

When Does a Higher Construal Level Increase or Decrease Indulgence?

Resolving the Myopia versus Hyperopia Puzzle

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Existing inquiry on self-control reveals an inconsistency. The mainstream research on myopic behavior suggests that consumers' use of a high versus low construal level should lead them to exhibit less indulgence. However, more recent work on hyperopia implies the opposite. This research attempts to resolve this discrepancy. In particular, it is proposed and demonstrated that the level at which a consumer construes information (i.e., abstract versus concrete), interacts with his or her self focus, and both factors jointly determine a consumer's indulgence level. When the self is not salient, outcomes implied by the myopia literature ensue. But when the self is focal, the opposite outcomes anticipated by the hyperopia literature obtain.

Consumers confront self-control dilemmas with great regularity. Will you have a snack of a chocolate fudge or a piece of fruit? Will you splurge on a plasma TV or replace the deteriorating roof on your garage? Will you join friends for a weekend getaway or spend the time finishing a major project with a looming deadline? The mainstream literature on self-control focuses on people's tendency to be myopic or short-sighted. Indeed, individuals often display self-control failure because they succumb to short-term hedonic pleasures rather than realizing the longer term benefits that can emerge from self restraint and prudent actions (Trope and Fishbach 2000; Fujita et al. 2006). Notably, research in this area has shown that one way to reduce such myopia is to encourage individuals to adopt a higher construal level (e.g., Fujita et al. 2006; Agrawal and Wan 2009). Construing issues at a higher level entails adopting a more abstract perspective, which heightens the salience of global long-term benefits. Thus, individuals who adopt a higher construal level are less likely to fall prey to myopic behavior.

Yet, another more recent stream of research points to an opposite form of self-control failure. This literature on hyperopia contends that many people over-control and persistently deprive themselves of indulgences (e.g., Kivetz and Keinan 2006; Keinan and Kivetz 2008). In fact, there is reason to believe that many individuals perceive themselves to be hyperopic, implicating a significant self-control problem of excessive farsightedness. According to Kivetz and his co-authors (Keinan and Kivetz 2008; Kivetz and Keinan 2006; Kivetz and Simonson 2002), one way to overcome this hyperopic tendency is to induce people to adopt a more distant temporal perspective, an outlook that has been shown to elicit a higher construal level (Lieberman, Sagristano, and Trope 2002). Keinan and Kivetz (2008) argue that a more distant choice perspective induces feelings of missing out in life, which then induces regret and leads to

corrective indulgence, for example, by choosing hedonic luxuries.

These two lines of research reveal an apparent inconsistency. The classic self-control literature that focuses on myopia suggests that a higher construal level should reduce indulgence (Fujita et al. 2006). Yet, the latter work on hyperopia proposes that excessive self-control also can be problematic and that a higher construal level should boost indulgence. As Kivetz and Keinan (2006) have noted, research is needed that not only clarifies and integrates these two lines of thinking, but also provides a more cohesive model of self-control.

A central goal of this research is to offer a means of doing just that, namely resolving the seeming inconsistency and enabling us to anticipate when a higher construal level will increase or decrease indulgence. We propose that the effect of construal level on indulgence is likely to be moderated by whether an individual focuses on the self. Self focus generally activates thoughts about what a person perceives to be his or her prevalent behavior pattern (Markus and Wurf 1987; Verplanken and Holland 2002). In consumption situations, these thoughts are likely to concern the person's routine consumption pattern. Extant research that has attempted to directly assess people's routine consumption pattern found that in such studies, a majority of consumers exhibited a hyperopic tendency (e.g., Kivetz and Keinan 2006; Keinan and Kivetz 2008). If this is the case, then an individual in a consumption context who focuses on the self should activate thoughts about his or her hyperopia, which entails forgoing pleasurable indulgences. If this individual then adopts a higher level of construal that involves perceiving matters globally from a broadly encompassing perspective, (s)he is likely to feel regret over missing out on the very enjoyment that life offers. Accordingly, this individual should deliberately increase indulgence at present – an outcome predicted by the hyperopic literature. However, if, alternatively, a person

does not focus on the self and therefore abstains from thinking about his or her consumption disposition, adoption of a higher construal level should produce the outcome suggested by the classic self-control literature; that is, the person should manifest reduced indulgence at present. This should occur because the higher construal level is instead likely to bring to mind global, societally inculcated principles that favor prudent behaviors.

Thus, this research makes an important contribution by offering reconciliation of an apparent discrepancy in the self-control literature about whether a higher construal level will increase or decrease indulgence (e.g., Keinan and Kivetz 2008 versus Fujita et al. 2006). We demonstrate and clarify why, contrary to the prevailing view in the self-control literature, a high construal level will not always lead to reduced indulgence. Further, our work sheds light on critical moderators of the preceding effects.

THEORETICAL BACKGROUND

Traditional research on self-control has focused on one type of self control failure, that of myopia. Myopia occurs when individuals favor short-term over long-term benefits (e.g., Hoch and Loewenstein 1991; Mukhopadhyay and Johar 2005). Extending on this, research on construal level theory suggests that a high versus low level of mental construal reduces myopia because it prompts people to think more abstractly about global bigger picture concerns, like long-term goals rather than short-term interests (Fujita et al. 2006; Agrawal and Wan 2009). Thus, inducing a high construal level, say by asking individuals to appraise *why* they wish to accomplish certain goals, has been shown to reduce indulgence compared to inducing a low

construal level, which can be achieved by asking people *how* they can accomplish the same goals (Fujita et al. 2006).

While myopia has occupied the central focus of the classic literature on self-control failure, an emerging stream of research has identified another form of a self-control problem called hyperopia (e.g., Haws and Poynor 2008; Kivetz and Keinan 2006). Hyperopia entails excessive farsightedness whereby individuals may have so well internalized the values offered by attending to responsibilities and necessities (e.g., engaging in self-control) that they experience difficulty bringing themselves to partake in enjoyable indulgences. In other words, this type of imbalance is the opposite of myopia, as individuals' emphasis on self-control impedes their ability to enjoy life's pleasurable indulgences. Hyperopia has been shown to be prevalent among participants in extant studies (Rick, Cryder and Loewenstein 2008; Keinan and Kivetz 2008). For example, in a study reported by Kivetz and Simonson (2002) that queried travelers of wide-ranging demographics, 63% of these people chose a prize for a necessity (e.g., grocery credit) over one for a luxury of equivalent value (e.g., a massage or facial).

Interestingly, research has found that when people are led to reflect on indulgence opportunities from a more psychologically distant (versus proximate) vantage point, they indicate feelings of missing out in life and report experiencing regret (Kivetz and Keinan 2006; Haws and Poynor 2008). To then counteract this state of affairs and avoid future regret, they are likely to commit to indulgence (Keinan and Kivetz 2008). This suggests that one way to overcome hyperopia is to introduce greater psychological distance. And greater versus less psychological distance has been shown to foster a high construal level (Lieberman et al. 2002; Liberman, Trope, and Stephan 2007). Thus, research on hyperopia suggests that a high versus

low level of mental construal will prompt individuals to indulge more. In fact, Haws and Poynor (2008) similarly suggest that construal level may act as a remedy for hyperopic tendencies by helping consumers to see the possible benefits of indulgent purchases and goals.

The preceding two streams of research on myopia and hyperopia are provocative, yet they seem to suggest a discrepancy. Whereas research on myopia contends that a high versus low construal level will reduce indulgence (e.g., Fujita et al. 2006), research on hyperopia implies just the opposite (e.g., Keinan and Kivetz 2008). This raises the question of what accounts for this apparent discrepancy and what might explain which outcome is likely to emerge and when.

To overview our efforts, we reasoned that a key to resolving the discrepant outcomes in the self-control literature could be whether people are aware of their typical consumption pattern (e.g., their hyperopic tendency) when they encounter an indulgence opportunity. Thus, our theorizing involved considering both what might make consumers recognize their hyperopic tendencies, and, more importantly, produce the opposing consequences reported in the literature. Our research indicates that the presence versus absence of a prime that prompts self focus (which makes one's consumption tendencies salient) when combined with a high or low construal level can effectively account for the discrepant findings observed previously.

Specifically, we theorize that whether people focus on the self may moderate the influence of construal level on indulgence and resolve the inconsistency in the literature (see figure 1). This follows because self focus alters the content of people's current thoughts and thus the cognitions that are subject to either a high or low construal level. To explain, extensive research indicates that priming the self activates self knowledge, including awareness of one's chronic tendencies (e.g., Markus 1977; Markus and Wurf 1987). Thus, if individuals engage in

self focus shortly before or while they assess a consumption opportunity, they are likely to become aware of their standard consumption habits, namely the extent to which they routinely display prudence or hedonism in consumption settings. Importantly, scholars have found that most people exhibit a significant degree of self deprivation or “tightwaddedness” in extant studies (Kivetz and Simonson 2002; Rick et al. 2008). Hence, we propose that self-focused individuals are likely to reflect on their own (frequently hyperopic) behavior and thereby perceive themselves as hyperopic (Bem 1965; Kivetz and Simonson 2002). Further, if these self-focused individuals perceive themselves in this manner and concurrently employ either a high or low construal level, their construal level should affect their interpretation of and reaction to their perceived hyperopic tendency. This follows because reliance on a high construal level promotes decontextualized thought that emphasizes superordinate goals and fosters abstract ideation of pertinent issues from a global perspective, whereas a low construal level elicits more concrete and detailed thought about local matters (Liberman and Trope 1998; Trope and Liberman 2003).

To clarify, suppose an individual encounters an appealing consumption opportunity when the self becomes focal, so that s/he becomes aware of his or her consumption pattern (i.e., hyperopia), plus (s)he employs a high construal level. The latter is likely to make this individual reflect globally or expansively on his/her hyperopic consumption pattern and related issues or questions. This might prompt thought about why this person behaves in a hyperopic manner and whether such behavior enhances the meaning of his/her life. The meaning of life--say, to enjoy one’s brief journey of live and living—is likely to be at odds with the individual’s salient everyday hyperopic behavior and induce regret about missing opportunities to enjoy life’s pleasures. In turn, such regret is apt to cause the individual to correct his/her hyperopic tendency

by enacting a deliberate decision to engage in indulgent behavior at the present moment. Hence, this logic suggests that self-focused individuals who employ a higher construal level should pursue greater indulgence or indicate a willingness to spend more on pleasurable indulgences.

Note that this outcome should not occur, however, among individuals who engage in self focus but adopt a relatively low construal level. Although the salience of the self again should lead such individuals to recognize their hyperopic tendency, their low construal level, which induces them to focus on the incidental details and concrete issues of everyday life, should render them oblivious to both the broader perspective tradeoff created by their hyperopic tendency and any regret that this tradeoff might provoke. Instead, these individuals are likely to consider their salient habitual hyperopic consumption pattern and view it as a cue as to how they should behave (Bem 1965), prompting a relatively low level of indulgence. Hence, integrating this theorizing, we hypothesize that when people engage in self focus, we should observe outcomes that align with those implied by the hyperopic literature: a high versus low construal level should foster greater indulgence.

The process and outcome that ensues should differ when the self is not salient at the time of a consumption opportunity. In this situation, awareness of one's consumption disposition (i.e., a routine hyperopic tendency) should be lacking. When these individuals adopt a high construal level, the absence of such self awareness should prevent the previously discussed feelings of regret from surfacing. However given these individuals' use of a high construal level, they are likely to evaluate consumption opportunities through the abstract lens of societally approved principles and norms, for example wise values of prudence (Fujita et al. 2006). This should lead these individuals to reduce indulgence. Yet, when these same non-self focused individuals adopt

a low construal level that stimulates thought about local issues and their details, such as the appealing concrete aspects of immediate consumption opportunities, this should elevate impulsive indulgence (Vohs and Faber 2007). In short, when the self is not focal, the outcomes should align with those implied in the classic myopia literature, namely a high versus low construal level will lead to less indulgence (e.g., Fujita et al. 2006; Liberman, Trope, and Wakslak 2007).

Note that the preceding theorizing reveals a very interesting distinction. The heightened indulgence that we expect to observe under lower construal when the self is not salient should result from relatively mindless, impulsive behavior (Vohs and Faber 2007), which is very different from the deliberate decision to indulge that we theorize will occur among self-focused individuals who adopt a high construal level. The former involves impulsive indulgence that is absent of thought, while the latter represents deliberate indulgence, which ensues from an intentional correction process aimed at mindfully overcoming regret over missed pleasures.

Insert figure 1 about here

We test our hypotheses and the logic on which they are based in five experiments. Studies 1a and 1b assess our basic hypothesis, demonstrating that self focus, the key moderator in our theory, can reconcile the discrepancy that appears in the self-control literature. Study 2 offers evidence for the proposed underlying process, namely that regret mediates the key outcomes. Study 3 provides further support for our focal hypothesis and validates the two alternative motivations that can foster indulgence – mindless impulsivity versus deliberate

intention. Finally, our last study illustrates our anticipated effects in the context of a real life-like choice scenario. More critically, however, it also assesses the content of people's thoughts about their choices, and thereby provides compelling evidence of the proposed underlying processes.

EXPERIMENT 1A

Method

Stimuli. The experiment employed a 2 (self focus: present vs. control) by 2 (construal level: high vs. low) between subjects design. Self focus was manipulated through the use of a mirror (Duval and Wicklund 1972). In the self focus present condition, participants completed the study in a cubicle in which a mirror faced them. This mirror and thus self focus was absent in the control (i.e., self focus absent) condition. Further, to manipulate construal level, we adopted a procedure used by Freitas, Gollwitzer, and Trope (2004). In the high construal level condition, participants responded to a series of queries about *why* they would engage in each of two activities, namely health improvement and maintenance, and staying connected with family and friends. In the low construal level condition, they did the same for queries about *how* they would engage in these activities.

To assess indulgence, all participants were provided with a bowl of 50 M&M candies at the beginning of the study and were told that they could snack on these while completing the study. The number of M&Ms eaten by the participants was used to measure indulgence.

Procedure. Sixty-eight undergraduate students (44 females) at the University of British Columbia participated in the study in exchange for \$5 each. The study was run in small groups of no more than four people per session. Upon arrival, participants were escorted to a desk in a cubicle and randomly assigned to one of the four treatments. Those in the self focus present condition were seated in a cubicle with a mirror facing them, whereas for those in the control condition the mirror was absent. Participants began by completing the construal level manipulation task described earlier. Upon finishing that task, the experimenter placed a bowl with 50 M&Ms on each desk and told the participants to feel free to snack on them as they worked on the rest of the study.

Next, participants rated their current feelings on 12 items, using a 7-point scale (1 = not at all; 7 = very much). Four of these items concerned positive mood (happy, cheerful, excited, upbeat), four concerned negative mood (sad, depressed, glum, upset), and the remaining four concerned nervous-related feelings (anxious, nervous, tense, tight). The presentation order of these 12 items was randomized. After this mood check, participants completed several filler tasks (e.g., they evaluated several neutral messages) for about 15-minutes. Next, they answered four involvement questions on 7-point scales (1 = not at all; 7 = very much). These questions asked them to indicate the extent to which they enjoyed doing the tasks, were motivated to complete the study, exerted effort during the study, and thought that the study was interesting. The study ended with some demographic questions. After participants were done and had left, the experimenter counted the number of M&Ms that were left in their bowls.

Results

As hypothesized, a significant two-way interaction of self focus and construal level emerged on the number of M&Ms eaten, which served as a measure of indulgence ($F(1, 64) = 11.02, p < .01$; see figure 2). Participants in the self focus present condition ate significantly more M&Ms when they employed a high ($M = 21.59$) versus a low level of construal ($M = 9.82$; $t(64) = 2.16, p < .05$). In contrast, participants in the control condition revealed the opposite pattern. They ate more M&Ms when they adopted a low ($M = 20.88$) versus a high ($M = 7.12$; $t(64) = -2.53, p < .05$) construal level. Examination of the other two contrasts in the interaction revealed that when participants employed a high construal level, they ate more M&Ms when self focus was present versus absent ($t(64) = 2.66, p < .05$). Yet, when participants adopted a low construal level, they indulged more by eating a larger quantity of M&Ms when self focus was absent versus present ($t(64) = -2.03, p < .05$). Thus, these data uphold our central hypothesis.

To assess whether our manipulations inadvertently affected participants' mood or involvement, we examined our measures of these responses. The mood items that assessed positive ($\alpha = .89$), negative ($\alpha = .90$) and nervous ($\alpha = .91$) feelings were each averaged to create three mood indices. No treatment effects were observed on any of these indices (all t 's < 1). In addition, we averaged each participants' responses to the four involvement items to create an involvement index ($\alpha = .79$). No treatment effects emerged on this index either (t 's < 1).

Insert figure 2 about here

Discussion

The results of experiment 1a support our basic hypothesis and show that including self focus as a moderator reconciles the opposing views about how construal level affects indulgence. Replicating outcomes reported in the myopia literature (Fujita et al. 2006), we found that when self focus was absent, a low versus high construal level prompted greater indulgence. In contrast, when self focus was present, an opposite pattern that concurs with the hyperopia literature (Kivetz and Simonson 2002) was observed, such that a high versus low construal level led to greater indulgence.

While the findings from this study are encouraging, one limitation was that our tasks that varied self focus and construal level were not only detached from each other, but they seemed quite opaque and unnatural. Further, our findings simply assume that inducing self focus in a consumption context leads people to perceive and think about themselves as typically hyperopic in their consumption pattern. In study 1b, we seek to address these concerns. We enhance the directness and face validity of our manipulations, assess directly whether people perceive themselves as hyperopic, and seek to conceptually replicate the preceding findings.

EXPERIMENT 1B

Method

Stimuli. Similar to our previous study, experiment 1b employed a 2 (self focus: present vs. control) by 2 (construal level: high vs. low) between subjects design. Our self focus manipulation not only varied whether participants activated thoughts about the self, but it also directly

manipulated whether participants thought about their own consumption pattern or not. Specifically, we asked participants to think and then write about either their own (self focus present condition) or an average American's (control condition) typical consumption pattern. Building on this, we then altered participants' construal level by asking them to think about their life or an average American's life from either a broader (i.e., high construal) or a day-to-day (i.e., low construal) perspective (see appendix for the exact manipulation instructions).

Next, participants received a fairly realistic, everyday life, indulgence decision scenario. They were asked to imagine that a good friend was leaving town and hosting a good-bye party later in the evening, which they had planned to attend. However, during the afternoon, their boss gave them an urgent task of preparing an important presentation for the next day. Because the presentation required considerable work, if they attended the friend's party they would not be able to prepare a decent presentation. Participants were then asked to indicate on a 7-point scale their likelihood of attending the party (i.e., the indulgence measure).

Procedure. A total of 168 North American consumers (100 females) who were members of an online panel completed the study in exchange for a small sum. Participants were randomly assigned to one of the four conditions and completed the manipulation task first. Then, they were presented with the decision scenario and indicated their likelihood of attending the party.

Results

First we assessed how participants characterized their own versus an average American

consumer's consumption pattern. Results corroborated our pilot study, verifying that most consumers view themselves as hyperopic. Specifically, 79% of the participants (67 of the 85 participants in the self focus present condition) who were asked to describe their own consumption pattern viewed themselves as someone who controls or keeps his/her desires in check most of the time, while 19% (16 individuals) viewed themselves as impulsive buyers. Further, and rather interestingly, 81% (67 individuals) of the 83 participants in the control condition regarded the average American consumer as impulsive, while only 12% (10 individuals) saw the average American as someone who controls him or herself.

Next, we conducted a 2 (self focus) by 2 (construal level) ANOVA on the measure that assessed participants' decision about whether to attend the party. Here a significant two-way interaction emerged ($F(1, 164) = 9.86, p < .01$). Participants in the self focus present condition reported a higher likelihood of attending the party (i.e., greater indulgence) when they were asked to think about life from a high ($M = 4.09$) versus low construal level ($M = 2.95; t(164) = 2.83, p < .01$). Participants in the control (i.e., self focus absent) condition, on the other hand, reported a higher likelihood of going to the party (i.e., greater indulgence) when they adopted a low ($M = 3.88$) versus a high construal level, although this effect only approached significance ($M = 3.22; t(164) = -1.62, p = .10$). Results of the other two contrasts in the interaction replicated the outcomes observed in study 1a. When participants adopted a high construal level, they reported a higher likelihood of attending the party when self focus was present versus absent ($t(164) = 2.15, p < .05$), but the reverse was true among those who adopted a low construal level ($t(164) = -2.29, p < .05$).

Discussion

The results of this study further support the basic premises of our theorizing. Using more direct and natural manipulations, they demonstrate that the presence or absence of self focus moderates whether construal level will heighten or reduce indulgent behavior. We observed this regardless of whether participants engaged in self focus without any mention of their consumption pattern (study 1a) or they were asked explicitly to think and write about their consumption tendency (study 1b). In addition, study 1b reconfirmed our foundational premise that most people apparently infer their consumption pattern by reflecting on their prevalent (hyperopic) behavior and thus perceive themselves as hyperopic. Yet, interestingly, when participants were asked to characterize the consumption pattern of the average American, the majority claimed that others are routinely impulsive (i.e., low in self-control). These observations suggest that most of us don't just act but actually perceive ourselves as hyperopic. Still, we apparently see ourselves as unique, perceiving that others are habitually impulsive.

In our next experiment we extend these findings by attempting to shed light on a critical process that we propose underlies the findings of the prior studies. In particular, we contend and seek to demonstrate that when individuals engage in self focus and employ a high (versus a low) construal level, they are likely to experience heightened feelings of regret, which then leads to heightened consumption of indulgences among these individuals.

EXPERIMENT 2

Method

Stimuli. Experiment 2 manipulated self focus and construal level in the same manner as study 1a. In addition, to assess indulgence, participants were asked to indicate the maximum amounts of money they were willing to pay for five different hedonic products. These hedonic products were chosen based on a pretest. Twenty-three individuals from the same pool used in study 1 were asked to rate a number of products on 7-point scales anchored as 1 = a necessity (i.e., utilitarian good) and 7 = a luxury (i.e., hedonic good). Using these data, we selected the top five hedonic goods that received ratings significantly higher than the midpoint value (i.e., 4). These goods included: dinner for two at a chic restaurant ($M = 6.30$; $t(22) = 11.35$, $p < .001$), a bottle of fine champagne ($M = 6.13$; $t(22) = 7.18$, $p < .001$), a sleekly styled portable travel grill ($M = 5.87$; $t(22) = 9.26$, $p < .001$), a plasma integrated HDTV ($M = 5.78$; $t(22) = 6.51$, $p < .001$), and a trendy Swatch sports watch ($M = 5.70$; $t(22) = 5.15$, $p < .001$).

We also administered a second dependent measure, namely a 10 item anagram task that explored participants' potential feelings of regret. Five of these anagrams were for words associated with regret (i.e., remorse, mistake, regret, missed, and repent), while the remaining five represented neutral words (i.e., porch, truck, month, phone, and drink). Participants' response time to solve each of these anagrams was measured in milliseconds. We expected that in the self focus present condition, individuals who adopted a high (but not a low) construal level would be faster in solving the regret-related anagrams, but these individuals' response times would be comparable to those of other individuals when solving neutral anagrams. Such differences should not be observed, however, among participants in the self focus absent

condition.

Procedure. Sixty-three students (45 females) at the University of British Columbia participated in the study for course credit. The study was run in small groups of up to four people. All participants completed the study on laptops and were assigned randomly to one of the four treatments. Self focus was manipulated by either placing or not placing a mirror in each workspace. When present, the mirror was positioned so that it faced participants as they completed the study. Participants first responded to the why or how questions that manipulated construal level. Then they indicated their willingness to pay (WTP) sums for each of the five hedonic products identified earlier. Next, participants completed the anagram task described earlier. All anagrams were presented one at a time in random order. Finally, participants answered several demographic measures.

Results

Each participant's WTP sums for all five hedonic products were averaged and then standardized to create a WTP index. A 2 (self focus) by 2 (construal level) ANOVA revealed a significant interaction on the WTP index ($F(1, 59) = 11.70, p < .001$; see figure 3). As expected, participants in the self focus present condition reported higher WTP sums for the hedonic products (i.e., higher indulgence) when they employed a high ($M = \$402.51$) versus a low construal level ($M = \$222.47; t(59) = 2.04, p < .05$). Those in the control (i.e., self focus absent) condition, on the other hand, reported higher WTP sums (i.e., higher indulgence) when they

adopted a low ($M = \$441.37$) versus high construal level ($M = 198.48$; $t(59) = -2.80, p < .01$).

Analyses of the other two contrasts in the interaction also upheld our theorizing. When participants adopted a high construal level, they reported higher WTP sums when self focus was present versus absent ($t(59) = 2.39, p < .05$). But when participants engaged in a low construal level, the reverse was true ($t(59) = -2.45, p < .05$).

Next we analyzed participants' response times (RT) for correctly solved anagrams. Each individual's RT for the five regret-related anagrams were averaged and then standardized to create a regret anagram index. Similarly, we constructed a standardized neutral anagram index for the five neutral anagrams. A three-way mixed design ANOVA on RT for correctly solved anagrams revealed a significant interaction of self focus, construal level, and anagram type ($F(1, 59) = 11.04, p < .01$). Further, the two-way interaction of self focus and construal level was significant for the regret anagram index ($F(1, 59) = 6.59, p < .05$) but not for the neutral anagram index ($F < 1$). Follow-up examination of the regret anagram index upheld predictions.

Participants in the self focus present condition solved the regret anagrams faster when they adopted a high ($M = 9.91$ seconds per anagram) versus a low construal level ($M = 14.96$ seconds per anagram; $t(59) = -3.12, p < .05$). No difference emerged among participants in the self focus absent condition ($M_{high\ construal} = 13.47$ and $M_{low\ construal} = 12.68$ seconds per anagram; $t < 1$).

Investigating the other two contrasts, when participants adopted a high construal level, they solved the regret related anagrams faster when self focus was present versus absent ($t(59) = -2.26, p < .05$). Yet such differences were absent when construal level was low ($t(59) = 1.39, p > .17$).

Insert figure 3 about here

Finally, we conducted mediation analysis to test our theorizing that regret mediates the effect of construal level on indulgence when self focus is present. When self focus is absent, however, people are unlikely to experience regret, and thus regret should not mediate the effect of construal level on indulgence in the control condition. We employed a test of moderated mediation (Preacher, Rucker and Hayes 2007) to assess the strength of the hypothesized indirect (mediation) effect (i.e., the effect of construal level on WTP) that is conditional on the value of a moderator (i.e., the presence versus absence of self focus). A 5000 resample bootstrap analysis indicated a significant conditional indirect (i.e., moderated mediation) effect at the $p < .05$ level when self focus was present (95% CI (29.90 to 192.59)). In contrast, when self focus was absent (i.e., our control condition), the indirect effect was not significant (95% CI (-70.28 to 48.11)).

Discussion

The results of study 2 replicate those of our previous studies, supporting our hypothesis that self focus interacts with construal level to jointly affect indulgence level. More critically, however, the findings also verify that when self focus is present (though not when it is absent), a high construal level stimulates feelings of regret, which then prompts greater indulgence.

These findings make significant progress by demonstrating a focal underlying process that drives the observed effects. Next, we delve deeper to further understand the different processes that influence people's indulgence behavior when the self is salient versus when it is

not. Recall that we theorized that non-self focused individuals who adopt a low construal level engage in indulgence impulsively or mindlessly, meaning that they will be drawn to and respond indulgently to readily perceivable appealing aspects of whatever offerings they encounter. In contrast, the indulgence exhibited by self focused individuals who employ a high construal level arises from these individuals' mindful and deliberate intentions. In this condition, individuals are intent on avoiding the regret that they have come to realize due to the salience of their routine (i.e., hyperopic) consumption pattern and high construal thinking. Hence, these latter individuals should only indulge in products or services that offer a truly pleasurable sensory experience (e.g., hedonic products). If however, the offering presents little or no real opportunity to satisfy these individuals' desire for pleasurable experiences (e.g., they are basic utilitarian items), we should not observe higher indulgence. On the other hand, because non-self focused individuals who adopt a low construal level behave impulsively, they should respond indulgently to both hedonic and utilitarian offerings so long as such offerings display some perceivable appeal (Vohs and Faber 2007). Experiment 3 tests these predictions by examining the sums that people are willing to pay for hedonic and utilitarian goods.

EXPERIMENT 3

Method

Stimuli. This study manipulated three factors using a mixed design: self focus, construal level, and product type (varied within-subjects). Participants in the self focus present condition

were asked to circle all self-related pronouns in a passage (e.g., I, me), while those in a control condition circled all words that were articles (e.g., a, the; Verplanken and Holland 2002). The passages used were comparable in word count, number of pronouns or articles, and structure. As in study 1, construal level was varied by asking participants to answer a series of why or how questions.

The key dependent variable was participants' willingness to pay (WTP) sums for five hedonic and five utilitarian products. These products were chosen based on a pretest detailed earlier in study 2. In addition to using the same top five hedonic goods employed in study 2, we also included the top five utilitarian products (i.e., a polyester camping tent with polyethylene sheeting and fiberglass, a conventional three-seat upholstered sofa, a high quality upright suitcase, a microwave oven, and a current edition marketing textbook). Ratings of each type of product loaded on single factors and were averaged, yielding separate hedonic and utilitarian product indices ($\alpha = .74$ and $.72$, respectively). A pairwise t-test revealed a significant difference between the two indices, confirming that the hedonic product index ($M = 5.96$) was indeed rated higher than the utilitarian index ($M = 4.05$; $t(22) = 8.86$, $p < .001$), on the 7-point scale anchored as 1 = a necessity (i.e., utilitarian good) and 7 = a luxury (i.e., hedonic good).

Procedure. Sixty-five students (42 females) at the University of British Columbia participated in the study for \$10 each. Upon arrival, they were assigned randomly to one of the four between-subjects (self focus and construal level) conditions and informed that they would complete several unrelated tasks. A cover story informed self focus present (absent) participants that a recent study suggested that people who detect pronouns (articles) accurately can actually

comprehend messages better. Thus, to test this, they would be given a printed passage and asked to circle either all pronouns (e.g., I, me; self focus present condition) or articles (e.g., a, the; control condition). In reality, this constituted the self focus priming task. To complete the guise, participants subsequently rated how well they understood the passage. They then completed the remaining tasks on a computer.

Construal level was manipulated via a series of why or how questions. Then participants viewed 10 randomly ordered color pictures of products on a computer screen. Each was accompanied by a brief description of the item. Participants were asked to indicate the amount they would be willing to pay for each good.

Results

For each participant, separate WTP indices were created for the five hedonic and five utilitarian products by averaging the sums recorded for the products of each type. These values were standardized to control for inherent price differences between hedonic and utilitarian products (see table 1 for means of z-values and dollar values). Results revealed a significant two-way interaction of self focus and construal level ($F(1, 61) = 6.59, p < .05$), which was qualified by a three-way interaction that included product type ($F(1, 61) = 4.32, p < .05$; see figure 4). As anticipated, a significant two-way interaction between self focus and construal level emerged for the hedonic products ($F(1, 61) = 11.32, p < .01$). Planned contrasts indicated that participants in the self focus present condition reported higher WTP (i.e., greater indulgence) when they adopted a high versus a low construal level ($M = \$388.08$ vs. $\$262.78$; $F(1, 61) = 5.98, p < .05$).

However, those in the self focus absent (control) condition revealed the opposite pattern. Their WTP and thus indulgence was greater when construal level was low versus high ($M = \$378.80$ vs. $\$262.12$; $F(1, 61) = 5.35, p < .05$). The other two contrasts indicated that when construal level was high, self focused versus non-self focused participants indicated higher WTP ($F(1, 61) = 6.23, p < .05$), yet the reverse occurred when construal level was low ($F(1, 61) = 5.13, p < .05$).

Analysis of the utilitarian products revealed only a significant main effect of construal level ($F(1, 61) = 4.24, p < .05$), indicating that WTP for such products was greater in the low versus the high construal level condition. Although the interaction of self focus and construal level was not significant on the utilitarian product index ($F < 1$), we examined the planned contrasts to assess our predictions (Winer 1971). The outcomes were as we anticipated. In the self focus present condition, WTP was relatively low and comparable regardless of construal level ($M_{high} = \$153.73$; $M_{low} = \$202.45$; $F < 1$). However, in the self focus absent (control) condition, WTP was higher when participants adopted a low versus a high construal level ($M = \$267.93$ vs. $\$142.94$, $F(1, 61) = 4.46, p < .05$).

 Insert figure 4 and table 1 about here

Discussion

The findings of study 3 support both our theory and our claims about the differing motivations that underlie the indulgent behavior of those who do versus do not engage in self focus. We found that when a self focus prime was present, individuals who employed a high construal level behaved indulgently (i.e., were willing to pay more) only when the target good

was a hedonic product. Thus, while self focused individuals who adopt a high construal level may feel regret when their hyperopic tendency is salient, this regret is unlikely to stimulate indulgent behavior unless the product in question delivers genuine sensory pleasure (i.e., is hedonic) and thus provides an opportunity to correct their hyperopic behavior. These findings are important as they imply that the motivations of these individuals entail relatively thoughtful, deliberate, and intention-focused cognition. On the other hand, when individuals refrained from self focus, we observed a higher WTP for utilitarian as well as hedonic products when construal level was low. This observation dovetails with the view endorsed in the literature on myopia, which suggests that impulsivity occurs unthinkingly and fosters a higher level of indulgence (i.e., higher WTP) when individuals adopt a low rather than high construal level. Notable too, our observation that non-self focused individuals displayed the aforementioned effect for both hedonic and utilitarian products aligns with findings reported by Vohs and Faber (2007, p. 544). Indeed, these researchers concluded that impulsive behavior is insensitive to whether an item (e.g., product) is desirable in terms of either its hedonic or utilitarian features.

Our last study pursues two goals. One goal is to show that self focus will moderate the impact of construal level on indulgence in a realistic choice context. To do this, we asked people to choose between two options, a hedonic product that clearly offers indulgent sensory pleasure, and a utilitarian good that satisfies more practical needs. A second and more critical goal is to offer more direct and compelling evidence of the precise process that accounts for the outcomes in each of our four focal treatment conditions. To accomplish this, we collected individuals' thoughts about their choices and coded them for evidence of the choice process that was used.

EXPERIMENT 4

Method

Stimuli. As in our previous studies, a 2 (self focus) by 2 (construal level) between subjects design was used. We varied both factors using a temporal imagination task that was adapted from one used by Forster, Friedman and Liberman (2004). Because a more remote temporal distance induces a higher construal level (Liberman, Trope, and Stephan 2007), participants in the high (low) construal level condition were asked to imagine life five years from now (tomorrow). Yet, in addition to this, we also modified the wording of this task to simultaneously vary self focus. Specifically, those in the self focus present condition were asked to imagine *their* lives, while those in the control (i.e., self focus absent) condition were asked to imagine life in general. To clarify, instructions in the high construal level/self focus present (control) condition read, “We would like you to travel in time. Close your eyes for about two minutes and imagine your life (life in general) five years from now. Think about what your life (life in general) would be like, where would you (people) be, how would you (they) be living, or what would you (they) be doing.” Our key dependent variable was a choice task. Participants were asked to choose between a hedonic option, which offered a more indulgent experience (i.e., a certificate for a top gourmet restaurant that was redeemable for a \$120 dinner-for-two), and a utilitarian option that addressed practical needs (i.e., a bookstore certificate that was redeemable for \$120 toward the purchase of any textbook).

Procedure. Sixty five undergraduate students (44 females) at the University of British Columbia completed the study in small groups for course credit. Each was seated at a computer terminal, informed that they would perform several ostensibly unrelated tasks, and randomly assigned to one of the four conditions. To begin, participants completed the temporal imagination task, which manipulated concurrently both self focus and construal level. Next, they completed the focal choice task. Participants were told that as a token of appreciation, their names would be entered in a lottery for a prize. They would be eligible to win one of two different prizes, and a single winner would receive the prize of his or her choice. Then participants were asked to indicate which of the two prize options (i.e., a restaurant or book certificate) they would choose and to record their thoughts that led to their choice. This last measure allowed us to examine participants' cognitions and derive important insights into the considerations that produced their choices (e.g., whether mindless impulses or regret driven deliberate intentions produced indulgence). Finally, to complete the guise, participants spent about 15 minutes performing unrelated tasks.

Results

Choice. We used binary logistic regression analysis to examine participants' choices. Results conceptually replicated those in our previous studies, revealing a significant two-way interaction between self focus and construal level ($B = 3.52$, $SE = 1.10$, $Wald = 10.27$, $p < .01$). When self focus was present, participants chose the hedonic option (i.e., the more indulgent restaurant vs. the bookstore prize) more frequently when they adopted a high versus a low

construal level ($M_{High\ Construal} = 70.59\%$, $M_{Low\ Construal} = 25.00\%$; $B = 1.97$, $SE = .79$, $Wald = 6.32$, $p < .05$). However, when self focus was absent (i.e., control condition), they chose the hedonic option more frequently when their construal level was low versus high ($M_{Low\ Construal} = 76.29\%$, $M_{High\ Construal} = 27.78\%$; $B = -1.54$, $SE = .77$, $Wald = 4.05$, $p < .05$). Analysis of the other two contrasts mimicked the outcomes of the previous studies. Participants in the high construal condition chose the hedonic option more frequently when self focus was present versus absent ($B = -1.83$, $SE = .75$, $Wald = 5.98$, $p < .05$). But those in the low construal condition chose the hedonic option more frequently when self focus was absent rather than present ($B = 1.69$, $SE = .80$, $Wald = 4.41$, $p < .01$).

Thoughts Analysis. Next we examined participants' thoughts about their choices, probing for evidence of the process that was used in each condition. Two independent judges who were blind to the treatments coded each participant's thoughts into the following six categories: 1) total number of thoughts; 2) number of regret-related thoughts that implied deliberate indulgence (e.g. "I chose the dinner because my girlfriend and I haven't gone out for long time to anywhere nice since I am short of cash"); 3) number of thoughts related to mindless impulsive behavior (e.g. "I prefer to choose the second option just intuitively"); 4) number of thoughts that concerned controlling one's behavior (e.g. "I probably won't consider it [dinner] since I'm saving up money for school"); 5) number of thoughts about adhering to farsighted societal norms (e.g. "Textbooks are handy and education is good. Textbooks will probably get me where I want to go"), and 6), other thoughts (see table 2 for more examples of thoughts within each category). Coding agreement for the two judges was 92%; all disagreements were resolved through

discussion. After determining the number of thoughts in each category for each respondent, we calculated each participant's percentage of thoughts in each category by dividing the number of thoughts in a category by the total number of thoughts generated by that particular individual.

 Insert table 2 about here

We ran 2 (self focus) by 2 (construal level) ANOVAs on each type of thoughts. No treatment effects were observed on the total number of thoughts ($t's < 1$) and the percentage of other thoughts ($t's < 1$). However, significant two-way interactions emerged on percentages of the remaining four types of thoughts, and further analyses of each of these thought types provided support for our theorizing. For regret-related deliberate indulgence thoughts ($F(1, 61) = 10.28, p < .01$), participants in the self focus present/high construal condition ($M = 33.88%$) generated more such thoughts than did those in each of the other three conditions (i.e. self focus present/low construal: $M = 2.06%$; $t(61) = 4.07, p < .001$; control/high construal: $M = 5.56%$; $t(61) = 3.74, p < .001$; and control/low construal: $M = 9.57%$; $t(61) = 3.00, p < .01$). There were no significant differences among the latter three conditions (all $t's < 1$). For thoughts concerning mindless impulsive indulgence ($F(1, 61) = 8.21, p < .01$), participants in the control (i.e., self focus absent)/low construal level condition ($M = 30.93%$) produced more such thoughts than did those in each of the other three conditions (i.e., self focus present/high construal: $M = 5.88%$; $t(61) = 3.30, p < .01$), self focus present/low construal: $M = 3.12%$; $t(61) = 3.61, p < .01$; and control/high construal: $M = 3.67%$; $t(61) = 3.64, p < .01$). No significant differences emerged among those three conditions (all $t's < 1$). For thoughts concerning self-control behavior ($F(1, 61)$

= 6.13, $p < .05$), participants in the self focus present/low construal condition elicited more such thoughts ($M = 48.31\%$) than did those in each of other three conditions (i.e., self focus present/high construal: $M = 12.18\%$; $t(61) = 3.14$, $p < .01$; control/high construal: $M = 17\%$; $t(61) = 2.76$, $p < .01$; control/low construal: $M = 12.43\%$; $t(61) = 2.97$, $p < .01$). Again, significant differences were absent among the latter three cells (all t 's < 1). Finally, for the percentage of thoughts about adherence to societal norms ($F(1, 61) = 6.72$, $p < .05$), participants in the control/high construal condition elicited a higher percentage of these thoughts ($M = 37.22\%$) compared to each of the other three cells (i.e., self focus present/high construal: $M = 1.18\%$; $t(61) = 4.36$, $p < .001$; self focus present/low construal: $M = 6.25\%$; $t(61) = 3.69$, $p < .001$; and control/low construal: $M = 10.71\%$; $t(61) = 3.04$, $p < .01$). Differences were absent among the latter conditions (all t 's < 1).

Discussion

The results from this study conceptually replicate the key outcomes obtained in our previous studies. Importantly, however, they also offer critical insight into the processes that produced such outcomes. Individuals chose the more hedonic option more frequently when they engaged (did not engage) in self focus and employed a high (low) construal level. Furthermore, analyses of individuals' thoughts shed valuable light on the processes that underlie the interaction of self focus and construal level. When self focus was present, the types of thoughts that dominated corresponded with the process outlined in the hyperopia literature. Specifically, the thoughts of self focused individuals in the high construal condition indicated a heightened degree of regret coupled with a desire to mindfully and deliberately correct their habitual

hyperopic behavior. For this reason, they chose the indulgent hedonic option more often. In contrast, self focused participants in the low construal condition reflected and followed the dictates of their habitual hyperopic tendency. As such, they produced an elevated percentage of self-control related thoughts, and they more frequently chose the utilitarian option. On the other hand, when self focus was absent, thoughts and behaviors corresponded with the process suggested in the myopia literature. In particular, participants in the high construal condition engaged in higher-level, principle-guided thinking, as was evidenced by their heightened percentage of thoughts concerning the practical wisdom of societal norms. Following suit, they also chose the utilitarian option more often. Finally, when non-self focused individuals considered their situation using a low construal level, they appeared to be mindlessly lured by the appealing features of the given options that promised visceral pleasure. Reflecting this, these individuals produced an elevated percentage of mindless impulsivity related thoughts and they chose the indulgent hedonic option more often.

GENERAL DISCUSSION

The current research advances our understanding in several ways. Most critical is the significant headway made in resolving the opposing views expressed in the self-control literature, namely the notion that a higher construal level will either increase or decrease individuals' indulgent behavior. Our theory and supporting evidence indicates that activation of self focus can modulate which of these outcomes will occur, providing a means of anticipating when and for whom a higher construal level will boost or undermine indulgence. Specifically, in the absence

of self focus, the outcomes anticipated by the classic myopia literature are likely to prevail. A low construal level will foster attentiveness to readily accessible appealing aspects of a consumption opportunity and thereby promote impulsive indulgence. In contrast, a high construal level invites abstract global thinking, stimulating relevant overarching goals and societally inculcated life-guiding principles that advise eschewing indulgence. Thus, when people abstain from self focus and employ a high versus low construal level, their indulgent behavior is reduced.

These outcomes reverse, however, when people engage in self focus. Self focus activates self knowledge, which in consumption contexts can include data about one's routine consumption disposition, that is their hyperopic tendency. Thus, when individuals engage in self focus and employ a high construal level, it induces regret over the missed opportunities to enjoy life's pleasures. Given such feelings, individuals aim to correct their behavior by deliberately engaging in indulgence. However, when individuals who engage in self focus adopt a low construal level, they become aware of their hyperopic disposition, but their concrete outlook on the here and now prevents them from realizing any potential regret. Hence, they simply note and adhere to their everyday hyperopic pattern, which culminates in a low degree of indulgent behavior.

Importantly, our theory also appears to be capable of accommodating and explaining a number of seemingly conflicting findings observed in the extant literature. For example, Fujita and Han (2009) examined the effect of construal level on indulgence, manipulating construal level by asking participants 'why' (high construal) or 'how' to (low construal) maintain close personal relationships. When later participants were asked to choose between having an apple or

candy, findings showed that they more frequently chose the indulgent candy in the low versus high construal level condition. Note that this study's manipulation corresponds with a self focus absent condition, and the results nicely align with our thesis that when self focus is absent, a lower construal level promotes greater indulgence. Similar examples of an ostensible absence of self focus and lower construal levels prompting less self control (i.e., more indulgence) also have been found in work by Fujita and Roberts (2010), Malkoc, Zauberaman, and Bettman (2010), and Fujita et al. (2006).

At the same time, other extant studies appear to align with our premise that when people do engage in self focus, the opposite occurs, such that a higher construal level elicits greater indulgence. Along these lines, a study by Keinan and Kivetz (2008) first asked participants to identify a situation that they experienced either last week (prompting a low construal level) or at least five years ago (prompting a high construal level) where, after confronting a choice between acting prudently (e.g., studying) or pursuing pleasure, they chose to behave prudently. Note that while this task manipulated construal level, it also seemed to induce participants to engage in self focus (i.e., search autobiographical memory). Next, participants rated their potential regret over their past choice, and as a parting token of appreciation, they were asked to choose between \$5 in cash or four Swiss chocolate truffles. Results revealed that not only did participants feel greater regret when the timing of their past prudence over pleasure choice prompted the use of a higher construal level, but more participants chose the indulgent chocolates over the cash as a gift when they had been led to employ a high versus low construal level. Hence, by making reasonable inferences about whether the manipulations or context invoked self focus, this as well as other extant studies support our thesis that when individuals engage in self focus, a higher construal

level can induce regret and lead people to engage in more indulgent actions (e.g., Patrick, Chun, and Macinnis 2009, where focal emotions either did or did not prompt self focus and the context strongly induced a low construal level; also Wilcox, Kramer and Sen 2011, where the focal emotion prompted self focus and the context induced either a low or high construal level).

Beyond these important theoretical contributions, our research also offers valuable practical implications both for marketers, who typically strive to increase indulgent behavior (e.g., the purchase of luxury or trendy goods), and for public policy makers, who commonly promote prudent actions (e.g., healthy eating, safe sex). To illustrate, our findings suggest that marketers are apt to benefit by using tactics that encourage consumers to adopt a high construal level (e.g., copy that dwells on distant future events or focuses on why consumers will reap certain benefits) when they promote hedonic goods in media that encourage consumers to self focus. Examples include magazines that target enthusiasts of various kinds of self development, say *Men's Health* or *Self*, which offer readers tips on why they should improve their own health and fitness, or *GQ* or *Vogue*, which promote self transformation in all aspects of style. On the other hand, marketers should benefit by using tactics that promote the use of a low construal level (e.g., employing copy that emphasizes near future events or focuses on how consumers can reap certain benefits) when they place ads for hedonic goods in media that are unlikely to invoke self focus. Examples here include *National Geographic*, which focuses on the wonders of nature or assorted cultures, or *Popular Science*, which explores science, technology and space advances.

Although our research did not investigate it directly, another tactic that practitioners could employ to encourage indulgence might be to simply prime consumers to counteract any feelings of regret they may experience by hanging banners in retail venues that urge consumers

to “live your life with no regrets.” This sort of self focused message may promote indulgence by employing the type of feelings and the process that we theorize is induced (i.e., one that invokes a deliberate decision to indulge) when consumers self focus and employ a high construal level.

Finally, our research also offers implications for consumers. Although societal norms urge us to control ourselves so as to minimize self-control failure, over-controlling the self can also lead to negative consequences (i.e., regret) that are detrimental to one’s well-being. Thus, as prior research has shown, people often pre-commit to indulgences (e.g., taking a vacation). Yet, as the consumption day approaches (i.e., the vacation nears), potential concrete problems or snafus often become salient, and they can act as hurdles for consumers who would benefit from the much-needed indulgence or break. Hence, our work suggests that at such times, focusing on one’s life from a broader, high construal perspective may help these consumers overcome their tentativeness and enjoy their imminent indulgence.

One question that merits further attention, however, is what sort of guidance can be offered to consumers who find themselves dizzyingly switching mindsets as they try to achieve balance between their alternative goals. That is, most of us strive to avoid detours and frivolous indulgences that promise to thwart our efforts to achieve our life goals (e.g., attaining self respect and the respect of others in our chosen profession by toiling hard and working at full capacity). Yet, doing so is pointless if it means that we end up missing out on the simple pleasures that make life’s short journey worthwhile (e.g., taking time out to enjoy a dinner with family or friends, or simply lounging at the beach where we can savor a cool breeze and experience the ocean’s exhilarating waves). Research that can help us to simultaneously keep these objectives in perspective could facilitate consumers’ efforts to attain a hard-to-achieve balance.

DATA COLLECTION INFORMATION

The data for studies 1a, 2, 3 and 4 were collected during Summer 2010, Fall 2010, Summer 2008, and Fall 2010 respectively, at the University of British Columbia by undergraduate research assistants under the supervision of the first author. The data for all these studies was analyzed by the first author under the supervision of the second author in consultation with the third author. The data for study 1b was collected during Summer 2012 from MTurk participants by the first author while at the University of Illinois at Urbana Champaign. The analysis was completed by the first author in consultation with second and third authors.

APPENDIX

TEMPORAL IMAGINATION TASK THAT MANIPULATED SELF FOCUS AND CONSTRUAL LEVEL IN EXPERIMENT 1B

Self focus present/ high (low) construal level manipulations:

In this task, we'd like you to think about and write down some thoughts. First, please think about and write down your typical consumption pattern. That is, are you an impulsive buyer? Or do you constantly control your desires when it comes to shopping? While all of us may behave in each of these ways in particular situations, please think about which of these two patterns you exhibit most of the time. In the space below, please describe what your own typical consumption pattern is?

Next, please take a few minutes to think about your life from a broader [day-to-day] perspective (i.e., focus on what is important in life [in day-to-day life]).

Control or self focus absent/high (low) construal level manipulations:

In this task, we'd like you to think about and write down some thoughts. First, please think about and write down what an average American consumer's consumption pattern tends to be. That is, are average American consumers usually impulsive buyers? Or do they constantly control their desires when it comes to shopping? While any given American consumer may behave in each of these ways in particular situations, please think about which of these two patterns American consumers exhibit most of the time. In the space below, please describe what the average American consumer's consumption pattern is?

Next, please take a few minutes to think about an average American's life from a broader [day-to-day] perspective (i.e., focus on what is important in life [in day-to-day life]).

REFERENCES

- Agrawal, Nidhi and Echo Wen Wan (2009), "Regulating Risk or Risking Regulation? Construal Levels and Depletion Effects in the Processing of Health Messages," *Journal of Consumer Research*, 36 (October), 448-62.
- Bem, Daryl J. (1965), "An Experimental Analysis of Self-Persuasion," *Journal of Experimental Social Psychology*, 74 (May), 199-218.
- Duval, Shelley and Wicklund, Robert A. (1972), *A theory of objective self awareness*, New York: Academic Press.
- Förster, Jens, Ronald S. Friedman, and Nira Liberman (2004), "Temporal Construal Effects on Abstract and Concrete Thinking: Consequences for Insight and Creative Cognition," *Journal of Personality and Social Psychology*, 87 (August), 177–89.
- Freitas, Antonio L., Peter Gollwitzer, and Yaacov Trope (2004), "The Influence of Abstract and Concrete Mindsets on Anticipating and Guiding Others' Self-Regulatory Efforts," *Journal of Experimental Social Psychology*, 40 (November), 739-52.
- Fujita, Kentaro and H. Anna Han (2009), "Moving Beyond Deliberative Control of Impulses: The Effect of Construal Levels on Evaluative Associations in Self-Control Conflicts," *Psychological Science*, 20 (July), 799-804.
- Fujita, Kentaro and Joseph J. Roberts (2010), "Promoting Prospective Self Control Through Abstraction," *Journal of Experimental Social Psychology*, 46 (November), 1049-1054.
- Fujita, Kentaro, Yaacov Trope, Nira Liberman, and Maya Levin-Sagi (2006), "Construal Levels and Self-control," *Journal of Personality and Social Psychology*, 90 (March), 351–67.
- Haws, Kelly L. and Cait Poynor (2008), "Seize the Day! Encouraging Indulgence for the

- Hyperopic Consumer," *Journal of Consumer Research*, 35 (December), 680-91.
- Hoch, Stephen J. and George F. Loewenstein (1991), "Time-Inconsistent Preferences and Consumer Self-control," *Journal of Consumer Research*, 17 (March), 492-507.
- Keinan, Anat and Ran Kivetz (2008), "Remedying Hyperopia: The Effects of Self-control Regret on Consumer Behavior," *Journal of Marketing Research*, 45 (December), 676-89.
- Kivetz, Ran and Anat Keinan (2006), "Repenting Hyperopia: An Analysis of Self-control Regrets," *Journal of Consumer Research*, 33 (September), 273-82.
- Kivetz, Ran and Itamar Simonson (2002), "Self-control for the Righteous: Toward a Theory of Precommitment to Indulgence," *Journal of Consumer Research*, 29 (September), 199-217.
- Liberman, Nira and Yaacov Trope (1998), "The role of feasibility and desirability considerations in near and distant future decisions: A test of temporal construal theory," *Journal of Personality and Social Psychology*, 75 (July), 5-18.
- Liberman, Nira, Michael D. Sagristano, and Yaacov Trope (2002), "The Effect of Temporal Distance on Level of Mental Construal," *Journal of Experimental Social Psychology*, 38 (November), 523-34.
- Liberman, Nira, Yaacov Trope, and Elena Stephan (2007), "Psychological Distance," in *Social Psychology: Handbook of Basic Principles (2nd Ed.)*, Vol. 2, ed. E. T. Higgins and A. Kruglanski, New York: Guilford, 353-83.
- Liberman, Nira, Yaacov Trope, and Cheryl Wakslak (2007), "Construal Level Theory and Consumer Behavior," *Journal of Consumer Psychology*, 17 (April), 113-17.
- Malkoc, Selin A., Gal Zauberan, and James R. Bettman (2010), "Unstuck from the Concrete:

- Carryover Effects of Abstract Mindsets," *Organizational Behavior and Human Decision Processes*, 113 (November), 112-126.
- Markus, Hazel (1977), "Self-Schemata and Processing Information About the Self," *Journal of Personality and Social Psychology*, 35 (February), 63-78.
- Markus, Hazel and Elissa Wurf (1987), "The Dynamic Self-Concept: A Social Psychological Perspective," *Annual Review of Psychology*, 38, 299-337.
- Mukhopadhyay, Anirban and Gita Venkataramani Johar (2005), "Where There Is a Will, Is There a Way? Effects of Lay Theories of Self-control on Setting and Keeping Resolutions," *Journal of Consumer Research*, 31 (March), 779-86.
- Patrick, Vanessa M., HaeEun Helen Chun, and Deborah J. Macinnis (2009), "Affective Forecasting and Self-control: Why Anticipating Pride Wins over Anticipating Shame in a Self-Regulation Context," *Journal of Consumer Psychology*, 19 (July), 537-545.
- Preacher, Kristopher J., Derek D. Rucker, and Andrew F. Hayes (2007), "Addressing Moderated Mediation Hypotheses: Theory, Methods, and Prescriptions," *Multivariate Behavioral Research*, 42 (January), 185-227.
- Rick, Scott I., Cynthia E. Cryder, and George Loewenstein (2008), "Tightwads and Spendthrifts," *Journal of Consumer Research*, 34 (April), 767-82.
- Trope, Yaacov and Ayelet Fishbach (2000), "Counteractive Self-control in Overcoming Temptation," *Journal of Personality and Social Psychology*, 79 (October), 493-506.
- Trope, Yaacov and Nira Liberman (2003), "Temporal Construal," *Psychological Review*, 110 (July), 403-21.
- Verplanken, Bas and Rob W. Holland (2002), "Motivated Decision Making: Effects of

Activation and Self-Centrality of Values on Choices and Behavior," *Journal of Personality and Social Psychology*, 82 (March), 434-47.

Vohs, Kathleen D. and Ronald J. Faber (2007), "Spent Resources: Self-Regulatory Resource Availability Affects Impulse Buying," *Journal of Consumer Research*, 33 (March), 537-47.

Wilcox, Keith, Thomas Kramer, and Sankar Sen (2011), "Indulgence or Self-control: A Dual Process Model of the Effect of Incidental Pride on Indulgent Choice," *Journal of Consumer Research* 38 (June), 151-63.

Winer, B. J. (1971), *Statistical Principles in Experimental Design*, New York: McGraw-Hill.

Table 1
Mean dollar values and z values for WTP (experiment 3)

		Hedonic Products		Utilitarian Products	
		Control	Self focus	Control	Self focus
Dollar Values	Low Construal	378.80	262.78	267.93	202.45
	High Construal	262.12	388.08	142.94	153.73
Z values	Low Construal	0.37	-0.38	0.44	0.07
	High Construal	-0.39	0.43	-0.28	-0.22

Table 2

Examples of participants' thoughts of four particular types when choosing between hedonic vs. utilitarian option (experiment 4)

Category	Examples
Regret related thoughts	"At the moment I am not working and he (<i>boyfriend</i>) has been in a bad economic situation. Even when we were together in NY, we did not have money to go out. This is why I choose the restaurant and to have a dinner that we will never forget."
	"It's been a while since I went for dinner at a fancy restaurant. I'd like to pamper myself!"
	"...the dinner prize would give me an excuse to have a night out with friends since I rarely go out."
	"... the restaurant option is interesting as I wouldn't have gone to an expensive restaurant now due to the cost, but with the coupon in hand, I'll be going and enjoying the dinner I wanted."
	"...this is kind of a luxury which I would have lived without, so I want the coupon to give me something luxurious that in normal circumstances I wouldn't have done."
Impulsive behavior related thoughts	"I'll like to go to the restaurant."
	"I would much rather spend an enjoyable evening indulging in food with a close friend."
	"...I like fine dining a lot and like enjoying nice meals."
	"I would like to share the happiness with my love."
	"It (<i>dinner gift card</i>) would be an excuse to ask someone out on a date....Although now as I'm typing I'm sort of regretting my decision just a tiny bit...I should have probably gone for the textbook thing. I'd hate to freeload off my parents all the time."
Self-control behavior related thoughts	"The gift certificate for the restaurant would only be like one day of glory. I need to save money to buy books because no matter what, I would need to buy them."
	"I thought the book store gift card would be more appropriate for me. I don't really go to gourmet restaurants, but I do need school supplies and am short on money."
	"Right now the course books are more important than the gourmet restaurant dinner."
	"The bookstore gift card is good since I am still in school and it would certainly come in handy."
	"Books are more necessary at this time. I need them for next semester. Dinner for two is not a necessity now. I can do that later or I'm just happy with a picnic, sandwich or a regular restaurant."
Adhering to societal norms related thoughts	"The dinner for two did not appeal to me because.... It is a waste of money."
	"I feel that using the money on a gourmet dinner is a waste..."
	"Bottom line: it (<i>gourmet dinner</i>) isn't necessary, it's only a luxury. Books are mandatory however."
	"I would rather receive something practical, such as a gift certificate (<i>for book store</i>)."
	"Having a fancy dinner is a one-go kind of thing...Instant gratification versus something more long-term."

FIGURE 1

THE JOINT EFFECT OF SELF FOCUS AND CONSTRUAL LEVEL ON INDULGENCE: A
CONCEPTUAL FRAMEWORK

FIGURE 2

MEAN NUMBER OF M&Ms EATEN (EXPERIMENT 1a)

FIGURE 3

AVERAGE WTP FOR HEDONIC PRODUCTS (EXPERIMENT 2)

NOTE. – Analysis was done with standardized values of WTP. However, for illustration purposes, raw means are presented in this figure.

FIGURE 4

AVERAGE WTP FOR HEDONIC AND UTILITARIAN PRODUCTS (EXPERIMENT 3)

NOTE. – Analysis was done with standardized values of WTP. However, for illustration purposes, raw means are presented in this figure.

FIGURE 1

THE JOINT EFFECT OF SELF FOCUS AND CONSTRUAL LEVEL ON INDULGENCE: A CONCEPTUAL FRAMEWORK

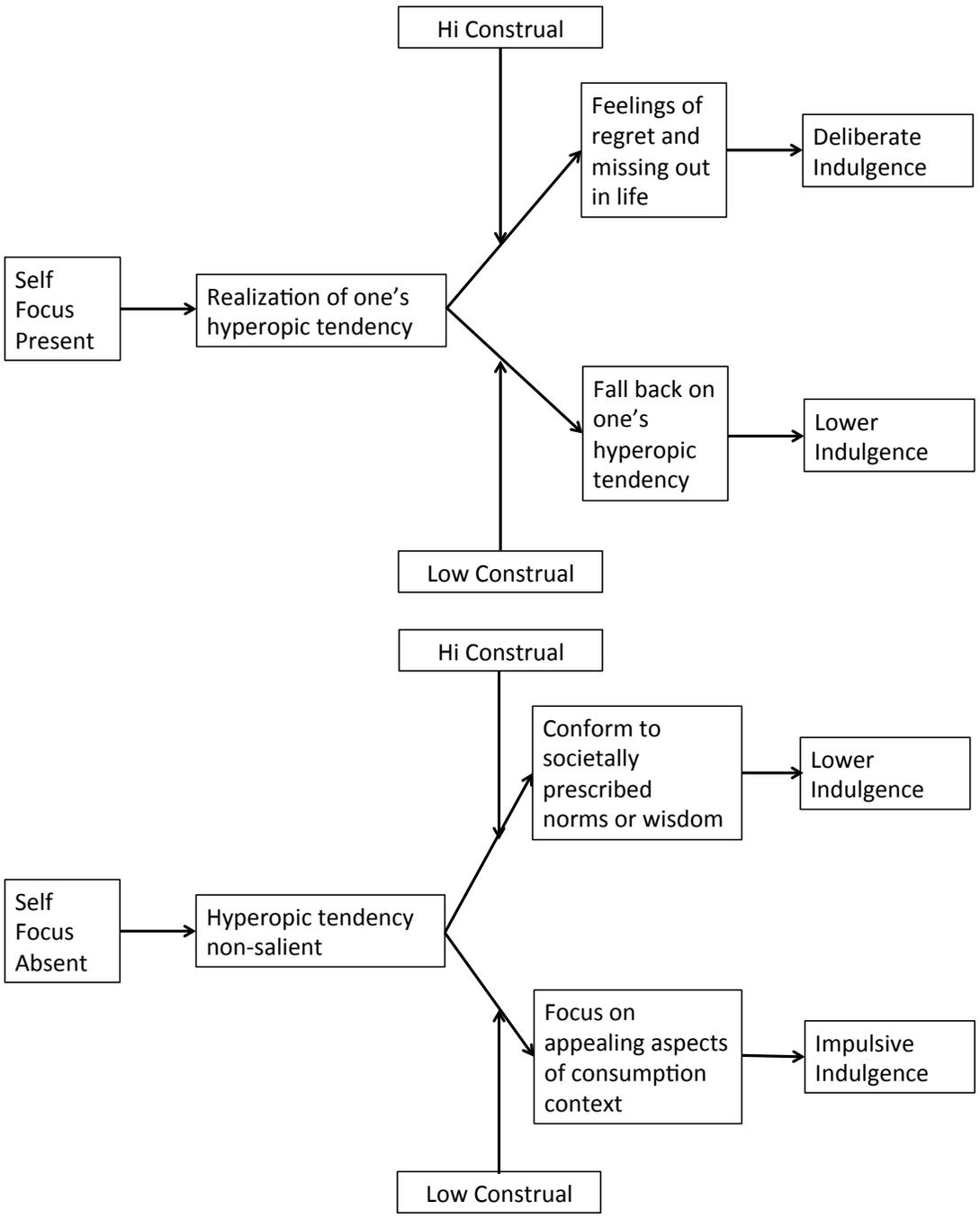


FIGURE 2

MEAN NUMBER OF M&Ms EATEN (EXPERIMENT 1a)

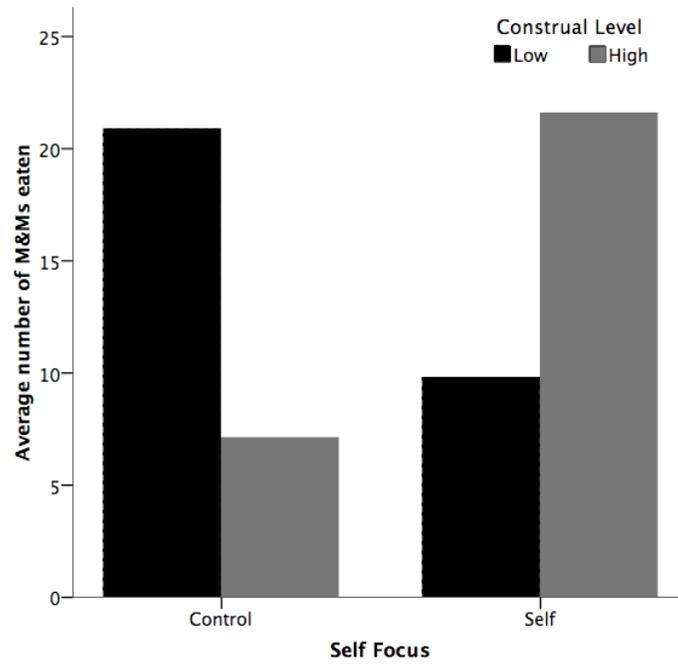
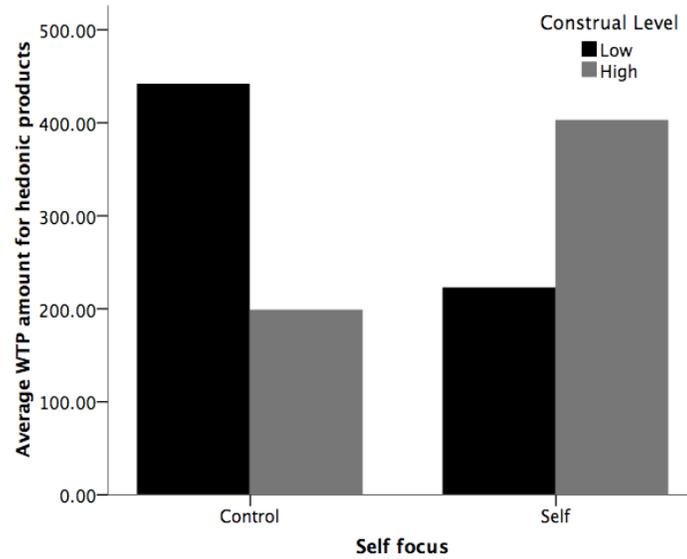


FIGURE 3

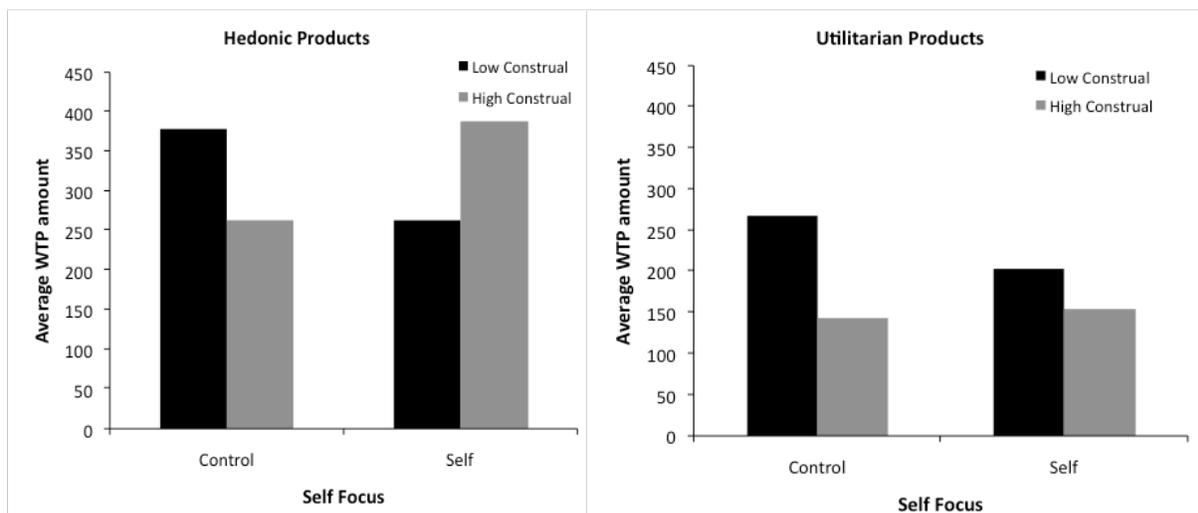
AVERAGE WTP FOR HEDONIC PRODUCTS (EXPERIMENT 2)



NOTE: Analysis was done with standardized values of WTP. However, for illustration purposes, raw means are presented in this figure.

FIGURE 4

AVERAGE WTP FOR HEDONIC AND UTILITARIAN PRODUCTS (EXPERIMENT 3)



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1) THEORETICAL BACKGROUND**1) EXPERIMENT 1A**

2) Method

3) *Stimuli*.3) *Procedure*

2) Results

2) Discussion

1) EXPERIMENT 1B

2) Method

3) *Stimuli*3) *Procedure*

2) Results

2) Discussion

1) EXPERIMENT 2

2) Method

3) *Stimuli*3) *Procedure*

2) Results

2) Discussion

1) EXPERIMENT 3

2) Method

3) *Stimuli*3) *Procedure*

2) Results

2) Discussion

1) EXPERIMENT 4

2) Method

3) *Stimuli*3) *Procedure*

2) Results

3) *Choice*3) *Thoughts Analysis*

2) Discussion

1) GENERAL DISCUSSION