Context-Dependent Effects of Goal Primes

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We provide evidence that goal priming effects are context dependent. We show that goal primes encourage prime-consistent behavior when the behavioral context is common and prime-inconsistent behavior when the behavioral context is uncommon. While the prime-consistent behavior is compatible with existing theory, the prime-inconsistent behavior poses a theoretical challenge. We argue that uncommon behavioral contexts encourage the release of a primed goal and, as a consequence, an increase in the relative activation of information inconsistent with the primed goal and prime-inconsistent behavior.

The influence of priming in consumer behavior is ubiquitous. Primes have been shown to influence product evaluations (e.g., Brendl, Markman, and Messner 2003), consideration set formation (e.g., Shapiro 1999), choices (e.g., Chun and Kruglanski 2005; Sheeran et al. 2005), the extremity of behavior (e.g., Shang, Reed, and Croson 2008), and product experience (e.g., Aaker and Stayman 1992). The pervasive influence of primes has also led to an extensive documentation of the processes supporting priming effects. Priming effects have been attributed to self-concept activation (e.g., Shang et al. 2008; Wheeler, DeMarree, and Petty 2007), information accessibility (e.g., Wheeler and Berger 2007), trait activation (e.g., Srull and Wyer 1979), exemplar activation (e.g., Stapel, Koomen, and Velthuijsen 1998), category activation (e.g., Bargh, Chen, and Burrows 1996), habit activation (e.g., Sheeran et al. 2005), mimicry (e.g., Chartrand and Bargh 1999; Tanner et al. 2008), and goal activation (e.g., Chartrand et al. 2008; Fitzsimons, Chartrand, and Fitzsimons 2008; Markman, Brendl, and Kim 2007).

The fervent interest in the processes that support priming effects has led to a corresponding interest in the moderators of priming effects. Two moderators are particularly pervasive across the many priming literatures. First, the distinctiveness of the prime influences the extent to which a prime creates prime-consistent or prime-inconsistent behavior. In general, less distinctive primes result in prime-consistent behavior, whereas more distinctive primes result in prime-inconsistent behavior (Stapel et al. 1998). Second, the relevance of the prime to the judgment or behavior influences its effectiveness. In general, relevant primes exert an influence on judgment and behavior, whereas irrelevant primes exert no influence (Stapel et al. 1998). Interestingly, distinctiveness and relevance moderate priming processes that rely on trait, exemplar, and category activation, whereas only relevance moderates priming processes that rely on habits, mimicry, and goals.

We propose that an additional factor moderates goal priming effects. More specifically, the extent to which a behavioral context is common or uncommon influences the extent to which a goal prime encourages prime-consistent or prime-inconsistent behavior. For example, we hypothesize that a prime encountered when entering a retail store (e.g., display of high-status goods) could encourage prime-consistent behavior when the shopping context is common (e.g., buy a gift for a friend) but prime-inconsistent behavior when the shopping context is uncommon (e.g., buy a gift for a boss). We anticipate that the behavioral context will moderate goal priming because of the characteristics of a passive goal guidance system. When goals are subtly primed (i.e., a person is not aware of goal activation), there must be a set of processes that guide goal pursuit and goal release (Chartrand, Dalton, and Cheng 2007; Shah 2005). Goal pursuit is characterized by an increased activation of information consistent with the primed goal relative to information in opposition to the primed goal (Shah, Friedman, and Kruglanski 2002). Goal release is characterized by a lessened activation of the information consistent with the primed goal relative to information in opposition to the primed goal (Förster, Liberman, and Higgins 2005). We hypothesize that

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common behavioral contexts encourage goal pursuit (i.e., a priming effect) and uncommon behavioral contexts encourage goal release and activation of information inconsistent with the primed goal (i.e., an antipriming effect).

We use five experiments to support our hypothesis. Experiment 1 shows that a goal prime results in a priming effect when a behavioral context is common (e.g., decision for the present) but an antipriming effect when a behavioral context is uncommon (e.g., decision for the future). Experiment 2 provides process evidence that goal-consistent information is more accessible than goal-inconsistent information in a common behavioral context but that goal-inconsistent information is more accessible than goal-consistent information in an uncommon behavioral context. Experiment 3 replicates experiment 1 but reverses the mapping of the behavioral context to the decision frame (i.e., common context = decision for the future; uncommon context = decision for the present), indicating that the results of experiment 1 are not a function of a specific temporal frame. Experiment 4 shows that the goal priming effect becomes stronger with a delay and hence provides evidence for the motivational content of the goal prime. Experiment 5 shows that the behavioral context moderates the influence of a goal prime when the goal is appropriate for the context but not when the goal is inappropriate for the context.

GOAL PRIMING

The goal priming literature is both vast and robust. Recent reviews (e.g., Bargh 2006; Dijksterhuis, Chartrand, and Aarts 2007) discuss a wide array of goal priming effects (see also Wheeler et al. [2007] for a review of several prime-to-behavior effects). These effects can be used to synthesize three properties of goal priming. First, goal primes activate a cognitive goal structure, not just a goal concept (Bargh 2006; Kruglanski 1996; Kruglanski et al. 2002). The cognitive goal structure consists of goals and associated information, behaviors, and contexts. This allows goal primes to exert an influence in a variety of contexts. For example, exposing consumers to a backpack increases the likelihood of cooperative behavior, whereas exposing them to a briefcase increases the likelihood of competitive behavior (Kay et al. 2004). Similarly, exposing consumers to an Apple logo as opposed to an IBM logo results in more creative uses for a common object (Fitzsimons et al. 2008). In each of these cases, the goal prime can exert an influence in the available behavioral context because the goal is linked to information that is represented in the behavioral context. Thus, a goal is not just a motivational concept; it is a motivational concept plus an associated information structure (Bargh 2006).

Second, goal priming effects are often obtained without a person's awareness. Extensive debriefing in goal priming studies shows that participants often make no connections between the priming tasks and the behaviors these tasks influence (e.g., Bargh et al. 2001; Chartrand and Bargh 1996; Chartrand et al. 2008). Furthermore, there are demonstrations of subliminal goal priming effects. For example,

Strahan, Spencer, and Zanna (2005) show that subliminal presentation of the primes "thirst" and "dry" increases the consumption of sweetened Kool-Aid. Similarly, Aarts et al. (2005) show that the subliminal presentation of "nurse" primes increases helping on a subsequent task. These demonstrations are important because they suggest that people must have nonconscious processes that allow for the prioritization of goals, the pursuit of goals, the release of goals, and so forth. In other words, prime-consistent behaviors are not the result of overt attempts to be compliant but of a much more passive guidance system.

Third, although goal primes are quite pervasive, there are situations in which goal primes do not exert an influence on behavior. Sheeran et al. (2005) show that social primes influence the likelihood of selecting a beer/wine voucher over a tea/coffee voucher, but only for people who regularly drink. Thus, goal primes can influence only permissible behaviors. Strahan et al. (2002) show that thirst primes are effective for people who are thirsty, but not for people who are hydrated. Thus, internal physiological states seem to moderate whether a goal prime can exert an influence. Oikawa (2004) shows that a goal prime can increase performance on a task, but only when there is no conscious monitoring of task performance. Conscious monitoring appears to activate and/or prioritize competing goals that can negate the influence of the goal prime.

PASSIVE GOAL GUIDANCE

The brief review of the goal priming literature suggests that goal priming can influence a variety of behaviors, although there are limits to the influence of the prime. The review also suggests that the influence of goal primes is guided by nonconscious processes (Bargh 2006; Dijksterhuis et al. 2007). A simple description of this guidance system might be that goal priming is influential when the behavioral context is relevant, but not when the behavioral context is irrelevant. We will argue that this description fails to appreciate the richness of a passive goal guidance system and the role it must play in coordinating behavior. A deeper understanding of the passive goal guidance system will allow us to make predictions about when goal priming might lead to priming or antipriming effects as opposed to priming or null effects.

A passive goal guidance system must coordinate three basic guidance activities: goal prioritization, goal implementation, and goal management. In the absence of a top-down prioritization of goals, a passive goal guidance system establishes priorities. Goal prioritization is likely to depend on two system properties. First, goals are self-motivating (Bargh 2006; Dijksterhuis et al. 2007). This property assumes that goals are represented using two information features: the semantic representation of the goal and the affective-motivational property of the goal (i.e., whether a goal is positive or negative; Custers and Aarts 2007). Second, goals must be pursued without the interference of competing goals and behaviors. This property is consistent with evidence suggesting that the activation of goals is accom-

panied by the inhibition of information that is inconsistent with the goal (e.g., Brendl et al. 2003; Fishbach, Friedman, and Kruglanski 2003; Shah et al. 2002; Shah and Kruglanski 2002). For example, Brendl et al. showed that people with a high desire to eat decreased their evaluations of nonfood items relative to people with a lower desire to eat. The *eat* goal activates information that is consistent with this goal and inhibits the accessibility of information that is inconsistent with the goal. The reduced accessibility of information that is inconsistent with the eat goal leads to the devaluation of the nonfood items.

Goal implementation in a passive goal guidance system depends on how prior experience has allowed goal pursuit to become associated with contexts and behaviors (Bargh 2006). Goals are activated and pursued in a select set of contexts. As a consequence, the representation of a goal becomes associated with the characteristics of the contexts (e.g., situations, social actors, behaviors, etc.) in which it is pursued (Bargh 1990; Chartrand et al. 2007). In effect, common contexts (i.e., frequently experienced contexts) afford an opportunity for the goal to be achieved because the behaviors within those contexts are associated with the pursuit of the goal. These common contexts, however, also make a variety of other behaviors available, some of which are inconsistent with the goal. Thus, in order to make the goal pursuit process feasible, goal pursuit often involves a reduction in the availability of information that supports competing behavior (Fishbach et al. 2003; Shah et al. 2002).

Interestingly, the goal priming context need not be associated with the goal pursuit context. For example, Chartrand et al. (2008) prime the goals of status or thrift in a scrambled sentence task and then ask consumers to choose between status (e.g., Nike) and thrift (e.g., Hanes) socks. Winkielman, Berridge, and Wilbarger (2005) prime emotional goals with happy and angry faces in order to influence the amount of beverages poured and consumed by thirsty people. In each of these cases, the goal prime exerts an influence because it activates information that is applicable in a common behavioral context, even though the goal priming context is unrelated to the behavioral context (see also Aarts, Gollwitzer, and Hassin 2004; Bargh et al. 2001; Dalton et al. 2007).

Goal management involves the issues of goal pursuit and goal release. The issue of goal pursuit is partially addressed in the discussion of goal implementation. Goals are implemented because the behavioral context allows for their pursuit. The more vexing issue is what happens when a situation is not proper for goal pursuit or an individual does not have experience with pursuing goals in that situation. Does an individual continue to wait for the opportunity to pursue the goal, or does the individual release the goal? There is little literature on the moderators that guide passive goal pursuit and/or goal release. At best, there are markers of goal pursuit and goal release. Continued goal pursuit is characterized by temporal escalation—an increase in goal drive over time when there is no opportunity to pursue an activated goal (Bargh et al. 2001). Goal release is characterized by a de-

crease (increase) in the relative activation of information that is consistent (inconsistent) with the recently active goal (Macrae et al. 1996; Monin and Miller 2001). In most cases, goal release occurs when an active goal has been achieved. To the extent that goal pursuit has inhibited information in opposition to the active goal, goal-inconsistent behavior can occur after goal achievement (Laran and Janiszewski 2009; Monin and Miller 2001). Next, we propose an additional factor that influences whether a goal is released by the passive goal guidance system.

THE CURRENT PROPOSITION

Our discussion of the passive goal guidance system represents an evolving conceptualization of nonconscious goal pursuit. One concern might be that the system is conceptualized in a way that suggests that passive goal guidance leads to compulsive behavior. For example, the current conceptualization may imply that environmental factors activate a goal and that the goal is pursued, with temporal escalation, until it can be achieved. We argue that the inability to disengage from a primed goal would be maladaptive (Shah 2005; Wrosch, Scheier, and Miller 2003). Instead, we propose that the passive goal guidance system can use characteristics of the behavioral context to determine whether the goal will be pursued or released. More specifically, when the behavioral context is relevant and common, the goal will be pursued. When the behavioral context is relevant and uncommon, the goal should be released. Because uncommon contexts have not been frequently experienced, the passive guidance system can treat uncommon contexts as not affording an opportunity for goal pursuit. We note that if the context is irrelevant for goal pursuit, temporal escalation is likely to occur.

To the extent that goal release results in goal-inconsistent (consistent) information becoming more (less) active, goal-inconsistent information can exert an influence on behavior. This prediction is congruent with evidence that the release of a goal often leads to the inhibition of goal-consistent information (Förster et al. 2005; Marsh, Hicks, and Bink 1998) and a greater likelihood of goal-inconsistent behavior (Fishbach, Dhar, and Zhang 2006; Monin and Miller 2001; Soman and Cheema 2004). Thus, we predict that an uncommon behavioral context should lead to release of a primed goal and an antipriming effect.

Two pieces of evidence support our prediction. First, consider the premise that an uncommon behavioral context might result in the release of an active goal. There is evidence that people engage in behavior that is consistent with chronic goals in the present but anticipate engaging in behavior that is inconsistent with chronic goals in the future. For example, Read, Loewenstein, and Kalyanaraman (1999) show that people prefer vice products in the present (e.g., a light comedy film) but prefer virtuous products in the future (e.g., an art film). If it is assumed that a pleasure goal is chronically active and that people commonly make decisions about movies in the present, then people should prefer a light comedy film in the present. In contrast, if it

is assumed that movie choices are typically not made too long in advance, then a delayed choice situation should be uncommon. The pleasure goal should be released, and information that is inconsistent with this goal (e.g., *intellectual improvement*) should exert more influence on behavior.

Second, the release of an active goal often results in goal-inconsistent behavior. Dieters who experience a regulatory failure consume more calories (i.e., engage in unregulated eating) on the day the diet fails than on a typical day (Herman and Polivy 2004; see also Cochran and Tesser 1996). People who set a firm plan to limit drinking (e.g., "I definitely will not have more than three drinks") and then violate the plan drink more than people who set and violate a weak plan (e.g., "I'll try to have fewer than three drinks"; Muraven et al. 2005). People who fail to reach a predetermined savings goal are more willing to engage in discretionary spending (Soman and Cheema 2004). In each of these situations, goal failure and goal release lead to more antigoal behavior than if no goal had been pursued at all.

EXPERIMENT 1

Experiment 1 manipulates the extent to which a choice context is perceived as common or uncommon by changing the temporal frame of a choice. After performing a goal priming task (i.e., scrambled sentence task), participants were asked to make a choice for either the same day or a month from now. The context was selected so that the choice made for the present was a common behavioral context and the choice made for the future was an uncommon behavioral context. We predicted that the common behavioral context should result in a priming effect and that the uncommon behavioral context should result in an antipriming effect.

Method

Participants and Design. Participants were 830 undergraduate business students from the University of Florida who participated in exchange for course credit. The design was a 2 (behavioral context: common, uncommon) × 3 (goal prime: have fun, impress others, neutral) × 2 (dinner replicate: dinner with friends, dinner with family) between-subjects design.

Procedure. Participants entered the behavioral lab and were seated in front of personal computers. Participants were told that they would be participating in two studies, with the first study aimed at investigating cognitive processes associated with unscrambling sentences. In truth, the study was a priming manipulation based on the procedures of Srull and Wyer (1979). Participants were presented with 10 sets of five words and asked to form sentences using four of the words. In the *have fun* prime condition, the task involved unscrambling sets of words such as "that entertainment pray true is," for which the correct sentence is "that is true entertainment." In the *impress others* prime condition, the task involved unscrambling sets of words such as "wore table he attire expensive," for which the correct sentence is "he

wore expensive attire." In the *neutral* prime condition, the task involved unscrambling sets of words such as "pants he blue stay wore," for which the correct sentence is "he wore blue pants." After unscrambling 10 sentences, participants were told that they were done with the first study.

In the ostensibly unrelated second study, we told participants that we were interested in college students' choices of restaurants. In the dinner-with-friends replicate, participants were told that they were going out to dinner to celebrate a friend's birthday and that they needed to make a restaurant reservation. In the dinner-with-family replicate, participants were told that their family was coming to town and that they needed to make a restaurant reservation. In the common context condition, participants were told that dinner would take place "tonight," whereas in the uncommon context condition, participants were told that dinner would take place "a month from now."

The choice set consisted of eight fun and eight fine local restaurants. The restaurants were chosen using a pretest. Thirty-nine participants from the same population as the main study indicated how fun or fine (1 = very fun to 9 = very fine) they perceived 16 different restaurants. Eight of the options were considered casual, fun restaurants ($M_{fun} = 4.55$) and eight of the options were considered fine restaurants ($M_{fine} = 6.38$; $F(1, 38) = 72.61$, $p < .01$).

After making the restaurant choice, participants were asked control questions and were extensively debriefed for suspicion about the real purpose of the experiment. The debriefing procedure included questions about the purpose of the experiment, the relationship between the first and the second study, and the potential influence of the sentence unscrambling task on subsequent choices (Bargh and Chartrand 2000; Chartrand and Bargh 1996).

Results

Control Tests. The control questions asked participants to classify, on the same scale used in the pretest, how fine they perceived the restaurant of their choice to be. Participants who chose a restaurant classified as fine in the pretest assigned significantly higher ratings than those who chose a restaurant classified as fun in the pretest ($M_{fun} = 4.38$ vs. $M_{fine} = 6.62$; $F(1, 828) = 384.62$, $p < .01$). Debriefing questions showed that none of the participants guessed the purpose of the experiment or expected that the priming task was related to the restaurant choice study. Finally, we asked a separate sample of 45 participants how unusual (1 = very unusual to 9 = very usual) it is to make a restaurant reservation for "tonight" and for "a month from now." Participants indicated that it is significantly more unusual to make a restaurant reservation for a month from now than for tonight ($M_{tonight} = 7.07$ vs. $M_{next month} = 2.98$; $F(1, 43) = 122.90$, $p < .01$).

Choices. Choice shares are presented in figure 1. Since there were no differences between the dinner-with-friends and the dinner-with-family replicates, as indicated by an omnibus logit model ($p > .67$), we collapsed the data from
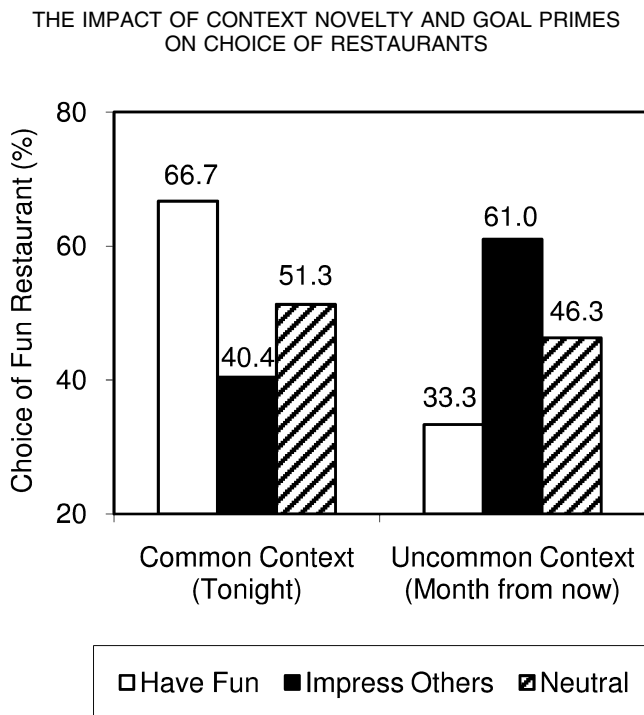
these two conditions. Our analysis indicates a significant interaction between the behavioral context and goal prime factors (Wald $\chi^2(2) = 35.43$, $p < .01$). In the common behavioral context, we found the priming effect often observed in prior research. Participants were more likely to choose a fun restaurant in the have fun prime condition (66.7%) than in the neutral prime, control condition (51.3%; $\chi^2(1) = 7.10$, $p < .01$). Participants were less likely to choose a fun restaurant in the impress others prime condition (40.4%) than in the neutral prime condition ($\chi^2(1) = 3.77$, $p < .05$). In the uncommon behavioral context, we found an anti-priming effect. Participants were less likely to choose a fun restaurant in the have fun prime condition (33.3%) than in the neutral prime condition (46.3%; $\chi^2(1) = 4.28$, $p < .05$). Participants were more likely to choose a fun restaurant in the impress others prime condition (61.0%) than in the neutral prime condition ($\chi^2(1) = 4.91$, $p < .05$).

Discussion

The results of experiment 1 provide evidence for the proposed moderation of context on goal priming effects. Participants in our experiment commonly made restaurant reservations for the present but not for the future. When reservations were made for the present, the choice context was common and there was a priming effect. However, when reservations were made for the future, the choice context was uncommon and there was an antipriming effect. In the common context, the goal prime influenced consumer choice through the activation of goal-related information. In the

uncommon context, the goal was released. This resulted in a decrease in the accessibility of the information that supported the pursuit of the goal and/or an increase in the accessibility of the information that interfered with the pursuit of the goal.

The results in the uncommon behavioral context are particularly important because they are not the typical null effect associated with an irrelevant goal prime. The have fun goal prime encouraged the choice of a fine restaurant, relative to a control, and the impress others goal prime encouraged the choice of a fun restaurant, relative to a control. To the extent that the uncommon context is encouraging goal release, the system is not returning to a steady state. A steady state should result in similar preferences across the two uncommon context conditions.

It is possible that our priming task simply primed a trait (e.g., "I am a fun person") or a behavior (e.g., choosing a fun restaurant) rather than a goal. At first glance, this explanation seems unlikely. A direct trait or behavioral prime should exert an influence independent of the behavioral context (i.e., different temporal frames should not change the value of a trait or behavior); hence it could not account for the goal prime by context interaction. Yet, a trait explanation could account for the results if it is assumed that the context alters the distinctiveness of the prime. For example, it could be argued that a common context makes the trait prime less distinctive so that prime-consistent alternatives are perceived as more appealing, whereas an uncommon context makes the trait prime more distinctive so that prime-consistent alternatives are perceived as less appealing. This alternative hypothesis was investigated in experiment 2.

EXPERIMENT 2

The goal of experiment 2 is to provide evidence supporting the proposed goal activation/release hypothesis while concurrently investigating the competing trait hypothesis. The goal activation/release hypothesis predicts that a goal prime followed by a common context will result in increased accessibility of information consistent with the goal relative to information inconsistent with the goal. The goal activation/release hypothesis also predicts that a goal prime followed by an uncommon context will result in decreased accessibility of information consistent with the goal relative to information inconsistent with the goal. In contrast, a trait hypothesis predicts increased accessibility of information consistent with the goal, regardless of the behavioral context. To test these hypotheses, we presented participants with letter strings, some of them being words that were consistent or inconsistent with the primed goal, and asked them to identify whether these letter strings were words or not. The speed of word identification was used as an indicator of information accessibility.

Method

Participants and Design. Participants were 142 undergraduate business students from the University of Florida

who participated in exchange for course credit. The design was a 2 (behavioral context: common, uncommon) × 2 (goal prime: have fun, impress others) × 2 (target word type: fun, impress) mixed design. Behavioral context and goal prime were manipulated between subjects, whereas target word type was manipulated within subjects.

Procedure. Participants entered the lab, were seated at computers, and were told that they would participate in three studies. The priming procedure was the same as that of experiment 1. In order to influence the activation and inhibition of information associated with the primed goal, participants performed a second study. They were told that their friend's birthday was coming up in a day (vs. in a month) and that they wanted to go to a restaurant to celebrate. We asked participants to imagine, for a minute, which restaurant they would go to (i.e., no options were shown on the screen), whom they would be with, and what they would do. We did not ask participants to make a choice because a choice could achieve the goal and encourage goal release. We simply asked them to write down what they imagined doing given the scenario.

In a third study, we told participants that we wanted to test their attentional capabilities in a task involving decisions about whether certain letter strings were or were not words. We told participants to focus on a fixation point (the letter *X*) placed on the center of the computer screen. After two seconds, the fixation point was replaced by a letter string. Participants had to press 1 if the letter string was a word and 0 if it was not, responding as quickly and accurately as possible. Participants performed 10 practice trials and then responded to 10 fun-related words (e.g., game, play) and 10 impress-related words (e.g., costly, best). These 20 target trials were presented in random order along with 10 irrelevant-word trials (aimed at avoiding suspicion about the real goals of the task) and 30 nonword trials.

Results

None of the participants guessed the real purpose of the experiment or established a connection between the priming task and the reaction time task (note that the words used in each task, although related to the same goal concepts, were different). Reaction times are presented in figure 2. Only reaction times of correct identifications of a letter string as a word or a nonword were included in the analysis. We performed a natural log transformation of all reaction times. The reaction times that exceeded 3 standard deviations from their cell mean were eliminated from the analysis (Bargh and Chartrand 2000).

A 2 (behavioral context) × 2 (goal prime) × 2 (target word type) repeated-measures ANOVA revealed a significant three-way interaction of these factors ($F(1, 138) = 27.67, p < .01$). There was a significant goal prime by target word type interaction in the common behavioral context condition ($F(1, 139) = 14.51, p < .01$). Participants were faster to recognize words related to fun than words related to impressing others in the have fun goal prime condition

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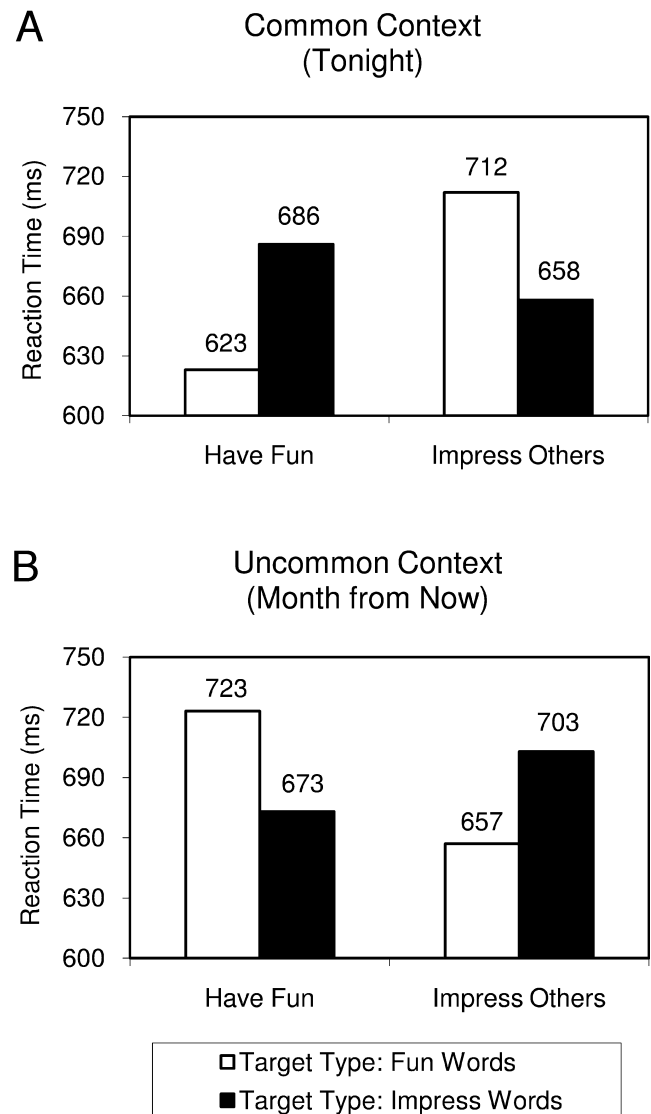
($M_{fun} = 623$ milliseconds, $M_{impress} = 686$ milliseconds; $F(1, 138) = 8.11, p < .01$) but slower to recognize words related to fun than words related to impressing others in the impress others goal prime condition ($M_{fun} = 712$ milliseconds, $M_{impress} = 658$ milliseconds; $F(1, 138) = 6.38, p = .01$).

There was also a significant goal prime by target word type interaction in the uncommon behavioral context condition ($F(1, 139) = 13.38, p < .01$). Participants were faster to recognize words related to impressing others than words related to fun in the have fun goal prime condition ($M_{fun} = 723$ milliseconds, $M_{impress} = 673$ milliseconds; $F(1, 138) = 7.28, p < .01$) but slower to recognize words

related to impressing others than words related to fun in the impress others goal prime condition (M_{fun} = 657 milliseconds, $M_{impress}$ = 703 milliseconds; $F(1, 138)$ = 6.04, p = .01).

Discussion

The results of experiment 2 provide support for the hypothesis that common behavioral contexts allow for goal pursuit and uncommon behavioral contexts encourage goal release. A common context led to increased accessibility of prime-consistent information relative to prime-inconsistent information. An uncommon context led to increased accessibility of prime-inconsistent information relative to prime-consistent information. Although the experiment was not designed to assess whether priming (antipriming) effects were a function of the activation (inhibition) of goal-consistent information, the inhibition (activation) of goal-inconsistent information, or a combination of the two, the results do provide evidence that relative levels of information accessibility change when a behavioral context is common versus uncommon. These results are inconsistent with a trait priming explanation of our experiment 1 results. The uncommon context should not lead to the decreased accessibility of trait-consistent information relative to trait-inconsistent information.

EXPERIMENT 3

We propose that a common behavioral context allows for the pursuit of a currently active goal and that an uncommon behavioral context causes the release of a currently active goal and the activation of goal-inconsistent information. In experiment 1, we tested this idea using a context in which a decision for the present was a common context and a decision for the future was an uncommon context. In experiment 3, we seek to show that it is the novelty of the context, not the temporal frame, that is responsible for goal pursuit or release. In this experiment, we changed the choice scenario so that a choice for the future was common and a choice for the present was uncommon. More specifically, people were asked to make choices of vacation destinations. We predicted that there would be a priming effect in the future (common) temporal frame condition and an antipriming effect in the present (uncommon) temporal frame condition, reversing the pattern of results found in experiment 1.

Method

Participants and Design. Participants were 646 undergraduate students who participated in exchange for course credit. The design was a 2 (behavioral context: common, uncommon) × 3 (goal prime: have fun, relax, neutral) between-subjects design.

Procedure. The procedure was similar to that of experiment 1. The sentences in the scrambled sentence task were the same as those of experiment 1 in the have fun goal prime and neutral prime conditions. In the relax goal prime condition, participants unscrambled 10 sentences such as "hours wealth she for paused," for which the solution is "she paused for hours." In the second, ostensibly unrelated study, participants in the common (uncommon) behavioral context condition were told to imagine that they planned to take a short vacation at the beginning of the summer and that summer started a month from now (tomorrow). They were presented with eight vacation destination options (presented in completely randomized order on the screen). Thirty-six participants from the same population as the main study indicated how fun and exciting (1 = quite relaxing to 9 = quite fun/exciting) they perceived the vacation destinations to be. Four of the options (e.g., Destin, FL) were rated as places to relax (M_{relax} = 3.58) and four of the options (e.g., Las Vegas) were rated as places to have fun and excitement (M_{fun} = 7.84; $F(1, 35)$ = 327.66, $p < .01$). After making a choice, participants were asked control questions and were debriefed for suspicion about the purpose of the experiment.

Results

Control Tests. The control questions asked participants to classify, on the same scale used in the pretest, how fun they perceived their choice destination to be. Participants who chose a vacation destination classified as fun in our pretest perceived the destination as more fun than those who chose a vacation destination classified as relaxing (M_{relax} = 3.18 vs. M_{fun} = 7.08; $F(1, 644)$ = 585.79, $p < .01$). Debriefing questions showed that none of the participants guessed the purpose of the experiment or expected the priming task to be related to the vacation study. A separate sample of participants indicated that it is significantly more unusual (1 = very unusual, 9 = very usual) to choose a vacation destination for "tomorrow" than for "a month from now" ($M_{tomorrow}$ = 2.68 vs. $M_{next\,month}$ = 7.91; $F(1, 43)$ = 319.66, $p < .01$).

Choices. Choice shares are presented in figure 3. A logit analysis indicates a significant interaction between the behavioral context and prime factors (Wald $\chi^2(2)$ = 28.79, $p < .01$). In the common behavioral context condition, we found a priming effect. Participants were more likely to choose a fun vacation destination in the have fun prime condition (68.3%) than in the neutral, control condition (52.8%; $\chi^2(1)$ = 5.93, p = .01) but less likely to choose a fun vacation destination in the relax prime condition (38.9%) than in the neutral condition ($\chi^2(1)$ = 3.71, $p < .05$). In the uncommon behavioral context condition, we found an antipriming effect. Participants were less likely to choose a fun vacation destination in the have fun prime condition (37.9%) than in the neutral, control condition (53.7%; $\chi^2(1)$ = 5.59, p = .01) but more likely to choose a fun vacation destination in the relax prime condition (65.3%) than in the neutral condition ($\chi^2(1)$ = 3.17, $p < .05$).

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CHOICE OF VACATION DESTINATIONS
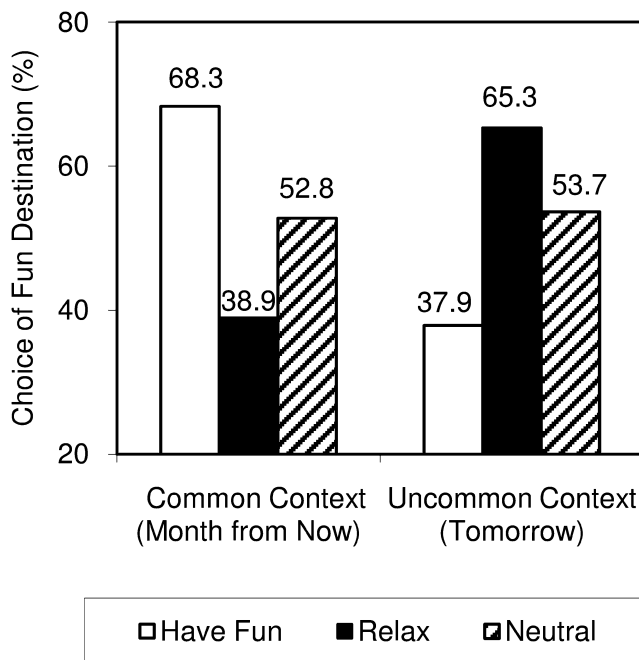
Discussion

Experiment 3 provides additional evidence that the novelty of the behavioral context moderates goal priming effects. In experiment 1, the common context was the present and the uncommon context was the future. In experiment 3, the common context was the future and the uncommon context was the present. The results of the two experiments suggest it is unlikely that there are systematic temporal priming and antipriming effects in the current studies. Instead, if people do not have much experience with the behavioral context, there will be an antipriming effect.

EXPERIMENT 4

There are two remaining concerns with the evidence presented thus far. First, experiments 1 and 3 relied on a temporal frame to manipulate the degree to which a behavioral context was seen as common. To address this issue, in experiment 4 we had participants choose a birthday gift for their dad (i.e., a common context) or for their friend's dad (i.e., an uncommon context). As in the previous experiments, we expected a priming effect when participants chose a gift for their dad. However, when participants chose a gift for their friend's dad, we expected an antipriming effect.

A second concern is that the process evidence for goal activation and release has been limited to the accessibility data of experiment 2. Although these data were inconsistent with a trait explanation of the priming and antipriming re-

sults, it could be argued that the results are consistent with an information accessibility explanation of priming and antipriming effects (Förster, Liberman, and Friedman 2007; Wheeler and Berger 2007). In other words, it could be that the goal primes are really semantic primes that exert a facilitatory influence in a common behavioral context and an inhibitory influence in an uncommon behavioral context for a reason other than goal activation and release. In order to provide additional evidence for the activation of goals, we relied on the temporal-escalation property of a goal. Bargh et al. (2001) show that the effects of a goal prime increase as the amount of time since goal activation increases. Goal drive increases until the goal is achieved or released. In contrast, purely cognitive primes are known to lose strength over time (Higgins 1996).

The procedure was modified so that half of the participants made an immediate choice and half performed a 5-minute filler task prior to making a choice. In the common behavioral context (e.g., buying a birthday gift for one's dad), we expected that the addition of a delay would increase the influence of the goal prime. In the uncommon behavioral context (e.g., buying a gift for one's friend's dad), we expected no influence of the delay. The uncommon context results in goal release. Goal-inconsistent information does not become more active until the goal is released, which happens only when participants are exposed to the uncommon context (i.e., after the 5-minute delay).

Method

Participants and Design. Participants were 600 undergraduate students from the University of Florida who participated in exchange for course credit. The design was a 2 (behavioral context: common, uncommon) × 2 (delay: no delay, delay) × 2 (goal prime: have fun, impress others) between-subjects design.

Procedure. The procedure was similar to that of the previous experiments. The sentences used in the scrambled sentence task were the same as those of experiment 1. In the no-delay condition, the second task involved an ostensibly unrelated "gift choice" study that investigated which gifts people buy in certain situations. Participants in the delay condition completed a filler study before advancing to the gift choice study. Participants were told that the study was another study investigating people's cognitive ability. They were instructed to list as many words as possible with *e* in the middle (e.g., apartment). A continue button became available after 5 minutes. The task was intentionally unrelated to the goal primes.

In the dad's (friend's dad's) context, the gift choice task instructions told participants to imagine that it was their dad's (friend's dad's) birthday and that they wanted to get him a gift (their friend invited them to the party, so they needed to get their friend's dad a gift). They were presented with two assortments. Assortment A offered four fine gifts (e.g., Riedel wine glasses, a marble chess set, an Italian leather wallet, and a Cross pen and pencil set) and assort-

ment B offered four fun gifts (e.g., a fun board game, a karaoke machine, a famous 70s band compact disc, and a bookshop gift certificate). Sixty-seven participants from the same population as the main study indicated how fun (1 = quite fun to 9 = quite impressive) they perceived the gifts in each assortment to be. The gifts in assortment B were considered significantly more fun ($M = 2.75$) than the gifts in assortment A ($M = 7.43$; $F(1, 66) = 238.98$, $p < .01$). In the gift choice task, participants were asked to judge (1 = assortment A to 9 = assortment B) from which assortment they were more likely to buy a gift. This judgment was the dependent measure of experiment 4. After this task, participants were fully debriefed and dismissed.

Results

Control Tests. A pretest indicated that it is significantly more unusual (1 = very unusual, 9 = very usual) to choose a birthday gift for a friend's dad ($M_{dad} = 7.10$ vs. $M_{frdad} = 2.65$; $F(1, 68) = 275.56$, $p < .01$). We were also concerned that our participants could find it inappropriate to buy certain types of gifts for their dad or a friend's dad. Separate groups of participants were asked to rate how appropriate (1 = very inappropriate to 9 = very appropriate) it was to buy a fun or an impressive gift for their dad ($n = 37$) and for their friend's dad ($n = 69$). Fun and impressive gifts were deemed appropriate for dads ($M_{fun} = 7.43$ vs. $M_{impress} = 7.71$; $F(1, 35) = 1.29$, $p > .36$) and friends' dads ($M_{fun} = 7.84$ vs. $M_{impress} = 7.65$; $F(1, 68) = 1.53$, $p > .22$).

Judgments. The means are presented in figure 4. A repeated-measures ANOVA revealed a significant three-way interaction of behavioral context, delay, and goal prime ($F(1, 592) = 4.82$, $p < .05$). We now turn to the analysis within each behavioral context condition. In the common behavioral context (see fig. 4A), there was a significant interaction between the delay and the goal prime factors ($F(1, 592) = 8.48$, $p < .01$). In the no-delay condition, there was a priming effect. Participants in the have fun prime condition ($M = 5.17$) indicated that they would be more likely to buy a gift from the fun assortment than those in the impress others prime condition ($M = 4.22$; $F(1, 592) = 5.39$, $p < .05$). In the delay condition, there was a stronger priming effect. Participants also indicated that they would be more likely to buy a gift from the fun assortment in the have fun prime condition ($M = 6.05$) than those in the impress others prime condition ($M = 3.34$; $F(1, 592) = 36.39$, $p < .01$). Two additional simple effect tests provided evidence for the temporal-escalation property of a goal. Participants in the have fun prime condition indicated that they would be more likely to buy a gift from the fun assortment in the delay condition ($M_{no delay} = 5.17$, $M_{delay} = 6.05$; $F(1, 592) = 4.17$, $p < .05$), and participants in the impress others prime condition indicated that they would be less likely to buy a gift from the fun assortment in the delay condition ($M_{no delay} = 4.22$, $M_{delay} = 3.34$; $F(1, 592) = 4.20$, $p < .05$).
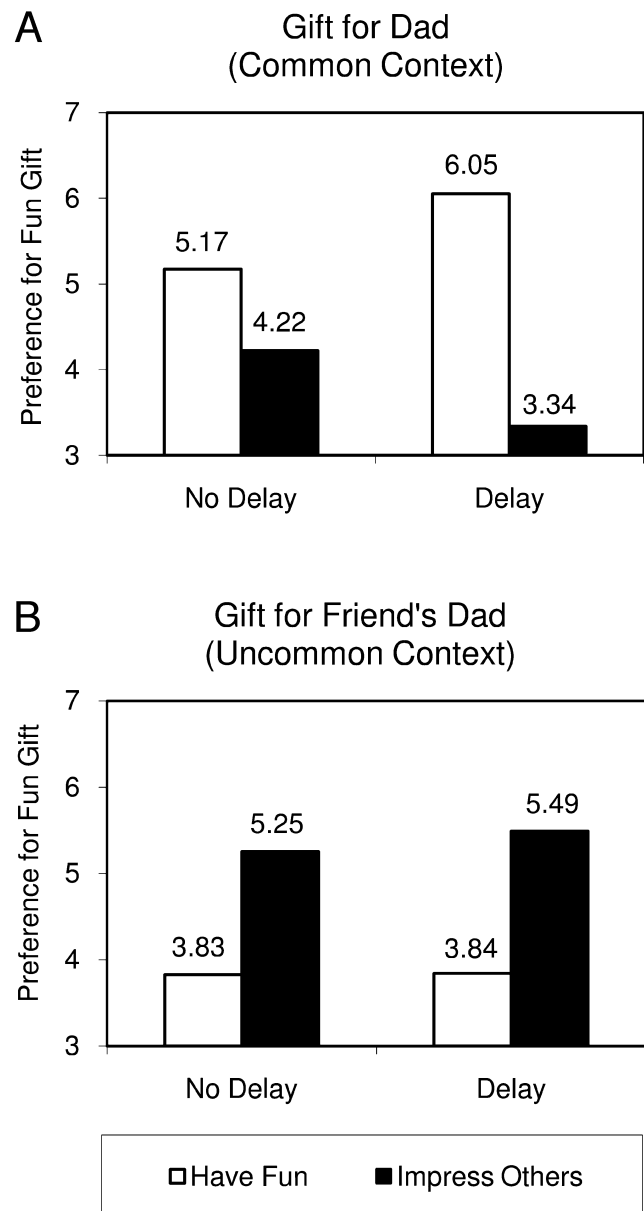
In the uncommon behavioral context (see fig. 4B), there was not a significant interaction between delay and goal prime ($F < 1$), but we did find the predicted antipriming effect. Participants in the have fun prime condition ($M = 3.83$) indicated that they would be less likely to buy a gift from the fun assortment than those in the impress others prime condition ($M = 5.37$; $F(1, 592) = 21.06$, $p < .01$).

Discussion

Experiment 4 provides evidence for priming and anti-priming effects using a nontemporal frame manipulation to alter the novelty of the behavioral context. When the context was common, there was a preference for a fun gift when the prime was have fun as compared to when the prime was impress others (i.e., a priming effect). More specifically, goal priming occurred when a person was asked to estimate the likelihood of buying a fun or impressive gift for his or her dad. When the context was uncommon, there was a preference for an impressive gift when the prime was have fun as compared to when the prime was impress others (i.e., an antipriming effect). More specifically, antipriming occurred when a person was asked to estimate the likelihood of buying a fun or impressive gift for his for her friend's dad.

Experiment 4 also shows that the effects of a goal prime increase with a delay, provided that the behavioral context is common. Temporal escalation is a documented property of goal activation (Bargh et al. 2001; Chartrand et al. 2008; Fitzsimons et al. 2008). Thus, the evidence of temporal escalation suggests that the priming and antipriming effects are a result of goal activation and release. The results also show that there is no influence of a delay in the uncommon context. This suggests that the passive goal guidance system releases (i.e., deactivates) active goals in an uncommon context but may not be sophisticated enough to regulate the amount of goal deactivation based on goal strength (i.e., increased deactivation of stronger goals).

EXPERIMENT 5

The previous experiments show a priming effect when the behavioral context is common and an antipriming effect when a behavioral context is uncommon. On the basis of previous literature (e.g., Higgins, Rholes, and Jones 1977; Strahan et al. 2002), we expect that there are situations in which the novelty of the context will not moderate the influence of the goal prime. For example, the novelty of the context should not moderate the influence of a goal prime when the goal is inappropriate for the context. Experiment 5 tests this boundary condition using the basic behavioral context by goal prime design of previous experiments along with an additional manipulation of the appropriateness of the goal. One choice context (i.e., birthday gift for one's dad) was selected so that both goal primes were appropriate; that is, pursuing those goals would be socially acceptable (i.e., impress others and have fun). In this situation, the novelty of the context should moderate the goal priming effect. A second choice context (i.e., birthday gift for one's professor) was selected so that one goal prime was appropriate (i.e., impress others) and the second goal prime was inappropriate (i.e., have fun). Again, when the goal prime is appropriate, the novelty of the context should moderate the goal priming effect. When the goal prime is inappropriate, the novelty of the context should not influence the goal priming effect.

Method

Participants and Design. Participants were 444 undergraduate students from the University of Florida who participated in exchange for course credit. The design was a 2 (gift choice context: dad, professor) × 2 (goal prime: have fun, impress others) × 2 (behavioral context: common, uncommon) between-subjects design.

Procedure. The procedure was similar to that of the previous experiments. The sentences used in the scrambled sentence task were the same as those of experiment 1. In the dad's (professor's) choice context, participants were told to imagine that it was their dad's (professor's) birthday today (a month from now) and that they wanted to get him a gift. They were presented with 16 options for gifts (presented in a completely randomized order on the screen). From the same population as the main study, 114 participants indicated how fun (1 = quite fun to 9 = quite impressive) they perceived a list of gifts to be. Eight of the gifts (e.g., ticket to a sporting event) were rated fun ($M_{\text{fun}} = 4.60$) and eight (e.g., ticket to an opera) were rated as likely to impress others ($M_{\text{impress}} = 6.87$; $F(1, 113) = 195.56$, $p < .01$). The debriefing procedure indicated that no participant guessed the real purpose of the experiment.

Results

Control Tests. A pretest in experiment 4 showed that both fun and impressive gifts were considered appropriate for one's dad. A second pretest indicated that an impressive gift was considered significantly more appropriate than a fun gift for professors ($M_{\text{fun}} = 4.14$ vs. $M_{\text{impress}} = 7.00$; $F(1, 35) = 63.79$, $p < .01$). A third pretest indicated that it is significantly more unusual (1 = very unusual to 9 = very usual) to choose a birthday gift a month in advance ($M_{\text{today}} = 7.07$ vs. $M_{\text{month}} = 4.60$; $F(1, 29) = 36.16$, $p < .01$).

Choices. Choice shares are presented in figure 5. A logit analysis indicates a significant three-way interaction among the gift choice context, goal prime, and behavioral context factors (Wald $\chi^2(3) = 22.40$, $p < .01$). We now turn to the analysis of each choice context condition. In the dad choice context (see fig. 5A), there was a significant two-way interaction between the goal prime and the behavioral context (Wald $\chi^2(2) = 12.82$, $p < .01$). There was a priming effect in both goal prime conditions. When the prime was to impress others, participants were less likely to choose a fun gift in the common context (38.3%) than in the uncommon context (65.3%; $\chi^2(1) = 7.01$, $p < .01$). When the prime was to have fun, participants were more likely to choose a fun gift in the common context (64.2%) than in the uncommon context (42.6%; $\chi^2(1) = 6.13$, $p = .01$).

In the professor choice context (see fig. 5B), there was a significant two-way interaction between the goal prime and the behavioral context (Wald $\chi^2(2) = 4.05$, $p < .05$). When the prime was to impress others (appropriate), there was a

A   Gift for Dad

B   Gift for Professor

□ Common Context (Today)
■ Uncommon Context (Month from now)
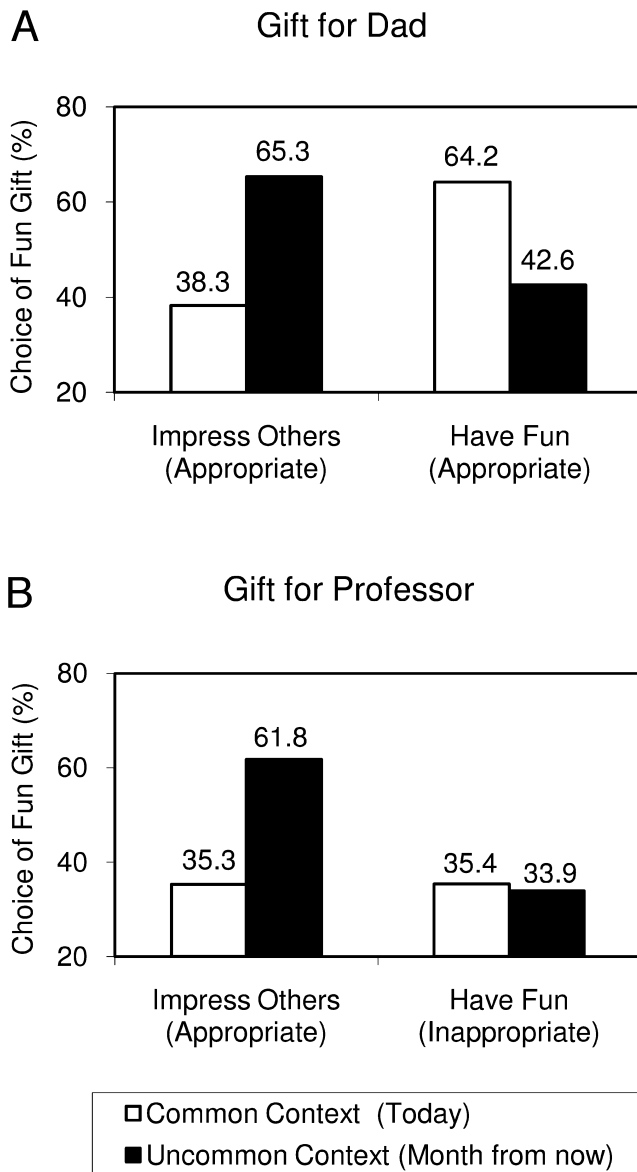
priming effect. Participants were less likely to choose a fun gift in the common context (35.3%) than in the uncommon context (61.8%; $\chi^2(1) = 7.45$, $p < .01$). When the prime was to have fun (inappropriate), there was a null effect of priming. Participants did not prefer a fun gift in the common (35.4%) or uncommon context (33.9%; $\chi^2(1) = .03$).

Discussion

Experiment 5 further explored the interaction between the novelty of the context and goal primes. When the goal prime was appropriate for the context (e.g., a fun or impressive gift for dad), the novelty of the context determined the influence of the prime. However, when the goal prime was inappropriate for the context (e.g., buying a fun gift for a professor), the context did not moderate the influence of the prime. The results of experiment 5 suggest that the passive goal guidance system is sensitive to the goal context representation. As discussed earlier, the cognitive goal structure consists of goals and associated information, behaviors, and contexts. When a context is represented in a goal structure, goal pursuit involves inhibiting information that would impede pursuit. Goal release results in an increase in the relative activation of this previously inhibited information. When a context is not represented in a goal structure, as is the case with an inappropriate goal, goal pursuit does not involve the inhibition of information that would impede pursuit. Thus, goal release does not result in an increase in the relative activation of this information.

GENERAL DISCUSSION

The results of five experiments support our claim that goal primes encourage prime-consistent behavior in a common behavioral context and prime-inconsistent behavior in an uncommon behavioral context. Common behavioral contexts allow for goal pursuit. Goal pursuit is characterized by an increased activation of information consistent with the primed goal relative to information in opposition to the primed goal. Uncommon behavioral contexts encourage goal release. Goal release is characterized by a lessened activation of the information consistent with the primed goal relative to information in opposition to the goal (experiment 2). We show that the temporal frame of a decision influences the novelty (i.e., common, uncommon) of a behavioral context (experiments 1 and 3). We also show that prior experience with a behavioral context influences whether the context is common or uncommon and, hence, whether priming or antipriming is observed (experiment 4). Finally, we show that context does not moderate the influence of goal primes when the goal is inappropriate (experiment 5).

Priming is a ubiquitous effect involving a variety of potential processes. The pervasiveness of priming effects has led some to question whether the majority of goal priming demonstrations are a form of semantic, procedural, or self-concept priming (Förster et al. 2007; Wheeler et al. 2007; Wheeler and Petty 2001). Two pieces of evidence suggest that our procedures were not simply encouraging semantic, procedural, or self-concept priming. First, semantic, procedural, and self-concept priming should not be sensitive to subtle changes in the decision context. In experiments 1 and 3, the decision context was changed from a decision for the present to a decision for the future. Semantic, procedural, and self-concept primes should exert a similar influence across contexts or a weaker influence in less common contexts. Thus, the antipriming effects in the uncommon context are not consistent with semantic, procedural, or self-concept priming. Second, goal priming is characterized by a temporal escalation of the influence of the prime (Bargh et al. 2001), whereas other types of primes are characterized by a tem-

poral decay of the influence of the prime. In experiment 4, the goal prime exerted a stronger influence on the choice behavior after 5 minutes as compared to after 1 minute. This result is consistent with the premise that the priming procedure was activating a goal.

Conceptual Issues

The research raises a number of issues related to goal pursuit and goal release. Typically, goal pursuit is discussed as part of an active, top-down guidance system. In a top-down goal guidance system, people (1) set performance standards for important goals (e.g., Locke and Latham 1990), (2) monitor their progress toward these goals (e.g., Fishbach and Dhar 2005), (3) increase motivation as the desired goal state nears (e.g., Kivetz, Urminsky, and Zheng 2006), and (4) experience a decrease in motivation once the goal is achieved (e.g., Förster et al. 2007). We propose that passive goal guidance operates in a different manner. In passive goal guidance, there is no goal standard and there is no monitoring of goal progress. Instead, prior experience allows a person to value a means, or more accurately the attributes/benefits of the means, with respect to a goal. Experience and contextual framing of available means dictate the extent to which a given means can partially or completely satisfy a goal. As such, goal "achievement" is a function not only of goal activation but also of means framing (i.e., a given means behavior can be framed to be sufficient for goal achievement or not) and means availability.

A passive goal guidance system that relies on means availability would certainly have the potential to make mistakes. Considering the plethora of competing stimuli consumers are exposed to on a daily basis, the goal system must have ways to filter these primes and pursue appropriate goals. For example, consider a passive guidance system that relies on the feature/benefit values of means given a goal but is not behavior context specific. Such a guidance system could lead to a number of antisocial behaviors when goals are active (and means associated with those goals are available), but the context is inappropriate for the use of the particular means. Although a top-down guidance system would certainly recognize the inappropriateness of certain means owing to learned norms for behavior, a passive, bottom-up guidance system would not have this knowledge. Instead, the frequency with which the goal and the means have been jointly used in a given context (i.e., a common or uncommon context) should dictate whether the goal can be pursued or not. In other words, the context itself must regulate goal pursuit in a passive goal guidance system.

If contexts do regulate goal pursuit in a passive goal guidance system, then two issues deserve further discussion. First, why do uncommon contexts encourage the release of a goal? Again, one must consider the role of a passive goal guidance system. Passive goal guidance is by definition reactive and opportunistic. A large majority of the behaviors supported by this system occur because they can occur, not because they are planned. If this is so, the system must also have ways of disengaging from goals to avert overloading.

One source of goal release is goal achievement. A second source of goal release is that new goals simply override existing goals. A third source of goal release is a lack of fit between the goal and the available situation. This lack of fit between a goal and the situation relates to the uncommon context studied in our experiments. In effect, a passive goal guidance system has learned that not all goals can be achieved when goal achievement is opportunistic. If each of these unrealized goals was retained (i.e., the goals remain active), the goal system would overload. Goal release may come when seemingly appropriate, relevant situations do not afford an opportunity to achieve the goal. Although it may be difficult to obtain microprocess evidence of the operations of a passive goal guidance system, additional research is needed to investigate this goal-striving aspect of a passive system.

A second issue concerns what defines an uncommon context. We argue that uncommon contexts are either relevant but uncommon or relevant but inappropriate. When a person is confronted with a relevant but uncommon context, the goal is released. Although it may seem dysfunctional for a goal system to be structured in a way that allows for release, this structure may in fact have evolutionary advantages. A passive goal guidance system that is structured for balance, as opposed to structured for goal pursuit regardless of contextual factures, may have the flexibility needed for social interaction and survival. If this is the case, we expect that other aspects of the context can possibly render a context uncommon. For example, a consumer shopping on a Web site may behave consistently with primes (e.g., value-priced or premium-priced products featured on the home page) in a common shopping situation but may behave inconsistently with primes in an uncommon shopping situation. Uncommon shopping situations may include shopping for a novel purpose, shopping on a novel Web site, shopping in a novel product category, being presented with a set of unfamiliar alternatives (even though the Web site/context is familiar), or observing the product being used (Web illustrations) in novel or unexpected ways. Moreover, in many situations, goal release due to an uncommon context might simply result in a null effect of goal activation. It may be that choice sets (behavioral sets) with negatively correlated benefits are most likely to show antipriming when the context is uncommon, but that choice sets consisting of clusters of uncorrelated benefits will not show antipriming. Future research can clearly provide further insight into the factors that render a context uncommon and the extent to which this context alters the relative activation of information associated with the goal.

Future Research and Limitations

Förster et al. (2007) argue that goal priming (1) is sensitive to the value of the prime, (2) has a gradient function, (3) is proportional to the product of the expectancy and value, (4) results in postattainment decrements in motivation, (5) involves inhibition of conflicting goals, (6) involves self-control, and (7) is moderated by equifinality and mul-

tifinality. Although these are a useful set of guidelines for thinking about goal priming, these guidelines have a mix of active and passive goal guidance characteristics. For example, the gradient function of a goal argues that motivated behavior will accelerate as a desired goal state is approached. In a passive goal guidance system, this gradient property is likely to influence initial execution of a means as opposed to repeated execution of a means. For example, if a status goal has been primed, the drive to engage in a status-promoting activity may increase as the availability of the activities increases. Given that a passive goal system has a difficult time assessing progress, the system is more likely to focus on opportunity to execute a means.

The differences between a top-down system and a passive, bottom-up system are also reflected in ideas about inhibition and self-control. Active goal guidance systems propose that people must engage in regulatory activities to control their goal drives (Carver and Scheier 1981). Goals compete with other goals for control of behavior (Shah and Kruglanski 2002). When goals are conceptualized as an information structure that includes behaviors that cut across a variety of contexts, then the pattern of inhibition and activation can be much more intricate. In a passive goal guidance system, inhibition will depend on context rather than on the identity of the goal prime. For example, a status goal prime might inhibit access to a social goal in a competitive social situation (e.g., middle school hallway) but enhance access to a social goal in a cooperative social situation (e.g., team sports). The point is that patterns of shared activation and inhibition—be they between goals, behaviors, information, or some combination of the three—will be context dependent. The influence of context on goal pursuit, release, and inhibition deserves a greater deal of attention in the literature.

Our research does have limitations. We argue that the release of a primed goal leads to an increase in recently inhibited information. This seems to be the case as demonstrated by the reaction time evidence in experiment 2 (i.e., thinking about the present vs. the future led to different patterns of accessibility of information associated with competing goals). Nevertheless, it is difficult to know if anti-priming occurs because of the inhibition of information associated with the primed goal, the activation of previously inhibited information, or a combination of the two. This distinction may be important in contexts that provide a large array of behavioral opportunities, some related to the primed goal, some related to competing goals, and some unrelated to the primed and competing goals. If antipriming is primarily a function of previously primed goal information being inhibited, then uncommon contexts could encourage a wide variety of behaviors. If antipriming is primarily a function of previously inhibited information becoming relatively more active, then an uncommon context should only encourage behaviors that are opposite to the prime. Examining factors that moderate the degree to which a previously primed goal is inhibited, or a previously inhibited goal rebounds, is an important area of future study.

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