts. Furthermore, these previous studies examined the effects of power on people who came to the research with different chronic tendencies. The current research also manipulates the thoughts that are made momentarily accessible in participants' minds but does so before manipulating power. Therefore, regardless of previously identified moderators, as the kinds of thoughts that are more accessible chronically (that were induced following the power induction), in the present studies we will manipulate the thoughts available in mind, to have control for the mental contents that are then validated by power via participants' random assignment.

2. Overview

In sum, the present research examines the extent to which induced power can increase reliance on cheating-relevant thoughts in accord with the predictions of the SVT. Across two experiments, we first manipulated thought direction (pro or anti-cheating) and then induced different levels of felt power. Following these two inductions, we assessed cheating using different paradigms. In the first study, participants were asked to report cheating intentions (e.g., being unfaithful to their significant other) and those intentions served as the dependent measure. In the second study, we followed a similar design, manipulating thought direction and power, but included a more objective measure of cheating behavior. Specifically, in this second study, the key-dependent measures were responses to two tasks in which participants were paid money according to their performance. In both tasks, participants were given the chance to exaggerate their performance to increase their monetary gains. In line with prior research, the discrepancy between objective performance and reported performance served as the measure of cheating.

Despite the differences in procedures and measures across studies, we expected thought direction to affect cheating, with participants induced to generate positive thoughts about cheating showing more cheating behavior compared to those induced to generate negative thoughts. More relevant, we predicted an interaction between thought direction and power. Consistent with the SVT, the direction of cheating thoughts was expected to have a greater impact under high (vs. low) perceived power conditions. To the extent that this interaction hypothesis is confirmed, the SVT theory would provide another potential mechanism by which enhanced power can both increase cheating (i.e., by validating salient positive thoughts about cheating) and also reduce cheating (i.e., when unfavorable thoughts towards cheating are salient before inducing power).

3. Study 1: power validates cheating thoughts affecting intentions to be unfaithful

The goal of Study 1 was to examine whether induced power can validate cheating-relevant thoughts and thereby affect intentions to cheat in a pattern consistent with the self-validation mechanism. Participants were first asked to generate either favorable or unfavorable thoughts regarding cheating. Then, power was manipulated by asking participants to think about a time they had previously felt powerful or powerless (Galinsky et al., 2003). As the dependent variable, participants' intentions to cheat on their partners were assessed (measure adapted from Lammers et al., 2011). We predicted cheating thoughts to guide cheating intentions, with participants induced to have favorable (vs. unfavorable) thoughts about cheating reporting more cheating intentions. Moreover, we hypothesized that the impact of cheating thoughts on behavioral intention will be further moderated by induced power, with high power polarizing the impact of initial thoughts on cheating intentions.

3.1. Method

3.1.1. Participants and design

Participants were 308 (59.4% females) Greek university students who received partial fulfillment of a course requirement for their participation. The age of participants ranged from 18 to 63 (M_{age} = 32.19, SD = 9.55). Prior to beginning, participants were informed that a prerequisite for their participation was to be in a relationship with a significant other. Right after that, we obtained informed consent and assured participants of the anonymity and confidentiality of their responses. A *sensitivity* power analysis was conducted using G*Power (Faul, Erdfelder, Lang, & Buchner, 2007), which indicated that the obtained sample (N = 308) with our design was able to detect effect sizes larger than $\eta_p^2 = 0.025$ with a power of 0.80. All data and code can be found at https://osf.io/xacb3/?view_only=0c30ac4ce04b46d4b04badd207ba9bd6.

3.1.2. Procedure

Upon arrival, participants were told that they would be taking part in a study about personality traits. They were told that their responses were completely anonymous and would not be used beyond the research purposes. Participants were instructed to read all materials carefully and to pay close attention to the tasks to foster high thinking conditions, because metacognitive processes (such as the SVT) are more likely to operate when thinking is relatively high (Briñol & Petty, 2022). First, participants were asked to generate either positive or negative thoughts towards cheating. Following this, they were induced to feel powerful or powerless using a memory task in which they had to recall past episodes of high or low power, respectively. Next, participants were asked to complete the dependent measure by indicating their behavioral intentions towards cheating on their partner. Finally, participants completed a power manipulation check along with some socio-

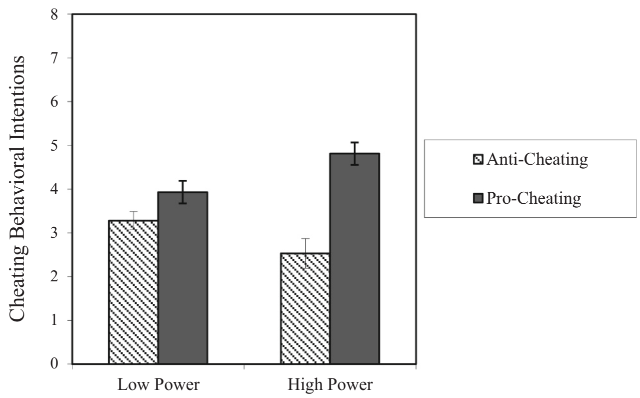

Fig. 1. Cheating behavioral intentions as a function of cheating thoughts and power. Error bars represent 95% confidence interval.

demographic questions and were debriefed and dismissed. None of the participants expressed any concern afterward. In line with the call for transparency (Simmons, Nelson, & Simonsohn, 2012), we report how we determined our sample size, all data exclusions (if any), all manipulations, and all measures in the study.

3.1.3. Independent variables

Cheating Thoughts. Participants were first asked to list either favorable or unfavorable thoughts about cheating. Specifically, in the favorable cheating thoughts condition, participants were asked to write down three positive thoughts that people, including themselves, might experience if they were involved in cheating behavior. In the unfavorable condition, they were requested to list three negative thoughts that people, including themselves, could experience in the same context. Instructions for this induction were adapted from those used by Killeya and Johnson (1998). Asking participants to generate positive or negative thoughts is a reliable way to bias the direction of thoughts towards the topic for which thoughts are generated (e.g., Briñol et al., 2018; Briñol & Petty, 2003).

Power. Immediately after the thought listing task, a power manipulation was used. As part of an ostensibly different study to develop live event inventories, participants were asked to write a brief essay regarding instances where they experienced high or low power (Galinsky et al., 2003). Participants in the high power condition described an experience when they had power over another person or persons (i.e., they had control over their outcomes or evaluations). Participants in the low power condition described an experience when someone else had power over them. This method of experimentally manipulating power is one of the most used procedures to influence feelings of power (e.g., Briñol et al., 2007; see also Galinsky, Rucker, & Magee, 2015).

3.1.4. Dependent measures

Cheating Thoughts Valence. Two independent judges, unaware of the experimental conditions, coded each participant's written thought with respect to whether it was favorable, unfavorable, or neutral towards cheating. Two indices of thought valence, one per judge, were created for each participant by subtracting the total number of unfavorable thoughts generated from the number of favorable thoughts listed. To control for verbal skills and other factors, this difference score was then divided by the total number of thoughts (Petty, Cacioppo, & Goldman, 1981; Lamprinakos, Magrizos, Kostopoulos, Drossos, & Santos, 2022). The two indices were averaged into one measure given the high inter-correlation (α = 0.95). This averaged measure served as a thought valence manipulation check.

Felt Power. To assess the success of our power manipulation, participants were asked to rate the degree of power that they were experiencing after writing the essay describing an experience characterized by either high or low power, using a 9-point scale (1 = I feel no power at all; 9 = I feel extremely powerful; adapted from Durso, Briñol, & Petty, 2016).

Cheating Behavioral Intentions. We asked participants to indicate the likelihood of being unfaithful to their partner. Specifically, we measured *cheating behavioral intentions* by asking: "Would you ever consider cheating on your partner?" and "How likely would it be for you to cheat on your partner?" Participants reported their intentions using two 9-point scales (1 = *definitely not*; 9 = *yes, I might*) and (1 = *totally unlikely*; 9 = *totally likely*). These items were adopted from previous research assessing the effects of power on behavioral intentions towards infidelity (Lammers et al., 2011). Responses on the two items were consistent, $r(305) = 0.63$, $p < .001$, and were averaged to form a single index of overall cheating behavioral intentions for each participant.

3.2. Results

3.2.1. Cheating thoughts valence

External ratings of the favorability of the cheating thoughts listed by participants were submitted to a 2 (cheating thoughts: favorable vs. unfavorable) × 2 (power: high vs. low) ANOVA. As expected, results showed a significant main effect of cheating thoughts on thought valence, such that thoughts listed by participants in the favorable cheating thoughts condition were perceived as more favorable (M = 0.87, SD = 0.25) than thoughts listed by participants in the unfavorable cheating thoughts condition (M = −0.77, SD = 0.31), $F(1, 304) = 2408.64$, $p < .001$, $\eta_p^2 = 0.89$. This finding shows that the manipulation of cheating thoughts valence was successful. As expected, there was no significant main effect of power $F(1, 304) = 0.207$, $p = .650$, $\eta_p^2 = 0.001$, nor a significant interaction between the variables $F(1, 304) = 0.398$, $p = .529$, $\eta_p^2 = 0.001$.

3.2.2. Felt power

The same 2 × 2 ANOVA as above showed that participants who were assigned to the high power condition reported feeling more powerful (M = 6.19, SD = 2.18) than participants who were assigned to the low power condition (M = 4.61, SD = 2.31), $F(1,303) = 21.65$, $p < .001$, $\eta_p^2 = 0.07$, indicating that the manipulation of power was successful. In addition, an unexpected main effect of cheating thoughts emerged, $F(1, 303) = 13.87$, $p < .001$, $\eta_p^2 = 0.04$, in that participants reported greater felt power in the favorable cheating thoughts condition (M = 5.93, SD = 2.42) than in the unfavorable condition (M = 4.62, SD = 2.08). As expected, no significant interaction between the variables $F(1, 303) = 2.23$, $p = .14$, $\eta_p^2 = 0.007$ emerged.

3.2.3. Cheating behavioral intentions

The same 2 × 2 ANOVA was conducted on cheating behavioral intentions. This revealed a main effect of the direction of initial cheating thoughts. Participants asked to generate favorable cheating thoughts reported greater intentions to cheat on their partner (M = 4.47, SD = 2.36) compared to those in the unfavorable cheating thoughts condition (M = 3.00, SD = 2.07), $F(1, 304) = 29.52$, $p < .001$, $\eta_p^2 = 0.09$. The main effect of the power induction on cheating behavioral intentions was not significant $F(1, 304) = 0.06$, $p = .80$, $\eta_p^2 < 0.001$.

As expected, a significant cheating thoughts × power interaction emerged, $F(1, 304) = 9.09$, $p = .003$, $\eta_p^2 = 0.03$. Decomposition of the interaction indicated that power polarized the effect of cheating thoughts on cheating behavioral intentions. As illustrated in Fig. 1, for the high power condition, participants with favorable cheating thoughts reported significantly greater cheating intentions (M = 4.81, SD = 2.39) compared to participants in the unfavorable cheating thoughts condition (M = 2.54, SD = 1.90), $F(1, 304) = 33.01$, $p < .001$, $\eta_p^2 = 0.10$. On the other hand, for participants in the low power condition, the cheating intentions difference between favorable (M = 3.93, SD = 2.20) and unfavorable thoughts was reduced (M = 3.28, SD = 2.13), $F(1, 304) = 3.18$, $p = .08$, $\eta_p^2 = 0.01$.

Decomposing this interaction differently, for participants in the favorable cheating thoughts condition who were placed in the high power condition, their reported cheating intentions were significantly greater ($M = 4.81$, $SD = 2.39$) than those in the low power condition ($M = 3.39$, $SD = 2.20$), $F(1, 304) = 7.06$, $p = .008$, $\eta_p^2 = 0.02$. In the unfavorable cheating thoughts condition, their reported cheating intentions were marginally lower for high ($M = 2.54$, $SD = 1.90$) vs. low power conditions ($M = 3.28$, $SD = 2.13$), $F(1, 304) = 3.07$, $p = .081$, $\eta_p^2 = 0.01$.[1]

Although all participants were explicitly asked to have a significant other in their lives as a prerequisite to participate in the study, we included a check at the end of the study to identify the percentage of those currently involved in a relationship at the time they came to the lab. Of the total sample (308 participants), 103 (33.4%) participants reported not being involved in a relationship at the time of the experiment, and 62 (20.1%) participants did not respond to this item. We contrast coded participants currently involved in a relationship ($-1 =$ participants that were not currently involved in a relationship, $1 =$ participants that were currently involved in a relationship) and we included it as an additional predictor in a new analysis. The 2 (cheating thoughts: favorable vs. unfavorable) × 2 (power: high vs. low) × 2 (currently involved in a relationship: yes vs. no) ANOVA conducted on cheating intentions revealed no main effect of relationship status, $F(1, 238) = 0.014$, $p = .907$ $\eta_p^2 < 0.001$. Also, the ANOVA revealed that the significant two-way interaction between thought direction and power remained significant, $F(1, 238) = 7.626$, $p = .006$ $\eta_p^2 = 0.03$, and was not further qualified by the additional predictor regarding whether participants were in a relationship or not, $F(1, 238) < 0.001$, $p = .986$ $\eta_p^2 < 0.001$. Finally, while the two way interaction between thought direction and power did not reach significance for participants who reported not being in a relationship, $F(1, 99) = 2.751$, $p = .100$ $\eta_p^2 = 0.03$, the effect was directionally consistent. Most relevant, when those participants were excluded from the analysis, the key two-way interaction between thought direction and power remained significant, $F(1, 139) = 5.904$, $p = .016$ $\eta_p^2 = 0.04$.[2]

3.3. Discussion

This study showed that power influenced behavioral intentions towards infidelity in a way consistent with the proposed metacognitive process of power affecting thought reliance. First, the direction of thoughts about cheating was manipulated and affected intentions to cheat. Specifically, participants who were assigned to generate favorable cheating thoughts reported greater intentions to cheat on their partner compared to participants who generated unfavorable cheating thoughts. Moreover, and crucial to our conceptualization, power moderated the effects of cheating thoughts on cheating behavioral intentions. As expected, high experienced power polarized the effect of cheating thoughts on cheating behavioral intentions relative to low experienced power. That is, for participants experiencing low power, the difference between generating favorable and unfavorable thoughts on cheating intentions was smaller than for participants experiencing high power. Described differently, when power validated favorable thoughts about cheating, participants reported increased intentions towards being unfaithful (replicating previous findings in this domain, but through a different process). Additionally, and crucial to our hypothesis, the opposite pattern was observed when unfavorable thoughts towards cheating were generated in the first place. When participants felt a sense of increased power, unfavorable thoughts towards cheating tended to lead to decreased behavioral intentions towards being unfaithful. To enhance convergent validity across inductions and measures, the next study examines whether our hypothesis of the effect of cheating thoughts and power will hold for other types of cheating behavior.

4. Study 2: power validates thoughts affecting actual cheating

In the second experiment, we aimed to replicate and extend the results from the previous study, using a more robust measure of behavioral cheating, that is lying on performance in order to gain money. Similar to Study 1, participants were first asked to generate either favorable or unfavorable thoughts about cheating. Following the thought direction manipulation, participants' felt power was manipulated by asking them to recall and describe in detail an event in which they had recently felt powerful or powerless. Participants in this study were given the chance to be involved in cheating behavior by exaggerating their performance on two tasks in order to maximize gaining of actual money.

As in Study 1, we expected cheating-relevant thoughts to guide cheating behavior, with more favorable thoughts about cheating being associated with increased cheating behavior. Moreover, we expected this relationship to be further moderated by power, with high (vs. low) power increasing the impact of the initial thought direction induction on cheating.

4.1. Method

4.1.1. Participants and design

Participants were 345 (42.9% females) on Amazon's Mechanical Turk website (www.mturk.com), and they were all English speakers. The age of participants ranged from 18 to 76 ($M_{age} = 35.70$, $SD = 11.24$). The experiment was a 2 (cheating thoughts: favorable vs. unfavorable) × 2 (power: high vs. low) between-subjects factorial design. A *sensitivity* power analysis was conducted using G*Power (Faul et al., 2007), which indicated that the obtained sample ($N = 345$) with our design was able to detect effect sizes larger than $\eta_p^2 = 0.022$ with a power of 0.80. Given the effect size for the critical two-way interaction in Study 1 was $\eta_p^2 = 0.03$, this power was reasonable.

4.1.2. Procedure

The general behavioral setup of this experiment involves a multiple-question task for which participants are paid according to their performance. Participants took part in the study individually. They received \$0.70 for their participation and had the chance to win up to \$4 in cash as well as lottery tickets for a \$25 Amazon coupon, depending on their performance on a variety of tasks. All materials were presented on computers using Qualtrics software. Participants were instructed to read all material carefully, to make sure that they understood the ways in which they could claim the bonuses associated with the study. This instruction was intended to foster high thinking conditions. Participants were randomly assigned to generate either favorable or unfavorable thoughts towards cheating behavior. Participants used the computer keyboard to enter their thoughts into a series of boxes that appeared on the computer screen one at a time.

Following the thought direction manipulation, participants were told that they were going to take part in a separate study, related to memory. As in Study 1, they were asked to recall a recent event in which they either possessed power over someone else or in which someone else possessed power over them. Next, all participants engaged in two different problem-solving tasks (matrices and anagrams). As explained below, we used two dependent measures assessing cheating behavior to generalize across outcomes and to ensure that our results are not context dependent. For example, some participants might lack enough motivation or ability to fluently conduct mathematical calculations during the study (our matrices DV) and they might have more ease or familiarity with solving anagrams, or vice versa. To avoid these issues, the two

[1] Additional analysis showed that the cheating thoughts × power interaction on cheating intentions was not further moderated by gender, $F(1,300) = 0.171$, $p = .68$, $\eta_p^2 = 0.001$. Moreover, the main effect of gender on cheating intentions did not reach significance, $F(1, 300) = 2.684$, $p = .102$, $\eta_p^2 = 0.009$.

[2] The fact that being in a relationship did not moderate the results could mean that participants not currently in a relationship were responding with respect to a past relationship or a future one.

dependent measures tapped into people's different skills (mathematical or verbal).

Finally, participants completed a power manipulation check and responded to sociodemographic variables and were then debriefed and dismissed. None of the participants expressed any concerns about the research or guessed the hypothesis when questioned during the study, prior to the debriefing. Similar to Study 1, to enhance the transparency of our results we report how we determined our sample size, all data exclusions (if any), all manipulations, and all measures in the study (Simmons et al., 2012).

4.1.3. Independent variables

Cheating Thoughts. The thought direction manipulation was identical to that of Study 1. Participants were first asked to list either favorable or unfavorable thoughts that people, including themselves, might experience if they were involved in cheating behavior. Specifically, in the favorable cheating thoughts condition, participants were asked to write down three positive thoughts that people, including themselves, might experience if being involved in cheating behavior, whereas in the unfavorable cheating thoughts condition, they were requested to list three negative thoughts that people, including themselves, might experience if being involved in cheating behavior. Participants could take as long as they needed and stop whenever they wanted. This manipulation came before the power induction, so it was expected to produce equivalent thoughts across levels of random assignment to experimental conditions.

Power. We manipulated feelings of power using the same memory retrieval paradigm as in Study 1. After listing their thoughts regarding cheating, participants were instructed to recall incidents in their lives related to high or low interpersonal power as part of ostensibly different tasks.

4.1.4. Dependent measures

Cheating Thoughts Valence. As in Study 1, two independent judges, unaware of the experimental conditions, coded each participant's thought written as favorable, neutral or unfavorable towards cheating. Two indices of thought valence, one per judge, were created for each participant by subtracting the total number of negative thoughts generated from the number of positive thoughts that the participant had listed, and this difference score was then divided by the total number of message-related thoughts (Cacioppo & Petty, 1981). The two indices were averaged into one measure of thought valence ($\alpha = 0.97$).

Felt Power. To assess the effectiveness of our power manipulation and in line with Study 1, participants were asked to rate the degree of power they felt after writing the essay describing an experience characterized by either high or low power, using a 9-point scale (1 = *I feel no power at all*; 9 = *I feel extremely powerful*).

Cheating Behavior (Matrices). Right after completing the thought direction and the power inductions, participants were introduced to the first behavioral cheating assessment based on a problem-solving task initially developed by Mazar, Amir, and Ariely (2008). The key notion behind this paradigm is that participants have the opportunity to falsely report higher performance levels in the task in order to earn more money. Specifically, participants were presented with 20 matrices on the computer screen. Each matrix contained three rows and four columns of three-digit numbers (e.g., 5.19). Participants were instructed to find the two numbers in each matrix that summed up to a perfect 10.00. Once the experiment started, participants had 5 min to complete the task. Instructions and an example were presented at the top of the screen. Participants were told they would earn $0.20 for each correct solution.

The computer kept track of their performance, and on the last screen it summarized how many matrices the participant solved correctly. To provide participants with an opportunity to engage in actual cheating in order to raise their earnings, we adopted the computer-glitch paradigm originally introduced by Vohs and Schooler (2008) (see also Lu et al., 2017). That is, after completing the task, participants received a system failure screen, informing them that the Qualtrics program had a glitch, and the correct answers were not stored properly in the system. Due to that, participants were told to report their performance in a box provided within the same screen, to receive payment based on their self-reported performance after completing the task. A cheating index was created for each participant by subtracting the number of the actually solved matrices from the number of the solved matrices that each participant reported. This enabled us to assess whether and to what extent participants had overstated their performance. We selected this type of task because it is a search task, and though it can take some time to find the right answer, when found, the respondents could unambiguously evaluate whether they had solved the question correctly (assuming that they could add two numbers to 10 without error), without the need for a solution sheet and the possibility of a hindsight bias (Fischhoff & Beyth, 1975).

Cheating Behavior (Anagrams). As previously mentioned, in order to enhance the external validity of our results and to ensure that our results are not context dependent, we used a second assessment of cheating behavior. This measure was introduced as an anagram task adapted from Goldsmith and Dhar (2013) and Goldsmith, Roux, and Ma (2018). For this task, participants were instructed to unscramble five anagrams (described as "word jumbles"). Participants then saw an example of word jumble ("ETKBAS") and its correct answer ("BASKET"). The anagrams were intended to be of varying difficulty but solvable by most participants (TABE, ARTST). The final three anagrams were intended to be the most difficult (CERIX, JAREBU, and BALEFY). To avoid deception, these anagrams could be used to form English language words (xeric, abjure, and labefy, respectively). Participants were further informed that each anagram they solved would provide them with 10 entries into a lottery for a $25 bonus payment. Like previous cheating behavioral assessments, we employed the computer-glitch paradigm adopted by Lu et al. (2017) to provide participants with the opportunity to cheat, raising their lottery entries. Specifically, after completing the task participants received a system failure screen, informing them that the program had a glitch, and the correct answers were not stored. For that reason, participants were instructed to report their performance on a box provided within the same screen, to receive payment based on their self-reported performance. Similar to the previous measure, a cheating index was created for each participant by subtracting the number of the actually solved anagrams from the number of the solved anagrams that each participant had reported. To further simplify the cheating assessments and minimize confusion, participants, right after completing each of the two cheating assessing tasks, received the same system failure screen relevant to the specific task and were asked to report their performance on the specific task only.[3]

4.2. Results

4.2.1. Cheating thoughts valence

Ratings of thought favorability were submitted to a 2 (cheating thoughts: favorable vs. unfavorable) × 2 (power: high vs. low) ANOVA. As predicted, there was a significant main effect of thought direction, such that thoughts listed by participants in the favorable thoughts

[3] The reason behind using the same glitch for both tasks has to do with authenticity. The specific glitch is precisely the one presented in the platform (Qualtrics), when respondents' answers are not stored (for example when internet reception quality is low). We presented the same glitch right after the completion of each task and we asked participants to self-report their performance to safeguard against any memory driven biases regarding performance. Finally, it is worth mentioning that during the debriefing, none of the participants expressed any concerns in this regard. We acknowledge that being suspicious regarding this procedure would have led to a reduction in cheating and potentially minimize our effects, but this is not consistent with our results in both tasks.

condition were perceived as more favorable towards cheating (M = 0.75, SD = 0.44) compared to those listed by participants in the unfavorable thought condition (M = −0.80, SD = 0.29), F(1, 341) = 1489.19, $p < .001$, $\eta_p^2 = 0.81$. This finding shows that the manipulation of cheating thoughts valence was successful. As expected, there was no significant main effect of power F(1, 341) = 0.120, p = .730, $\eta_p^2 < 0.001$, nor a significant interaction between the variables F(1, 341) = 0.102, p = .749, $\eta_p^2 < 0.001$.

4.2.2. Felt power

A 2 (cheating thoughts: favorable vs. unfavorable) × 2 (power: high vs. low) ANOVA on felt power revealed, as expected, a main effect of power on the measure of felt power. Specifically, participants who were assigned to the high power condition reported feeling more powerful (M = 5.88, SD = 2.20) compared to participants who were assigned to the low power condition (M = 4.92, SD = 2.49), F(1, 341) = 14.21, $p < .001$, $\eta_p^2 = 0.04$. This finding shows that the manipulation of power was successful. As expected, there was no significant main effect of cheating thoughts F(1, 341) = 0.13, p = .72, $\eta_p^2 < 0.001$, nor a significant interaction between the variables F(1, 341) = 0.17, p = .68, $\eta_p^2 = 0.001$.

4.2.3. Cheating behavior (matrices)

A 2 (cheating thoughts: favorable vs. unfavorable) × 2 (power: high vs. low) ANOVA on the matrices-cheating behavioral task revealed a main effect of cheating thoughts on cheating behavior. Participants in the favorable cheating thoughts generation condition cheated more (by reporting more unsolved matrices as solved) (M = 6.34, SD = 6.72) compared to those in the unfavorable cheating thoughts condition (M = 3.48, SD = 5.18), F(1, 341) = 19.75, $p < .001$, $\eta_p^2 = 0.06$. As expected, the main effect of the power induction on cheating was not significant F(1, 341) = 0.13, p = .72, $\eta_p^2 < 0.001$. Most importantly, a significant cheating thoughts × power interaction on cheating behavior emerged, F(1, 341) = 5.48, p = .020, $\eta_p^2 = 0.02$. Decomposition of the interaction indicated that power polarized the effect of cheating thoughts on cheating behavior. As illustrated in Fig. 2, for the high power condition, participants in the favorable cheating thoughts condition engaged in significantly greater cheating behavior (M = 7.04, SD = 6.91) compared to participants in the unfavorable cheating thoughts condition (M = 2.64, SD = 4.21), F(1, 341) = 22.55, $p < .001$, $\eta_p^2 = 0.06$. On the other hand, for participants in the low power condition, there was no significant difference on cheating behavior between those in the favorable cheating thoughts condition (M = 5.76, SD = 6.53) and those in the unfavorable cheating thoughts condition (M = 4.39, SD = 5.96), F(1, 341) = 2.26, p = .13, $\eta_p^2 = 0.007$.

Decomposing the same interaction based on cheating thoughts favorability, we found that for participants in the favorable cheating thoughts condition who were placed in the high power condition, cheating behavior was significantly greater (M = 7.04, SD = 6.91) compared to participants in the low power condition (M = 5.76, SD = 6.53), F(1, 341) = 3.52, p = .06, $\eta_p^2 = 0.01$. On the other hand, in the unfavorable cheating thoughts condition, cheating behavior was reduced for the participants placed in the high power condition (M = 2.64, SD = 4.21) compared to participants in the low power condition (M = 4.39, SD = 5.96), although the difference did not reach significance, F(1, 341) = 2.04, p = .154, $\eta_p^2 = 0.006$.[4]

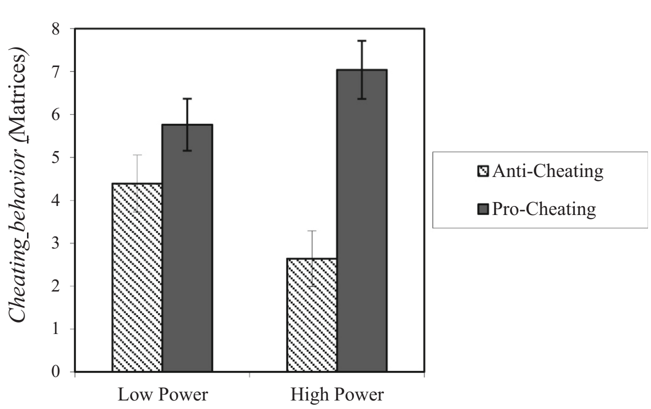

Fig. 2. Cheating behavior (matrices) as a function of cheating thoughts and power. Error bars represent 95% confidence interval.

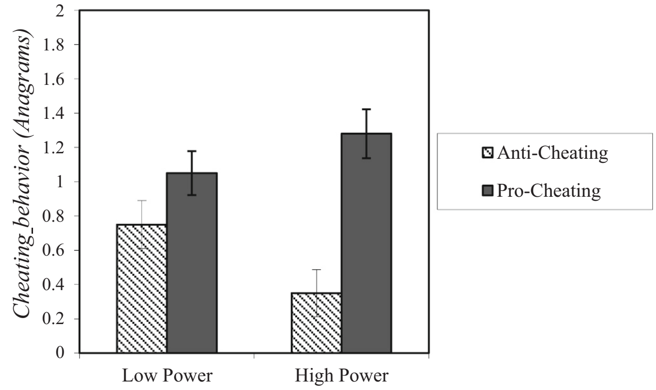

Fig. 3. Cheating behavior (anagrams) as a function of cheating thoughts and power. Error bars represent 95% confidence interval.

4.2.4. Cheating behavior (anagrams)

A 2 × 2 ANOVA on the second cheating behavioral task (anagrams) again revealed a main effect of cheating thoughts on cheating behavior. Participants in the favorable cheating thoughts condition cheated more (by reporting more unscrambled anagrams as solved) (M = 1.16, SD = 1.43) compared to those in the unfavorable cheating thoughts condition (M = 0.54, SD = 1.08), F(1, 341) = 20.22, $p < .001$, $\eta_p^2 = 0.06$. Moreover, a significant cheating thoughts × power interaction on cheating behavior emerged, F(1, 341) = 5.21, p = .023, $\eta_p^2 = 0.02$. Decomposition of the interaction indicated that power polarized the effect of cheating thoughts on cheating behavior. As illustrated in Fig. 3, for the high power condition, participants in the favorable cheating thoughts condition engaged in significantly greater cheating behavior (M = 1.28, SD = 1.53) compared to participants in the unfavorable cheating thoughts condition (M = 0.35, SD = 0.92), F(1, 341) = 22.52, $p < .001$, $\eta_p^2 = 0.06$. On the other hand, for participants in the low power condition, there was no significant difference in cheating behavior between those in the favorable cheating thoughts condition (M = 1.05, SD = 1.34) and those in the unfavorable cheating thoughts condition (M = 0.75, SD = 1.21), F(1, 341) = 2.50, p = .12, $\eta_p^2 = 0.007$.

Decomposing the same interaction based on cheating thoughts favorability, for participants in the favorable cheating thoughts condition who were placed in the high power condition, cheating behavior was greater (M = 1.28, SD = 1.53) compared to participants in the low power condition (M = 1.05, SD = 1.34), although the difference did not reach significance, F(1, 341) = 1.45, p = .23, $\eta_p^2 = 0.004$. On the other hand, in the unfavorable cheating thoughts condition, cheating behavior was significantly lower for the participants placed in the high power condition (M = 0.35, SD = 0.92) compared to participants in the low power condition (M = 0.75, SD = 1.21), F(1, 341) = 4.03, p = .04, η_p^2 =

[4] The two-way interaction between thought direction and power was not significant for objective performance, F(1, 341) = 0.87, p = .35, $\eta_p^2 = 0.003$. Similarly, and as expected, the main effect of the power induction on objective performance was not significant. F(1, 341) = 0.30, p = .86, $\eta_p^2 < 0.001$. An unexpected main effect of cheating thoughts emerged on objective performance, F(1, 341) = 8.07, p = .005, $\eta_p^2 = 0.02$, in that participants performed worse in the favorable cheating thoughts condition (M = 2.69, SD = 3.41) than in the unfavorable condition (M = 3.83, SD = 4.06).

0.01. Finally, as expected, the main effect of the power induction on the cheating behavioral outcome was not significant $F(1, 341) = 0.38$, $p = .54$, $\eta_p^2 = 0.001$.[5,6,7]

4.3. Discussion

In this second study, we extended the previous results by moving from cheating intentions to actual cheating behavior for profit maximizing. Using a behavioral outcome, the results of this second study showed one more time that high (vs. low) power participants exhibited greater cheating behavior only when they were induced to generate initial favorable thoughts towards cheating. The opposite was true when powerful participants generated unfavorable cheating-relevant thoughts to begin with. In that case, high (vs. low) power participants cheated less, reversing the most frequently observed effect in this domain. To conclude, the convergent experimental evidence across the two studies reveals that power can lead to either more or less cheating, depending on whether salient thoughts about cheating while feeling powerful are favorable or unfavorable, respectively.

5. General discussion

Mass media are buzzing with stories about powerful people being involved in extramarital affairs, cheating, or lying. The present research provides an initial step in providing evidence for predictions about such behaviors based on the self-validation theory (SVT; Briñol & Petty, 2022). This theory allows a new understanding of when and why power could lead to different (even opposite) cheating-related outcomes. Based on this SVT framework, we expected and found that high power increases cheating intentions and behavior only when individuals have generated favorable thoughts about cheating. When power followed (rather than preceded) thinking, we were able to replicate the most common finding in this domain, specifying the conditions in which it is more likely to emerge, and providing a different metacognitive interpretation. However, when individuals' thoughts about cheating were unfavorable, high power validated these anti-cheating thoughts, thus leading to less cheating behavior. As noted, we provide a novel explanation for the obtained result deriving from a metacognitive framework.

Convergent evidence in line with our conceptualization occurred irrespective of whether participants expressed their intentions to be unfaithful to their partner (Study 1) or cheated on an actual problem-solving task to increase the amount of money they received (Study 2): the impact on behavior and behavioral intentions remained consistent. High (vs. low) power increased cheating intentions/behavior when thoughts about cheating were favorable but decreased cheating intentions/behavior when thoughts were unfavorable.

In sum, the current studies extend prior work by demonstrating that power can increase or decrease cheating as a function of thought direction towards cheating (i.e., favorable vs. unfavorable), and do so in a way predicted by the metacognitive process of thought validation based on the distinction between thought direction and perceived thought validity. Therefore, rather than power only operating through impulsivity or by changing the amount and nature of thoughts, as suggested by previous research, we propose that feelings of power can also operate by validating thoughts, at least in the conditions tested in the present research (i.e., when power follows thinking and the amount of thinking is relatively high). It is important to note that in most of the previous studies reviewed, power was induced prior to thought generation and thus was able to provoke changes in thinking (amount of thinking, content of thinking, nature of thinking, accessibility of thoughts etc.).[8] Nonetheless, in the present research, those dimensions were kept constant across experimental conditions by asking all participants to generate the same number and content of thoughts, while we varied exclusively the direction of thoughts about cheating. Moreover, the power induction followed rather preceded thought generation. In this approach, power is unlikely to impact properties of thoughts (accessibility, amount, content, etc.) because thoughts are generated prior to the power induction.

Put differently, if power had been induced before (rather than after) thought generation in the current studies, we would have expected power to affect the number and/or content of the subsequent thoughts generated as shown in previous research varying timing of inductions (Briñol et al., 2007). That is, according to the SVT and prior research, power has different effects depending on when power is induced in the process. For instance, before generating thoughts, people tend to assess their confidence in their existing beliefs to determine how much thinking they will exert in coming up with thoughts. If people have confidence in their existing views, they are less inclined to generate thoughts or to deeply process new information. Therefore, experiencing high power before thinking should reduce the number of thoughts generated compared to low power (consonant also with prior

[5] The cheating thoughts × power interaction was not significant for objective performance in solving anagrams $F(1, 341) = 0.70$, $p = .41$, $\eta_p^2 = 0.002$. Similarly and as expected, the main effect of the power induction on objective performance was also not significant $F(1, 341) = 2.62$, $p = .11$, $\eta_p^2 = 0.008$. An unexpected main effect of cheating thoughts emerged on objective performance, $F(1, 341) = 7.59$, $p = .006$, $\eta_p^2 = 0.02$, in that participants performed better in the unfavorable cheating thoughts condition ($M = 2.42$, $SD = 1.09$) than in the unfavorable condition ($M = 2.10$, $SD = 1.15$).

[6] We collapsed the two behavioral tasks together. The new dependent measure was participants' overall cheating behavior in both the matrices and anagrams tasks combined. Cheating behavioral responses on the tasks were standardized, with higher numbers representing greater cheating. Responses on cheating behavioral tasks were moderately intercorrelated, $r(343) = 0.53$, $p < .001$, and were averaged to form a composite score of participants' overall cheating behavior. A 2 × 2 ANOVA on overall cheating behavior revealed a main effect of cheating thoughts on cheating behavior. Participants in the favorable cheating thoughts condition cheated more ($M = 0.22$, $SD = 0.97$) compared to those in the unfavorable cheating thoughts condition ($M = -0.24$, $SD = 0.68$), $F(1, 341) = 26.81$, $p < .001$, $\eta_p^2 = 0.07$. Moreover, a significant cheating thoughts × power interaction on cheating behavior emerged, $F(1, 341) = 7.17$, $p = .008$, $\eta_p^2 = 0.02$. Decomposition of the interaction indicated that power polarized the effect of cheating thoughts on cheating behavior. Specifically for the high power condition, participants in the favorable cheating thoughts condition engaged in significantly greater cheating behavior ($M = 0.33$, $SD = 1.05$) compared to participants in the unfavorable cheating thoughts condition ($M = -0.38$, $SD = 0.54$), $F(1, 341) = 30.24$, $p < .001$, $\eta_p^2 = 0.08$. On the other hand, for participants in the low power condition, there was no significant difference in cheating behavior between those in the favorable cheating thoughts condition ($M = 0.14$, $SD = 0.90$) and those in the unfavorable cheating thoughts condition ($M = -0.09$, $SD = 0.77$), $F(1, 341) = 3.19$, $p = .08$, $\eta_p^2 = 0.009$. Decomposing the same interaction based on thought direction, for participants in the favorable cheating thoughts condition who were placed in the high power condition, cheating behavior tended to be greater ($M = 0.33$, $SD = 1.05$) compared to participants in the low power condition ($M = 0.14$, $SD = 0.90$), but that difference was statistically non-significant, $F(1, 341) = 2.33$, $p = .13$, $\eta_p^2 = 0.007$. On the other hand, in the unfavorable cheating thoughts condition, cheating behavior was lower for the participants placed in the high power condition ($M = -0.38$, $SD = 0.54$) compared to participants in the low power condition ($M = -0.09$, $SD = 0.77$), $F(1, 341) = 5.06$, $p = .03$, $\eta_p^2 = 0.02$ Finally, as expected, the main effect of the power induction on cheating behavioral outcome was not significant $F(1, 341) = 0.32$, $p = .57$, $\eta_p^2 = 0.001$.

[7] In line with the findings of experiment 1, gender did not further moderate the cheating thoughts × power interaction on the combined cheating outcome, $F(1, 308) = 0.010$, $p = .92$, $\eta_p^2 < 0.001$. Additionally, a main effect of gender on cheating outcome occurred, $F(1, 308) = 3.050$, $p = .05$, $\eta_p^2 = 0.019$, with male participants cheating more ($M = 0.69$, $SD = 0.88$) than female participants ($M = -0.13$, $SD = 0.82$).

[8] To the best of our knowledge, there is only one exception in which the induction of power followed the measurement of other variables in the domain of cheating (Kim & Guinote, 2022a).

interpretations according to which high power affects thinking via impulsivity). Conversely, when power is induced after generating thoughts (as in the present studies), power affects the perceived validity of those previously generated thoughts and thus affects the extent to which individuals rely on them.

Additionally, it is worth mentioning that while previous studies examined the effects of power on people who come with different mindsets and different chronic tendencies (e.g., Chen et al., 2001; DeCelles et al., 2012; Guinote et al., 2012), the SVT can potentially explain those findings if the power validated people's chronic tendencies enhancing their impact. Importantly, the current research is the first to manipulate the thoughts that are made momentarily accessible in participants' minds before manipulating power to affect cheating. Therefore, regardless of people's innate tendencies and natural variations in what kinds of thoughts are more accessible chronically, we manipulate the thoughts available in mind to have control over the mental contents that are then validated by power via participants' random assignment. We expected and found that induced power increases reliance on induced cheating-relevant thoughts regardless of whether these initial thoughts were in one direction or another, and regardless of whether those thoughts would match the thoughts naturally occurring in participants within each condition.

The present research comes with certain limitations. First, high versus low power was not studied in a natural context; rather, it was experimentally induced. Although we did not compare people with different levels of chronic or professional power, we used a well-established induction that has been used successfully in previous research (e.g., DeMarree et al., 2014; Galinsky et al., 2003; Galinsky et al., 2015). Additionally, we included manipulation checks while using different samples (i.e., university students and Mturk workers) from different countries (i.e., Greece, English-speaking countries) to safeguard that our power inductions were successful across diverse populations. Although that is true, future research can consider more naturalistic settings, and rely on natural variations in power. Alongside, further research in this domain should test the proposed mechanism using not only a moderation approach to testing process as in the present studies (Spencer, Zanna, & Fong, 2005) but also a mediation approach in which the proposed mediator (thought confidence) is measured along with some potential alternative accounts. We did not do so because we feared that including such a measure early in the procedure might have made the origin of confidence (power) so salient that it would have attenuated the expected misattribution effects (cf., Schwarz & Clore, 1983). Moreover, by including such a measure at the end of the study, we might have assessed confidence after it had dissipated. Instead of assessing the perceived validity of thoughts as a potential mediator, we relied on an experimental approach to process by varying thought direction (since we made opposite predictions for power as a function of the direction of thoughts).

In addition to the aforementioned limitations, one might argue in favor of the addition of a control group in which thoughts were not manipulated before the induction of power. It is unclear whether in such a hypothetical control group, the thoughts would be by default more positive or less positive towards cheating.[9] In fact, it could be that thoughts for potential controls would be both positive *and* negative. Thus, it is important to note that the primary thoughts that are validated or invalidated by power often have a dominant direction (e.g., positive or negative, cooperative or competitive). As illustrated in the results of the current studies, validation of univalent thoughts leads to behavioral polarization. But what if thoughts were mixed in direction (e.g., some positive regarding cheating and some negative)? In other words, what if people are ambivalent in their thoughts (positive and negative reactions towards cheating), and this ambivalence is then validated by power? In line with the SVT, validating ambivalence should increase the classic effects of being ambivalent. In accord with this view, previous results indicated that validation inductions can increase the feelings of conflict that ambivalent people have (DeMarree, Briñol, & Petty, 2015), can provoke more careful deliberation of information relevant to the target of ambivalence (Clarkson, Tormala, & Rucker, 2008), and, over time, reduce attitude stability (Luttrell, Petty, & Briñol, 2020; Luttrell, Petty, Briñol, & Wagner, 2016).

To illustrate this idea with a specific SVT example relevant to power, in research conducted by Durso et al. (2016), participants were asked to read information about an employee whose behavior was either consistent (all good or all bad) or mixed (both good and bad). Next, participants were induced to feel high or low power by recalling a past time in which they had power over another person or in which someone else had power over them. Following these two inductions, participants had to choose to promote or to fire the employee. The time it took to make the decision was recorded. For the univalent positive and negative employees, high power was associated with faster decision making, replicating previous research in this domain (e.g., Galinsky et al., 2003). Contrary to previous research, for the mixed (ambivalent) employees, feeling high (vs. low) power led for the first time to slower decision making. To conclude, when individuals' thoughts were ambivalent, high (vs. low) power validated these conflicting reactions, which ironically caused greater power to lead to slower action.

Finally, we argue that if the attributed meaning to power changes, then the effect of power on subsequent judgments could also differ (Cesario & McDonald, 2013; Garrison, Tang, & Schmeichel, 2016; see Briñol, Petty, Santos, & Mello, 2017, for a review). For example, if people feel guilty about possessing power, they may experience doubts about their thoughts, which could lead to different outcomes on cheating (Chen et al., 2001; Lamprinakos et al., 2022). Similarly, if people perceive power as unpleasant or as being associated with low validity meanings (e.g., arrogance, stubbornness), these negative associations could potentially reduce (rather than increase) reliance on previously generated thoughts.

Declaration of Competing Interest

The author(s) declared no conflicts of interest with respect to the authorship or the publication of this article.

Data availability

I have shared the link to my data/code in the manuscript. Please see page 10.

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[9] Having a control group with neutral levels of power (or without any induction of power) being induced experimentally would contribute to making more precise statements regarding whether high power increased or low power decreased use of thoughts, but ultimately, we do not see this as critical for our conceptual contribution. Whether such control group falls precisely between the compared power conditions (high vs. low) or is closer to one than the other would depend on various situational and individual differences that are beyond the scope of this work. That is, there are a large number of background variables that could affect whether high power increases or low power decreases thought use relative to a control group in any given study.

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