

Transcending Temptation Through Abstraction: The Role of Construal Level in Self-Control

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Abstract

Many goals that people pursue are distal in that they cannot be attained in the here and now but rather must be achieved through action across varied social contexts over time. Self-control requires people to make decisions consistent with distal goals when tempted by more immediate rewards. Inspired by construal-level theory, we propose and review evidence that the way in which people subjectively represent, or construe, events systematically influences these decisions. We suggest that high-level construal (the use of cognitive abstraction to extract the essential and goal-relevant features common across a class of events), relative to low-level construal (the process of highlighting the incidental and idiosyncratic features that render a particular event unique), promotes self-control. We discuss implications for future research.

Keywords

self-control, construal level, temporal discounting

Many of the things people want most cannot be attained in the immediate here and now. For example, although one might aspire to lose weight, one cannot do so through a single action in the specific moment at hand; weight loss instead requires action across diverse social contexts over time. Pursuit of these distal goals, however, is frequently undermined by salient rewards immediately available in one's environment. Although less valuable than the rewards of distal goals, these proximal rewards are alluring because they can be enjoyed in the more immediate here and now. Consider, for example, someone with a choice between receiving \$5 today or \$10 next week. Although \$10 is of greater value, the \$5 alternative provides the more proximal reward of having money in hand. Dieters may feel similarly conflicted when presented with a choice of snack between a high-calorie candy bar and a low-calorie apple. Though they may value weight loss over hedonism, the ability to achieve the hedonistic reward in the immediate here and now weakens their commitment to their goal of losing weight. The term "self-control" refers to the successful resolution of these decisional dilemmas in favor of the more valuable, distal goals despite the allure of the smaller, proximal rewards (Ainslie, 1975; Fujita, 2011; Mischel, Rodriguez, & Shoda, 1989). Given that self-control has been linked to numerous positive life outcomes (Mischel et al., 1989; Moffitt et al., 2011), it is important to understand when and why people succeed or fail in their self-control efforts.

Construal-Level Theory

Inspired by construal-level theory (CLT; Trope & Liberman, 2010), we propose that the way in which people subjectively construe or understand events influences self-control. Research has suggested that decisions reflect not the objective features of the decision context but rather people's subjective construal of those features (e.g., Griffin & Ross, 1991). A "hard hit" in the eyes of one sports fan might be construed as a "dirty play" by another (Hastorf & Cantril, 1954). CLT proposes that subjective construal differs not only between people but also within the same person across different contexts.

Central to CLT is the notion of psychological distance. The here and now of direct experience serves as a de facto reference point; as events recede from this reference point, they become more psychologically distant. Without direct experience, detailed specifics about distant events are unreliable or unavailable. Therefore, to plan and think about these events, people engage in high-level construal, using cognitive abstraction to extract the essential, goal-relevant features likely to apply to all possible occurrences of the distant events. For example, although it is impossible to know exactly how one

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will spend the day 10 years from now, most people can assume it will start with breakfast and a shower, entail interacting with family members and colleagues, and end with sleep. As events become more psychologically proximal, people can engage in low-level construal, incorporating the incidental and secondary details provided by direct experience to form idiosyncratic representations of singular events. An individual may know that tomorrow will entail a breakfast of oatmeal, a 10 a.m. meeting with a research collaborator, and dinner with an old friend at Larry's Bistro. The term "construal" refers to both the process of representing an event and the output of this process. CLT focuses on the process, and it generally assumes that differences in content result from differences in process. The association between psychological distance and construal level is overgeneralized, such that people use high-level construal to represent distant events and low-level construal to represent proximal events, even when detailed specifics are known about the distant events.¹

Research has supported the proposition that psychological distance influences construal, with consequences for decision making and behavior. For example, with increasing temporal distance, people are more likely to categorize objects into fewer, broader categories and to infer broad dispositional traits from single behaviors, two effects that suggest heightened abstraction (Trope & Liberman, 2010). Because high-level construal leads people to understand single instances as examples of broad classes of events, it also promotes sensitivity to the broad implications of one's behavior. Thus, people who engage in high-level rather than low-level construal exhibit greater consistency between their values and behavior, because they better recognize that the instance at hand is one for which values are relevant (Trope & Liberman, 2010). More pertinent to our discussion in this article, high-level construal has also been shown to promote self-control.

Construal Level and Self-Control

To appreciate the role of construal level in self-control, consider dieters choosing between a candy bar and an apple for a snack. If dieters choose on the basis of features salient to direct experience, such as taste (low-level construal), they might prefer the candy bar. Transcending direct experience through high-level construal, however, would lead dieters to understand this decision in broader terms—as a choice between weight loss and hedonism. Given that dieters presumably value weight loss over hedonism, they should prefer the apple in this situation.

We thus propose that construal level systematically influences self-control. High-level construal enhances people's appreciation for the broader, goal-relevant implications of their choices, which in turn promotes self-control. Low-level construal, by contrast, directs people's attention to the salient secondary, incidental features of their choices, which in turn may lead to failures of self-control. High-level construal, relative to low-level construal, should therefore enhance self-control.

Researchers examining this proposition have experimentally manipulated construal level and observed its effects on self-control. Because psychological distance can be confounded with other variables (e.g., diminished personal relevance, reduced emotional impact), the most critical tests manipulate construal level directly as procedural mind-sets, promoting participants' general tendency to construe events in high-level and low-level terms (e.g., Freitas, Trope, & Gollwitzer, 2004; Fujita, Trope, Liberman, & Levin-Sagi, 2006). In one mind-set-based manipulation of construal level, for example, participants consider either why (e.g., "to live a long life") or how (e.g., "by eating more vegetables") they engage in a behavior (e.g., "maintaining good physical health"; Freitas et al., 2004). In another manipulation, participants generate either superordinate categories (e.g., "animal") or subordinate exemplars (e.g., "poodle") for a series of 40 everyday objects (e.g., "dog"; Fujita et al., 2006). Both procedures induce changes in construal level that transfer to subsequent unrelated contexts. Research has shown, for example, that generating category labels rather than exemplars leads people to describe activities (e.g., "attending a family reunion") by referencing the abstract values that the activities serve (e.g., "respecting tradition") rather than the specific actions that the activities involve (e.g., "going to a picnic"; Fujita et al., 2006). In the next section, we review research that has used this methodology to test the effect of construal level on self-control.

Supporting Evidence

Temporal discounting

Initial evidence that high-level construal promotes self-control came from work examining *temporal discounting*—the tendency to value rewards less as they become more distant in time (e.g., Ainslie, 1975). Steeper discount rates are associated with poorer self-control, because they lead people to prefer smaller but immediate rewards over larger but delayed rewards. In one experiment, Fujita and his colleagues (2006) induced differences in construal level, using the why/how manipulation described earlier. Participants then indicated how much more they would pay to receive the same consumer good (e.g., a \$100 gift certificate to their favorite restaurant) now versus later (e.g., 6 months from now) as a measure of discounting. High-level construal reduced rates of discounting (i.e., differences in willingness to pay now versus later), suggesting greater self-control (see also Malkoc, Zauberman, & Bettman, 2010).

Choice and behavior

High-level construal also enhances self-control in choice and behavior. In one experiment, for example, Fujita and Han (2009) recruited female undergraduate students, a population that is typically concerned with weight loss. Participants first completed the category/exemplar construal-level manipulation

described earlier. They then indicated whether they would prefer to eat an apple or a candy bar. Participants in the high-level construal condition, relative to those in the low-level construal condition, were 50% more likely to prefer the apple, suggesting heightened self-control.

In another experiment, Fujita and his colleagues (2006) manipulated construal level using the why/how procedure. An experimenter then connected participants to a bogus physiological instrument that could ostensibly diagnose their personality characteristics while they gripped a handgrip. Critically, participants were told that the feedback provided by the instrument would be more useful and diagnostic the longer they held the handgrip. Because holding a handgrip is physically taxing, this procedure created a self-control conflict between the short-term desire to release one's grip and the long-term benefits of receiving diagnostic feedback. Participants engaged in high-level, relative to low-level, construal held the handgrip longer, suggesting enhanced self-control.

Additional evidence has come from research examining *ego depletion*—the apparent diminished capacity for self-control following the execution of self-control behavior (e.g., Muraven & Baumeister, 2000). Typically, engaging in self-control in one task (e.g., eating radishes in front of a display of cookies) leads to reduced self-control in subsequent tasks (e.g., persistence on challenging problem-solving tasks). Research has shown, however, that when a construal-level manipulation is interposed between the two tasks, participants induced to adopt a low-level construal show the typical depletion pattern, but participants induced to adopt a high-level construal do not (Agrawal & Wan, 2009; Schmeichel & Vohs, 2009). The fact that high-level construal appears to protect people from ego depletion suggests that it enhances self-control.

Prospective self-control

Like Odysseus, who bound himself to his ship's mast to resist the allure of the Sirens' song, people engage in precommitment strategies to bolster their self-control when they anticipate temptation (a process known as *prospective self-control*). One such strategy is self-imposed punishment (Ainslie, 1975). By committing to some punishment for self-control failure, people raise the costs of failure and increase their motivation to choose the larger, distal-goal-consistent reward. Research by Fujita and Roberts (2010) has suggested that high-level construal increases the likelihood that people will use prospective self-control strategies such as self-imposed punishment. In one experiment, participants were presented with an opportunity to receive feedback about their cognitive skills. Although this feedback was presented as diagnostic and useful, the assessment required participants to appear for an appointment that was inconveniently scheduled during the middle of the night. Participants thus anticipated a self-control conflict between the long-term benefits of completing the assessment versus the short-term costs associated with inconvenient procedures. Those induced to adopt a high-level

construal, relative to a low-level construal, agreed in advance to pay higher cancellation fees for missing their appointments, presumably to avoid the temptation of skipping the assessment at the last minute. High-level construal thus appears to enhance prospective self-control (see also Rogers & Bazerman, 2008).

Mechanisms

Attitudes

Research has also examined mechanisms by which high-level construal promotes self-control. When a person's construal of an event changes, what that event means to the person changes. An effective way to assess this change in meaning is by measuring attitudes toward the tempting short-term reward. Whereas construing a candy bar as a "tasty snack" promotes positive attitudes, construing the same candy bar as a "diet-buster" promotes negative attitudes. Research has shown that whereas low-level construal promotes more positive attitudes toward temptations, high-level construal promotes more negative attitudes (Fujita & Han, 2009; Fujita et al., 2006, Rogers & Bazerman, 2008).

Critically, this effect has been demonstrated using implicit as well as explicit measures. Implicit attitudinal measures assess the ease with which people associate objects with positivity or negativity without requiring effortful deliberation. Using such implicit measures, Fujita and Han (2009) showed that high-level construal promotes the association of temptations with negativity, which in turn reduces preferences for those temptations. This suggests that high-level construal may influence evaluations of temptations not through some effortful overriding of temptation impulses but rather through a change in the meaning of those temptations.

Asymmetric temptation-goal associations

Changes in construal level may also alter cognitive associations between concepts. Research has suggested that self-control is enhanced by asymmetric temptation-goal associations (e.g., Fishbach, Friedman, & Kruglanski, 2003)—specifically, proximal temptations activate distal goal concepts, but goal concepts do not reciprocally activate temptations. These asymmetric associations are functional in that they bias one's thought in favor of distal goals at the expense of proximal temptations. Research by Fujita and Sasota (2011) has suggested that these associations are evident only when people are engaged in high-level, not low-level, construal, suggesting that high-level construal may enhance the cognitive accessibility of goals, which in turn may promote self-control.

Caveat

High-level construal is not a panacea for all failures of self-regulation. Self-control is a specific form of self-regulation whereby one determines which of two outcomes—smaller but

proximal versus larger but distal—one wants more. In this respect, self-control differs from other forms of self-regulation, such as determining how best to attain a valued end and deciding how to proceed when one's initial efforts have failed. High-level construal may be beneficial when the self-regulation challenge at hand requires self-control, but it may be detrimental in other situations.

Consider, for example, a golfer attempting to make a tournament-winning putt. Successful execution requires the golfer to carefully self-regulate his or her behavior. Yet, this situation does not entail a self-control conflict: The golfer is not tempted to miss. Because there is no proximal temptation to overcome, high-level construal should not be expected to have a positive impact on performance. If anything, considering the broader implications of this behavior (i.e., winning the tournament) might cause the golfer to underperform because of anxiety and overmotivation (“choking”; Baumeister, 1984). Determining whether high-level or low-level construal is beneficial for self-regulation thus requires nuanced analysis of the challenges with which people are confronted.

Future Directions

Examples of successful self-control suggest that, in service of self-control, people may spontaneously engage in high-level construal to represent proximal temptations. Ongoing research in our lab has supported this assertion and suggested that there may be meaningful individual differences in this ability. A promising future direction for research is the development of diagnostic instruments to measure people's construal of self-control dilemmas as a means of identifying which people are most likely to experience self-control failures. People who spontaneously use low-level construal, rather than high-level construal, to represent impending self-control dilemmas may be more vulnerable to failure. Such diagnostic tools may also be useful for interventions, because they may be used to identify an area of deficiency (i.e., in the level of construal of particular situations).

A greater understanding of construal levels may also provide insight into age-related differences in self-control. Children at age 5 are markedly more skilled at self-control than are children at age 3 (e.g., Mischel et al., 1989). Perhaps such age differences result from children's increasing ability to engage in cognitive abstraction over the course of development. Children's self-control may depend on developing cognitive abilities to transcend the present and travel mentally in time (i.e., to adopt a high-level construal). Exploring the cognitive development of high-level construal may thus provide important insights into self-control.

By explicating the role of construal level in self-control, we hope to better understand who is likely to succeed or fail in their self-control efforts, as well as when and why these successes and failures happen. Given that self-control failures are implicated in some of the most pressing societal problems—including obesity, addiction, and debt—empirical investigation of this

topic is clearly needed. We encourage and look forward to future research to this end.

Recommended Reading

- Fujita (2011). (See References). A comprehensive conceptual analysis of self-control that reviews much of the more recent research on the topic.
- Fujita et al. (2006). (See References). A representative paper that illustrates several methods for experimentally manipulating construal levels, using procedural priming techniques, and their effects on self-control.
- Mischel, W., Rodriguez, M. I., & Shoda, Y. (1989). (See References). One of the most important and influential papers describing the psychology of self-control and its real-world implications.
- Trope, Y., & Liberman, N. (2010). (See References). The most recent and comprehensive review of construal-level theory.

Declaration of Conflicting Interests

The authors declared that they had no conflicts of interest with respect to their authorship or the publication of this article.

Note

1. Research by Mischel, Rodriguez, and Shoda (1989) highlighted the role of “hot,” affective cognitions in failures of self-control. It may be tempting to assume that high-level construal, given its level of abstraction, is “colder” and less emotional than low-level construal. Abstraction and emotionality, however, are conceptually independent. Research has suggested, for example, that although direct experience (and corresponding low-level construal) tends to heighten emotional reactions, some emotional experiences are also enhanced, not reduced, by high-level construal (e.g., Eyal & Fishbach, 2010). Thus, the construal-level perspective that we outline in this article is distinct from the “hot” vs. “cool” approach (Mischel et al., 1989).

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