CHAPTER 12

# Want–Should Conflict

## *A Synthesis of Past Research*

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In our daily lives we frequently face a tension between what we want to do (or what we desire) and what we believe we should do. After a long week at work, we may want to share an expensive dinner and a few drinks with friends when we know we should go home early and get a good night's sleep. Similarly, we might be tempted to get caught up on the current season of *Homeland* when we know we should focus on drafting a book chapter we promised to send to collaborators.

For decades, researchers have examined battles like these between highly desirable options that provide immediate gratification (e.g., eating junk food, procrastinating, overspending) and options that provide more long-term benefits (e.g., eating healthy food, meeting deadlines, and saving for retirement; see, e.g., Ainslie, 1975, 1992; Bazerman, Tenbrunsel, & Wade-Benzoni, 1998; Loewenstein, 1996; Schelling, 1984; Sen, 1977; Shefrin & Thaler, 1988; Strotz, 1956; Thaler & Shefrin, 1981). Bazerman et al. (1998) refer to the common struggle between choosing what we desire in the heat of the moment and what would be best for us in the long run as "*want–should* conflict." According to their conceptualization, we each face frequent conflicts between "multiple selves"—our *want* self, who desires immediate gratification, and our *should* self, who argues for our long-term interests.

In this chapter, we review and synthesize past research on *want–should* conflict. We begin with a formal definition of relative *wants* and *shoulds* and summarize prior work on the underlying cognitive processes

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that produce *want–should* conflict. We then describe empirical research on the levers that predictably tip the balance in favor of *want* versus *should* choices. In the final section of this chapter, we discuss a series of interventions that policy makers, organizations, and individuals can use to promote more future-oriented, *should* choices.

## What Are *Wants* and *Shoulds* and Why Should We Care?

Before discussing the cognitive processes underlying *want–should* conflict, it is important to clarify what we mean when we refer to *want* and *should* selves and the options that each prefers. As described above, Bazerman et al. (1998) proposed that individuals often evaluate decisions through two different lenses, almost as if they are comprised of two competing selves: a *want* self and a *should* self. The *want* self focuses myopically on the here and now, and thus strongly desires instant gratification. In contrast, the *should* self is more far-sighted, guided primarily by long-term interests.

Milkman, Rogers, and Bazerman (2008, p. 326) define options as relative *wants* and *shoulds* based on the following criteria:

1. The instantaneous utility obtained from the *want* option is greater than the instantaneous utility obtained from the *should* option.
2. The sum of the utility (discounted at a standard exponential rate, $\delta = 1 - \varepsilon$) that will be derived from the *want* option in all future periods is less than the sum of the utility that will be derived from the *should* options in all future periods.

While we follow Milkman et al. (2008) and define *wants* relative to *shoulds* and according to the utility they provide over time, it is worth noting that other definitions of *desire* (or *wanting*, in our language) have focused on characteristics distinct from utility, such as the intense affect and/or feelings evoked by wanting something (Kavanagh, Andrade, & May, 2005; Hofmann, Baumeister, Förster, & Vohs, 2012; see also Andrade, May, Van Dillen, & Kavanagh, Chapter 1, this volume). The utility-based definition we adopt provides a precise characterization of *wants* (and *shoulds*) but admittedly overlooks the important role played by affect in experiencing desire.

Also notable is the fact that the definition we adopt for *wants* and *shoulds* articulates the characteristics of relative *want* and *should* options but does not indicate which type of option is optimal and thus rational (i.e., utility-maximizing). The rational choice is the one that provides greater discounted net utility (calculated by summing the discounted short- and long-term utilities across all future periods). Sometimes the *want* option is optimal and thus rational to select—this is the case when the short-term benefits from the *want* option are significant enough to

dominate the long-term benefits from the *should* option. At other times, the long-term benefits of the *should* option exceed the short-term gains from the *want* option, making the *should* option optimal and thus rational to select.

There is some evidence that individuals occasionally underindulge in *want* options—a phenomenon referred to as hyperopia (Kivetz & Keinan, 2006). Indulging in the *wants* that we most desire can cause us to feel wasteful, irresponsible, and immoral (Giner-Sorolla, 2001; Kivetz & Simonson, 2002; Prelec & Herrnstein, 1991), and as a result of a distaste for such feelings, some individuals underconsume *want* options. However, it is far more typical for individuals to feel that they have made the opposite mistake (i.e., overindulging in *wants* at the expense of *shoulds*; Milkman et al., 2008) and to regret this irrational behavior later on. Further, overindulging in *want* options typically has a greater cost than overindulging in *should* options. For example, failures to control one's desires (e.g., choosing pizza over vegetables, watching TV instead of exercising, smoking rather than quitting, buying an unnecessary designer handbag rather than depositing this money in a savings account) can contribute over time to serious individual and societal problems, such as obesity, high cancer rates, and undersaving. In many such cases, then, we can say that observed levels of indulgence in *want* options are suboptimal (and thus not rational), as higher net utility would be obtained by selecting *shoulds* overs *wants*. Because this mistake of overindulging in *wants* is generally more common and costly than the opposite error, when we discuss *want–should* conflict throughout this chapter, we will primarily focus our discussion on how individuals and policy makers can increase the rate at which *should* options are selected.

## Cognitive Processes Believed to Produce Want–Should Conflict

In order to better understand the outcomes of the tension that individuals experience when faced with a choice between *want* and *should* options, it is useful to examine the cognitive processes believed to underlie *want–should* conflict. In line with the multiple-selves framework put forth by Bazerman et al. (1998), some economic models have proposed that people are controlled by conflicting selves with competing preferences (Fudenberg & Levine, 2006; Read, 2001; Thaler & Shefrin, 1981). Relatedly, psychologists have proposed a model wherein individuals' decision-making processes are guided by two modes of thought, or "systems," which are referred to as System 1 and System 2 (Stanovich & West, 2000). System 1 is an intuitive, automatic system that relies on emotions and makes quick judgments. System 2 engages in slower and more logical, effortful reasoning (Milkman, Chugh, & Bazerman, 2009). In choosing between *wants* and *shoulds*, the instinctive and emotional processing driven by

System 1 tends to favor affectively rich *want* options, whereas the deliberative and analytical processing of System 2 tends to place more weight on long-term consequences and thus favors *shoulds*. For example, when you are contemplating eating a slice of chocolate cake, System 1 will focus on the fact that it is delicious, but System 2 will focus on the impact it will have on your waistline. According to this theory, factors in a decision maker's environment that weaken or strengthen System 1 versus System 2 will affect whether *wants* or *shoulds* are favored. Specifically, when an individual's System 1 is triggered (e.g., by visceral factors) or System 2 is taxed (e.g., tied up with complex thinking) and unable to weigh in with full force on want–should conflicts, *wants* will be more likely to win out. But, when System 1 is dampened or System 2 is triggered, *shoulds* will be preferred at a higher rate. Recent neurological research using functional magnetic resonance imaging (fMRI) technology has provided some evidence that indeed, consistent with this two-system model, different neurological regions are differentially activated by decisions that involve short-term rewards and long-term rewards (McClure, Laibson, Loewenstein, & Cohen, 2004).

In contrast to models of multiple competing systems, other research has proposed that construal level theory (CLT) can explain *want–should* conflict. According to CLT, events and choices can be represented in two fundamental and distinct ways—abstractly or concretely. The proximity of an event impacts how it is mentally represented. Distant events (e.g., events that are distant in space, time, or likelihood) are evaluated at a high level and are associated with schematic, abstract, and goal-relevant characteristics. In contrast, proximal events (e.g., events that are nearby in space, time, or likelihood) are evaluated at a low level and draw people's attention to concrete, specific, and detail-focused characteristics (Liberman, Sagristano, & Trope, 2002; Trope & Liberman, 2003). For example, a low-level construal of exercising would activate thoughts about the pain, discomfort, and time required to work out, pushing an individual to do what she wants and skip the gym, whereas a high-level construal of exercising would focus thoughts on the overarching benefits of exercise for one's physical and psychological well-being, pushing an individual to do what she should and exercise. Building on this notion, recent research has shown that *should* choices are more appealing when construed at a high level than at a low level (Rogers & Bazerman, 2008; Fujita, Trope, Liberman, & Levin-Sagi, 2006). In other words, this line of research posits that one fundamental factor that produces a tension between *want* and *should* choices and tips the scales when we face such choices is the level at which we construe the world, which is shifted by our circumstances.

Another body of research suggests that limited self-regulatory capacity shapes the outcomes of our internal struggles between *wants* and *shoulds* (Muraven & Baumeister, 2000). According this stream of research, self-control (or the ability to select *should* choices) is conceptualized as

resembling a muscle that can be weakened through repeated use. The idea is that after resisting something we desire (e.g., a particularly tempting *want*) or, more generally, after engaging in activities that require the use of our executive function (e.g., overriding impulses), we have less self-control "strength" available for subsequent choices, causing us to give in to our short-term desires more readily (Muraven & Baumeister, 2000). According to this theory, giving in to the desires of our *want* self is attributable to a lack of self-control strength and is more likely after we have been called upon to repeatedly exercise self-control. Overall, the research on depletion suggests that when the *should* self is in a weakened state, it is more likely to lose its bouts with the *want* self.

## What Factors Shift Whether We Choose *Wants* or *Shoulds*?

### Choosing for Now or Later

Much prior research on *want–should* conflict has examined instability in our preferences for *wants* and *shoulds* when we make choices for now versus later. A stylized finding from this literature is that people prefer *should* options at a higher rate when making decisions for the more distant future but prefer *want* options more often the sooner choices will take effect. For example, deciding to go to the gym tomorrow is easier than deciding to go this minute, and committing to save more for retirement next year is easier than committing to forgo a portion of today's paycheck. This pattern has been demonstrated in decision domains ranging widely from those involving money to those involving food and movie rentals (e.g., Thaler, 1981; Ainslie & Haendel, 1983; King & Logue, 1987; Kirby & Herrnstein, 1995; Kirby, 1997; Read, Loewenstein, & Kalyanaraman, 1999; Milkman, Rogers, & Bazerman, 2009; Milkman, Rogers, & Bazerman, 2010).

Economists have modeled the tendency to prefer *wants* over *shoulds* at a higher rate the sooner a choice will be enacted by assuming that people discount utility more steeply in the short term than over the long run (Ainslie, 1992; Laibson, 1997; Loewenstein & Prelec, 1992; Strotz, 1956). Perhaps the most widely used model of impatience in intertemporal choice is Laibson's (1997) quasi-hyperbolic time discounting model in which all periods beyond the present period are discounted steeply by a constant factor, $\beta < 1$, in addition to the rational, exponential discount factor, $\delta = 1 - \varepsilon$. Because *should* options provide more long-term utility but less short-term utility than *want* options, Laibson's model makes a clear prediction about how time will shape the outcomes of *want–should* conflicts: people will prefer *wants* over *shoulds* at a higher rate when choosing for the present period than when choosing for future periods.

Multiple laboratory and field studies investigating impulsiveness have confirmed that people show extremely high discount rates for delayed rewards (Angeletos, Laibson, Repetto, Tobacman, & Weinberg, 2001; Kirby, 1997; Kirby & Herrnstein, 1996; McClure et al., 2004). In an early study of dynamic inconsistency, the average participant opted to receive $50 immediately (a *want* option) rather than $100 in 6 months (a *should* option) but preferred to receive $100 in 18 months rather than $50 in 12 months (Ainslie & Haendel, 1983). These results contradict the predictions of standard economic theory, which suggests that an individual's preferences between two sure sums of money should depend only on the time delay that separates their receipt (6 months in both cases). These results, however, are consistent with a quasi-hyperbolic time discounting model.

Intertemporal preference reversals involving *wants* and *shoulds* have been shown not only with money but also with various other outcomes. For example, in one experiment, subjects randomly assigned to select a film to watch that day were more likely to select lowbrow films (*want* choices) than subjects randomly assigned to select a film they would watch several days in the future (Read et al., 1999). In a field study of dynamic inconsistency and online DVD rentals, Milkman et al. (2009) demonstrated that when people rent a *should* movie before a *want* movie, they are significantly more likely to return their rentals out of order, suggesting a higher tendency to procrastinate when it comes to watching *should* films than *want* films. They also hold *should* movies longer than *want* movies, which is further evidence of procrastination when it comes to doing what we *should*. Interestingly, more experienced renters exhibit this pattern to a lesser extent than inexperienced renters, suggesting that there is some scope for learning how to avoid dynamic inconsistency. In the domain of online grocery shopping, Milkman et al. (2010) found that the percentage of extreme *should* groceries (e.g., fruits and vegetables) in a customer's basket tends to increase and the percentage of extreme *want* groceries (e.g., ice cream and cookies) tends to decrease the further in advance of delivery a customer places her order. In addition, Milkman et al. (2010) showed that customers spent more when ordering for more immediate delivery than for a later delivery (spending is a typical *want* behavior, whereas saving is a *should* behavior), which provides another example of dynamic inconsistency.

Related field research has demonstrated that firms respond to, capitalize on, and profit from consumers' dynamic inconsistency when it comes to *wants* and *shoulds*. For example, Oster and Scott Morton (2005) found that across approximately 300 American magazines, the ratio of the newsstand price to the subscription price is significantly larger for leisure magazines (*wants*) than for investment magazines (*shoulds*). This suggests that magazine pricing has been optimized to take advantage of

people's tendency to plan ahead (e.g., subscribing) when it comes to purchasing *should* options but to make spur-of-the-moment decisions (e.g., buying a magazine at the newsstand) when it comes to purchasing *want* options. Additionally, DellaVigna and Malmendier (2006) examined gym attendance (a *should* behavior) and found evidence that people regularly paid a high fee for unlimited gym memberships when they could have saved money by selecting a flat, pay-per-visit fee schedule instead. These results indicate that gym goers often overestimate their future attendance (a *should*) when signing up for a membership (planning in advance) and opt for the *want* option (in this case, skipping gym visits) when deciding whether or not to exercise on a given day. In other words, "now" they prefer the *want* of skipping the gym, but "later" they anticipate preferring the *should* of exercise, and firms are able to extract excess fees from consumers as a result of this type of dynamic inconsistency.

### Cognitive Load

As described above, one theory that has been proposed to explain the choices people make when faced with *want–should* tradeoffs is a two-system model. This theory suggests that the relative strengths of System 1 reactions (characterized by emotions and instincts) and System 2 reactions (characterized by deliberative, controlled thinking) influence the outcomes of *want–should* conflicts. Building on this notion, *want* options are expected to be more likely to win out when the cognitive resources available to make a decision are limited (or when System 2 is overburdened), which would allow System 1 to dominate the decision process. In one study designed to test this prediction, Shiv and Fedorikhin (1999) presented participants with two snack options: a piece of chocolate cake (a *want*) or a cup of fruit salad (a *should*). They found that individuals who were randomly assigned to memorize a seven-digit number (and who thus had reduced cognitive resources) were more likely to choose cake over fruit than those who were assigned to memorize a two-digit number. This finding is consistent with a two-system model of *want–should* conflict and highlights the fact that the availability of cognitive resources is critical to making farsighted and deliberative *should* decisions.

### Construal Level

As discussed previously, construal level theory (CLT) suggests that we prefer *shoulds* over *wants* more often when we are thinking abstractly and thus focusing on the global and goal-relevant features of options rather than when we are thinking concretely and thus focusing on the contextualized, surface-level, and goal-irrelevant features of options. For instance, abstract representations of exercising bring to mind its long-term

benefits, while concrete representations remind us of its in-the-moment pains and required planning. Past experimental research has shown that the tendency to make *should* choices can indeed be enhanced by inducing abstract, high-level representations of events (e.g., by focusing people on more distal events in time, space, and hypotheticality rather than more proximal events; Trope & Liberman, 2003; Rogers & Bazerman, 2008). For example, Fujita et al. (2006) primed some research participants to think abstractly by asking them to describe *why* they maintain good physical health and primed others to think concretely by asking them to describe *how* they maintain good physical health. They found that when a more abstract, high-level mindset was activated, people exhibited stronger preferences for delayed *should* rewards over immediate *want* outcomes. This research highlights that inducing people to adopt a higher-level construal mindset is one way to increase future-oriented, *should* decision making.

## Depletion

The process of reining in our short-term desires and choosing *shoulds* over *wants* requires exercising willpower or self-regulation (Carver & Scheier, 1998; Higgins, 1996). As discussed previously, a growing body of research suggests that exerting willpower comes at a cost, and that cost is a reduction in available self-control resources for use in future choices (Baumeister, Bratslavsky, Muraven, & Tice, 1998). In other words, individuals have limited self-regulatory resources, and exerting self-control to avoid *wants* in one situation can decrease one's subsequent ability to exert self-control. For example, in one study designed to test this theory, Baumeister et al. (1998) showed that participants who resisted eating chocolate chip cookies (an obvious *want* for most people) quit working on unsolvable puzzles earlier (where persistence is a *should* behavior) than did individuals who resisted eating radishes, an activity that for most people requires little self-control. Further, in field research, it has been shown that exposure to demanding work environments—which induce repeated exertion of willpower—exhausts executive resources (Danziger, Levav, & Avnaim-Pesso, 2011) and reduces *should* choices (Dai, Milkman, Hoffmann, & Staats, 2015). In one study, hospital employees sanitized their hands (an important *should* behavior) less and less at recommended times later in their work shifts—an effect that was exacerbated by higher work intensity and alleviated by longer breaks between shifts (Dai et al., 2015). Together, these studies illustrate the paradox that by exercising self-control now, we increase the likelihood that we will give in to our desires to indulge later. Fortunately, although the self-control muscle can be weakened through repeated use, it can also be strengthened through proper exercise. Muraven (2010) found evidence that practicing small acts of self-control greatly increased smokers' chances of successfully quitting the habit.

### Incidental Uncertainty

Building on prior ego depletion research, Milkman (2012) proposed and demonstrated that facing uncertainty about the future is depleting and can thus reduce self-control resources and increase our tendency to select *want* options. For example, when people were unsure of whether or not they held a winning lottery ticket, they were less persistent on math problems (where persisting is a *should*) than when they knew the outcome of the lottery. When they were unsure which of two movies they would watch tomorrow, they were more likely to choose to eat an unhealthy *want* snack than when they were informed of which movie they would see. Further, when prompted to simply describe uncertain (versus certain) aspects of their lives, participants were more likely to elect to read a *want* magazine over a *should* magazine. The effect of uncertainty on take-up of *should* options was mediated by depletion. Overall, this work suggests that reducing uncertainty in an individual's environment can reduce impulsive choices and increase the likelihood that he or she will select *should* options.

### Joint versus Separate Evaluations

The outcomes of *want–should* conflicts are also influenced by whether we evaluate options one at a time or simultaneously. Although *want* options tend to be preferred at a higher rate than *should* options in isolation, we are more likely to think about the costs and benefits of each option and make farsighted *should* choices when multiple options are evaluated at the same time (Bazerman et al., 1998). For example, when viewed in isolation, a charity that saves baby polar bears may seem more alluring and receive more donations than a charity that funds skin cancer research. However, when these choices are compared side by side, people tend to donate to the charity that helps people, viewing its mission as more important, albeit less emotionally resonant (Kahneman & Ritov, 1994). This research highlights the fact that presenting *want* and *should* options simultaneously rather than sequentially is one way to promote more *should* choices.

### Mood Effects

Past research has also demonstrated that emotions can shift the outcomes of *want–should* conflicts. First, positive mood has been shown to facilitate future-oriented, *should* decision making (Labroo & Patrick, 2009; Fedorikhin & Patrick, 2010), and a number of explanations have been proposed for this. One account is that experiencing positive affect signals to decision makers that their current situation is nonthreatening, which reduces discounting of the future and thus makes *shoulds* relatively more attractive (Pyone & Isen, 2011; Labroo & Patrick, 2009). Another reason

suggested by past research is that positive affect can counteract ego depletion, restoring the depleted willpower resources necessary for selecting *should* options (Tice, Baumeister, Shmueli, & Muraven, 2007). Further, Fedorikhin and Patrick (2010) argued that resisting temptation may be a technique that individuals in a positive mood employ to maintain their emotional state, since giving in to temptation can induce guilt and other negative emotions. In one study, these authors demonstrated that after randomly assigning participants to watch clips of videos that induced either a happy or neutral mood, those placed in a positive mood were more likely to select a *should* option (grapes) over a relative *want* option (M&Ms). However, they found that the tendency for positive moods to increase *should* choices is attenuated by elevated arousal, because arousal is depleting (Fedorikhin & Patrick, 2010). In addition to exploring the impact of positive moods, past research has also explored the impact of negative affect on *want–should* conflict. Recent studies have demonstrated that negative affect can lead to self-control breakdowns (Leith & Baumeister, 1996), whereby sadness increases decision makers' tendency to focus on immediate gratification and to dramatically discount future outcomes (Lerner, Li, & Weber, 2013). Together, this research shows that people who are relaxed and happy are more likely to make *should* choices, whereas individuals who are emotionally aroused or in a negative mood are more likely to reach for the instant gratification produced by indulging in a *want* option.

## Licensing Effects

Interestingly, our choices between *wants* and *shoulds* can be affected not only by our current state but also by decisions we have made in the past as well as those we anticipate making in the future. Specifically, past research has shown that people feel "licensed" to make (or justified in making) *want* choices if they believe they have previously engaged in *should* behaviors or if they anticipate having opportunities to engage in *should* behaviors in the future (see also de Ridder, de Witt Huberts, & Evers, Chapter 10, this volume; Dholakia, Chapter 20, this volume). For example, Khan and Dhar (2006) showed that people who were asked to imagine they would partake in a *should* behavior (e.g., donating part of their tax rebate to charity, volunteering for community service), relative to a control group who did not imagine any such future good behavior, were more likely to select an affectively desirable *want* product (e.g., a pair of designer glasses) over a cognitively favorable *should* product (e.g., a less expensive but more utilitarian pair of glasses).[2] Furthermore, *want*

[2]Interestingly, licensing effects only hold when participants voluntarily engage in a *should* behavior—there is no licensing effect when individuals are forced to engage in *shoulds*.

products are more likely to be selected when individuals make what they believe is the first of a series of similar decisions rather than a single, isolated choice, presumably because individuals making repeated decisions believe they will have the opportunity to choose *shoulds* in the future to compensate for current indulgences (Khan & Dhar, 2007). These findings highlight that choosing between *wants* and *shoulds* is often not done in isolation but instead hinges on an individual's past choices and anticipated future decisions.

### Closeness to Your Future Self

The outcomes of *want–should* conflicts are affected not only by what we think our future self will choose but also by how close we feel to our future self. *Want–should* conflicts fundamentally involve tradeoffs between options that satisfy the present self's desires (*wants*) and options that benefit the future self (*shoulds*). As a result, when we do not feel psychologically connected to our future self, we should be less interested in taking actions to benefit this self and thus shy away from *should* options. Indeed, an emerging stream of research suggests that people are more impatient the more disconnected they feel from their future self. For example, people prefer smaller-sooner rewards over larger-later rewards at a higher rate when they anticipate experiencing life-changing events (rather than events that are unlikely to change their identity and beliefs), since life-changing events induce a greater disassociation between their image of their present self and their image of their future self (Bartels & Rips, 2010). More generally, when people are told that their identity (e.g., beliefs, values, and goals) will change considerably over time, they are more likely to accept immediate benefits (*wants*) and forsake larger deferred benefits (*shoulds*). On the other hand, farsighted decision making can be facilitated by making people feel closer to their future self. For example, Hershfield et al. (2011) increased study participants' reported willingness to save for retirement by allowing them to virtually interact with age-progressed images of themselves—an experience that helped them relate to and imagine their future self.

### Fresh Starts

Recent research suggests that there are naturally arising points in time when people are particularly motivated to pursue their long-term interests, or in other words, to prefer *shoulds*. Temporal landmarks, which include personally relevant life events (e.g., anniversaries, birthdays) and reference points on shared calendars (e.g., holidays, the start of a new week, month, year, or semester), demarcate the passage of time and help us organize our activities, memories, and experiences (Robinson, 1986; Shum, 1998). Recent field research by Dai, Milkman, and Riis (2014) has

shown that temporal landmarks magnify people's virtuous intentions and increase their engagement in *should* behaviors. Dai et al. (2014) analyzed (1) daily Google search volume for the term "diet," (2) undergraduate students' gym attendance records, and (3) a wide range of goals (pertaining to education, health, finance, etc.) that Internet users committed to pursuing on a goal-setting website (*www.stickK.com*). Each of these three field studies revealed that people engage in *should* behaviors (i.e., dieting, exercising, and goal pursuit) more frequently following temporal landmarks, including the start of the week, month, year, and academic semester, as well as immediately following a birthday, a federal holiday, or a school break. The authors refer to this phenomenon as "the fresh start effect" (Dai et al., 2014).

In another paper, Dai, Milkman, and Riis (2015) explore what types of temporal landmarks are most motivating and examine the mechanism underlying increased motivation. They find that more meaningful landmarks produce a larger uptick than less meaningful landmarks in the rate at which people intend to and choose to engage in *should* behaviors. For example, people expect that they are more likely to begin pursuing their goals following a more meaningful landmark (e.g., their first move to a new home) than following a less meaningful landmark (e.g., moving to a new home for the ninth time). Also, Dai et al. (2015) find that students are more likely to choose to receive reminders about their goals on a date labeled as the beginning of their school's summer break than the same date labeled "Administrative Day." Furthermore, Dai et al. (2015) propose and show that this strengthened motivation to engage in *should* behaviors following more meaningful temporal landmarks is driven by a greater psychological disassociation from one's past imperfections.

This stream of research on the "fresh start effect" suggests several techniques that can potentially be leveraged to promote *should* choices. For example, managers and policy makers may consider encouraging farsighted decisions following temporal landmarks (e.g., a birthday, a work anniversary), particularly those that are perceived as more psychologically meaningful (e.g., a major birthday, a round-number work anniversary). In addition, framing a given day as a meaningful fresh start may increase the likelihood that people will make more *should* decisions.

## Prescriptions

Past research examining what shifts decisions when we face *want–should* tradeoffs (reviewed above) highlights that our choices regarding *wants* and *shoulds* are malleable and depend on the context in which we make a decision. Taking advantage of this malleability, an increasing number of "nudges," or interventions that leverage psychology to guide behavior without restricting choice (Thaler & Sunstein, 2008), have been designed

with the goal of promoting farsighted, *should* decisions. As discussed previously, many policy makers are seeking ways to increase engagement in *should* behaviors (e.g., increasing savings, reducing smoking, increasing healthy eating and exercise). Here we review a series of different "nudges" that have been shown to successfully increase the rate at which we choose *shoulds* over *wants*.

## Prompt Planning

Prompting plan making—or prompting people to stipulate when, where, and how they will enact their goals—is one of the oldest prescriptions for increasing engagement in *should* behaviors, dating back to research conducted in the 1960s. Specifically, in 1965, Leventhal, Singer, and Jones demonstrated that prompting people to form a plan of action for receiving a tetanus shot significantly increased take-up of tetanus inoculations. Since then, plan making has been shown to improve our likelihood of achieving goals in a diverse array of domains, including exercise, dieting, smoking cessation, academic performance, test preparation, recycling, and voting (for more extensive reviews, see Gollwitzer, 1999; Rogers, Milkman, John, & Norton, in press).

Planning prompts are effective for a number of reasons (Dai et al., 2013; Rogers et al., in press), one of which is that they reduce forgetfulness. When people take the time to create and even write down the when, where, and how of a plan, they mentally associate their target actions with cues relating to the when and where of execution. For example, creating a plan with the form "at noon tomorrow, I will vote" links voting to the cue of "noon tomorrow." When a cue arises (e.g., at noon tomorrow), an individual who has formed a plan is more likely to remember and then perform the predetermined actions. Planning also discourages procrastination by creating explicit commitments to oneself and sometimes also to others. For example, people feel internal pressure to follow through on their plans and seek to avoid breaking explicit commitments to themselves because behaving inconsistently with their past actions, beliefs, and attitudes can create discomfort (Festinger, 1962). Further, some plans (e.g., to get a mammogram) may literally require making an appointment (e.g., with a doctor), which may be difficult to cancel or delay.

Recent large-scale field studies have demonstrated the effectiveness of plan making as a means of increasing take-up of two important *should* behaviors—receiving flu shots and receiving colonoscopies (Milkman, Beshears, Choi, Laibson, & Madrian, 2011, 2013). In one three-armed randomized, controlled trial (Milkman et al., 2011), thousands of employees from a Midwestern utility company were informed by mail of where and when free flu shots would be available at their work site. Employees in the control condition only received this logistical information. Employees in two other conditions were encouraged on their

reminder mailing to (privately) form a plan about either (1) the date (the general planning condition) or (2) both the date and time (the specific planning condition) when they intended to receive their shot. Prompting employees to make a specific plan increased flu shot uptake significantly from 33% in the control condition to 37% in the specific planning condition. As expected, the take-up rate in the general plan condition of 35% fell between the other two conditions (and did not differ significantly from either). Notably, employees whose on-site clinic was open only for a single day (as opposed to 3 or 5 days) and who thus had the most to lose from forgetfulness or procrastination benefited the most from the prompt (turnout in this group increased from 30% in the control to 38% in the specific plan group). In a similar study by Milkman et al. (2013), planning prompts were demonstrated to significantly increase take-up of colonoscopies. In this study, those predicted to be the most likely to forget to follow through (e.g., older adults, adults with children, and those who did not comply with previous reminders) benefited most from the planning prompt. These field experiments, together with past research, highlight the value of planning prompts as a scalable, low-cost nudge for increasing engagement in *should* behaviors by combating forgetfulness and procrastination.

### Commitment Devices

Many people are sophisticated about preventing their self-control problems from getting in the way of their good (or *should*) intentions (O'Donoghue & Rabin, 1999). As a result, another way to increase engagement in *shoulds* is by providing individuals with access to commitment devices—or a means of voluntarily (1) enforcing restrictions on themselves until they have done what they know they should or (2) imposing penalties for failing to do what they should. Commitment devices have existed in many forms throughout the years. For instance, the piggy bank is a commitment device that encourages us to commit to saving by setting aside a certain portion of earnings for future use. More modern forms of commitment devices include Antabuse, a medication that makes alcoholics physically ill after consuming even a small amount of alcohol, and *stickK.com*, a website that takes users' money if they fail to achieve their goals. A definition of commitment devices provided by Rogers, Milkman, and Volpp (2014, p. 2065) states that they have two basic features: "First, people voluntarily elect to use them. This means people must be self-aware enough about the gap between their current goals and their likely future behaviors that they see the value of taking steps to constrain their future selves. . . . Second, commitment devices associate consequences with people's failures to achieve their goals."

Ultimately, commitment devices are mechanisms that allow people to prevent themselves from giving in to unwise *wants*. Past research has

shown that they can been used successfully to reduce procrastination (Ariely & Wertenbroch, 2002), undersaving (Ashraf, Karlan, & Yin, 2006; Beshears, Choi, Laibson, Madrian, & Sakong, 2011), smoking (Giné, Karlan, & Zinman, 2010), failures to achieve work goals (Kaur, Kremer, & Mullainathan, 2010), and succumbing to repeated temptations in a laboratory setting (Houser, Schunk, Winter, & Xiao, 2010). A classic example of a commitment device is the Save More Tomorrow™ program, which asks employees to agree to increase their savings rates whenever they receive a raise and has been shown to dramatically increase savings rates (Thaler & Benartzi, 2004).

Some past studies have further shown that people are sometimes willing to pay for products that make a desirable option less attractive in an effort to commit themselves to making *should* choices. Examples of such "value-destroying" options include restrictive savings accounts that penalize withdrawals before a predetermined date or before a savings goal is reached (Ashraf et al., 2006; Beshears et al., 2011) and gym memberships that cost more if one fails to meet a predefined attendance goal (Royer, Stehr, & Sydnor, 2012). Similarly, some people will voluntarily limit the amount of *want* products available for their future consumption because they expect their future self to overconsume, by buying smaller packages of *wants* despite the presence of volume discounts (Wertenbroch, 1998) or by ordering smaller portions of fast-food meals even when a larger portion costs the same price (Schwartz, Riis, Elbel, & Ariely, 2012). In fighting the urge to procrastinate, some will even elect to self-impose earlier deadlines than those externally designated by supervisors or instructors (Ariely & Wertenbroch, 2002). The fact that many choose to restrict their future choice sets to reduce future *want* decisions supports the notion that people value overcoming desires that conflict with their long-term well-being.

### Temptation Bundling

Temptation bundling is a new type of commitment device (introduced in 2014 by Milkman, Minson, and Volpp), which has proven an effective means of increasing engagement in one important *should* behavior—exercise. Temptation bundling seeks to increase *should* behaviors by bundling them with tempting *wants*, a strategy that can simultaneously reduce engagement in *wants* and increase engagement in *shoulds*. For example, a doctoral student may have the goal of spending more time writing a manuscript (a *should* behavior) while recognizing that he has been consuming too many Starbucks white chocolate mochas (a *want* behavior). Using temptation bundling, the student might commit to only consuming white chocolate mochas while working on his manuscript, thus increasing time spent writing and reducing white chocolate mocha consumption. In addition to simultaneously tackling two types

of self-control problems, temptation bundling has the potential to harness consumption complementarities: working while drinking mochas may make work more enjoyable and efficient as well as reducing one's guilt (and therefore overall enjoyment) associated with mocha consumption.

Milkman et al. (2014) demonstrated the effectiveness of temptation bundling as a means of increasing exercise (a *should* behavior) in a field experiment. Study participants were randomly assigned to (1) a full-treatment condition in which access to tempting lowbrow audio novels (*wants*) was restricted to the gym, (2) an intermediate treatment condition in which participants were simply encouraged to self-restrict their enjoyment of tempting audio novels to the gym, or (3) a control condition. Initial gym attendance among individuals in the full treatment condition was 51% higher than attendance in the control group (a significant difference), and participants in the intermediate treatment condition showed a marginally significant 29% initial increase in gym attendance, although notably, the boosts in gym attendance in both treatment groups decayed significantly over the course of the 9-week study. Furthermore, at the conclusion of the study, 61% of participants were willing to pay to have their access to an iPod containing tempting audio novels restricted to the gym. In other words, people would pay to have access to a possession they could otherwise use freely restricted so they could only enjoy this desirable *want* while exercising (or engaging in a *should* behavior). These findings suggest that temptation bundling may be an effective means of increasing take-up of *shoulds* and that there may be a market for temptation-bundling devices.

## Conclusion

This chapter has synthesized research on the internal conflict we face when presented with *want* and *should* options, with particular attention to how we can best encourage more *should* choices. The effectiveness of many of the strategies we have discussed has important implications for public policy. In the realm of public health, for instance, ailments such as addiction and obesity carry tremendous costs. Specifically, it is estimated that unhealthy behaviors may account for up to 40 percent of premature deaths in the United States (Schroeder, 2007), and such behaviors place a significant strain on the nation's health care systems (Finkelstein, Trogdon, Cohen, & Dietz, 2009). In many cases, outcomes such as obesity and addiction can be traced back to individuals' failures to successfully navigate *want–should* conflicts, with our short-term desires (e.g., watching television, eating junk food, smoking) frequently winning out over what is in our long-term best interest (e.g., exercising, eating healthy food, receiving preventive care, quitting smoking).

The research highlighted throughout this chapter shows that even minor interventions (e.g., planning prompts, making individuals feel closer to their future self) can shift behaviors in societally beneficial directions. Policy makers may be able to utilize these types of interventions to "nudge" individuals toward *should* behaviors without restricting their choices (Thaler & Sunstein, 2008). While still a relatively new idea, the notion that "nudging" citizens toward *should* choices without taxing them or restricting their options in any way has gained popularity with politicians around the world. For example, in 2010, Prime Minister David Cameron of the United Kingdom created a Behavioral Insights Team (also known as the "nudge unit") to apply such techniques to public problems (Bell, 2013). For academics to provide policy makers as well as individuals with the greatest possible insight about how to facilitate *should* decision making, additional research on *want–should* conflict is needed. The better we understand *want–should* conflict, the more successful we will become at designing effective interventions that promote *should* choices and help people avoid the temptation to give in to harmful cravings and desires.

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