Consumer power and choice deferral: The role of anticipated regret

By: Mehdi Mourali, Zhiyong Yang, Frank Pons, and Derek Hassay


© 2017 Elsevier B.V. This work is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License.

Abstract:

This paper examines the influence of social power on consumers' propensity to defer choice. Based on the notion that elevated power reduces regret anticipation—the fear of making a wrong choice—it is proposed that power influences the extent of choice deferral by reducing consumers' susceptibility to anticipated regret. Because of the regret-based mechanism, power can increase or decrease consumers' propensity to defer choice, depending upon the situational factors that are associated with anticipated regret, such as salience of regret, outcome reversibility (e.g., return policy), and locus-of-regret (postponing vs. choosing now). Using different manipulations of power, seven studies provide consistent support for the proposed effects and show that situational factors and marketing strategies can induce, turn off, or even reverse the effect of power on deferral. Theoretical contributions and managerial implications are discussed.

Keywords: power | choice deferral | decision confidence | anticipated regret | decision difficulty

Article:

“The fundamental concept in social science is Power, in the same sense that Energy is the fundamental concept in physics.”

Russell (1938, p.10)

1. Introduction

Marketers devote considerable resources to enhancing traffic at their physical and virtual stores. Yet, a rise in store traffic may not translate into a proportionate increase in sales, as shoppers often leave the store empty handed. Indeed, the conversion rate is around 20% among brick-and-mortar stores, and 2.3% in online retailers (Cooper, 2016). It is even lower for online electronics stores, ranging from 0.5% to 2.63% (InternetRetailer, 2014). One likely contributor to these unimpressive conversion rates is the phenomenon of choice deferral. Past research has shown that consumers often defer a choice when presented with several attractive alternatives (Dhar, 1997, Leeftlang and Wittink, 2000, Tversky and Shafir, 1992), even when each alternative on its own is seen as sufficiently attractive (Iyengar & Lepper, 2000). This type of consumer indecision may lead to significant loss of revenue for marketers, as well as foregone opportunities for
consumers. Therefore, it is important to understand the psychological mechanisms underlying choice deferral, and those factors that either reduce or increase its occurrence.

The phenomenon of choice deferral has traditionally been attributed to decisional conflict or difficulty experienced when a decision-maker is unable to trade-off important attributes (Tversky & Shafir, 1992). According to the trade-off avoidance hypothesis (Luce, 1998, Luce et al., 1997), consumers may defer choice in an effort to avoid experiencing the negative emotions that can arise when making difficult trade-offs between important attributes. A related interpretation ascribes the experience of conflict to preference uncertainty (Dhar, 1997, Dhar and Nowlis, 1999, Dhar and Nowlis, 2004, Dhar and Simonson, 2003, Leeflang and Wittink, 2000). According to this viewpoint, people do not always have clearly defined preferences, and small differences in the attractiveness of the available options can increase this uncertainty. Hence, people defer choice because they find it difficult to select the best option. Evidently, both the trade-off avoidance hypothesis and the preference uncertainty hypothesis emphasize the presence of conflict or selection difficulty as a crucial determinant of choice deferral.

Relatively easy decisions (e.g., when one option clearly dominates all others) are less likely to induce deferral. Nevertheless, when conflict is present, some consumers tend to defer choice more than others. In the present research, we investigate how power, one of the most pervasive forces of our social world (Keltner et al., 2003, Russell, 1938), influences consumers' propensity to defer choice.

Consumers regularly experience feelings of both power and powerlessness. These subjective experiences of power may arise from a number of sources, including consumers' perceptions of their socioeconomic status (Henry, 2005), and bargaining position (Dwyer, 1984). Building on the approach/inhibition theory of power (Keltner et al., 2003), we propose that power reduces consumers' anticipation of future regret, which in turn, could lead to either more or less choice deferral, depending on whether choosing or deferring is the more regrettable decision.

This research has implications for both theory and practice. The approach/inhibition theory of power suggests that having power influences behavior through a combination of a more active approach system and a less active inhibition system. Thus, having power makes people attend more to the potential rewards associated with an action, but it also makes them attend less to the dangers inherent in that action (Keltner et al., 2003). Prior work showing a positive effect of power on action has emphasized the active approach system as the key driver of behavior, but has largely neglected the role of a hindered inhibition system. Among the rare exceptions, Durso, Briñol, and Petty (2016) examined the power-inaction relationship by revealing that high power increases action when options elicit univalence, but promotes inaction when options elicit ambivalence. Going beyond their research, we examine how differences in consumers' psychological state of power influence their propensity to defer choice, while holding the level of decisional conflict constant.

Moreover, our research contributes to the literature on choice deferral. Previous studies in this domain (Luce, 1998, Luce et al., 1997, Tversky and Shafir, 1992) have identified decisional conflict and difficulty in making choices as the main drivers of choice deferral. Extending this line of research, the present work suggests that power is another important determinant of choice
deferral. We show that even if decision difficulty is held constant, consumers may still defer or not defer their decisions, depending on their situationally activated feeling of power. Because of the regret-based account, the power-choice deferral link is moderated by situational factors that are associated with anticipated regret, such as salience of regret, outcome reversibility (e.g., return policy), and locus of regret (postponing vs. choosing now). From a managerial perspective, our research provides new insights and novel approaches for marketers to reduce choice deferral and increase sales, as detailed later in the paper.

The structure of the paper is as follows. First, we briefly review the literature on power and discuss its influence on choice deferral, including a description of our proposed mechanism and plausible alternatives. We then report on seven experimental studies that provide converging evidence in support of our hypothesized effects. We conclude with a discussion of the implications of our results and directions for future research.

2. Power and choice deferral

Power is defined as an individual's capacity to influence other people; a capacity that is conferred by the individual's ability to provide or withhold valuable resources and administer punishments (Cartwright, 1965, French and Raven, 1959, Keltner et al., 2003, Thibaut and Kelley, 1959). Powerful individuals have more access to valuable resources—including material resources such as money, food, and jobs, as well as social resources such as knowledge, respect, and affection—and control how these resources are distributed to those with less power (Fiske and Berdhal, 2007, Keltner et al., 2003).

In line with this definition, power is mainly viewed as a relational variable. That is, an individual's power can be primarily understood in relation to other individuals, insofar as having power means having “power over”. The social nature of power distinguishes it from related, but self-focused, constructs such as control and self-efficacy, which are conceptually closer to Weber's (1946) definition of power as the production of intended effect, or “power to” (Overbeck & Park, 2001). Control, for instance, refers to how much an outcome is contingent on one's own behavior (Rotter, 1966), whereas self-efficacy refers to beliefs about one's ability to successfully perform a particular action (Bandura, 1977). Although both constructs are self-focused, control and self-efficacy differ in that, it is possible to believe that an outcome is contingent on one's action, and yet not believe that one has the ability to produce the necessary action (Bandura, 1977, Haidt and Rodin, 1999). Power has also been differentiated from constructs such as: leadership, status, and authority that are best considered antecedents of power (see Anderson and Berdahl, 2002, Keltner et al., 2003 for detailed discussions of these differences). Finally, researchers have recently distinguished between social power and personal power (Lammers et al., 2009, Malkoc and Duguid, 2012); an interesting distinction that prompts us to think about the source and target of influence, but does not alter the fundamental conceptualization of power as a social construct. Malkoc and Duguid (2012) defined personal power as the ability to do and get what you want without being influenced by others. In that sense, personal power is just as social and relational as the power to influence others. That said, the focus of this research is on the social aspect of power.
Importantly, previous research has shown that people can easily form mental representations of their relative power (Bargh et al., 1995, Chen et al., 2001, Galinsky et al., 2003, Min and Kim, 2013). This subjective sense of power is usually the direct result of actually experiencing a powerful or powerless role, but it can also be activated by recalling previous experiences with power, or by simply encountering cues to the possession of power (Anderson and Berdahl, 2002, Anderson and Galinsky, 2006). Recently, Dubois, Rucker, and Galinsky (2012) used a simple advertisement to situationally activate consumers' state of power. Once activated, an individual's sense of power has been shown to influence a wide range of cognitive, affective, and behavioral responses (Anderson and Berdahl, 2002, Anderson and Galinsky, 2006, Galinsky et al., 2003, Guinote, 2007a, Guinote, 2007b, Min and Kim, 2013, Smith and Trope, 2006). For example, a perception of greater power was related to more abstract thinking (Smith & Trope, 2006), increased optimism in the perception of risk (Anderson & Galinsky, 2006), being better at processing goal-relevant messages (Min & Kim, 2013), and greater ability to act in a goal-consistent manner (Guinote, 2007a), whereas a diminished sense of power was associated with compensatory consumption (Dubois et al., 2012, Rucker and Galinsky, 2008, Rucker and Galinsky, 2009), greater behavioral and speech inhibition (Dovidio et al., 1988, Ellyson and Dovidio, 1985, Hosman, 1989, Keltner et al., 2003) and difficulties in distinguishing between goal-relevant and goal-irrelevant information (Smith, Jostmann, Galinsky, & van Dijk, 2008). Moreover, individuals with a greater sense of power were found to engage in more flexible information processing (Guinote, 2007b), to have more confidence in their own thoughts (Briñol et al., 2007, Min and Kim, 2013), and to be more sensitive to their subjective experiences and feelings (Weick & Guinote, 2008).

Of particular relevance to the present research is the relationship between power and action orientation. In a series of studies, Galinsky et al. (2003) showed that power increases people's propensity to act. For example, high power participants were more likely to act by taking a card in a simulated game of blackjack (study 1), and by removing an annoying fan (study 2) than low power participants. Galinsky et al. (2003) interpreted their findings in terms of the approach/inhibition theory of power (Keltner et al., 2003), which posits that elevated power activates the behavioral approach system, whereas reduced power activates the behavioral inhibition system. An active approach system, in turn, leads to greater action orientation, whereas an active inhibition system results in inaction and avoidance tendencies.

Expanding on the work of Galinsky et al. (2003), we propose that power also reduces consumers' propensity to anticipate regret, which in turn, may lead to either more or less deferral. We expect power to reduce regret anticipation for at least two reasons. First, the approach/inhibition theory of power suggests that having power makes people attend more to the potential rewards associated with an action, and less to the dangers inherent in that action (Keltner et al., 2003). Powerful individuals tend to be more confident in their beliefs and abilities to make good decisions (Anderson and Galinsky, 2006, Briñol et al., 2007, Min and Kim, 2013) than individuals with less power. This heightened confidence leads to excessive focus on potential payoffs, and little concern with potential downside of decisions (Ellyson and Dovidio, 1985, Galinsky et al., 2003, Gruenfeld, 1995). For example, Anderson and Galinsky (2006) noted that “...individuals with power should be more likely to engage in behaviors such as gambling or unprotected sex, because they would be more focused on money they could win or the physical pleasure involved in the sexual encounter, and less focused on the possibility of
losing money or contracting a sexually transmitted disease” (p. 513). Failing to consider the possibility of a negative outcome should lead to less anticipation of regret.

Second, even when they do attend to threatening information, the powerful tend to be less concerned with the associated consequences (Inesi, 2010). Feelings of power can often mitigate the pain of experienced losses and other negative outcomes. A review of twenty years of research on natural disasters, for instance, found that people with higher socioeconomic status (i.e., higher power) tend to experience less psychological stress, are less financially devastated by, and recover faster from disasters than poorer (i.e., lower power) people (Fothergill & Peek, 2004). The experience of power objectively decreasing the negative impact of losses has important implications for how the powerful make decisions. When a powerful individual is contemplating a decision that involves potential negative outcomes, the person is likely to rely on past experience and predict that his or her power will buffer the loss. In other words, power imbues individuals with greater confidence in dealing with negative outcomes. Remarkably, powerful individuals seem to extend their predictions to outcomes for which power cannot objectively provide a buffer. This point is well illustrated in Inesi's (2010) example of a politician who may expect that catching a cold would feel less bad after winning an election, despite the fact that his new position of power cannot objectively lessen the pain of a sore throat. Inesi (2010) used the buffering idea to successfully predict power's impact on loss aversion. In a series of experiments, she found that compared to those with less power, powerful individuals consistently predicted that negative outcomes will feel less painful, and as a result sought to avoid them less.

Taken together, the forgoing discussion suggests that when choosing among attractive products, powerful consumers should be less inclined to ruminate about how regretful they might feel if they made a wrong choice or missed out on an attractive option. Consistent with our reasoning, prior studies report that social power enhances consumers' subjective certainty (Fast et al., 2012, Fischer et al., 2011), decision confidence (Briñol et al., 2007, Magee et al., 2010, Tost et al., 2012), and overconfidence (Fast et al., 2012, See et al., 2011), whereas preference certainty is acknowledged as an important determinant of choice deferral (Dhar, 1997, Dhar and Simonson, 2003). Therefore, decision confidence induced by feelings of power can undermine anticipated regret (c.f., Contractor & Kumar, 2013), which in turn, reduces choice deferral (Beattie, Baron, Hershey, & Spranca, 1994).

Regret plays an important role in decision making. In particular, people often avoid making a decision that they anticipate might lead to regret (Loomes and Sugden, 1982, Som and Lee, 2012). Early regret research suggests that action produces more regret than inaction (Gilovich and Medvec, 1995, Khaneman and Tversky, 1982). However, later work (Inman and Zeelenberg, 2002, Zeelenberg and Pieters, 2007, Zeelenberg et al., 2002) indicates that both action and inaction can produce high levels of regret, depending on what the “normal” or most justifiable behavior in the situation is. For example, Inman and Zeelenberg (2002) found that a decision to switch to a different alternative (action) is generally associated with greater regret than a decision to repeat a purchase (inaction). However, when there is sufficient motivation to justify a switch (e.g., in case of negative prior consumption experience), consumers associate more regret with a repurchase decision than a switch decision.
Similarly, consumers typically associate more regret with choosing than with deferring (Anderson, 2003, Cooke et al., 2001, Janis and Mann, 1977). However, when delaying is less justifiable (e.g., when the future alternatives are expected to be less attractive than the current ones), consumers associate more regret with a deferral decision than a choice decision (Simonson, 1992). Thus, we expect that in most cases, increased power would lead to less deferral. Nonetheless, when deferring is less justifiable, we predict that the relationship between power and deferral will be positive.

3. Overview of the present research

In seven experimental studies, we test the broad hypothesis that power can significantly impact consumers' propensity to defer choice. Using situationally activated feelings of power in both online (through a banner ad in study 1a) and offline (through a marketplace situation in study 1b) settings, studies 1a and 1b examine the main effect of power on deferral in a relatively high conflict decision situation, where there is no normatively superior option (the higher quality option is also priced higher), thus requiring the decision maker to make price-quality tradeoffs.

One might argue that power reduces choice deferral because the powerful are simply more likely to act than those with less power. This unmediated process implies that the effect of power on deferral does not depend on the level of decisional conflict. That is, if power automatically increases action, then powerful consumers should choose more than powerless consumers regardless of how difficult a decision is. In contrast, the regret-based mechanism predicts that power would influence choice deferral only when regret is relevant. That is, only when choices are associated with a high degree of decisional conflict. Another plausible explanation is psychological distance. Previous research shows that power increases abstract thinking (Magee et al., 2010, Magee and Smith, 2013, Miyamoto and Ji, 2011, Smith et al., 2008, Smith and Trope, 2006) and social distance (Lammers et al., 2012, Smith and Trope, 2006). Recently, Thomas and Tsai (2012) found that psychological distance reduces choice deferral through lowering the feeling of decision difficulty. We believe that it is an unlikely mechanism for our findings, since the current research focuses only on those decision problems that involve a sufficient level of conflict (i.e., decision difficulty is unlikely affected by psychological distance). We show that even if decision difficulty is held constant, consumers may still defer or not defer their decisions, depending on their situationally activated feeling of power. In study 2, we empirically assess the proposed regret-based mechanism and the alternate psychological distance mechanism. Also, consistent with our theorizing, study 2 tests for decision confidence as a precursor of anticipated regret.

In study 3, we test yet another alternative explanation. It could be argued that powers' influence on deferral is strictly due to differences in perceived risk. We reasoned that differences in anticipated regret can occur independently from perceived risk and affect choice deferral over and above any differences in perceived risk. To test this in study 3, we deliberately sought to control for differences in perceived risk (by making sure that the risk information is transparent) and show that even if we control for perceived risk, power can still reduce choice deferral.

Study 4 is designed to provide more support for the regret-based mechanism. If our regret-based mechanism is true, when feelings of regret are made salient, the powerful should be affected by
these feelings just as likely as the powerless. Therefore, we predict that when regret is made salient, powerful consumers would defer choice as frequently as powerless consumers.

The regret-based mechanism also implies that if regret is improbable, there would be no difference in the propensity to defer choice between powerful and powerless consumers. Indeed, if the powerless do not anticipate greater regret, then they should be just as likely as the powerful to choose now rather than postponing their decision. In study 5, we test the hypothesis that making the decision outcome reversible, which has been shown to reduce regret anticipation (Zeelenberg et al., 1996, Zeelenberg and Pieters, 2007), would eliminate the effect of power on deferral.

Finally, in study 6, we examine a purchase situation in which greater regret is associated with delaying one's decision than with choosing now. Here, we test the hypothesis that low power consumers would defer choice less frequently than high power consumers, but that this positive effect of power on deferral would disappear when regret is made salient.

4. Study 1a: Power and choice deferral in an online store

The purpose of study 1a is to test the main effect of power on consumers' propensity to defer choice. To enhance the marketing implications of our findings, we conducted the study in an online retailing context and followed previous research (Dubois et al., 2012; experiment 3) to develop an online banner for power manipulation.

4.1. Participants and procedure

One hundred eighty adults from Amazon Mechanical Turk (MTurk; 48.9% female; $M_{\text{age}} = 36.51, SD = 12.14$) participated in the study in exchange for monetary incentives. Study 1a contained two conditions, with power manipulated between subjects. Participants were asked to imagine that they would like to buy a compact digital camera from the Internet. At an online store where they normally shop, they see a banner ad that states either “We All Feel Powerful Sometimes” in the high power condition, or “We All Feel Powerless Sometimes” in the low power condition (for stimuli, see Appendix 1). Similar ad appeals were used by Dubois et al., (2012; Exp. 3) as situational primes for feelings of power in a real-life setting. Next, participants were presented with a purchase scenario in which they could choose one of two digital cameras or defer their choice to a later time (see Appendix 1). As a manipulation check, participants rated the extent to which they felt powerful on a nine-point scale ($1 = \text{not powerful}; 9 = \text{powerful}$) after making the product choice decision (Rucker, Dubois, & Galinsky, 2011).

4.2. Results

Manipulation check. Participants in the high power condition reported feeling significantly more powerful ($M = 5.71, SD = 2.24$) than those in the low power condition ($M = 4.95, SD = 2.12$, $F(1, 178) = 5.37, p = 0.02, \eta^2 = 0.03$). Therefore, power was successfully manipulated.

Choice deferral. Consistent with our expectations, 17.20% of those in the high power group decided to defer their choice, compared with 35.63% in the low power group. A logistic
regression analysis with choice as the dependent variable (0 = deferral; 1 = otherwise) and power as the independent factor revealed that such a difference was statistically significant ($\beta_{\text{power}} = 0.98$, $SE = 0.35$, Wald $\chi^2(1) = 7.64$, $p = 0.006$, Odds Ratio (OR) = 2.66).

5. Study 1b: Power and choice deferral in an offline context

To assess the generalizability of the results from study 1a, we re-administered this experiment using a different manipulation of power with another sample of MTurk workers ($N = 216$; 55.1% female; $M_{\text{age}} = 36.83$, $SD = 12.08$). The research design, procedures, and measures in this study were identical to those in study 1a, except for one difference: Instead of using a banner to manipulate power as employed in study 1a, power was manipulated by having participants read a description of either a low power or a high power bargaining situation, and imagine how they would feel, think, and act in this situation (see Dubois et al., 2012 for a similar manipulation). More specifically, those in the low power condition were told: “You just moved to a new city and desperately need a place to live. The rental market in this city is virtually non-existent so that your only option is to buy a home (house, apartment, or condo). Unfortunately, the real estate market is best described as a “sellers’ market”. That is, the demand for properties far exceeds the supply. There are few desirable properties within your price range, and the good ones tend to move very quickly. They are often sold on the same day they are listed. Needless to say, you have had a lot of trouble finding what you are looking for. Fortunately, a new listing just came up for a property in your price range. Given the market conditions, you need to act very quickly. You are ready to begin negotiating with the seller, knowing fully well that you have very little power and virtually no leverage to influence the terms of the deal.”

Those in the high power condition read: “You decided it is time to buy a new home (house, apartment, or condo). Fortunately, the real estate market where you intend to buy your new home is currently considered a “buyer's market”. That is, the supply of properties far exceeds the demand for them. There are many desirable properties within your price range, and with little effort you were able to find a number of properties that met your needs. After viewing several properties on the same street you decided to make an offer on your favorite one. Because of the market conditions, the property has been on the market for months despite the seller being “extremely motivated” to sell. You are ready to begin negotiating with the seller, knowing that you are in a powerful negotiating position.”

5.1. Results and discussion

**Manipulation check.** Participants in the high power condition reported feeling significantly more powerful ($M = 6.95$, $SD = 1.54$) than those in the low power condition ($M = 3.25$, $SD = 2.27$, $F(1, 214) = 196.59$, $p < 0.001$, $\eta^2 = 0.48$), indicating a successful manipulation of power.

**Choice deferral.** Consistent with study 1a, in the high conflict condition, 20.56% of those in the high power group decided to defer their choice, compared with 35.78% in the low power group ($\chi^2(1) = 6.17$, $p = 0.013$). Logistic regression analysis showed that such a difference was statistically significant ($\beta_{\text{power}} = 0.77$, $SE = 0.31$, Wald $\chi^2(1) = 6.05$, $p = 0.014$, OR = 2.15).
Studies 1a and 1b provide preliminary evidence that situationally activated power induced by in-store advertisements or marketplace conditions can reduce choice deferral. Although these results confirm our prediction, study 1 does not assess the mechanism underlying this effect. Why do the powerful defer decisions less than the powerless? We tackle this question in study 2.

6. Study 2—Power, regret, and choice deferral

Study 1 focused on decision contexts where the decisional conflict was relatively high. This study includes both high and low conflict decisions. If our theorizing is correct, we should observe that power reduces the incidence of choice deferral when decisional conflict is high but not when it is low, and that the joint effect of power and decisional conflict on choice deferral is mediated by decision confidence and anticipated regret. Study 2 was also designed to test an alternative mechanism: that the effect of power on choice deferral is mediated by changes in construal level. That is, power leads to more abstract construal, which in turn leads to less deferral.

6.1. Participants and procedure

Two hundred and sixty-three undergraduate students took part in study 2 in exchange for course credit. Seven participants failed to answer the choice question and were removed from the sample. This left us with a final sample of 256 participants (48.8% female, $M_{age} = 21.10$, $SD = 2.54$).

Participants were randomly assigned to one of four conditions in a 2 (high power vs. low power) × 2 (high conflict vs. low conflict) between-subjects design. Following previous research (Galinsky et al., 2003, Smith and Bargh, 2008), those assigned to the high power condition were instructed to: “Please recall a particular incident in which you had power over another individual or individuals. By power, we mean a situation in which you controlled the ability of another person or persons to get something they wanted, or were in a position to evaluate those individuals. Please describe this situation in which you had power – what happened, how you felt, etc.” Those in the low power condition were instructed to: “Please recall a particular incident in which someone else had power over you. By power, we mean a situation in which someone had control over your ability to get something you wanted, or was in a position to evaluate you. Please describe this situation in which you did not have power – what happened, how you felt, etc.”

To measure construal level, participants completed a 19-item version of the Behavioral Identification Form (BIF) adapted from Liberman and Trope (1998). This version was used in previous research with student samples (e.g., Aggarwal & Zhao, 2015). Each item asks participants to choose between an abstract representation (e.g., making the room look fresh) and a concrete representation (e.g., applying brush strokes) of the same action (e.g., painting a room).

After responding to the BIF scale, participants were presented with the same purchase scenario as used in study 1, in which they could choose one of two digital cameras or defer their choice to a later time. Decisional conflict was manipulated by the presence versus absence of a normatively superior option in the choice set. In the low conflict condition, one option (higher
quality, lower price) was normatively superior to the other option in the set (lower quality, higher price). In contrast, the high conflict condition (as used in studies 1A and 1B) did not include a normatively superior option (the higher quality option was also priced higher), thus requiring the decision maker to make price-quality tradeoffs.

To assess anticipated regret and decision confidence, participants rated the following items on a seven-point scale (1 = strongly disagree; 7 = strongly agree): 1) When trying to decide among the cameras, I was worried about making the wrong choice; and 2) When deciding among the cameras I thought about how much I would regret it if I chose the wrong camera; 3) When trying to decide among the cameras, I was very confident in my ability to make the right choice. The first two items measured anticipated regret, and the last item measured decision confidence. Finally, participants were asked to indicate how difficult it was for them to choose among the options presented in the study (1 = not at all difficult; 7 = very difficult), as a manipulation check for decisional conflict.

6.2. Results and discussion

Manipulation checks. Participants reported feeling significantly more powerful in the high power condition (M = 5.89, SD = 1.96) than those in the low power condition (M = 4.33, SD = 2.00, F (1, 254) = 39.43, p < 0.01, η² = 0.13), indicating a successful manipulation of power. Moreover, a 2 (power) × 2 (conflict) ANOVA with perceived difficulty as the dependent variable revealed a significant main effect of conflict (F (1, 249) = 45.44, p < 0.01, η² = 0.15). Participants in the high conflict condition perceived the decision to be more difficult than those in the low conflict condition (M High Conflict = 3.51, SD = 1.31 vs. M Low Conflict = 2.43, SD = 1.25). Neither power (F (1, 249) = 0.236, p = 0.63), nor the power × conflict interaction (F (1, 249) = 0.67, p = 0.52) impacted perceived decision difficulty. This result confirms the successful manipulation of decision conflict.

Choice deferral. In the high conflict condition, 25.4% of those in the high power group decided to defer their choice, compared with 47.7% in the low power group (χ²(1) = 6.84, p < 0.01). In contrast, in the low conflict condition, high power participants were as likely to defer their choices (23.3%) as low power participants (20.6%; χ²(1) = 0.14, p = 0.71). The significance of these results was further examined through logistic regression. A model was run with choice deferral as the dependent variable, and power, conflict, and their interaction as independent factors. The analysis revealed no effect of power (β = 0.16, SE = 0.43, Wald χ²(1) = 0.14, p = 0.71), a significant effect of conflict (β = 1.26, SE = 0.39, Wald χ²(1) = 10.43, p < 0.01, OR = 3.52), and a significant power × conflict interaction (β = −1.15, SE = 0.57, Wald χ²(1) = 3.99, p = 0.05, OR = 0.32), confirming that the effect of power on choice deferral varied across the high versus low conflict conditions.

Anticipated regret. In this section, we test the prediction that power reduces consumers' anticipation of regret when decisional conflict is high, but not when decisional conflict is low. An index of anticipated regret was created by averaging the two regret measures (α = 0.84). A 2 (power) × 2 (conflict) ANOVA on anticipated regret found a significant effect of power (F (1, 252) = 9.28, p < 0.01, η² = 0.04), a significant effect of conflict (F (1, 252) = 4.99, p = 0.03, η² = 0.02), and most importantly, a significant power × conflict interaction (F (1, 252) = 5.54,
As predicted, when decisional conflict was high, high power consumers anticipated less regret than low power consumers ($M_{High Power} = 3.17$, $SD = 1.80$ vs. $M_{Low Power} = 4.31$, $SD = 1.68$, $F(1, 252) = 14.60$, $p < 0.01$). However, when decisional conflict was low, high power and low power consumers did not differ in their anticipation of regret ($M_{High Power} = 3.19$, $SD = 1.65$ vs. $M_{Low Power} = 3.34$, $SD = 1.63$, $F(1, 252) = 0.09$, $p = 0.76$).

Mediation analysis. The previous analyses indicate that decisional conflict moderates the effect of power on choice deferral, and on anticipated regret. We now present evidence that the joint effect of power and decision conflict on choice deferral is in fact mediated by anticipated regret. Mediated moderation was assessed with the bootstrapping method (Preacher and Hayes, 2004, Zhao et al., 2010), using Hayes’ (2012) PROCESS macro model 8. A 95% confidence interval of the parameter estimates was obtained by running 5000 times of resampling. The final estimation results are summarized in Table 1. Consistent with our predictions, the indirect effect of the power × conflict interaction on deferral through anticipated regret is significant (95% CI = $-2.17$ to $-0.14$). More specifically, the indirect effect of power on choice deferral through anticipated regret was significant in the high conflict condition (95% CI = $-2.06$ to $-0.51$), but not in the low conflict condition (95% CI = $-0.83$ to $0.50$). Furthermore, after controlling for anticipated regret, the direct effect of power × conflict on choice deferral became non-significant, suggesting that the mediation through anticipated regret was a full mediation (Preacher & Hayes, 2004). Taken together, contrary to predictions based on the unmediated process hypothesis, these results indicate that high power consumers are not always more likely to choose than low power consumers. Instead, power reduces choice deferral only when missing out on an option might cue regret.

Table 1. The mediating role of anticipated regret (Study 2).

<table>
<thead>
<tr>
<th>Paths or effects</th>
<th>Coefficient *</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power × Conflict → Regret (interaction effect on the mediator)</td>
<td>$-0.99^*$</td>
<td>0.42</td>
</tr>
<tr>
<td>Regret → Deferral (mediator to DV)</td>
<td>1.11**</td>
<td>0.15</td>
</tr>
<tr>
<td>Power × Conflict → Deferral (total effect of interaction on DV)</td>
<td>1.12*</td>
<td>0.56</td>
</tr>
<tr>
<td>Power × Conflict → Regret → Deferral (indirect effect of interaction on DV through mediator)</td>
<td>$-1.10^*$</td>
<td>0.53</td>
</tr>
<tr>
<td>Power × Conflict → Deferral, controlling for regret (direct effect of interaction on DV)</td>
<td>$-0.74$</td>
<td>0.72</td>
</tr>
<tr>
<td>Power → Deferral through regret under high conflict (conditional indirect effect of IV on DV at moderator value = high conflict)</td>
<td>$-1.27^{**b}$</td>
<td>0.40</td>
</tr>
<tr>
<td>Power → Deferral through regret under low conflict (conditional indirect effect of IV on DV at moderator value = low conflict)</td>
<td>$-0.16^c$</td>
<td>0.34</td>
</tr>
</tbody>
</table>

*a $p < 0.05$; **$p < 0.01$.
b 95% confidence interval for the bootstrap estimate of the indirect effect = $[-2.06; -0.51]$.
c 95% confidence interval for the bootstrap estimate of the indirect effect = $[-0.83; 0.50]$.

Abstract vs. concrete construal. In this section, we test the alternative account that the effect of power on choice deferral can be explained by differences in abstract versus concrete construal levels. We created a construal index by adding respondents' number of higher level responses on the BIF, such that higher scores indicate higher (more abstract) construal levels. Our analysis
revealed no effect of power on construal level ($M_{\text{High Power}} = 11.73, SD = 3.92$ vs. $M_{\text{Low Power}} = 12.01, SD = 4.05$, $F(1, 254) = 0.31, p = 0.58$). Moreover, construal level had no significant impact on choice deferral ($\beta = -0.01$, $SE = 0.04$, Wald $\chi^2(1) = 0.14$, $p = 0.71$). The lack of effect of power on construal level is somewhat surprising, given that prior research had reported a significant effect (Smith & Trope, 2006, Exp. 2). A plausible reason for this discrepancy is the difference in the BIF measures. The measure used in this study is a 19-item version of the BIF adapted from Liberman and Trope (1998), whereas Smith and Trope (2006) used the original 25-item scale. Apart from the smaller number of items, the 19-item scale also describes a different set of behaviors. It is possible that the effect of power on abstract versus concrete processing depends on the BIF measure, but we can only speculate this point.

**Decision confidence.** In building our argument for the mediating role of anticipated regret, we suggested that powerful consumers' lower regret anticipation is due, in part, to their higher confidence in their ability to make the right decision. This line of reasoning implies the existence of a chain of effects from power to decision confidence to anticipated regret to choice deferral. In this section, we test this chain of effects in the high conflict condition, using Hayes' (2012) PROCESS macro Model 6. A 95% confidence interval of the parameter estimates was obtained by running 5000 times of resampling. The final estimation results are summarized in Table 2A. As anticipated, the indirect effect of the power on deferral through the confidence-regret chain is significant ($CI = [-3.31; -0.86]$). Moreover, after controlling for the confidence-regret chain, neither the $Power \rightarrow Confidence \rightarrow Regret \rightarrow Deferral$ indirect effect ($95\% CI = [-0.44; 1.35]$) nor the $Power \rightarrow Regret \rightarrow Deferral$ indirect effect ($95\% CI = [-1.81; 0.92]$) indirect effect is significant.

Table 2A. The confidence-regret chain of mediation under high conflict (Study 2).

<table>
<thead>
<tr>
<th>Paths or effects</th>
<th>Coefficient$^a$</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>$Power \rightarrow Deferral$ (direct effect of IV on DV)</td>
<td>$-0.53^{**b}$</td>
<td>0.65</td>
</tr>
<tr>
<td>$Power \rightarrow Confidence \rightarrow Regret \rightarrow Deferral$ (indirect effect1: IV $\rightarrow$ M1 $\rightarrow$ M2 $\rightarrow$ DV)</td>
<td>$-1.85^c$</td>
<td>0.71</td>
</tr>
<tr>
<td>$Power \rightarrow Confidence \rightarrow Deferral$ (indirect effect2: IV $\rightarrow$ M1 $\rightarrow$ DV)</td>
<td>$-0.33^d$</td>
<td>0.46</td>
</tr>
<tr>
<td>$Power \rightarrow Regret \rightarrow Deferral$ (indirect effect3: IV $\rightarrow$ M2 $\rightarrow$ DV)</td>
<td>$-0.23^e$</td>
<td>0.67</td>
</tr>
<tr>
<td>Total indirect effect (sum of all indirect effects)</td>
<td>$-1.75^{**f}$</td>
<td>0.72</td>
</tr>
</tbody>
</table>

$^a p < 0.05$; $^{**}p < 0.01$.

$^b$ 95% confidence interval for the bootstrap estimate of the indirect effect = $[-1.81; 0.75]$.

$^c$ 95% confidence interval for the bootstrap estimate of the indirect effect = $[-3.31; -0.86]$.

$^d$ 95% confidence interval for the bootstrap estimate of the indirect effect = $[-0.44; 1.35]$.

$^e$ 95% confidence interval for the bootstrap estimate of the indirect effect = $[-1.81; 0.92]$.

$^f$ 95% confidence interval for the bootstrap estimate of the indirect effect = $[-3.20; -0.48]$.

We have also tested the reverse serial mediation model $Power \rightarrow Regret \rightarrow Confidence \rightarrow Deferral$ and found that the indirect effect of power on deferral through the regret-confidence chain was not significant ($95\% CI = [-0.16; 0.75]$). The detailed estimation results are presented in Table 2B. These analyses confirm that in the proposed causal chain, it is indeed powerful consumers' higher confidence that leads to reduced anticipation of regret but not the other way around.
### Table 2B. The regret-confidence chain of mediation under high conflict (Study 2).

<table>
<thead>
<tr>
<th>Paths or effects</th>
<th>Coefficienta</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power → Deferral (direct effect of IV on DV)</td>
<td>-0.53b</td>
<td>0.65</td>
</tr>
<tr>
<td>Power → Regret → Confidence → Deferral (indirect effect1 IV → M1 → M2 → DV)</td>
<td>-0.15c</td>
<td>0.22</td>
</tr>
<tr>
<td>Power → Regret → Deferral (indirect effect2: IV → M1 → DV)</td>
<td>-2.08**d</td>
<td>0.90</td>
</tr>
<tr>
<td>Power → Confidence → Deferral (indirect effect3: IV → M2 → DV)</td>
<td>0.18e</td>
<td>0.25</td>
</tr>
<tr>
<td>Total indirect effect (sum of all indirect effects)</td>
<td>-1.75**f</td>
<td>0.76</td>
</tr>
</tbody>
</table>

a *p < 0.05; **p < 0.01.

b 95% confidence interval for the bootstrap estimate of the indirect effect = [-1.81; 0.75].

c 95% confidence interval for the bootstrap estimate of the indirect effect = [-0.16; 0.75].

d 95% confidence interval for the bootstrap estimate of the indirect effect = [-3.89; -0.83].

e 95% confidence interval for the bootstrap estimate of the indirect effect = [-0.22; 0.79].

f 95% confidence interval for the bootstrap estimate of the indirect effect = [-3.26; -0.50].

---

### 7. Study 3—Replication with monetary consequences

Study 3 aims to achieve three objectives: 1) enhance the external validity of earlier studies' findings by examining the impact of power on deferral in a decision context involving real monetary consequences as opposed to a scenario-based context; 2) rule out one additional alternative explanation: power's effect on choice deferral is driven by powerful consumers' lower risk perceptions; and 3) include a control condition to clarify whether the effect is driven by high power or low power.

#### 7.1. Participants and procedure

One hundred and twenty-six undergraduate students (51.6% female; *M* age = 21.40, *SD* = 2.56) participated in study 3 in exchange for course credit. Participants' sense of power was manipulated the same way as in study 2, with an additional control condition to detect whether the action comes from high power or from low power groups. Those in the control group were asked to: “Try to remember your day yesterday as vividly as possible: activities that you took part in, things that happened to you, how you felt, people whom you interacted with, places that you went to, etc. Please describe your day yesterday in as much detail as possible.” As a manipulation check, participants rated the extent to which they felt powerful on a seven-point scale (1 = not powerful; 7 = powerful) immediately following the power manipulation (Rucker et al., 2011).

In a later ostensibly unrelated task, participants were provided with an opportunity to earn money by playing a simple lottery game. The game consisted of rolling a dice, with different outcomes corresponding to different earnings. They were shown two gambles (A and B in Appendix 2), each offering a 1/6 probability of earning $10, a 1/3 probability of earning $5, and a 1/2 probability of earning zero dollars. To control for potential differences in the perception of risk (e.g., Anderson & Galinsky, 2006), the instructions explicitly stated the exact probabilities of winning each amount and explained that these probabilities were identical across all gambles in the study. Participants were then told that they could now play one of the two gambles presented
to them, or wait until the end of the study, at which point they would be given a choice between
two different gambles with similar earning structures.

Following the initial choice task, participants were asked to estimate their own probabilities of
winning $10, $5, and $0, irrespective of the objective probabilities described in the instructions.
Any significant differences in these subjective estimates across the power conditions would
suggest a failure at controlling for differences in risk perceptions. Anticipated regret was
measured as in study 2, and finally, participants who elected to defer choice were provided with
a second pair of gambles to choose from (see gambles C and D in Appendix 2).

7.2. Results and discussion

Manipulation check. A one-way ANOVA revealed a significant difference in how powerful
participants felt between the three power conditions ($F (2, 123) = 43.42, p < 0.01, \eta^2 = 0.41$).
Consistent with our expectations, participants in the high power group reported feeling
significantly more powerful than those in the control group ($M_{\text{High Power}} = 5.64, SD = 1.14$
vs. $M_{\text{Control}} = 3.71, SD = 1.33, t = 7.12, p < 0.01$). In addition, participants in the low power
group reported feeling significantly less powerful than those in the control group ($M_{\text{Low Power}} = 3.05, SD = 1.48$
vs. $M_{\text{Control}} = 3.71, SD = 1.33, t = 2.17, p = 0.03$).

Choice deferral. Consumers primed with high power deferred choice less frequently (21.4%)
than those in the control group (52.4%; \( \beta = -1.40, SE = 0.49, \text{Wald } \chi^2(1) = 8.21, p < 0.01,\)
OR = 0.25). Consumers primed with low power did not differ in their deferral frequency (57.1%)
from those in the control group (52.4%; \( \beta = 0.19, SE = 0.44, \text{Wald } \chi^2(1) = 0.19, p = 0.66\)). It
appears that the extent of choice deferral is influenced more by having power than by lacking
power. Similarly, anticipated regret was significantly affected by high power ($M_{\text{High Power}} = 3.27, SD = 1.73$ vs. $M_{\text{Control}} = 4.69, SD = 2.47, t = -3.04, p < 0.01$), but not by low power ($M_{\text{Low Power}} = 5.14, SD = 2.11$ vs. $M_{\text{Control}} = 4.69, SD = 2.46, t = 0.90, p = 0.37$). The anticipated regret
index was created by averaging responses on the two regret measures (\( \alpha = 0.90 \)).

As in study 2, we conducted a mediation analysis to test our process hypothesis that power
influences choice deferral by reducing consumers' ability to anticipate regret. Given that the low
power and control conditions did not differ in their extent of choice deferral, we combined these
two conditions to create a binary power variable which took the value of 1 for high power and 0
otherwise. The indirect effect using the bootstrapping method (5000 bootstraps) and Hayes'
model 4 confirmed that the indirect effect of power on choice deferral through anticipated regret
was significant (95% CI = \(-3.41, -0.92\)). Furthermore, after controlling for anticipated regret,
the direct effect of power on choice deferral became non-significant (95% CI = \([-1.97, 0.38]\)),
suggesting full mediation.

Alternative explanation. To assess the perceived risk explanation, we examined respondents'
estimates of their own probabilities of winning $10, $5, and $0. The analysis revealed two
insights: Not surprisingly, respondents generally anchored their estimates on the explicitly stated
objective probabilities. The average estimate for the probability of winning $10 was 15.79%
compared to an objective probability of 16.67% (\( t = -0.28, p = 0.78 \)). The average estimate for
the probability of winning $5 was 31.14% compared to an objective probability of 33.33%
More importantly, the analysis revealed no differences between the various power groups in their estimates for the probability of winning $10 ($M_{High\ Power\ ($10)} = 15.58\%$ vs. $M_{Low\ Power\ ($10)} = 16.28\%$ vs. $M_{Control\ ($10)} = 15.49\%$; $F(2, 123) = 0.10, p = 0.90$), the probability of winning $5 ($M_{High\ Power\ ($5)} = 30.74\%$ vs. $M_{Low\ Power\ ($5)} = 30.95\%$ vs. $M_{Control\ ($5)} = 31.73\%$; $F(2, 123) = 0.10, p = 0.91$), and the probability of winning $0 ($M_{High\ Power\ ($0)} = 54.88\%$ vs. $M_{Low\ Power\ ($0)} = 56.55\%$ vs. $M_{Control\ ($0)} = 54.40\%$; $F(2, 123) = 0.24, p = 0.79$). These results suggest that we have successfully controlled for differences in perceived risk. We can therefore confidently rule out perceived risk as an alternative explanation of our findings.

8. Study 4—Salience of anticipated regret

8.1. Participants and procedure

In this study, we experimentally manipulate the salience of anticipated regret. If our proposed mechanism is true, making anticipated regret more accessible should eliminate the difference between powerful and powerless consumers in the propensity to defer choice.

One hundred and twenty-four undergraduate students (59.7% female; $M_{age} = 22.01, SD = 1.87$) participated in study 4 in exchange for course credit. The study, which was described as a series of unrelated tasks, consisted of a 2 (high power vs. low power) × 2 (salient regret vs. control) between-subjects design. Participants’ sense of power was primed using a scrambled sentence task (Smith & Trope, 2006). The task consisted of 16 items, each comprised of five words. Participants were asked to use any four words to make a grammatically correct sentence. In the high power condition, eight of the 16 items contained a word related to having power (authority, captain, commands, controls, dominates, executive, influenced, privileged). In the low power condition, eight of the 16 items contained a word related to lacking power (complied, janitor, obey, passive, servant, submits, subordinate, yield).

Following the power manipulation, participants were presented with three purchase scenarios (bike helmets, cordless phones, and printers) in which they could choose one of two options or defer their choice to a later time (see Appendix 3 for a sample scenario). Before indicating their choice in each product category, participants in the salient regret condition, but not those in the control condition, were prompted to think about how much regret they would feel if they made the wrong choice (Simonson, 1992).

8.2. Results and discussion

In the control condition, the choice patterns mirrored those found in the earlier studies. Across all three scenarios, participants in the high power group were less likely to defer their choices.
(21.5%) than those in the low power group (45.2%; $\chi^2(1) = 11.71, p < 0.01$). In contrast, high power participants in the salient regret condition, were slightly more likely to defer their choices (61.3%) than low power participants (52.7%), though the difference was not statistically significant ($\chi^2(1) = 1.40, p = 0.24$). Fig. 1 offers a graphic illustration of this effect, while Table 3 provides a breakdown of the choice percentages across scenarios.

Fig. 1. Power, regret salience and choice deferral (Study 4).

<table>
<thead>
<tr>
<th>Control</th>
<th></th>
<th>Salient regret</th>
</tr>
</thead>
<tbody>
<tr>
<td>Helmets</td>
<td>Phones</td>
<td>Printers</td>
</tr>
<tr>
<td>Low power</td>
<td>45.2%</td>
<td>41.9%</td>
</tr>
<tr>
<td>High power</td>
<td>25.8%</td>
<td>16.2%</td>
</tr>
<tr>
<td>$\chi^2$ (p-value)</td>
<td>2.54 (0.11)</td>
<td>5.01 (0.02)</td>
</tr>
</tbody>
</table>

The significance of these results was further examined through logistic regression. Since each participant made three decisions, there was a nested structure of the data, with three decisions nested to the same person. Treating each decision as an independent observation would violate the non-independence of the data. To overcome this issue, we used multilevel logistic regression to account for both between- and within-subject variance in choice deferral. We tested a two-level model, in which the choice decisions were treated as the level-1 unit and participants as level-2 unit. The focus was on the explanatory variables at level 2, including power, salience of regret, and their interaction term. We estimated the model using MPlus (v8.0). The analysis revealed a significant effect of power ($\beta = 0.24$, $SE = 0.08, t = 2.94, p < 0.01$), a non-significant effect of salience of regret ($\beta = -0.08$, $SE = 0.11, t = -0.70, p = 0.49$), and most importantly, a significant power $\times$ salience interaction ($\beta = -0.32$, $SE = 0.14, t = -2.30, p = 0.02$) confirming that the effect of power on choice deferral varied across the high versus low regret salience conditions. This model explained 15.9% of the variance in choice deferral among participants.

Study 4 supports our regret-based mechanism, by showing that if the anticipation of regret is made salient, the effect of power on deferral is eliminated. Extending this study's finding, we expect that making regret irrelevant would also eliminate the effect of power on choice deferral. Indeed, if the powerless do not anticipate regret, then it is believed that they will be as likely to choose as the powerful. This assertion is tested in the next study.
9. Study 5—Outcome reversibility

The purpose of this study is to test the prediction that when the choice outcome is made reversible—a situation previously shown to reduce regret anticipation—the effect of power on choice deferral is eliminated. We use return policy to manipulate outcome reversibility.

9.1. Participants and procedure

One hundred and eight undergraduate students (51.9% female; $M_{\text{age}} = 21.76, SD = 1.55$) were paid $10 to take part in study 5. The study featured a 2 (high power vs. low power) × 2 (reversible outcome vs. irreversible outcome) between-subjects design. Participants' sense of power was primed using the same scrambled sentence task as in study 4. Participants also chose among the same three product categories as in study 4. However, those in the reversible outcome condition were told that they have one month to test their chosen product and, if not satisfied, they could return it without hustle. Those in the irreversible outcome condition were told that their purchase represents a final sale.

9.2. Results and discussion

In the irreversible outcome condition, power had a significant negative effect on choice deferral. Consistent with studies 3 and 4 (control group), low power consumers deferred their choice (59.3%) more often than high power consumers (22.2%; $\chi^2_{(1)} = 23.01, p < 0.01$). In the reversible outcome condition, however, the effect of power on choice deferral disappeared. The frequency of choice deferral was no different for low power (29.6%) and high power consumers (25.9%; $\chi^2_{(1)} = 0.28, p = 0.60$). Fig. 2 offers a graphic illustration of this effect, while Table 4 provides a breakdown of the choice percentages across scenarios.

![Fig. 2. Power, outcome reversibility and choice deferral (Study 5).](image)

<table>
<thead>
<tr>
<th></th>
<th>Irreversible outcome</th>
<th>Reversible outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Helmets</td>
<td>Phones</td>
</tr>
<tr>
<td>Low power</td>
<td>55.6%</td>
<td>59.3%</td>
</tr>
<tr>
<td>High power</td>
<td>22.2%</td>
<td>18.5%</td>
</tr>
<tr>
<td>$\chi^2_{(1)}$ (p-value)</td>
<td>6.31 (0.01)</td>
<td>9.43 (&lt; 0.01)</td>
</tr>
</tbody>
</table>
Similar to study 4, multilevel logistic regression was used to test the significance of these effects with choice as the dependent variable, and power, outcome reversibility, and their interaction as independent factors at level 2. Consistent with our expectations, the analysis showed no main effect of power ($\beta = 0.04$, $SE = 0.10$, $t = 0.38$, $p = 0.71$), a significant effect of outcome reversibility ($\beta = -30$, $SE = 0.10$, $t = -2.93$, $p < 0.01$), and most importantly, a significant power $\times$ reversibility interaction ($\beta = 0.33$, $SE = 0.15$, $t = 2.30$, $p = 0.02$) confirming that the effect of power on choice deferral varies across the reversible and irreversible outcome conditions. This model explained 16.2% of the variance in choice deferral among participants.

Examined in concert, the findings from studies 4 and 5 provide considerable support for the idea that the effect of power on choice deferral is driven by differences in the anticipation of regret. Study 4 demonstrated that high power consumers' propensity to defer choice increases substantially when prompted to consider the potential for future regret (from 21.5% to 61.3%, $\chi^2(1) = 30.3$, $p < 0.01$), whereas study 5 found that low power consumers' propensity to defer choice decreases dramatically (from 59.3% to 29.6%, $\chi^2(1) = 14.4$, $p < 0.01$) when anticipation of regret is unlikely (e.g., when outcomes are easily reversible).

Thus far, our focus has been on purchase situations in which consumers generally associate more regret with a decision to choose than with a decision to defer. Next, we examine a purchase situation in which consumers are expected to regret a decision to defer more than a decision to choose (i.e., a situation in which future alternatives are expected to be less attractive than the current ones).

10. Study 6—When anticipated regret reduces deferral

Study 6 is designed to test the prediction that when choice deferral is associated with more regret, low power consumers who are more inclined to anticipate regret would be less likely to defer choice than high power consumers. However, when regret is made salient, the effect of power on deferral would disappear.

10.1. Pretest

Thirty-two undergraduate business students pre-tested three purchase scenarios (cordless phones, gas barbeques, and camcorders) in which choice deferral was expected to increase anticipated regret. The scenarios were adapted from Simonson (1992) and included the following instructions: “Suppose that it is July and that you need to buy a wedding present for a close family member who is getting married at the end of August. You have already decided to buy the present at the Best store, from which you have received a catalogue with items on sale each month. Your major dilemma is whether to make the purchase in July or to wait for a potentially better sale in August. Imagine that you have decided to buy a gas barbeque (cordless phone, camcorder) as the wedding present. The following items are on sale in July:” (see Appendix 4 for a sample scenario). In each product category, participants were asked to indicate in which case they would feel greater regret: if they bought the gift in July and later found out that the August sales were much better, or if they bought the gift in August and discovered that the July sales were much better.
Consistent with Simonson's (1992) findings, participants indicated that they would feel more regret if they waited to purchase the gift in August, only to find out that the July sales were much better (65.6% of the time across the three scenarios, $z = 3.22, p < 0.01$).

10.2. Participants and procedure

Two hundred and sixteen undergraduate business students (53.2% female; $M_{age} = 21.80$, $SD = 1.93$) received $10 each to participate in study 6. The study consisted of a 2 (high power vs. low power) × 2 (salient regret vs. control) between-subjects design. Participants' sense of power was manipulated using the mindset priming technique described in study 2. Following the power manipulation, participants were presented with the three purchase scenarios from the pretest. Similar to Simonson's (1992) regret manipulation, participants in the control condition were simply asked to indicate in which month they would make the purchase, and if it is July, which brand they would choose. Those in the salient regret condition were told that at the end of the study, they would be provided with a handout of the products on sale in August. This handout would also show the products on sale in July so that they can see which month had the better sales and what they have gained or missed by buying in the month that they have selected. Finally, they were asked to indicate the month in which they would purchase the gift and if it is July, their chosen brand.

10.3. Results and discussion

As expected, in the control condition, the choice patterns were opposite to those found in the previous studies. Across the three scenarios, participants in the high power group were more likely to purchase the gift in August (43.2% of the time) than those in the low power group (24.7% of the time; $\chi^2(1) = 12.39, p < 0.01$). In contrast, in the salient regret condition, high power participants were as likely to defer their choices to August (16.7%) as low power participants (17.3%; $\chi^2(1) = 0.02, p = 0.88$). Fig. 3 offers a graphic illustration of this effect, while Table 5 provides a breakdown of purchase timing across scenarios.

![Fig. 3. Power and choice deferral when delaying is regretted more than choosing (Study 6).](image)

The significance of these results was further ascertained through multilevel logistic regression. A model was run on the 2-level data with purchase month as the dependent variable, and power, salience of regret, and their interaction as the level-2 predictors. The analysis revealed no main effect of salience of regret ($\beta = 0.07, SE = 0.07, t = 1.13, p = 0.26$), a significant main effect of
power ($\beta = -0.19, SE = 0.07, t = 2.54, p = 0.01$), and most importantly, a significant power $\times$ salience interaction ($\beta = 0.19, SE = 0.09, t = 2.03, p = 0.04$) confirming that the effect of power on choice deferral varied across the high versus low regret salience conditions. This model explained 11.3% of the variance in choice deferral among participants.

Table 5. Power and deferral when delaying is regretted more than choosing (Study 6).

<table>
<thead>
<tr>
<th>Control</th>
<th>Camcorders</th>
<th>Barbeques</th>
<th>Phones</th>
<th>Salient regret</th>
<th>Camcorders</th>
<th>Barbeques</th>
<th>Phones</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low power</td>
<td>25.9%</td>
<td>25.9%</td>
<td>22.2%</td>
<td>16.7%</td>
<td>20.4%</td>
<td>14.8%</td>
<td></td>
</tr>
<tr>
<td>High power</td>
<td>42.6%</td>
<td>40.7%</td>
<td>46.3%</td>
<td>18.5%</td>
<td>16.7%</td>
<td>14.8%</td>
<td></td>
</tr>
<tr>
<td>$\chi^2 (p-value)$</td>
<td>3.33 (0.07)</td>
<td>2.67 (0.10)</td>
<td>6.95 (&lt;0.01)</td>
<td>0.064 (0.80)</td>
<td>0.245 (0.62)</td>
<td>0.000 (1)</td>
<td></td>
</tr>
</tbody>
</table>

11. General discussion

As the quote from Bertrand Russell in the beginning of the paper suggests, power is undeniably one of the central features of our social world. A number of studies have recently examined the influence of power on various aspects of consumer behavior and decision-making (Dwyer, 1984, Kim and McGill, 2011, Mourali and Yang, 2013, Rucker et al., 2011, Rucker and Galinsky, 2008, Rucker and Galinsky, 2009, Torelli and Shavitt, 2011). The research presented in this paper adds to this rapidly growing body of literature by examining the relation between power and choice deferral. Our key hypothesis is that power can both decrease and increase consumers' tendency to defer choice. We reasoned that this occurs because having power reduces people's ability to anticipate future regret, and because anticipating regret could lead to either more or less deferral.

The regret-based mechanism also suggests that situational factors—such as salience of regret, outcome reversibility (e.g., return policy), and locus-of-regret (postponing vs. choosing now)—can induce, turn off, or even reverse the effect of power on deferral. Situationally activating power through a banner ad (study 1a) and marketplace conditions (study 1b), studies 1a and 1b test the main effect of power on choice deferral in both online and offline settings. Study 2 replicates study 1’s findings in a lab experiment and demonstrates the mediating role of anticipated regret. Study 3 enhances the external validity of our findings by examining the impact of power on deferral in a decision context involving real monetary consequences. Studies 4 and 5 further show that situational factors associated with anticipated regret—salience of regret and outcome reversibility—can turn off the effect of power on deferral. Study 6 switches consumers' locus-of-regret from choosing now to postponing the decision and reverses the effect.

Given that some of our studies have relatively low sample sizes, to remedy this problem, we conducted a mini-meta-analysis of the studies we reported. Our meta-analysis of the earlier data (see Appendix 5) supported the conclusion that low (vs. high) power leads to more choice deferral when regret is not salient ($g = -0.764, p < 0.001$), whereas there is no difference across low- and high-power conditions when regret is salient ($g = -0.035, p < 0.001$; $\chi^2 (1) = 18.79, p < 0.001$).

11.1. Theoretical contributions
These findings have important implications for the current power literature. One of the key findings from the approach/inhibition theory of power (Galinsky et al., 2003, Keltner et al., 2003) is that elevated power promotes action whereas powerlessness leads to inaction and avoidance behavior. Our results, however, add to the recent findings that power can sometimes lead to inaction. Durso et al. (2016) found that high power increases action when options elicit univalence, but promotes inaction when options elicit ambivalence. Similarly, our findings indicate that while power is generally associated with less deferral, in some situations it may drive consumers not to make a choice.

Our research also contributes to the power literature by identifying a novel mechanism underlying the effect of power on choice deferral—that of decision confidence and anticipated regret. Because of this mechanism, situational factors that make regret salient or reduced—such as outcome reversibility and locus-of-regret (postponing vs. choosing now)—can change consumers' tendency to defer their choice. Similarly, situationally activating consumers' confidence in their decisions can drive their attention away from regret. This is because the enhanced confidence leads consumers to focus on the potential benefits, rather than the downside, of their decisions (Ellyson and Dovidio, 1985, Galinsky et al., 2003, Gruenfeld, 1995). By showing that the relationship between power and choice deferral is driven by the salience of regret, our research represents the first attempt to offer theoretical explanations for the inconsistent findings documented in the literature on the effect of power on action/inaction. Our findings suggest that, to accurately predict the effect of power on action/inaction, one must understand the nature of the relationship between regret and action/inaction. When people associate greater regret with inaction than with action, the powerless should be even more prone to act than the powerful.

Our findings also have implications for research on choice deferral. This research often stresses (and frequently manipulates) decision conflict/difficulty as the main predictor of choice deferral. In contrast, our results indicate that when the level of decision difficulty is held constant, consumers' ability to anticipate future regret plays an important role in determining whether they choose now or postpone their decision to a later time. In our studies, regret anticipation was influenced by consumers' state of power. However, factors other than power may also impact regret anticipation, and by extension the likelihood of choice deferral. For instance, people are less likely to anticipate regret when they can easily reverse the outcome of a decision (Zeelenberg et al., 1996). This suggests that marketers who offer liberal return policies should experience fewer lost sales due to choice deferral than those who do not.

11.2. Managerial implications

Findings from our research offer several important managerial implications regarding how the effect of situationally activated feelings of power can be capitalized on by marketers to reduce consumer indecision. The marketplace abounds in situational contingencies that can change individuals' mental representations of their relative power. Our findings show that marketers can reduce choice deferral by increasing the fit between locus-of-regret and the situationally activated feelings of power. Two approaches may be used to achieve this goal. The first is to increase consumers' perceived power to match with the situation where choosing is associated with more regret. One way is to empower customers in the store (or online platform) through
banner ads (as in study 1a) or marketplace conditions (as in study 1b). Communication appeals can also be used to enhance the accessibility of feelings of power. Rucker et al. (2011) suggest that power can be readily activated through the use of ad appeals.

The second approach is to alter the locus-of-regret associated with a decision to match consumers' psychological state of power. This strategy is useful when the decision context is prone to inducing a particular state of power. For example, enhancing consumers' belief about their own expertise through a store sign may activate their feelings of power, whereas reminding them of salespeople's expertise may prompt their feelings of powerlessness. Thus, when consumers' power is situationally activated, marketers do not need to shift consumers' locus-of-regret. However, when consumers are expected to feel less powerful, firms can follow our study 5 to create a purchase situation in which consumers are expected to regret a decision to defer more than a decision to choose.

Moreover, since decision difficulty is an important theoretical moderator of the relationship between power and choice deferral, as shown in study 2, it might also be profitable for marketers to utilize the interactive nature of the Web to facilitate communications with novice customers, for example by either providing “virtual advisors,” to enhance their decision confidence. For example, Marissol-Coralia Hotel in Guadeloupe offers prospective or visiting clients a 10-min tour guided by the experienced front-line employees to know the features and services available at the hotel. This process can reduce consumers' evaluation difficulty (Laroche, Yang, McDougall, & Bergeron, 2005). Similar strategies are used in the IHS (i.e., interactive home shopping) channel, where online marketers attempt to facilitate consumers' decision-making by offering them electronic aides in real estate hunting.

11.3. Limitations and future research

Even though this research demonstrated that power reduces the anticipation of regret, the full extent of the relationship between power and regret remains largely unexplored, and offers some interesting avenues for future research. Questions that merit further attention include: Does power also influence the experience of post-decisional regret? Do powerful and powerless individuals manage their current regret differently (i.e., do they use different coping strategies)? And when do personal power and social power have a similar pattern of effects on choice deferral, and why do their effects differ?

In addition, we have focused exclusively on choice deferral. However, choice deferral can be viewed as one manifestation of a broader phenomenon: that of decision avoidance (Anderson, 2003, Luce, 1998). Anderson (2003) defines decision avoidance as “a pattern of behavior in which individuals seek to avoid the responsibility of making a decision by delaying or choosing options they perceive to be nondecisions” (p. 139). Other decision avoidant behaviors include choosing to maintain the status quo (Samuelson & Zeckhauser, 1988), and the omission bias (Ritov & Baron, 1992). An interesting avenue for future research would be to investigate whether power would similarly affect these avoidant behaviors.

Finally, beyond its influence on choice behavior, power is likely to affect other stages of the decision-making process (e.g., problem recognition, information search, consideration set
formation, evaluation of alternatives, and post decisional processes). Consider the stage of information search for instance. Do powerful consumers devote the same amount of effort and search the same type of information as powerless consumers? Do powerful and powerless consumers differ in their relative use of internal versus external information search? Such questions illustrate the promising potential of a systematic investigation of the role of power in consumer decision-making.

Acknowledgments

This research was supported by Social Sciences and Humanities Research Council of Canada Grant 410-2010-0626 awarded to the first author. We thank Madelynn Matthews, Alysha Rozon, and Rachel Gabel for assistance with data collection.

Appendix 1. Power manipulation and choice scenario used in study 1

Power manipulation for study 1a:

Imagine that you would like to buy a compact digital camera. At an online store where you normally shop, you see a banner at the website that states:

Product choice for studies 1a and 1b:

In the store, you find the following alternatives on sale. You also have the option of not buying either of them and looking for a camera at a different store.

<table>
<thead>
<tr>
<th>Sony Cyber-shot DSC-WX150</th>
<th>Canon PowerShot Elph 330 HS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight: 4.7 oz.</td>
<td>Weight: 5.1 oz.</td>
</tr>
<tr>
<td>Megapixels: 18 MP</td>
<td>Megapixels: 12 MP</td>
</tr>
<tr>
<td>Optical Zoom: 10 ×</td>
<td>Optical Zoom: 10 ×</td>
</tr>
<tr>
<td>LCD size: 3 in.</td>
<td>LCD size: 3 in.</td>
</tr>
<tr>
<td>Regular Price = $259.99</td>
<td>Regular Price = $219.99</td>
</tr>
</tbody>
</table>

In this situation I would (check one):

_____ Not buy either of these cameras and go to another store.
_____ Buy the Sony Cyber-shot DSC-WX150.
_____ Buy the Canon PowerShot Elph 330 HS
Appendix 2. Gambles with monetary outcomes (study 3)

Gamble A: Roll the dice. If the outcome is 1, 2, or 3, you will earn $0. If the outcome is 4 or 5, you will earn $5. If the outcome is 6, you will earn $10.

Gamble B: Roll the dice. If the outcome is 4, 5, or 6, you will earn $0. If the outcome is 2 or 3, you will earn $5. If the outcome is 1, you will earn $10.

Gamble C: Roll the dice. If the outcome is 2, 4, or 6, you will earn $0. If the outcome is 1 or 5, you will earn $5. If the outcome is 3, you will earn $10.

Gamble D: Roll the dice. If the outcome is 1, 3, or 5, you will earn $0. If the outcome is 2 or 6, you will earn $5. If the outcome is 4, you will earn $10.

Appendix 3. Sample choice scenario used in studies 4 and 5

Imagine that you would like to buy a cordless phone. At the store you normally shop, you find the following alternatives. You also have the option of not buying either of existing alternatives and looking for a phone at a different store.

Appendix 4. Sample choice scenario used in study 6

The products included in this study are actual brands that were on sale at the Best store during the summer of 2009. At the end of the study, you will be provided with a handout of the products on sale in August. This handout will also show the products on sale in July so that you can see which month had the better sales and what you have gained or missed by buying in the month that you have selected.

Appendix 5. Meta-analysis

Our meta-analysis database contains 13 effect sizes, including one from study 1a, one from study 1b, two (high and low conflict) from study 2, two (high power vs. low power; high power vs. control) study 3, two (salience of regret vs. control) from study 4, two (reversibility vs. control)
from study 5, two (locus-of-regret: postponing vs. choosing now) from study 6, and one unreported study (i.e., study 1 in the original submission). The number of people who deferred the choice and sample sizes of both the low-power and the high-power conditions for each observation were coded into the Comprehensive Meta Analysis (CMV) 2.0 software to calculate Hedge's $g$—also known as the correction for Cohen's $d$ (Lakens, 2013). The difference between these two metrics lies in the way the standard deviation is calculated (Fern & Monroe, 1996). As described by Hedges and Olkin (1985), Cohen's $d$ generates a biased estimate of the population effect size. For that reason, they suggest the use of Hedge's $g$ as a more conservative and robust estimation method. In addition to capturing the effect size for each observation, we classified these observations into either “regret-implicit” or “regret-salient” conditions, except for the “choosing now” condition in study 6 as the design of this study is not alignable with that in other studies. The Forest Plot of these effects is presented in Fig. A1:

**Fig. A1.** Forest plot of effects.

### Main effects

As shown in Table A1, the mean Hedge's $g$ across the studies in our database is $-0.450$ ($p = 0.001$) in the random effects model, which is significant—as indicated by the 95% bootstrapped confidence interval around the mean ($CI_{BS} = -0.713$ to $-0.187$). This result suggests that, in general, the powerful are less likely to defer their choice than the powerless. Rosenthal's fail-safe sample size ($N_{FS} = 103$) indicates that this result is robust. A funnel plot of all effect sizes plotted against their respective precision metric also confirms that there is little publication bias in the form of a file drawer problem, as shown in Fig. A2.

**Table A1.** Main effect results.

<table>
<thead>
<tr>
<th>Model</th>
<th>Study name</th>
<th>Hedge's $g$</th>
<th>Standard error</th>
<th>Variance</th>
<th>Lower limit</th>
<th>Upper limit</th>
<th>Z-value</th>
<th>p-value</th>
<th>Unaccounted variance ($\chi^2$)</th>
<th>Fail-safe sample size ($N_{FS}$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Random</td>
<td>Study 1a (add)</td>
<td>0.057</td>
<td>0.342</td>
<td>0.117</td>
<td>-1.376</td>
<td>-1.187</td>
<td>2.516</td>
<td>0.012</td>
<td>37.64</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Study 1b (intervention)</td>
<td>0.003</td>
<td>0.295</td>
<td>0.016</td>
<td>-1.000</td>
<td>-0.252</td>
<td>0.209</td>
<td>0.839</td>
<td>0.392</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Study 2a (high conflict)</td>
<td>0.058</td>
<td>0.209</td>
<td>0.044</td>
<td>-0.978</td>
<td>-0.198</td>
<td>-2.713</td>
<td>0.007</td>
<td>0.567</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Study 3 (low conflict)</td>
<td>0.007</td>
<td>0.205</td>
<td>0.170</td>
<td>-0.690</td>
<td>-0.551</td>
<td>-4.227</td>
<td>0.000</td>
<td>0.392</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Study 4 (low conflict)</td>
<td>0.137</td>
<td>0.287</td>
<td>0.085</td>
<td>-0.690</td>
<td>-0.551</td>
<td>-4.227</td>
<td>0.000</td>
<td>0.392</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Study 5 (choice)</td>
<td>0.076</td>
<td>0.260</td>
<td>0.169</td>
<td>-0.690</td>
<td>-0.551</td>
<td>-4.227</td>
<td>0.000</td>
<td>0.392</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Study 6 (low conflict)</td>
<td>0.071</td>
<td>0.260</td>
<td>0.169</td>
<td>-0.690</td>
<td>-0.551</td>
<td>-4.227</td>
<td>0.000</td>
<td>0.392</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Study 7 (control group)</td>
<td>0.003</td>
<td>0.295</td>
<td>0.016</td>
<td>-1.000</td>
<td>-0.252</td>
<td>0.209</td>
<td>0.839</td>
<td>0.392</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of samples ($k$)</th>
<th>Number of observations (N)</th>
<th>Weighted Hedge's $g$</th>
<th>95% Confidence Interval ($CI_{BS}$)</th>
<th>Unaccounted variance ($\chi^2$)</th>
<th>Fail-safe sample size ($N_{FS}$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choice Deferral</td>
<td>13</td>
<td>1125</td>
<td>$-0.450^a$</td>
<td>$[-0.713, -0.187]$</td>
<td>37.64</td>
</tr>
</tbody>
</table>

*a $p = 0.001$. 

---

**Note:**
- The studies included are from different loci of regret, with one from study 5 and two from study 6, plus an unreported study. The number of people who deferred their choice and sample sizes for both conditions were coded into the CMV 2.0 software to calculate Hedge's $g$. The difference between these two metrics lies in the way the standard deviation is calculated. Cohen's $d$ can generate a biased estimate of the population effect size. Hedges and Olkin (1985) suggested the use of Hedge's $g$ as a more conservative and robust estimation method.
- The observations were classified into “regret-implicit” or “regret-salient” conditions, except for the “choosing now” condition in study 6 due to design differences with other studies.
- A Forest Plot of these effects is presented in Fig. A1.

**Main effects:**
- The mean Hedge's $g$ across studies in our database is $-0.450$ ($p = 0.001$) in the random effects model, indicating a significant difference.
- Rosenthal's fail-safe sample size ($N_{FS} = 103$) supports the robustness of the result.
- A funnel plot confirms little publication bias, suggesting no file drawer problem.
Fig. A2. Funnel plot of all observed effects.

Moderating effects

Our main effect results demonstrate that generally there is a negative effect of power on choice deferral; however, there is substantial heterogeneity in the “power—choice deferral” relationship ($\chi^2(12) = 37.64, p < 0.001$). This suggests an examination of key moderator to the relationship between power and choice deferral is warranted. Univariate analysis was performed using the CMA 2.0 software, with Hedge's $g$ as the common effect size metric. As indicated in our paper, the core thesis of our research shows that power decreases choice deferral when regret is not salient; however, when regret is salient (low or high), the powerful and the powerless do not differ in choice deferral. Consistent with this hypothesis, the mixed effects analysis show that low (vs. high) power leads to more choice deferral when regret is not salient ($g = -0.764, p < 0.001$), whereas there is no difference across low- and high-power conditions when regret is salient ($g = -0.035, p < 0.001$; $\chi^2 (1) = 18.79, p < 0.001$). These results are shown in Table A2.

Table A2. Weighted univariate results for salience of regret.

<table>
<thead>
<tr>
<th></th>
<th>Number of samples</th>
<th>Number of observations</th>
<th>Mean effect</th>
<th>95% Confidence Interval (CI(95))</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regret not salient</td>
<td>8</td>
<td>665</td>
<td>$-0.764^{***}$</td>
<td>$[-0.953, -0.576]$</td>
</tr>
<tr>
<td>Regret salient</td>
<td>4</td>
<td>330</td>
<td>$-0.035$</td>
<td>$[-0.305, 0.236]$</td>
</tr>
</tbody>
</table>

$^{***} p < 0.001$.

References


