The Maximizing Mind-Set

JINGJING MA
NEAL J. ROESE

Getting the best has been advocated as an ideal in almost every domain of life. We propose that maximizing constitutes a mind-set that may be situationally activated and has cross-domain consequences. Specifically, we show that the maximizing mind-set amplifies regret and dissatisfaction, increases the likelihood of returning and switching products, and affects sensory experiences such as taste. The effect of the maximizing mind-set occurs only when consumers learn that they do not get the best but not when they do in fact get the best. We validate our conception of the maximizing mind-set by demonstrating its embrace of underlying processes of comparisons and goals.

Getting the best is great. It has been advocated as ideal in almost every domain of life. In business, companies strive to find the best possible clients, customers, and employees. In education, students are encouraged to search for the most suitable schools and majors, and to get as many 'A's as possible. In entertainment, some of the most popular TV shows, such as *American Idol*, *Dancing with the Stars*, and *X Factor*, revolve around the crowning of the best performer. Although maximizing outcomes can be considered as a goal, here we construe it as a mind-set, that is, a way of thinking that carries over across different judgment domains (Levav, Reinholtz, and Lin 2012).

If there is a maximizing mind-set, what are its psychological consequences? Will these consequences unfold across the boundary lines of different life domains? For example, does looking for the most suitable city in which to live have a carryover influence on regret after having missed out on a sale on school supplies? Does trying to get 'A's in school have a cross-domain impact on satisfaction with a smartphone purchase? Moreover, most people do not always achieve the best outcome, and so another key question centers on the consequences of a maximizing mind-set after failure as well as after success.

In the present research, we show that the maximizing mind-set is rooted to two underlying processes: a tendency to compare and the goal to get the best. This mind-set can have a cross-domain impact on psychological outcomes. Specifically, we find that the maximizing mind-set activated in one domain (e.g., nonconsumption) can amplify regret and dissatisfaction in a different domain (e.g., consumption), increase the likelihood of returning and switching products, and impact the sensory experience of taste. Our primary focus is on documenting the distinct effects of the maximizing mind-set on psychological responses to decision outcomes, but we benchmark these focal findings against effects on the decision making process and on the objective outcome of the decision. Further, we identify a moderating condition of the effects of the maximizing mind-set on outcome responses, namely, the valence of an outcome (getting the best versus not getting the best).

THEORETICAL BACKGROUND

Maximizing

In the present research, we conceptualize the maximizing mind-set in terms of two key features: a tendency to compare and the goal to get the best. This conception of maximizing is based on prior research in the domain of decision making, which has long recognized that some decision makers consistently try to choose the "best" and others tend to "satisfice," that is, settle for "good enough" options (Simon 1955, 1956, 1978). Maximizing involves making comparisons along the road to searching thoroughly for alternatives (Carter and Gilovich 2010; Iyengar, Wells, and Schwartz 2006; Levav et al. 2012; Schwartz et al. 2002; Sparks, Ehrlinger, and Eibach 2012). For instance, maximizers applied for more jobs and attended more job interviews relative to satisficers (Iyengar et al. 2006). Further, maximizers are more likely to engage in both upward and downward social comparison (Schwartz et al. 2002). Thus, a key element of

Jingjing Ma (jingjing-ma@kellogg.northwestern.edu) is a doctoral candidate in marketing, Kellogg School of Management at Northwestern University, Evanston, IL 60208. Neal J. Roese (n-roese@kellogg.northwestern.edu) is the John L. and Helen Kellogg Professor of Marketing, Kellogg School of Management, Northwestern University, Evanston, IL 60208.

maximizing is the tendency to compare among alternatives. Second, maximizing involves a salient goal to get the best. This aspect is illuminated by some of the self-report items that constitute the first published individual difference measure of maximizing: "No matter what it takes, I always try to choose the best thing"; "No matter what I do, I have the highest standards for myself"; "I will wait for the best option, no matter how long it takes"; and "I never settle for second best" (Schwartz et al. 2002, 1182). Going forward, we note that a categorical distinction between maximizers and satisficers is a semantic convenience only; rather, we consider maximizing to be a continuous dimension with the endpoints reflecting relatively higher maximizing versus lower maximizing (satisficing).

In terms of the consequences of maximizing, past research has shown that maximizers are less happy and less optimistic (and more depressed and regretful) than satisficers (Chang et al. 2011; Nenkov et al. 2008; Purvis, Howell, and Iyer 2011; Rim et al. 2011; Roets, Schwartz, and Guan 2012; Schwartz et al. 2002). However, such findings are based on trait level measurements and hence are correlational. Beyond this pattern of correlation, it remains unclear what causal impact an elevated maximizing tendency might have on effect and behavior. Also, these earlier studies have mostly focused on the affective responses to decision outcomes and have not taken into account the decision process that produced those outcomes. It is possible that maximizers devote more time and effort to their decision making than do satisficers (Iyengar et al. 2006; Levav et al. 2012) and as a result are more likely to be dissatisfied due to either the higher cost of effort expended or the higher expectation resulting from that effort (Huang and Zeelenberg 2012). For example, although some research (Levav et al. 2012) showed that maximizing led to extensive search and lower satisfaction, it was possible that maximizing caused extensive search and extensive search caused lower satisfaction, and maximizing had nothing to do with satisfaction. Accordingly, one objective of the present research was to examine the impact of maximizing on affective responses to decision outcomes and whether this impact derives directly from, or is independent of, its effect on decision process. Below we review the literature on affective responses to decision outcomes (regret and satisfaction) and consider their relation to the maximizing mind-set. We then provide an integrative review of past research on various kinds of mind-sets.

Affective Responses

We propose that the maximizing mind-set can influence affective responses such as regret and satisfaction, which, in turn, feed into negative behavioral consequences, such as returning and switching a selected product. Regret may be defined as a negative emotion rooted to a self-focused upward counterfactual inference. That is, regret involves inferring that one's own decision or action could have been different and could have brought about a better outcome than what actually happened (Epstude and Roese 2008; Roese and Summerville 2005; Saffrey, Summerville, and

Roese 2008; Zeelenberg and Pieters 2007). The subjective experience of regret is painful and is often accompanied by a feeling of "kicking yourself" (Roseman, Wiest, and Swartz 1994; Zeelenberg et al. 1998). Regret can be conceptualized in terms of a comparison between an outcome (e.g., unreliable smartphone reception) and a superior (i.e., upward) counterfactual alternative (e.g., reliable smartphone reception; Taylor 1997; van Dijk and Zeelenberg 2005; Zeelenberg and van Dijk 2005) and has been shown to be perhaps the most important emotion to be uniquely related to decision making, in terms of both an input to decision process and a reaction to decision consequences (Lin, Huang, and Zeelenberg 2006; Reb 2008; Reb and Connolly 2009; Zeelenberg et al. 2008).

As defined by Churchill and Surprenant (1982, 493), satisfaction is "an outcome of purchase and use resulting from the buyer's comparison of the rewards and costs of the purchase in relation to the anticipated consequences." These anticipated consequences are essentially expectations, which create frames of reference against which the consumer makes a comparative judgment regarding the outcome (Oliver 1980, 2010; Roese and Sherman 2007). When the outcome is better than expected, satisfaction results, whereas when the outcome is poorer than expected, dissatisfaction results (e.g., Andrews and Withey 1976; Campbell, Converse, and Rodgers 1976; Cardozo 1965; McKinney, Yoon, and Zahedi 2002; Shepperd and McNulty 2002; Watts 1968; Weaver and Brickman 1974). Because both regret and satisfaction depend on comparisons, an initial assumption is that the maximizing mind-set influences these affective outcomes by way of elevating the tendency to make comparisons. Besides affecting regret and satisfaction, the maximizing mind-set may also influence a series of behavioral consequences through regret and satisfaction, such as reduced repurchasing, increased likelihood of returning products, and brand switching.

In sum, because the maximizing mind-set embraces a tendency to compare to superior alternatives (i.e., the best), and because regret and satisfaction are defined by such comparisons, we expect that the maximizing mind-set increases regret and dissatisfaction regarding consumption outcomes. We further propose that this increased regret and dissatisfaction can in turn lead to increased negative behavioral responses, such as increased likelihood of returning and switching products.

These ideas are compatible with past research on maximizing, which has shown that individuals who score higher on maximizing also tend to report greater regret and lower life satisfaction, relative to those lower in maximizing (Chang et al. 2011; Iyengar, Wells, and Schwartz 2006; Purvis, Howell, and Iyer 2011; Rim et al. 2011; Roets et al. 2012; Schwartz et al. 2002; Sparks et al. 2012; Nenkov et al. 2008). Of course, this past research specified maximizing as an individual difference construct, whereas we focus on maximizing as a state that may vary situationally. Accordingly, we sought to activate the maximizing mind-set and then observe its consequences. By experimentally manipulating

the maximizing mind-set, we may explore its causal links to affective and behavioral responses, relations that were invisible to prior, correlational research. Next, we elaborate on our conceptualization of the maximizing mind-set by considering it in relation to past research on other kinds of mind-sets.

The Maximizing Mind-Set

According to one definition, "a mind-set is characterized by the persistence of cognitive processes and judgmental criteria that are activated in the course of performing a task. Once activated, it generalizes to other situations, affecting responses in these situations as well" (Wyer and Xu 2010; Xu and Wyer 2007, 556–57). This definition of mind-set originated from earlier work on procedural priming, which refers to the momentary activation of discrete cognitive operations arranged in a sequence and which are directed at the solution of problems or challenges (Förster and Liberman 2007; Schooler 2002; Smith 1990).

Procedural priming generally involves two stages. In the first stage, a performance task within a specific domain is given to participants to activate a type of cognitive procedure. Next, another task within a different domain is presented; performance on this second task is used to gauge the impact of mere completion of the first task. For example, in a classic demonstration by Luchins (1942), participants first learned a complicated rule for using water jugs to solve a series of problems and then were more likely to overapply this complicated rule in later problems that could be solved more easily in other ways.

Gollwitzer and his colleagues (Gollwitzer 1990; Gollwitzer and Bayer 1999; Gollwitzer, Heckhausen, and Steller 1990; Gollwitzer and Moskowitz 1996; Gollwitzer and Sheeran 2006) have explored varying consequences of deliberative versus implemental mind-sets. A deliberative mind-set is defined as weighing the pros and cons (i.e., assessment and evaluation) prior to a decision (and tends to be more impartial), whereas an implemental mind-set centers on the action of executing on a decision (and tends to be biased in favor of the merits of the chosen course of action). Another kind of mind-set is the counterfactual mind-set (Galinsky and Kray 2004; Galinsky and Moskowitz 2000; Galinsky, Moskowitz, and Skurnik 2000; Hirt, Kardes, and Markman 2004; Kray and Galinsky 2003), defined as the tendency to consider alternatives about past outcomes. Kray, Galinsky, and Wong (2006) showed that a counterfactual mind-set enhanced performance on analytic tasks but impaired performance on creative tasks. Markman et al. (2007) expanded on this result by differentiating between two kinds of counterfactual mind-set: a subtractive counterfactual mind-set (involving deleting elements that were present in reality) enhanced performance on analytic tasks, whereas an additive counterfactual mind-set (involving adding new elements not present in reality) enhanced performance on creative tasks. Xu and Wyer (2007, 2008) proposed yet another mind-set that involves comparison, which they termed a comparative mind-set. In their research, ac-

tivation of this mind-set was achieved by having participants engage in brief comparison tasks involving products, wild animals, or object features. The comparative mind-set was found to promote choice and agentic action. Finally, construal level theory (Trope, Liberman, and Wakslak 2007; White, MacDonnell, and Dahl 2011) and regulatory focus theory (Higgins 1998) proffered influential platforms for mind-set priming: for construal, people may be induced to momentarily focus on concrete versus abstract details (e.g., Freitas, Gollwitzer, and Trope 2004; Torelli and Kaikati 2009), and for regulatory focus, people may be induced to focus on current objectives with regard to a gain reference point (promotion focus) or a loss reference point (prevention focus; see, e.g., Freitas and Higgins 2002; Lee, Keller, and Sternthal 2010).

More recently, Levav et al. (2012) described effects involving the maximizing mind-set, which they defined similarly to the present conception. They showed that smaller initial choice sets placed within sequences of increasing set size activate the maximizing mind-set, resulting in greater search depth (i.e., more sampling and longer decision time). Supporting the mind-set interpretation, these authors showed that the maximizing mind-set persisted in subsequent, unrelated tasks. Instead of focusing on the decision-making process, our research focuses on the impact of the maximizing mind-set on affective and behavioral responses to decision outcomes while controlling for the decision-making process (i.e., effort and search depth). We believe that increasing choice-set size is one way to activate this mind-set but also that any comparative task with the goal to "get the best" will similarly activate this mind-set (Mogilner, Shiv, and Iyengar 2013). In the present research, we used several techniques to activate the maximizing mind-set, but the common elements underlying these were that they all embraced both the tendency to compare and the goal the get the best.

Building on past work on mind-sets, the present research aimed to demonstrate that the activation of the maximizing mind-set brings about cross-domain effects. We predicted that the maximizing mind-set amplifies regret and dissatisfaction and increases the likelihood of returning and switching products:

H1a: The maximizing mind-set increases regret and dissatisfaction across domains.

H1b: The maximizing mind-set increases returning and switching of products across domains, and this effect is mediated by shifts in regret and/or dissatisfaction.

The effects predicted above presume that the individual is reacting to a situation that is not the best, for example, a product is a failure. Of course, sometimes people do indeed get the best, which typically is a positive affective experience (Weiner 1985). This raises the question of an intriguing potential moderator, whether or not the outcome of a choice is or is not the best possible outcome. We propose that the maximizing mind-set would be unlikely to impact individ-

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uals' responses when the outcome is the best, because the maximizing mind-set features an elevated tendency to compare to superior alternatives. Once the outcome is the best, there is no superior alternative to which to compare, and thus the impact of the maximizing mind-set would be negligible. Our proposition is consistent with past research on counterfactual thinking, which has shown that positive (as opposed to negative) outcomes are less prone to activate counterfactual comparisons (Epstude and Roese 2008; Roese 1997; Roese and Hur 1997). Our proposition is also consistent with past research on individuals' tendency to maximize, which has found that upward but not downward comparisons influence the satisfaction reported by maximizers (Schwartz et al. 2002). Accordingly, we hypothesized:

> **H2**: The maximizing mind-set increases negative responses when the outcome is not the best, but it does not influence responses when the outcome is the best.

Finally, we validate our conceptualization of the maximizing mind-set by demonstrating its embrace of underlying processes centering on comparisons and goals:

> **H3**: The construct of the maximizing mind-set is defined by two underlying processes rooted to upward comparisons and the goal to get the best.

Across seven experiments, we examined the impact of the maximizing mind-set on various affective and behavioral responses to decision outcomes, with the additional goal of distinguishing such effects from those centering on decision process. Experiments 1a and 1b demonstrated the basic cross-domain effect of the maximizing mind-set on regret, satisfaction, and the likelihood of returning a product (hypotheses 1a and 1b), while controlling for performance and decision effort (i.e., aspects of decision process). Experiment 2 further clarified the effect of maximizing in relation to activation of a satisficing mind-set, while controlling for search depth. Experiment 3 showed that outcome valence moderated the impact of the maximizing mind-set on affective and behavioral responses, such that when the outcome was not the best, the maximizing mind-set had a negative impact on these responses, but when the outcome was the best, the maximizing mind-set had no effect (hypothesis 2). Experiment 3 also controlled for the impact of decision process by randomly assigning choice outcomes. Experiment 4 provided further evidence for hypothesis 2 and extended the findings to a reverse of the cross-domain effect documented in experiments 1a and 1b. Experiments 5 and 6 were designed to pinpoint the processes underlying the maximizing mind-set, namely, comparisons and goals, respectively (hypothesis 3). Also, experiment 6 clarified the maximizing mind-set by differentiating its consequences from the comparative mind-set proposed by Xu and Wyer (2007, 2008).

EXPERIMENT 1A

The goal of experiment 1a was to provide an initial test of the hypothesis that the maximizing mind-set activated in one domain can produce carryover effects in another domain. A two-stage paradigm was used to induce the maximizing mind-set in a nonconsumption domain and then to examine regret in a consumption domain.

Method

Participants were 76 adults (39 males and 37 females) recruited from Amazon Mechanical Turk (MTurk) and paid 50 cents each for a 5-minute study. They were randomly assigned to one of three priming conditions: maximizing mind-set, control mind-set, and baseline. Participants in the maximizing mind-set condition were asked to write down their best choices in 13 life domains, which correspond to the 13 domains measured by the maximization scale developed by Schwartz et al. (2002; see app. A for exact manipulations). This task was designed to prompt the maximizing mind-set, that is, making salient the goal to get the best and activating comparative thinking. Participants in the control mind-set condition answered 13 questions in similar domains but not involving maximizing, and participants in the baseline condition did not answer any questions.

Next, all participants participated in a game called "Best Deal," which was used to evoke momentary regret. In this game, participants were asked to choose the deal signifying the best value from among three different deals for the same product. Within each set of deals, one deal was objectively superior in value (i.e., less expensive) than the other deals, but due to the density of information, this was not immediately obvious. For example, participants were asked "Assume that you need to buy three cartons of milk. Which deal will you choose? A. $3 each, buy 2 get 1 free; B. $3 each, buy 3 get 30% off; or C. $6.20 for 3 cartons." (In this case, option A was the best deal.) Each participant received five sets of deals from five different product categories.

After participants made their deal selections, the objectively cheapest deals were revealed to them, and they were informed that they would receive a $1 bonus at the end of the study if they got all the best deals. Only one participant got all the deals right and received the $1 bonus. Then participants were asked to rate "How regretful are you about your choices?" on a 0 (not at all) to 100 (extremely) scale. In addition to the rating of regret, they were also asked to rate their mood ("How happy are you now?") and to evaluate the task ("Do you think this game is difficult?" "Do you think this game is fun?") on 0 (not at all) to 100 (extremely) scales. The purpose of measuring mood was to show that the maximizing mind-set did not create a halo effect of negativity. That is, we wished to test whether any effects on regret could be explained by a more general mood effect. The purpose of measuring task perception (difficulty and fun) was to rule out the alternative explanation that the maximizing mind-set influenced perceptions of the task (perhaps making the task seem less pleasant), which in turn might account for any variation in regret ratings.

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Results and Discussion

Confirming hypothesis 1a, the maximizing mind-set produced greater regret than the other two conditions ($F(2, 73)$ = 5.65, $p < .01$; see fig. 1). The maximizing mind-set produced greater regret than the control mind-set condition (20.5 vs. 5.7; $t(47)$ = 2.82, $p < .01$) and the baseline condition (20.5 vs. 6.89; $t(47)$ = 2.4, $p < .05$).
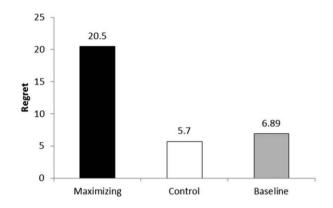
Next, we examined whether this greater regret produced by the maximizing mind-set was due to performance differences. That is, it might be the case that individuals in the maximizing mind-set condition worked harder and achieved a better outcome than those in the control conditions, and because they nevertheless still did not get the bonus, they may have experienced greater regret than those in the control conditions. Because there was always an objectively superior deal possible, we simply tabulated the number of best deals obtained by participants. Those in the maximizing mind-set condition indeed obtained more best deals than those in the control mind-set condition (3.41 vs. 2.67; $t(47)$ = 2.58, $p < .01$) and those in the baseline condition (3.41 vs. 2.63; $t(47)$ = 2.88, $p < .01$; see fig. 1). Thus, it appeared that the maximizing mind-set condition motivated participants to work harder than those in the control conditions. However, after controlling for the number of best deals obtained, the maximizing mind-set still produced greater regret than in the control mind-set condition ($F(1, 46)$ = 9.48, $p < .005$) and the baseline condition ($F(1, 46)$ = 6.68, $p < .01$). Thus, the maximizing mind-set influenced regret over and above its effect on performance.
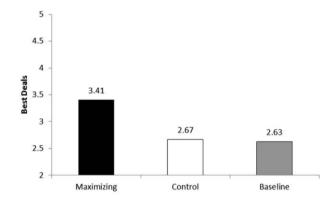
In addition, mood did not differ between the maximizing mind-set and control mind-set conditions (68.41 vs. 68.56; $t(47)$ = 0.02, $p = .98$) nor between the maximizing mind-set and baseline conditions (68.41 vs. 75.96; $t(47)$ = 1.09, $p = .28$). This result suggested that the maximizing mind-set did not create a general negative mood but rather only influenced regret specifically. Finally, participants' ratings on task difficulty and fun were not significantly different between the maximizing mind-set and control mind-set conditions (30.45 vs. 27.63; $t(47)$ = 0.35, $p = .73$; 62.55 vs. 64.81; $t(47)$ = 0.29, $p = .77$) nor between the maximizing mind-set and baseline conditions (30.45 vs. 27.67; $t(47)$ = 0.39, $p = .70$; 62.55 vs. 73.85; $t(47)$ = 1.46, $p = .15$). This ruled out the alternative explanation that the maximizing mind-set changed individuals' perception of the task, which in turn influenced regret.

Experiment 1a provided the first indication that the maximizing mind-set can produce carryover effects into domains unrelated to those in which the mind-set was evoked. Specifically, the maximizing mind-set, activated in a nonconsumption domain, influenced an important affective response—regret—in the consumption domain. Moreover, this effect was significant even after controlling for performance. Besides statistically controlling for performance, experiment 1b experimentally controlled for performance and decision effort by testing the impact of the maximizing mind-set in a hypothetical product failure scenario with the same outcome

THE MAXIMIZING MIND-SET INCREASES REGRET OVER UNDESIRABLE CONSUMPTION OUTCOMES AND AT THE SAME TIME INCREASES DECISION EFFORT (EXPERIMENT 1A)

and the same amount of effort needed in the maximizing mind-set condition and the control condition.

EXPERIMENT 1B

The goal of experiment 1b was to test the effect of the maximizing mind-set on affective responses (regret and satisfaction), as well as behavioral intentions (likelihood of returning a product). In addition, this experiment was designed to rule out an alternative explanation that the effect of the maximizing mind-set on regret in experiment 1a was due to enhanced effort. Finally, the experiment introduced a different experimental procedure by which to activate the maximizing mind-set.

Method

Participants were 62 adults (38 males and 24 females) recruited from Amazon MTurk and paid 50 cents each for a 5-minute study. They were randomly assigned to one of two priming conditions: maximizing mind-set and control. The maximizing mind-set induction was different from that

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used in experiment 1a: in this case, participants confronted five choices across five nonconsumption domains and in each, picked the best (see app. A for exact manipulations). Participants in the control condition engaged in some non-maximizing tasks with a similar task effort in the same domains as those in the maximizing mind-set condition. For example, they were asked to compare two pictures of Beyoncé and point out the differences.

Following the priming tasks, participants were asked to imagine a product failure scenario: "Imagine that you just upgraded your smartphone to a newly launched version. Then you found out that this new version has a fundamental flaw—unable to dial out from time to time." After reading this scenario, they were asked to rate "How regretful are you about upgrading your smartphone?" "How satisfied are you with your new smartphone?" "How likely are you to return it?" on 0 (not at all) to 100 (extremely) scales.

Results and Discussion

Consistent with hypothesis 1a, the maximizing mind-set (relative to the control condition) resulted in greater regret (80 vs. 57; $t(60) = 3.96$, $p < .001$), reduced satisfaction (24 vs. 35; $t(60) = 2.02$, $p < .05$), and increased behavioral intentions (i.e., likelihood of returning the product; 85 vs. 69; $t(60) = 2.58$, $p < .05$; see fig. 2).
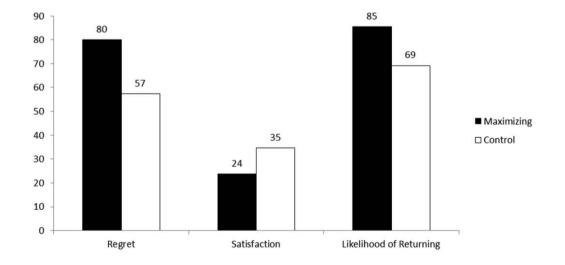
Next, we conducted two bootstrap mediation analyses (Zhao, John, and Chen 2010) with priming (maximizing mind-set vs. control) as the independent variable, behavioral intention (likelihood of returning the product) as the dependent variable, and the two affective responses (regret and satisfaction) as two separate mediators. The reason that we analyzed regret and satisfaction separately is that these

two variables, although modestly correlated ($b = .32$, $p < .01$), are nevertheless separable constructs. Conceptually, regret implicitly references the actions of the decision maker whereas satisfaction is agnostic on this element and, empirically, several studies have shown the constructs to be distinct (Zeelenberg et al. 1998; Zeelenberg and Pieters 2004). Appendix B lists all the correlation coefficients between regret and satisfaction, Cronbach's αs, and a meta-analysis based on these correlation coefficients. The meta-analysis showed that these two variables are significantly correlated overall ($b = -.49$), but there was significant variability across studies. The mediation analyses were run in SAS 9.2 with Preacher and Hayes's macro (2008; see http://www.afhayes.com/spss-sas-and-mplus-macros-and-code.html). The results showed that regret/satisfaction significantly mediated the impact of the maximizing mind-set on the likelihood of returning the product (see table 1), such that the maximizing mind-set produced higher regret/lower satisfaction which, in turn, led to higher likelihood of returning the product. These findings are consistent with hypothesis 1b.

Thus, experiment 1b demonstrated that the maximizing mind-set can impact affective and behavioral responses in the consumption domain, specifically regret, satisfaction, and likelihood of returning the product. Moreover, the same product failure scenario was given to participants in both the maximizing mind-set condition and the control condition, thus ruling out the alternative explanation that the magnified negative reactions could be caused by enhanced effort. Finally, experiment 1b offered converging support for the robustness of the effect of the maximizing mind-set, in that we used a different experimental induction and found effects on additional dependent variables than in experiment 1a.

FIGURE 2

THE MAXIMIZING MIND-SET NEGATIVELY INFLUENCES AFFECTIVE AND BEHAVIORAL RESPONSES TO UNDESIRABLE CONSUMPTION OUTCOMES (EXPERIMENT 1B)

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TABLE 1

MEDIATION (EXPERIMENTS 1B AND 3)

Experiment	N	IV	Mediator	DV	Indirect effect	95% Confidence interval
1b	62	Maximizing vs. control	Regret	Likelihood of returning	2.44	(.08, 5.67)
			Satisfaction	Likelihood of returning	3.92	(.85, 8.06)
3	273	Maximizing vs. control	Regret	Willingness to pay	−1.87	(−3.86, −.68)
			Regret	Switch	.05	(.02, .09)
			Liking	Willingness to pay	−5.8	(−9.10, −2.84)
			Liking	Switch	.06	(.03, .10)

NOTE.—Affective responses (regret, satisfaction/liking) significantly mediated the effect of the maximizing mind-set on behavioral responses (likelihood of returning the product, willingness to pay, and product switching).

EXPERIMENT 2

The previous experiments assessed the impact of the maximizing mind-set relative to various control conditions. Prior research (e.g., Iyengar et al. 2006; Schwartz et al. 2002) conceptualized the maximizing (vs. satisficing) construct as one bipolar rather than two unipolar dimensions, with individuals who score relatively higher on the maximizing scale being referred to as maximizers and those who score lower being referred to as satisficers (but see Turner et al. [2012] for a self-report measurement approach that treats satisficing as a dimension of maximizing). We have assumed at the outset a linear relation between maximizing and choice outcomes, such that if we primed a satisficing tendency, we would observe effects in the opposite direction as those we have observed involving the maximizing prime, or more specifically, maximizing priming should result in greater regret and less satisfaction than a satisficing priming condition. We attempted to test this assumption of linearity of maximizing effects by designing a condition intended to evoke a satisficing mind-set, namely, a brief judgment task emphasizing quick yet sufficiently reasonable conclusions.

In experiment 2, we tested the effects of the maximizing mind-set (vs. the satisficing mind-set vs. the baseline) on regret and satisfaction. In addition, we measured individuals' search depth (an indicator of decision process) during decision making so as to examine whether the maximizing mind-set had an impact on affective responses beyond influencing decision process, as opposed to the effect on affect being directly derived from decision process.

Method

Participants were 515 adults (313 males and 202 females) recruited from Amazon MTurk and paid 50 cents each for a 10-minute study with a 1 in 20 chance of getting their chosen product in this study. They were randomly assigned to one of three priming conditions: maximizing mind-set, satisficing mind-set, and baseline.

The maximizing mind-set induction was similar to that used in experiment 1b (see app. A for exact manipulations). The satisficing mind-set induction consisted of questions concerning choosing "good enough" or reasonably satisfactory options within the same domains as the maximizing

mind-set induction. Participants in the baseline condition did not receive any priming task.

Following the priming task, all participants were presented with five products with pictures and names (Skittles Gift Tin, Ghirardelli Thank You Chocolate, Mille Lacs Cheddar Cheese—3.75 oz., Deli Direct Cheese Blocks Gift Set, and Bonne Maman Strawberry Preserve Mini Jar) and instructed to pick the one they wanted to receive from us as a gift. At the same time, they were informed that they could find detailed product information on Amazon by clicking the product names (an embedded JavaScript recorded the number of clicks). The number of products clicked was the operationalization of search depth.

Immediately after participants made their pick, the five products along with their market prices were revealed to participants. At the same time, they were informed that they could receive an Amazon gift card with the exact amount of money as the market price of their chosen product (one day after this study, we sent these Amazon gift cards by email to 25 randomly selected participants and informed them that they could use these gift cards to purchase the items they selected during the experiment). Because most participants (76%) did not choose the product with the highest market price, this information served the purpose of regret induction (this variable, i.e., whether or not the highest-price product was chosen, served as the basis for an exploratory analysis of the role of getting the best vs. not getting the best).

Participants next rated their regret ("How much regret do you feel over regarding your choice?") on a 1 (not regret) to 7 (regret) scale and satisfaction ("How satisfied are you with your choice of item?") on a 1 (dissatisfied) to 7 (satisfied) scale.

Results and Discussion

Confirming hypothesis 1a, the maximizing mind-set produced greater regret and lower satisfaction than the other two conditions ($F(2, 512) = 7.72$, $p < .001$, for regret; $F(2, 512) = 4.94$, $p < .01$, for satisfaction). The maximizing mind-set produced greater regret and lower satisfaction than the satisficing mind-set condition (2.1 vs. 1.65; $t(341) = 3.11$, $p < .005$, for regret; 5.99 vs. 6.29; $t(341) = 2.3$, $p < .05$, for satisfaction) and the baseline condition (2.1 vs. 1.62;

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$t(342) = 3.36$, $p < .001$, for regret; 5.99 vs. 6.35; $t(342) = 2.85$, $p < .005$, for satisfaction; see fig. 3). Note, however, that in no case did the satisficing priming produce a significant difference relative to the baseline condition. Like all null effects, the inherent ambiguity precludes clear conclusions, but we suspect that the attempt to prime satisficing was simply not as effective as our maximizing priming procedures have proven to be. Nevertheless, the significant difference between the maximizing and satisficing conditions provides further support to the robustness of the maximizing mind-set induction, which is the principal focus of all experiments reported here.

Next, we examined whether the maximizing mind-set produced greater search depth (i.e., higher number of products searched) and better outcomes (i.e., higher market value of the chosen product). Participants in the maximizing mind-set condition indeed searched more products than did those in the satisficing mind-set condition and the baseline condition (1.53 vs. 1.32 vs. 1.28; $F(2, 512) = 4.43$, $p < .01$; see fig. 3), but they did not get better outcomes than the other two conditions ($7.09 vs. $7.04 vs. $7.12; $F(2, 512) = .06$, $p = .94$). Importantly, even after controlling for search depth, the maximizing mind-set still produced greater regret and lower satisfaction than in the other two conditions ($F(2, 511) = 7.76$, $p < .001$, for regret; $F(2, 511) = 4.95$, $p < .01$, for satisfaction).
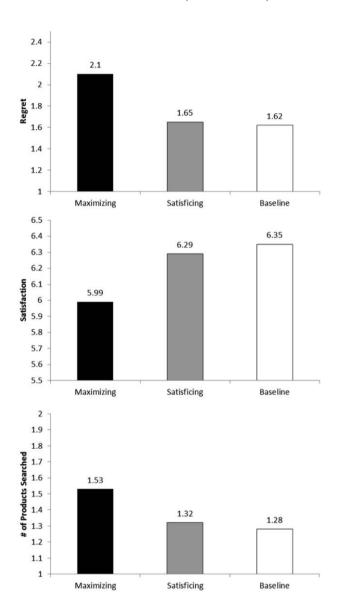
In addition, we found that the impact of the maximizing mind-set on regret and satisfaction was evident only among participants who did not get the most expensive product (76% of the total participants) but not among those who did get the most expensive product (24% of the total participants). Specifically, for participants who did not get the most expensive product, the maximizing mind-set produced greater regret and lower satisfaction than the satisficing mind-set condition and the control condition (2.32 vs. 1.76 vs. 1.72, $F(2, 388) = 7.79$, $p < .001$, for regret; 5.84 vs. 6.17 vs. 6.31, $F(2, 388) = 5.11$, $p < .01$, for satisfaction). In contrast, for participants who indeed got the most expensive product, the maximizing mind-set did not have any significant impact on regret or satisfaction (1.43 vs. 1.28 vs. 1.3, $F(2, 121) = .43$, $p = .65$, for regret; 6.45 vs. 6.69 vs. 6.47, $F(2, 121) = 1.27$, $p = .28$, for satisfaction). This result indicated that the impact of the maximizing mind-set may be moderated by the valence of the outcomes. However, the outcomes in this study were not exogenously manipulated but endogenously generated; thus, we cannot reach any causal conclusions about the role of outcome valence. Accordingly, experiment 3 manipulated outcome valence by randomly assigning the best and the nonbest outcomes.

EXPERIMENT 3

Experiment 3 investigated the effect of the maximizing mind-set on affective and behavioral responses in conditions when the outcome is the best versus not the best. We considered outcome valence to represent a possible boundary condition for the effects observed thus far. According to hypothesis 2, effects should be reduced or absent when the

FIGURE 3

THE MAXIMIZING MIND-SET NEGATIVELY INFLUENCES AFFECTIVE RESPONSES AND INCREASES SEARCH DEPTH COMPARED TO A SATISFICING MIND-SET AND A BASELINE CONDITION (EXPERIMENT 2)

outcome is the best. We tested hypothesis 2 in a real food consumption setting using a richer array of dependent measures, including regret, liking, taste, willingness to pay (WTP), and product switching.

Method

Participants in this laboratory study were 273 undergraduates (116 males and 157 females) attending Northwestern

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University, paid $8 each for their participation. They were randomly assigned to the four conditions of a 2 mind-set priming (maximizing mind-set vs. control) × 2 outcome (best vs. nonbest) between-subject design. The maximizing mind-set induction was similar to that used in experiment 1a, but in this case participants were asked not only to name the best within a particular category but also to explain why (see app. A for exact manipulations). The control priming condition consisted of nonmaximizing questions intended to be of equivalent task effort to the mind-set priming condition: "Please tell us about a class you are taking this quarter (e.g., the objectives, content, and requirements of this class)."

Following the priming task, all participants saw pictures of six popular snacks in the US market (Lays Classic, Doritos Nacho Cheese, Doritos Cool Ranch, Cheetos Crunchy, Sun Chips, Fritos Original) and were instructed to pick the snack they liked the most. Immediately after they made their pick, half of the participants received their chosen snack (the best outcome condition), and the other half were told that the snack they chose had run out, and a random snack instead was given to them by the experimenter (the nonbest outcome condition).

Participants next rated their given snack on regret ("How much regret do you feel about your snack choice?"), liking ("How much do you like the snack?"); both scales anchored by 1 (not at all) to 7 (very much). Participants then tasted the snack on the spot and rated it from 1 (bad) to 7 (good). Next, participants expressed their willingness to pay (i.e., "How much are you willing to pay for this snack?"; responses could be any amount ranging from 0 to 100 cents). Finally, to assess product switching, participants were shown six Canadian snacks (six different favors of *Old Dutch* brand potato chips) and asked "Are you willing to trade in the snack you just received for one of the snacks below?" (to which they could select "trade" or "not trade"). The reason we used Canadian snacks was because the packaging was in English, yet most of our participants (95%) had never purchased them.

Results and Discussion

We first noted that the dependent variables were highly intercorrelated (see table 2). Accordingly, we began with an omnibus test of the effect of the manipulated variables on all of the continuous variables. This two-way MANOVA, with priming (maximizing mind-set vs. control) and outcome (best vs. nonbest) as the two factors and regret, liking, taste, and WTP as dependent variables, revealed that the overall effect of priming was marginally significant (Wilks's $\lambda = 0.97$; $F(4, 266) = 2.19$, $p < .07$) and that the overall effect of outcome was significant (Wilks's $\lambda = 0.67$, $F(4, 266) = 32.55$, $p < .001$). More important, the overall two-way interaction effect was significant (Wilks's $\lambda = 0.93$, $F(4, 266) = 5.19$, $p < .001$). To clarify this interaction effect, we examined it within each dependent variable separately via a generalized linear model (GLM), and the first 3 of the 4 dependent measures followed essentially the same pattern, as noted below.

TABLE 2

CORRELATION MATRIX OF DEPENDENT VARIABLES
(EXPERIMENT 3)

	Regret	Liking	Taste	WTP
Regret	1.00			
Liking	−.46	1.00		
	<.001			
Taste	−.43	.86	1.00	
	<.001	<.001	<.001	
WTP	−.20	.51	.49	1.00
	<.005	<.001	<.001	

NOTE.—Person correlation coefficients, $N = 273$; prob > r under H0: = 0. WTP, willingness to pay.
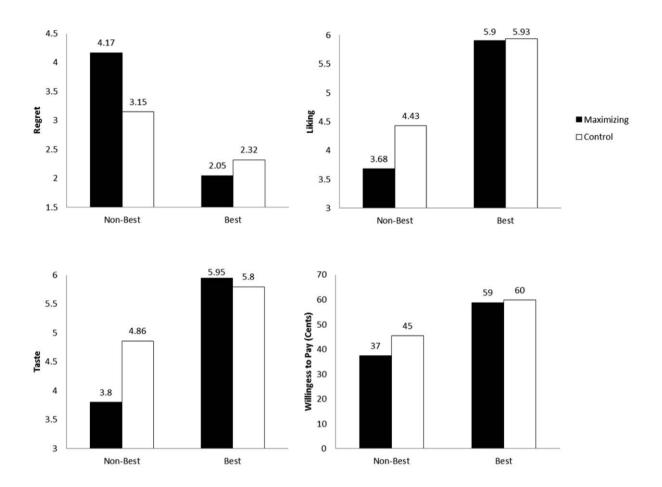
First, for regret, the two-way interaction effect was significant ($F(1, 269) = 8.78$, $p < .005$), such that the maximizing mind-set versus control effect was significant in the nonbest outcome condition (4.17 vs. 3.15; $t(173) = 3.8$, $p < .001$) but not in the best outcome condition (2.05 vs. 2.32; $t(96) = .83$, $p = .41$). Second, for liking, the two-way interaction was also significant ($F(1, 269) = 4.41$, $p < .05$), such that the maximizing mind-set versus control had a significant impact on liking in the nonbest outcome condition (3.68 vs. 4.43; $t(173) = 3.36$, $p < .001$) but not in the best outcome condition (5.9 vs. 5.93; $t(96) = .1$, $p = .92$). Third, for taste, the two-way interaction was significant ($F(1, 269) = 13.43$, $p < .001$), such that the maximizing mind-set versus control had a significant impact on taste in the nonbest outcome condition (3.8 vs. 4.86; $t(173) = 4.83$, $p < .001$) but not in the best outcome condition (5.95 vs. 5.8; $t(96) = .75$, $p = .46$). Fourth, for WTP, the two-way interaction was not significant ($F(1, 269) = 1.04$, $p = .31$; see fig. 4).

Product switching was a dichotomous measure and so was tested separately. It followed the same pattern as that observed for regret, liking, and taste: The maximizing mind-set (vs. control) evoked greater product switching in the nonbest outcome condition (68% vs. 32%) but not in the best outcome condition (47% vs. 53%). A logistic model with priming (maximizing mind-set vs. control) and outcome (best vs. nonbest) as the independent variables and the likelihood of product switching as the dependent variable showed that the maximizing mind-set produced a higher likelihood of product switching than did the control condition ($b = .53$, $\chi^2(1) = 13.61$, $p < .001$) and that this effect was significantly stronger in the nonbest outcome condition than in the best outcome condition ($b = .31$, $\chi^2(1) = 4.74$, $p < .05$). In addition, the nonbest outcome condition produced a higher likelihood of product switching than did the best outcome condition ($b = .47$, $\chi^2(1) = 10.54$, $p < .001$).

We conducted four bootstrap mediation analyses (Zhao et al. 2010) with priming (maximizing mind-set vs. control) as the independent variable and behavioral responses (willingness to pay or product switching) as dependent variables, and affective responses (regret or liking) as two separate mediators. The results showed that the maximizing mind-

THE MAXIMIZING MIND-SET NEGATIVELY INFLUENCES AFFECTIVE AND BEHAVIORAL RESPONSES TO NONBEST
AS OPPOSED TO BEST CONSUMPTION OUTCOME (EXPERIMENT 3)

set produced higher regret/lower liking, which, in turn, led to lower willingness to pay and higher likelihoods of product switching (see table 1). These findings are consistent with those of experiment 1b and with hypothesis 1b.

In sum, these results showed that the maximizing mind-set has a broad effect on affective and behavioral responses to consumption outcomes. Specifically, we showed the mediating pathway by which maximizing heightens regret, which then reduces liking, taste, willingness to pay, and increases product switching. This experiment also revealed a boundary condition, such that although the maximizing mind-set can negatively influence effect and behavior when the outcome is not the best, when the outcome is the best, the maximizing mind-set has no effect.

EXPERIMENT 4

So far, we have demonstrated that the maximizing mind-set activated in a nonconsumption domain can have a cross-

domain impact on affective and behavioral responses in the consumption domain. To further support the argument that we have activated a mind-set (i.e., a mental state defined in terms of its effects that extend across domains), experiment 4 was designed to reverse the cross-domain direction observed in the previous experiments, such that this mind-set can also be activated in the consumption domain and impact responses in an unrelated nonconsumption domain. As such, this experiment can rule out the interpretation that there is something special and necessary about the effect passing from a nonconsumption to a consumption domain. In addition, we tested whether the moderating effect of outcome valance (best vs. nonbest) found in experiment 3 also held in the current context.

Method

Participants in this laboratory study were 262 students (109 males and 153 females) at Northwestern University,

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paid $8 each. This experiment was based on a 2 (priming: maximizing mind-set vs. control) × 2 (outcome: best vs. nonbest) between-subject design.

First, all the participants were given a response task called the "Letter Game." In this task, participants pressed computer keys to judge the similarity between letters, with the instruction to respond as quickly as possible. Next, participants were randomly assigned to one of two priming conditions: maximizing mind-set and control. The mind-set priming task was similar to that used in experiment 1b. However, instead of choosing the best in various nonconsumption domains, participants made consumption choices in five product categories. As an illustration: "Which backpack brand do you think is the best? A. The North Face. B. JanSport. C. Columbia. D. Mountain Hardware. E. Timbuk2." The control condition consisted of nonmaximizing questions intended to be equated for task effort: "Please describe the features of the backpack you currently own (e.g., color, size, brand, etc.)."

Following the priming task, participants were told that "the letter game study in which you just participated explores how individuals' response times to letters correlate with intelligence levels. The distribution of the correlation is as follows. . ." Participants were presented with the distribution of the response times among the general population and how the range of the response times corresponded to the range of intelligence levels (see table 3 for screen shots of the feedback given to participants). Then they were told either that their response time was 258 ms, which fell in the range of the top 10% intelligence level (best outcome condition), or 531 ms, which was below average (nonbest outcome condition). A pretest with 224 participants from the same subject pool showed that their mean estimated reaction time was 371 ms, and the corresponding intelligence level was 21%-40%. The false feedback (269 ms vs. 531 ms) was used as a manipulation of the best vs. nonbest outcome.

Finally, participants answered one question concerning regret ("How much regret do you feel about this result?") and two questions measuring satisfaction ("How satisfied are you with this result?"; "How good or bad do you feel about this result?") on 1 to 7 scales. The ratings of these latter two questions were highly correlated (Cronbach's α = .97) and so were averaged. Participants rated "Is your

result better or worse than what you expected?" on another 1 (worse than what I expected) to 7 (better than what I expected) scale. This question was used as a manipulation check of outcome valence.

Results and Discussion

First, the main effect of priming on regret was significant, such that the maximizing mind-set induced greater regret than did the control condition (3.31 vs. 2.7; $F(1, 258)$ = 11.39, $p < .001$). This effect was moderated by outcome ($F(1, 258)$ = 3.49, $p < .07$), such that maximizing versus control had a significant effect on regret in the nonbest outcome condition (4.27 vs. 3.42; $t(133)$ = 3.17, $p < .005$) but not in the best outcome condition (2.18 vs. 2.01; $t(125)$ = .69, p = .49). The main effect of outcome was also significant, such that those receiving best outcomes were less regretful about their choices than those receiving nonbest outcomes (2.09 vs. 3.87; $F(1, 258)$ = 92.56, $p < .001$). These results are consistent with the findings in experiment 3 (see fig. 5).

Second, the main effect of the maximizing mind-set on satisfaction was significant, such that the maximizing mind-set induced lower satisfaction than did the control condition (3.64 vs. 4.42; $F(1, 258)$ = 29.25, $p < .001$). This effect was moderated by outcome ($F(1, 258)$ = 5.34, $p < .02$), such that the effect of the maximizing mind-set versus control was significant in the nonbest outcome condition (1.88 vs. 2.79; $t(133)$ = 4.73, $p < .001$) but not in the best outcome condition (5.73 vs. 5.97; $t(125)$ = 1.14, p =.25). The main effect of outcome was also significant, such that those receiving best outcome (top 10%) rated their performance in the Letter Game as more satisfying than those receiving nonbest outcome (below average; 5.85 vs. 2.31; $F(1, 258)$ = 598.7, $p < .001$). These results concerning satisfaction are also consistent with findings in experiment 3 (see fig. 5).

The manipulation check of outcome valence (best vs. nonbest) showed that participants rated the best outcome as significantly better (than expected) than the nonbest outcome (5.35 vs. 2.61; $F(1, 258)$ = 293.92, $p < .001$); this effect held across the maximizing mind-set condition and the control condition, as indicated by a nonsignificant interaction effect ($F(1, 258)$ = .00, p = .96). Also, participants in the maximizing mind-set condition compared to those in the

TABLE 3

IQ TEST FEEDBACK (EXPERIMENT 4)

IQ level	Highly intelligent	Intelligent	Above average	Average	Below average	Bottom 10
Best:						
IQ percentage	1–10	11–20	21–40	41–60	61–90	91–100
Reaction time (ms)	<289	289–350	351–390	391–455	456–733	>733
Your average reaction time is: 269						
Nonbest:						
IQ percentage	1–10	11–20	21–40	41–60	61–90	91–100
Reaction time (ms)	<289	289–350	351–390	391–455	456–733	>733
Your average reaction time is: 531						

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FIGURE 5

THE MAXIMIZING MIND-SET NEGATIVELY INFLUENCES
AFFECTIVE RESPONSES TO UNDESIRABLE
NONCONSUMPTION OUTCOMES (EXPERIMENT 4)

control condition rated the outcome as significantly worse than expected (3.76 vs. 4.11; $F(1, 258) = 4.91$, $p < .05$).

In sum, the results of the current experiment provided further support for the robustness of the effects of the maximizing mind-set. That is, the maximizing mind-set effect was not context specific, such that its effect can persist from a nonconsumption domain to a consumption domain as well as from a consumption domain to a nonconsumption domain. So far, we have demonstrated several ways to activate the maximizing mind-set and examined a range of consequences of this mind-set. Recall that we conceptualized the underlying basis of the maximizing mind-set in terms of a tendency to compare and the goal to get the best. The next two experiments aimed to provide further validation of this conceptualization.

EXPERIMENT 5

This experiment was designed to validate our proposed definition of the maximizing mind-set by showing directly that our maximizing mind-set priming procedure indeed evokes a heightened tendency to make comparisons, and specifically to make upward comparisons. Accordingly, in experiment 5, we again manipulated maximizing mind-set and then assessed its effect on affective outcome variables, but in addition we also used a thought-listing task to capture the extent of upward comparative thinking. We expected that maximizing would involve a significantly enhanced tendency to engage in upward comparisons, namely, thoughts focusing on a better alternative to the option at hand.

Method

Participants in this laboratory study were 156 undergraduates (57 males and 99 females) at Northwestern University, paid $8 each. They were randomly assigned to one of two priming conditions: maximizing mind-set and control. The maximizing mind-set priming questions were the same as those in experiment 1b. The control condition consisted of nonmaximizing tasks with a similar task effort (i.e., describing a class). Testing was completed using personal computers in the laboratory.

Following the priming tasks, all participants were asked to choose between two imperfect vacation packages of equal attractiveness, adapted from Xu and Wyer (2008). Specifically, vacation package A had four desirable features (good nightspots, attractive beaches, good museums, and nice shopping centers) and two undesirable features (pollution problem and expensive); vacation package B had four desirable features (good nightspots, good theaters, attractive beaches, and efficient transportation) and two undesirable features (possible bad weather and crowded).

After participants made their choice of vacation package, they rated satisfaction ("How satisfied are you with your chosen vacation package?"; responses were on a 1 [dissatisfied] to 7 [satisfied] scale). Immediately after, they completed a thought listing task with the following instruction: "Please explain why you gave the above satisfaction rating." Participants were then given a blank space on the computer screen in which to type in as many responses as they saw fit.

Results and Discussion

The two vacation packages were of equal attractiveness to participants (52% vs. 48% of participants picked package A vs. B, respectively; $\chi^2(1) = 0.23$, $p = .63$). Importantly, the two vacation packages were of equal attractiveness regardless of whether participants were in the maximizing mind-set condition or the control condition ($\chi^2(1) = 0.64$, $p = .42$), indicating that the effect of the maximizing mind-set on satisfaction was unlikely to be caused by differentiated preferences toward the packages.

The maximizing mind-set decreased satisfaction relative to the control condition (3.83 vs. 4.85; $t(154) = 4.92$, $p < .001$), as observed previously. We next examined the pattern of comparative thinking between the two conditions. Thought-listing responses were coded by two raters blind to the experimental hypothesis (inter-rater agreement = 92%), and disagreements were solved through discussion. The coders tabulated each participant's upward comparison

statements (upward comparison was defined to the coders as statements that compared the chosen option to superior alternatives/better options) and downward comparison statements (downward comparison was defined to the coders as statements that compared the chosen option to inferior alternatives/worse options). Because participants could type as many responses as they want, many of them listed more than one comparison statement, and some of them listed both upward and downward comparison statements. Hence coders coded each participant's responses into two continuous variables—number of upward comparison statements and number of downward comparison statements. We conceptualized the maximizing mind-set in terms of its underlying basis in a tendency to compare and the goal to get the best. Thus, we expected a greater number of comparisons in the maximizing mind-set condition compared to the control condition. Also, because the maximizing mind-set also involves the goal to get the best, we expected that these comparisons would be predominately upward as opposed to downward (i.e., centering on superior as opposed to inferior options).

As expected, participants in the maximizing mind-set condition recorded significantly more upward comparisons than those in the control condition (0.90 vs. 0.67; $t(154) = 1.82$, $p < .07$); participants rarely engaged in downward comparisons regardless of condition (0.08 vs. 0.06; $t(154) = .31$, $p = .76$). Further, the total thoughts listed (operationalized as the number of letters written) did not differ between the maximizing mind-set and control conditions (141 vs. 153; $t(154) = .87$, $p = .39$). This result ruled out the possibility that the increased upward comparisons in the maximizing mind-set condition were due merely to increased task involvement or heightened cognitive activity.

To examine further the role of upward comparison in the impact of the maximizing priming on satisfaction, we conducted the bootstrap test (Zhao et al. 2010) with the number of upward comparisons as the mediator, priming (maximizing vs. control) as the independent variable, and satisfaction as the dependent variable. We found that the mean indirect effect from the bootstrap analysis was significant ($a \times b = -0.0827$), with a 95% confidence interval excluding zero ($-.2137$ to $-.0144$). In the indirect path, the maximizing priming compared to control increased participants' likelihoods of making upward comparisons by 22%. Each one unit increase of comparisons decreased satisfaction level by .37 units on a 1 to 7 scale. Thus, a tendency to make upward comparisons mediated the effect of maximizing on satisfaction.

EXPERIMENT 6

We have conceptualized the maximizing mind-set as embracing two underlying aspects: comparisons and the goal to get the best. Experiment 5 validated the first part of our conceptualization by showing the role of comparison, especially upward (as opposed to downward) comparison. In experiment 6, we turn to a demonstration of the role of the goal to get the best in the maximizing mind-set. To do this,

we activated the maximizing mind-set in the same manner as in our previous studies, but on a between-subject basis we also activated the comparative mind-set. Recall that the comparative mind-set is defined in terms of the mental procedure of comparing two or more objects. Thus, the definition of this mind-set overlaps with that of the maximizing mind-set with regard to the key aspect of comparison. However, the comparative mind-set does not embrace the other aspect of getting the best (e.g., individuals can compare to find out the differences or similarities among objects instead of the best object); in other words, the goal to get the best is the distinguishing feature between these two mind-sets. If the activation of both mind-sets produces identical consequences, we might conclude that both derive their impact entirely from comparison processes. However, any observed divergence in their consequences might be due to the distinguishing feature of the goal to get the best. Recall that the nonmaximizing mind-set priming in experiment 1b and the satisficing mind-set priming in experiment 2 both involved the comparison process but neither involved the goal to get the best; these two types of priming did not increase regret or dissatisfaction. This indicated that the comparative mind-set may not influence affective responses the same way as the maximizing mind-set. However, these two types of priming differed from the maximizing mind-set priming also in terms of the priming content. In experiment 6, we intended to compare the maximizing mind-set and the comparative mind-set while controlling for the specific content.

We used hypothesis 2 as the place to look for this divergence. That is, hypothesis 2 suggested a boundary condition of the previously observed effect of the maximizing mind-set, such that the maximizing mind-set increases regret and dissatisfaction when the outcome is not the best, but not when the outcome is the best. This particular pattern connects to the underlying goal of getting the best and would thus seem to be a unique consequence of the maximizing mind-set and not the comparative mind-set. By testing both the maximizing and comparative mind-sets in the same experiment, we may detect differences between the two mind-sets in terms of their respective impact on affective responses.

Another goal of experiment 6 was to examine the impact of the maximizing mind-set on consumption outcomes, that is, the extent to which consumers achieve their goal of getting the best product or service. Experiment 1a provided the first indication that the maximizing mind-set may improve performance, and experiment 2 showed that it increased search depth. However, in these two experiments, the consumption outcomes were not significantly affected by the maximizing mind-set. In experiment 6, we investigated the effect of the maximizing mind-set on participants' likelihoods of getting their desired consumption outcomes. We also investigated participants' subsequent satisfaction with these self-selected consumption outcomes. In experiments 1b, 3, 4, and 5, the consumption outcomes (getting a desirable or undesirable consumption outcome) were created by the experimenter through either random assignments of

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the outcomes (e.g., getting their favorite snack or not) or hypothetical scenarios (e.g., imagining that they got a malfunctioned smartphone). In reality, consumers themselves are usually the creators of their own consumption outcomes. Experiment 6 was intended to replicate the findings that the maximizing mind-set intensifies regret and dissatisfaction by using consumption outcomes that were self-selected.

Method

Participants were 354 adults (218 males and 136 females) from Amazon MTurk who were each paid 50 cents to participate. The design consisted of one manipulated factor (three priming conditions: maximizing mind-set, comparative mind-set, and baseline). The dependent measures centered on participants' choices, their obtained outcomes, and their self-reported satisfaction and regret.

Participants in the maximizing mind-set condition were asked to choose "the best" option from among three options. There were five sets of options from five different domains (see app. A for exact manipulations). Participants in the comparative mind-set condition were asked to compare two options and evaluate whether or not these two options differ. In this second condition, there were five sets of options from the same five domains as those in the maximizing mind-set condition. Participants in the baseline condition did not receive any priming task.

Following the manipulation, all participants were given a hypothetical scenario in which they needed to buy three cartons of milk. They were asked to choose the best deal among three deal options: $3 each, buy 2 get 1 free; $3 each, buy 3 get 30% off; and $6.2 for 3 cartons. In addition, they were informed that the best deal was the one with the lowest price for three cartons of milk. After participants made their choices, the best deal was revealed to them, which was "$3 each, buy 2 get 1 free (total price was $6)." After the revelation of the best deal, participants were informed that "if you chose the best deal—$3 each, buy 2 get 1 free—you will be automatically entered into a lottery for a $10 bonus. The chance of winning is 1 in 50. Winners will get their bonuses through Mturk on June 16th."

Whether or not participants chose the best deal was a dependent measure centering on outcome. To be clear, this outcome (best or nonbest, binary coded as 0 or 1) was created by participants themselves during the experiment and constitutes the reverse of the approach taken in experiments 2 and 3, in which getting the best versus not the best was a manipulated variable. We could then test whether consumption outcome (i.e., whether or not participants got the best) varied as a function of mind-set activation relative to baseline.

After participants were notified about their consumption outcomes, they rated regret and satisfaction: "How regretful are you about your choice of the best deal?"; "How satisfied are you about your choice of the best deal?" (1 to 7 scales).

We examined the effect of the maximizing mind-set (compared to comparative mind-set and baseline) on regret and dissatisfaction following different consumption outcomes

(best vs. nonbest). This constituted a 3 (priming: maximizing mind-set, comparative mind-set, vs. baseline) × 2 (outcome: best vs. nonbest) between-subjects factorial design, with the first variable as a randomly assigned variable and the second variable as an endogenously created (i.e., self-selected) variable.
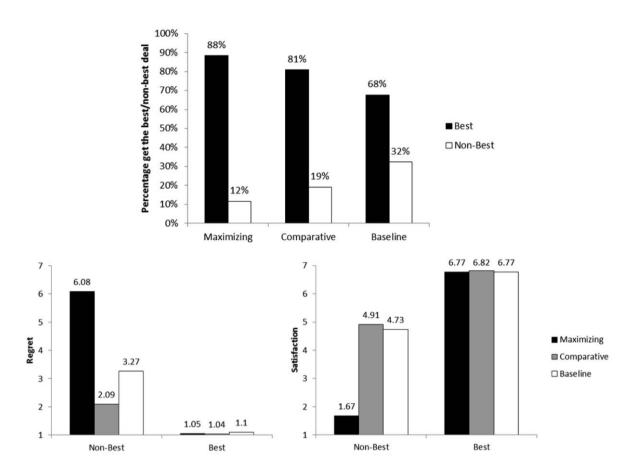
Results and Discussion

Turning first to outcome, participants' likelihoods of getting the best deal differed across the three priming conditions ($\chi^2(2) = 15.46$, $p < .001$). Participants in the maximizing mind-set and comparative mind-set conditions were more likely to get the best deal than those in the baseline condition (88% vs. 68%, $\chi^2(1) = 14.00$, $p < .001$; 81% vs. 68%, $\chi^2(1) = 5.62$, $p < .05$). Maximizing and comparative mind-set conditions did not differ on this metric (88% vs. 81%, $\chi^2(1) = 2.31$, $p = .13$). This finding is consistent with past research showing that any mind-set that involves the mental procedure of forming comparisons can increase (at a very general level) task performance (Kray et al. 2006; Mussweiler and Epstude 2009). This finding is also consistent with the result in experiment 1a, showing that participants in the maximizing mind-set condition obtained more best deals than those in the control condition.

We next turned to the affective outcome variables—regret and satisfaction. Recall that our key test is whether hypothesis 2 is confirmed for both the maximizing and comparative mind-set, or if the maximizing mind-set uniquely produces affective consequences in line with hypothesis 2. Regret and satisfaction were independently tested with 3 (priming: maximizing, comparative, baseline) × 2 (outcome: best vs. nonbest) GLM models. First, in both cases the main effect of priming was significant ($F(2, 348) = 40.5$, $p < .001$, for regret; $F(2, 348) = 11.1$, $p < .001$, for satisfaction), as was the main effect of outcome ($F(1, 348) = 1298$, $p < .01$, for regret; $F(1, 348) = 1074.49$, $p < .001$, for satisfaction). More important, the two-way interaction between priming and outcome was also significant in both cases ($F(2, 348) = 216.42$, $p < .001$, for regret; $F(2, 348) = 118.39$, $p < .001$, for satisfaction; see fig. 6).

For those who got the best deal (best outcome condition), the maximizing mind-set, the comparative mind-set, and the baseline condition produced similar amounts of regret (1.05 vs. 1.04 vs. 1.1; ns) and high satisfaction (6.77 vs. 6.82 vs. 6.77; ns). For those who did not get the best deal (nonbest outcome condition), the maximizing mind-set produced greater regret (6.08 vs. 3.27, $t(54) = 9.19$, $p < .01$) and lower satisfaction (1.67 vs. 4.73, $t(54) = 13.19$, $p < .01$) than in the baseline condition. This pattern was the same as that observed in experiments 3 and 4, and is consistent with hypothesis 2. By contrast, the comparative mind-set did not produce greater regret (2.09 vs. 3.27, $t(64) = 5.20$, $p < .01$) nor did it impact satisfaction (4.91 vs. 4.73, $t(64) = 0.92$, $p = .36$), relative to baseline. More importantly, the maximizing mind-set produced significant greater regret (6.08 vs. 2.09, $t(32) = 10.68$, $p < .001$) and lower satisfaction (1.67 vs. 4.91, $t(32) = 10.78$, $p < .001$) than did

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the comparative mind-set. Although the endogenous nature of the best vs. nonbest outcomes and the small sample size in the nonbest outcome conditions weakened the power of our finding that the comparative mind-set did not produce greater regret/dissatisfaction compared to the control, the evidences from experiments 1b and 2 added extra support to our proposition that the comparison process along did not significantly impact regret and satisfaction.

In sum, this experiment showed that both the maximizing mind-set and the comparative mind-set can improve consumption outcomes (i.e., they increase the likelihood that people will get the best deals). However, only the maximizing mind-set, and not the comparative mind-set, produced greater regret and lower satisfaction under the condition in which the outcome was not the best. Although the results here revealed different patterns of affective responses by the maximizing mind-set versus the comparative mind-set, whether this pattern holds in other consumption settings remains for future testing to determine.

GENERAL DISCUSSION

The present research documented the existence, operation, and mechanistic underpinnings of the maximizing mind-set. Although much past research has explored a variety of mind-sets (deliberative, implemental, counterfactual, comparative, construal level, regulatory focus, to name just a few), the present research is the first to put a major spotlight on a mind-set that focuses specifically on the goal to get the best. In an era marked by ever increasing global trade, more and more societies around the world are emphasizing "the best," be it individual excellence, artistic and product innovation, or efficiency in service and industry. With greater transparency afforded by digital media, more people are exposed to global standards of excellence and benchmarks for success. What it means to be "the best" has never been more stark. And yet, not everyone can be the best. What are the consequences for consumers who are inundated with advocacy for the best and yet who do not always experience

the best in their own lives? The present research sheds new light on the psychological consequences of the maximizing mind-set.

Experiment 1a demonstrated that the maximizing mind-set produced greater regret than relevant control conditions, and it did so in a different domain than the one in which it was activated, the defining characteristic of a mind-set effect. Further, this experiment showed that the maximizing mind-set affected regret beyond its impact on decision performance. Experimentally controlling for performance and decision effort, experiment 1b demonstrated that when a product failed, the maximizing mind-set (relative to control) increased regret, decreased satisfaction, and increased the likelihood of returning the product. To show theoretical convergence with past research on maximizing, experiment 2 adopted a fuller control condition, a satisficing mind-set condition, and demonstrated that the maximizing mind-set produced greater regret and dissatisfaction compared to both a satisficing mind-set and a baseline condition. This experiment also showed that the impact of the maximizing mind-set on affective responses after decision making came above and beyond its impact on decision-making process, namely, search depth. Experiment 3 revealed a boundary condition, such that although the maximizing mind-set had a negative impact on effect and behavior when the outcome was not the best, this effect disappeared when the outcome was the best possible. Experiment 4 replicated the findings in experiment 3 and provided further generality for the non–context-specific nature of the observed mind-set effects. Specifically, the maximizing mind-set effect was found to persist from a nonconsumption domain to a consumption domain as well as from a consumption domain to a nonconsumption domain. Experiment 5 validated our conceptualization of the maximizing mind-set by showing that this mind-set indeed increased participants' tendency to conduct upward comparisons. Experiment 6 explored the role of the goal to get the best in the maximizing mind-set by showing that it may produce different affective reactions relative to the comparative mind-set.

The primary focus of the present research was to document the effects of the maximizing mind-set on affective and behavioral responses to decision outcomes as opposed to decision-making process. We adopted two methods to control for decision process: one statistical and the other experimental. Specifically, experiments 1a and 2 statistically controlled for decision process, namely, performance and search depth, respectively. Experiment 1b controlled for decision process (performance and effort) by using a hypothetical scenario, experiment 3 by using random assignment to choice outcome, and experiment 4 by moving the performance task ahead of the maximizing priming. We generally found that the maximizing mind-set promotes individuals to work harder, search more deeply, and ultimately perform better, but then this also makes them more regretful and less satisfied with their outcomes. More importantly, we found that the impact of the maximizing mind-set on affective responses to decision outcomes occurred above and beyond its impact on decision processes.

This research adds to past research on the maximizing decision strategy (Wright 1974, 1975) by conceptualizing maximizing at a mind-set that carries effects across different judgment domains. Different from past research that examined maximizing as a decision strategy in a specific context, we show that once the maximizing mind-set is activated in one context, its impact can carry over to other contexts no matter the specific goal or semantic content of these contexts.

This research also adds to the literature on maximizing tendency as an individual difference by demonstrating causal instead of correlational relation between maximizing and psychological consequences (Diab, Gillespie, and Highhouse 2008; Iyengar et al. 2006; Nenkov et al. 2008; Roets et al. 2012; Schwartz et al. 2002). The effect of the maximizing mind-set on regret and satisfaction is consistent with past research findings showing that individuals with a maximizing tendency are more likely to regret and be dissatisfied than those with a satisficing tendency. Different from past research, however, we experimentally elevated individuals' maximizing tendency instead of just measuring it. Further, we found that maximizing can have causal effects on several outcomes, including higher regret, lower satisfaction, decreased liking, and less favorable taste experiences. We further noted a boundary condition, such that when people achieve an outcome that is indeed the best, the maximizing mind-set no longer produces measurable effects. In the present research, the best outcome is not only better than the other available options but also desirable even when evaluated in isolation. Further research could separate these two standards by examining the best in a set of undesirable options and the nonbest in a set of desirable options. Much research has shown that just missing the best option can make people feel even more regretful than being far away from the best (Kahneman and Tversky 1982; Miller and McFarland 1986; Roese 1997). This implies that the maximizing mind-set could heighten people's regret even when they got the second best among a set of desirable options.

Future research is also needed to establish the connection between the situationally activated maximizing mind-set and the chronic behavioral tendency to maximize. In the present research, we showed that the impact of the maximizing mind-set versus a satisficing mind-set on regret and satisfaction converges with past findings using individual difference measures of the same construct. However, we did not find any difference between a satisficing mind-set and the baseline condition. Although it is difficult to draw strong inferences from this null result, one possibility is that the default state for most of the individuals is similar to that of satisficing (Shaklee and Fischhoff 1982; Stüttgen, Boatwright, and Monroe 2012). Future research may explore a satisficing mind-set and connect it with individuals' chronic behavioral tendency to maximize or satisfice (see Turner et al. 2012). We measured individuals' maximizing/satisficing tendency in some of our reported studies, and there was

some evidence showing that the maximizing mind-set induction was more effective for maximizers than satisficers. Further research could systematically study the relation between maximizing/satisficing priming and the chronic tendency to maximize/satisfice. It is possible that the maximizing priming might be more effective for maximizers whereas the satisficing priming might be more effective for satisficers.

An unsolved yet important question is whether or not maximizing and satisficing represent endpoints of the same construct. Although past research generally construed them as one construct with the lower end of maximizing as satisficing, low maximizing and satisficing could be different, that is, orthogonal. If we construe low maximizing as featuring the absence of the goal to get the best and satisficing as featuring the goal to get good enough options, the absence of the goal to get the best is not the same as the goal to get good enough options. Low maximizing could simply be a state with an absence of standards or without good/bad judgments. In this case, the lack of maximizing (low maximizing) is driven by a lack of standards rather than low standards (i.e., good enough, acceptable). Another way to look at maximizing and satisficing is to construe maximizing as a multidimensional construct with satisficing as one dimension (see Turner et al. 2012). In this case, either the goal to settle for good enough options or the lack of the goal to get the best can lead a decrease in the overall maximizing tendency. Future research may explore more effective means of manipulating a satisficing mind-set that is distinguishable from the nonmaximizing/control mind-set.

This research further adds to past research on maximizing as a mind-set (Levav et al. 2012; Mogilner et al. 2013) by identifying the key features of this mind-set and the psychological as well as its behavioral consequences. We conceptualize the maximizing mind-set in terms of its underlying basis in a tendency to compare and the goal to get the best, and we show thought-listing evidence demonstrating the critical role of comparison, especially upward comparison, and the necessary role of the goal to get the best. We speculate that there are at least two reasons why upward comparison but not downward comparison drives the effect of the maximizing mind-set on psychological responses: 1. The goal to get the best in the maximizing mind-set drives people's attention to better/best alternatives, so they tend to generate more upward comparative thoughts. 2. People in the maximizing mind-set attend to both better alternatives (to hope to get them) and worse alternatives (to avoid them/ to make sure that they already got the best) during the decision-making process. The upward comparative thoughts but not the downward comparative thoughts linger even after the decision-making process ends; thus, they are more likely to impact post-decision satisfaction than the downward comparative thoughts. Consistent with this idea, past research has shown that upward counterfactual comparisons are generated in far greater numbers than downward counterfactual comparisons (Epstude and Roese 2008; Nasco and Marsh 1999). Further research is needed to track and examine the

entire decision making process and the post-decision-making process.

Consistent with past research findings (Levav et al. 2012), we show that the maximizing mind-set affects the decision-making process, such as search depth, decision effort, and decision outcomes. Adding to past research findings, we systematically show that the maximizing mind-set affects the post-decision process as well, such as post-decision regret and satisfaction. More importantly, we show that the maximizing mind-set affects the post-decision process above and beyond its impact on the decision-making process. This opens the door to investigate the interaction between the decision-making process and the post-decision process in the context of maximizing. This also raises the possibility to turn on and off individuals' maximizing mind-set in each process, so that individuals can work hard and perform better in the decision-making process by possessing a maximizing mind-set and feel satisfied and happy post-decision making by possessing a satisficing mind-set.

The current research represents an important addition to an emerging literature that specifies mind-sets as momentary shifts in procedural thinking that are content-neutral, that is, carry over from one judgment domain to another (Gollwitzer et al. 1990; Kray et al. 2006; Wyer and Xu 2010; Xu and Wyer 2008). We have shown that the maximizing mind-set has a cross-domain influence on affect, cognition, and behavior. Specifically, this mind-set increases individuals' decision effort and search depth (decision process), objective behavioral result (performance or decision outcome), and regret and dissatisfaction (decision consequence). Moreover, this research distinguished the maximizing mind-set from related constructs, such as the comparative mind-set, in terms of both antecedents and consequences. In addition, we developed effective experimental means of activating this mind-set, thus conferring new opportunities for future research to investigate further effects of this mind-set in other judgment and decision-making domains. For example, how does the maximizing mind-set influence consumers' indecisive behaviors? Because the maximizing mind-set enhances consumers' tendency to compare and search for alternatives, it is possible that this mind-set may increase decision difficulty by overloading consumers with choice options (Chernev 2003; Iyengar and Lepper 2000; Schwartz 2000), which in turn may result in prolonged decision time and choice deferral.

This research also suggests several managerial and policy implications. The potential impact of the maximizing mind-set on post-purchase regret and customer satisfaction offers guidance to marketing managers regarding advertising and in-store displays. Comparative ads and comparative pricing accompanied by advocating optimal features may activate the maximizing mind-set, which in turn may increase post-purchase regret and dissatisfaction and even impact brand switching in situations of product malfunction/failure. Even when a brand/product is indeed the best in the market, comparative ads and "we are the best" positioning may not increase consumer satisfaction or loyalty. For example, Ap-

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ple has advocated its iPhone as the best smartphone on the market in terms of performance, physical design, features, and ease of operation. Whenever there is a slight malfunction of this "best" smartphone, such as an alarm malfunction on the first day of daylight saving, or the misplacing of locations by Apple's Map application, there seems to be especially extensive media coverage along with tremendous customer complaints.

In terms of policy implications, any society's advocacy of getting the best may be of value to promoting the performance and the efficiency of individuals, industries, and quality of life. However, the danger is clear in terms of bringing corresponding psychological pain in the not-un-common outcome that people fail to achieve the very best. More attention is needed to the potential problems of this advocacy of getting the best. After all, most people, most of the time, do not get the best. The present research demonstrated some downsides of constantly trying to get the best in the context of satisfaction with consumption outcomes only. Further research is needed to investigate other consequences, in other domains, of the maximizing mind-set. For example, in the domain of education, constantly trying to get as many A's as possible may well impair students' originality and creativity. In the domain of romantic relationship, maximizing may negatively affect marital satisfaction and contribute to elevated divorce rates (see Schwartz 2009). Is there some way to mitigate these possibly deleterious effects of a society's continual activation of a maximizing mind-set in its citizenry?

More broadly, this research offers insights into the well-being of our daily lives. We show that tasks involving comparing and getting the best can induce the maximizing mind-set, and that this mind-set can have negative effects on individuals' psychological well-being, particularly when they do not get the best. In this context, this research raises the possibility of the potential impact of some mundane tasks on well-being. Choosing the tastiest dish from a long menu in a Chinese restaurant, watching American Idol and Dancing with the Stars, and grading students' assignments are seemingly routine, everyday life tasks, but as we have shown, they may well have carryover effects on emotional reactions in unrelated life domains.

DATA COLLECTION INFORMATION

The first author conducted the first, second, and the last studies on Amazon Mechanical Turk in 2011, 2013, and 2012. The first author supervised the collection of data for the third, fourth, and fifth studies by research assistants at Kellogg Lab, Northwestern University, in 2012. These data were analyzed mainly by the first author with support from several doctoral students and faculty members at Kellogg School of Management. The data analysis methods and results were discussed on multiple occasions by both authors.

APPENDIX A
MIND-SET MANIPULATIONS

Experiment 1a: Maximizing versus Nonmaximizing Mind-Set Priming (Adapted from the Maximizing Scale)

Solid circles indicate items in the maximizing mind-set priming. Open circles indicate items in the nonmaximizing mind-set priming.

- What do you think is the most suitable job for you?
- Which radio station do you like the best?
- Which TV channel do you like the best?
- What kind of girl/boyfriend do you think is the perfect fit for you?
- What do you think is the best gift for a friend?
- What movie do you like the best?
- What clothing brand do you like the best?
- Who do you think is the best singer?
- Who do you think is the best writer?
- What type of restaurant do you like the best?
- Where do you think is the best place to live?
- What do you think is the best way of living?
- What is your highest standard for yourself?
- What is your job?
- Write down a radio station you know.
- Write down a TV channel you know.
- Write down the first name of your girl/boyfriend.
- Recall a gift you bought for a friend.
- Recall a movie you watched recently.
- What clothing brand are you wearing now?
- Whose music are you listening to these days?
- Did you write any emails today?
- What type of restaurant is near your apartment?
- What city do you live in?
- Are you living a busy life?
- What is your major/specialty?

Experiment 1b: Maximizing versus Nonmaximizing Mind-Set Priming

Solid circles indicate items in the maximizing mind-set priming. Open circles indicate items in the nonmaximizing mind-set priming.

- Which pop star do you think has the best vocal ability? A. Beyoncé; B. Rihanna; C. Akon; D. Shakira; E. Eminem.
- Which country do you think is the best place to visit? A. Belgium; B. Denmark; C. The Netherlands; D. Norway; E. Sweden.
- Which university do you think offers the best education? A. Harvard; B. Yale; C. Princeton; D. UPenn; E. Columbia.
- Which type of job do you think offers the highest salary? A. Surgeon; B. CEO; C. Engineering Man-

ager; D. Airline Pilot; E. Dentist.
- Which type of pet do you think is the smartest? A. puppy; B. cat; C. bunny; D. turtle; E. fish.
○ Is there any difference between these two photos of Beyoncé? A. Yes; B. No.
○ Is there any difference between these two Belgium flags? A. Yes; B. No.
○ Is there any difference between these two Harvard logos? A. Yes; B. No.
○ Is there any difference between these two photos of a surgeon? A. Yes; B. No.
○ Is there any difference between these two photos of puppies? A. Yes; B. No.

Experiment 2: Maximizing versus Satisficing Mind-Set Priming (Choice Task)

Questions and options are pretested to be of interest to our participants. Solid circles indicate items in the maximizing mind-set priming. Open circles indicate items in the satisficing mind-set priming.

- Please choose the singer you think has the best vocal ability: A. Beyoncé; B. Rihanna; C. Akon; D. Shakira; E. Eminem.
- Please choose the country you think is the best place to visit: A. Belgium; B. Denmark; C. The Netherlands; D. Norway; E. Sweden.
- Please choose the university you think offers the best education: A. Harvard; B. Yale; C. Princeton; D. UPenn; E. Columbia.
- Please choose the job you think offers the highest salary: A. Surgeon; B. CEO; C. Engineering Manager; D. Airline Pilot; E. Dentist.
- Please choose the type of pet you think is the smartest: A. rabbit; B. hamster; C. turtle; D. fish; E. cat.
○ Please choose the singers you think are good enough to listen to: A. Beyoncé; B. Rihanna; C. Akon; D. Shakira; E. Eminem.
○ Please choose the countries you think would be acceptable to visit: A. Belgium; B. Denmark; C. The Netherlands; D. Norway; E. Sweden.
○ Please choose the universities you think are affordable to study at: A. The Ohio State University; B. Boston College; C. University of Phoenix; D. University of Washington-Seattle; E. University of Delaware.
○ Please choose the jobs that you think pay well enough to live on: A. Plumber; B. Pilot; C. Baker; D. Software Designer; E. Waiter.
○ Please choose the pets that you would be willing to live with: A. rabbit; B. hamster; C. turtle; D. fish; E. cat.

Experiment 3: Maximizing versus Nonmaximizing Mind-Set Priming (Essay Writing Task)

Questions and options are pretested to be of interest to our participants. Solid circles indicate items in the maximizing mind-set priming. Open circle indicates items in the nonmaximizing mind-set priming. Squares indicate items we developed later but did not appear in this article.

- What is the best gift for a friend? Why is it better than other gifts?
- What is the best movie of all time? Why is it better than other movies?
- Who do you think is the best singer? Why do you think s/he is better than other singers?
- Which type of restaurant do you like the best? Why do you like it more than other types of restaurant?
- Where is the best place to live? Why is it better than other places?
○ Please tell us about a class you are taking this quarter (e.g., the objectives, content, and requirements of this class).
▫ Please describe a gift you bought for a friend recently.
▫ Please describe a movie you recently watched.
▫ Please describe a song you recently listened to.
▫ Please describe a restaurant you recently went to.
▫ Please describe a vacation place you recently visited.

Experiment 6: Maximizing versus Comparative Mind-Set Priming

Questions and options are pretested to be of interest to our participants. Solid circles indicate items in the maximizing mind-set priming. Open circles indicate items in the comparative mind-set priming.

- Which rewards package do you think is the best? A. $75,000 annual salary + $5,000 bonus; B. $80,000 annual salary; C. $78,000 annual salary + $2,000 bonus.
- Which lottery do you think is the best? A. 1% chance win $100; B. 2% chance win $50; C. 0.5% chance win $200.
- Which mortgage do you think is the best? A. 4.75% interest rate, $709 monthly payment; B. 4.5% interest rate, $730 monthly payment; C. 4.625% interest rate, $719 monthly payment.
- Which payment option do you think is the best? A. $1,300 monthly rent, no utility fee; B. $1,100 monthly rent, $200 utility fee; C. $1,200 monthly rent, $100 utility fee.
- Which battery choice do you think is the best? A. $3, lasts 100 hours; B. $1.5, lasts 50 hours; C. $6, lasts 200 hours.
○ Compare the two rewards packages. Do you think they differ? A. $75,000 annual salary + $5,000 bonus; B. $78,000 annual salary + $2,000 bonus (different, same).

○ Compare the two lotteries. Do you think they differ?
  A. 1% chance win $100; B. 2% chance win $50.
○ Compare the two mortgages. Do you think they differ? A. 4.75% interest rate, $709 monthly payment;
  B. 4.5% interest rate, $730 monthly payment.

○ Compare the two payment options. Do you think they differ? A. $1,300 monthly rent, no utility fee; B. $1,100 monthly rent, $200 utility fee.
○ Compare the two batteries. Do you think they differ? A. $3 each, lasts 100 hours, B. $1.5 each, lasts 50 hours.

APPENDIX B

TABLE B1

CORRELATIONS BETWEEN REGRET AND SATISFACTION

Experiment	N	b	Cronbach α	p	Regret target	Satisfaction target
1b	62	−.32	.49	.01	Upgrading the phone	The phone
2	515	−.79	.88	.0001	Your choice	Your choice of item
3	273	−.46	.62	.0001	Your snack choice	The snack
4	262	−.61	.74	.0001	IQ results	IQ results
6	354	−.86	.93	.0001	Your choice of the best deal	Your choice of the best deal
Meta-analysis	1,466	−.49				

NOTE.—b is the correlation coefficient between regret and satisfaction. The correlation coefficient in the meta-analysis is the weighted average (weighted by sample sizes) of the correlation coefficients in experiments 1b, 2, 3, 4, and 6. As the regret target and the satisfaction target become different, the correlation coefficient decreases.

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