



Regulatory focus and temporal distance[☆]

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Abstract

Four studies identify and examine a temporal component to regulatory focus. Results support the assertion that promotion focus tends to predominate for temporally distant goals, whereas proximal goals are characterized by more balanced consideration of both promotion- and prevention-focused concerns. In Study 1, students rated the importance of promotion and prevention goals at two points in time: 2 weeks before and a few minutes before an examination. Promotion goal importance increased with temporal distance, whereas prevention goal importance remained constant over time. Study 2 replicated this pattern holding the actual time-span constant (3.5 weeks) and varying only the psychological sense of proximity/distance. In Study 3, subjects rated the regulatory focus of goals at varying points in time, both future and past. The temporal effect was replicated for both time periods. Study 4 provided evidence for the reverse effect, that of regulatory focus on the perceived temporal distance of future goals. Taken together, these findings suggest an integration across research domains that links regulatory focus to temporal perspective for both prospective and retrospective judgments.

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Introduction

We are all mental time travelers: Although forever chained to the present, much of our mental activity nevertheless aims at events at varying points in the future and past. But how do perceptions of temporally distant vs. proximate events differ? And are there any commonalities between perceptions of future vs. past? Some answers to these questions have appeared in independent research on optimism shifts (e.g., Shepperd, Ouellette, & Fernandez, 1996), temporal construal theory (Liberman

& Trope, 1998), the planning fallacy (Buehler, Griffin, & Ross, 1994), the “rosy view” (Mitchell, Thompson, Peterson, & Cronk, 1997), durability bias (Gilbert, Pinel, Wilson, Blumberg, & Wheatley, 1998), and regret (Gilovich & Medvec, 1995). We argue that these lines of research have yielded findings compatible with a general conclusion—changes in temporal perspective alter the self-regulatory strategies individuals adopt during goal pursuit. Temporal distance to a goal is proposed to affect the extent to which goal-related concerns are framed in terms of promotion and prevention (e.g., Higgins, 1998). More specifically, we argue that temporally distant goals are associated with a relatively greater emphasis on promotion vs. prevention. This difference narrows as goals draw nearer in time, however, permitting prevention focus to exert relatively greater influence on self-regulation in time periods close to the present.

Regulatory focus

The principle of regulatory focus (Higgins, 1998) distinguishes between two strategies for goal attainment—promotion focus and prevention focus. Although

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both strategies embrace the hedonic goal of approaching pleasure, they are distinct in that a promotion focus involves sensitivity to the presence or absence of positive outcomes (e.g., emphasizing advancement, accomplishment, etc.), whereas a prevention focus involves sensitivity to the absence or presence of negative outcomes (e.g., emphasizing caution, protection, etc.). Regulatory focus has been operationalized both in terms of situationally labile cognitive states as well as chronic processing tendencies, each having similar classes of consequences. First, regulatory focus influences social perception in that it orients attention toward information compatible with the regulatory focus (Higgins, Roney, Crowe, & Hymes, 1994). Second, failure to achieve promotion or prevention activates emotion clusters centering on, respectively, dejection, or agitation (Higgins, Shah, & Friedman, 1997). Third, performance (as mediated by effort and persistence) varies as a function of the match between regulatory focus and task characteristics (Förster, Higgins, & Idson, 1998).

Importantly, promotion focus may be said to involve *maximal goals*, whereas prevention focus involves *minimal goals* (Brendl & Higgins, 1996; Freitas, Liberman, Salovey, & Higgins, 2002; Idson, Liberman, & Higgins, 2000). A maximal goal reflects the most that one could wish for, whereas a minimal goal reflects bare necessities or the least one could comfortably tolerate. A key distinction between these two types of goals centers on the boundary of focus, i.e., whether one tends to focus on potential variation above or below the goal point. For maximal goals, individuals focus on the upper boundary—the range of higher and better outcomes surpassing the goal point (e.g., an Olympic athlete might strive toward getting onto the medal stand, but nevertheless imagine what it might be like to get the bronze, or the silver, or the gold, or even to set a new world record). By contrast, for minimal goals, individuals strive to keep from falling below a minimally acceptable outcome, focusing on holding at bay a range of inferior possible outcomes (e.g., an Olympic athlete might strive to preserve the honor of his nation by not scoring in the bottom half). In short, maximal goals involve an unbounded upper range of ever more desirable possibilities, whereas the scope of action for minimal goals involves the lower range of unwanted possibilities.

This distinction is of pivotal importance in linking regulatory focus and temporal distance. Two aspects, reflecting opposing directions of causal effect, are evident. First, in the case of the effect of temporal distance on regulatory focus, time itself is a resource, both subjectively and objectively. Time affords the luxury of maximal goals. That is, with a temporally distant perspective, individuals have the liberty to envision optimal outcomes, to consider alternative strategies, and to survey information widely. When this temporal resource dwindles, however, promotion focus should

likewise diminish. Individuals instead shift their emphasis to self-protection and maintenance of the status quo. Consistent with this proposal, impending deadlines or time restrictions have been shown to result in behaviors typically associated with prevention focus, such as less extensive information search, restrictions in the range of alternatives considered, decreased risk-taking, greater attention to negative information, and greater selectivity in information processing (Ariely & Zakay, 2001; Ben-Zur & Bresnitz, 1981; Maule & Edland, 1997; cf. Liberman, Idson, Camacho, & Higgins, 1999, 2001).

But whereas time is a resource, regulatory focus is a constraint. If we flip the direction of causation around, to the effect of regulatory focus on temporal distance, promotion vs. prevention differentially constrain the bounds of temporal imagination. Maximal goals offer an unbounded upper limit, meaning that they minimally constrain ambition. Therefore, promotion relative to prevention focus invites goals that demand more time to prepare, more time to implement, more time to complete, and overall that occupy a mental space more temporally removed from the here-and-now. Thus, we hypothesized that merely inducing a promotion rather than prevention focus, because it focuses attention to betterment rather than preservation, would push the individual to an imagined time point further removed from the present.

This proposed relation between regulatory focus and temporal perspective may account for a range of previously observed temporal patterns in judgment, encompassing judgments of the past as well as the future. The summary below is intended to illuminate the commonalities across these various research areas, with a spotlight on temporally focused goals, that is, target tasks with a discrete completion point (e.g., getting married) as opposed to those that are ongoing and open-ended (e.g., being happy; see Madey & Gilovich, 1993).

Prospection

People tend to view temporally distant goals more optimistically than goals that are close at hand. That is, individuals evince heightened confidence in their ability to achieve success at discrete tasks when the relevant events (e.g., exams, athletic contests) are temporally distant rather than proximate (Gilovich, Kerr, & Medvec, 1993; Shepperd et al., 1996; Taylor & Shepperd, 1998). Further, the planning fallacy refers to the pattern whereby individuals anticipate more rapid task completion than is actually the case, in part because of their faith in specific facilitatory behaviors that they intend to perform combined with disregard for potential impediments (Buehler et al., 1994; Newby-Clark, Ross, Buehler, Koehler, & Griffin, 2000). Two lines of theory provide explanations for heightened confidence in

success at temporally distant as opposed to proximate goals, one affective and one cognitive. First, processes of affect regulation might result in attempts to brace for the worst by downgrading performance estimates to soften the blow of potential failure (Sanna, 1999; Shepperd, Findley-Klein, Kwavnick, Walker, & Perez, 2000). Second, level of construal shifts with increasing temporal distance, such that events in the distant future are construed on an abstract, schematic level, whereas immediate events are construed at a task-specific, contextual level (Liberman & Trope, 1998; Trope & Liberman, 2000, in press). The contextual and concrete nature of obstacles may thus render them more salient as events draw near, resulting in reduced confidence relative to temporally distant events.

These findings may be summarized in terms of relatively greater promotion focus for temporally distant events and prevention focus for proximate events. Moreover, both affect and cognition are intimately related to temporal optimism shifts. Heightened promotion goals for temporally distant events initiate action and encourage enthusiasm without getting “bogged down in details.” A relatively greater emphasis on prevention focus for proximate than distant events might reflect increased levels of anxiety and also heightened task-specific attention that incorporates assessment of both facilitating and inhibiting factors. Research on prospective judgment is thus compatible with the argument that promotion looms larger than prevention concerns with increasing temporal distance from the present. That promotion goals are, on average, construed at a more abstract level than prevention goals follows from this reasoning, and is tested directly in Study 3.

Retrospection

Research on retrospective judgment likewise hints at a relation between regulatory focus and time, though work in this domain has followed a different path. Reflection on failures in one's past typically involves counterfactual thoughts that specify how the goal might have been achieved (Roese, 1997). Two lines of research on counterfactual thinking jointly point to a connection between regulatory focus and temporal perspective. First, Gilovich and Medvec (1994) showed that when people consider events in the distant past, they are likely to generate additive counterfactuals (i.e., specifying the addition of some new action that was not in fact performed), whereas when considering the more recent past, people are more likely to generate subtractive counterfactuals (i.e., specifying the subtraction of some action that was in fact performed). Gilovich and Medvec (1995) offered several explanations for this temporal pattern, the most relevant of which was the tendency for obstacles to become less salient in memory over time.

And second, (Pennington & Roese, 2003; Roese, Hur, & Pennington, 1999) drew a direct connection between these same counterfactual subtypes and regulatory focus, showing that additive counterfactuals are evoked by promotion failure, whereas subtractive counterfactuals are evoked by prevention failure. Collectively, these two lines of research suggest that individuals perceive distantly past events with a promotion focus (as evidenced by predilection for additive counterfactual thoughts), whereas proximately past events are viewed with a prevention focus (as evidenced by a preference for subtractive counterfactuals).

Additionally, Gilovich et al. (1993) found that retrospective confidence in the completion of promotion-oriented achievement goals was greater for temporally distant as opposed to proximate events (Study 3), a pattern that was equivalent in prospective confidence judgments (Study 2). More directly relevant, they found that participants' prospective thought-listings contained greater emphasis on the causes of success (i.e., promotion focus) than on the causes of failure (i.e., prevention focus) when focusing on temporally distant than proximate events (Study 4). Mitchell et al. (1997) also examined both prospective and retrospective judgments, discovering that both were evaluatively more positive than was the actual present-tense experience. Again, this pattern was associated with a decrease in relevant negative thoughts as temporal distance from the target event increased. Thus, previous research on retrospective judgment may also be summarized with regard to increasing promotion focus with temporal distance.

The present research

This research examined two directions of effect, that of temporal distance on regulatory focus (Studies 1, 2, and 3), and of regulatory focus on temporal distance (Study 4). Study 1 was a longitudinal examination of students' perceptions of an exam when it was either in the near or distant future, with promotion and prevention focus measured at both time points. Study 2 used a framing manipulation (cf. Wilson & Ross, 2001) to test experimentally the effect of perceived future temporal distance on regulatory focus. Study 3 also assessed the effect of temporal distance on regulatory focus, but was additionally intended to widen our scope by examining not just 2 but 11 time points in both past and future, permitting an assessment of whether patterns are localized within pockets or generalize linearly over broader spans of time. Study 4 focused on the reverse causal relation, that of regulatory focus on temporal distance. Participants were induced to focus on either promotion or prevention for either the future or the past, then asked to estimate the time point of both goal initiation and completion.

Study 1

Study 1 tested students' perceptions of an upcoming exam at two points in time spanning two weeks. The contrast between temporally distant vs. proximate events was thus within-subject.

Method

Eighty undergraduate students (52 women and 28 men) from an introductory cognitive psychology course at Northwestern University participated.

Participants completed a written survey at two points in the academic quarter. Two weeks before a midterm exam, the experimenter distributed consent forms and surveys at the beginning of the class period. Participants who chose to participate were asked to record the last four digits of their student identification numbers and were allowed approximately 10 min to complete the survey. On the day of the course exam, the survey was distributed at the beginning of class. Students were reminded that the exam would take much less time than the allotted class period (which was over 2 h), in order to assuage any possible concerns that the survey would interfere with students' ability to complete the exam in time.

Participants first estimated how well they expected to do on the exam by providing an estimated grade percentage score and by completing a subjective confidence rating along a 9-point scale ranging from *extremely poorly* to *extremely well*. For the measure of regulatory focus, participants were asked to think about their performance on the exam and to indicate the extent to which they were concerned with 10 different issues. Five of these items described positively framed promotion-focused outcomes (getting a high score, doing well compared to others taking the test, showing strengths, being pleased with performance, improving GPA). The remaining five items pertained to negatively framed prevention-focused concerns (avoiding an unfavorable score, scoring in the lower end of the distribution, revealing weaknesses, disappointing oneself, and damaging transcript). Each was rated with regard to current concern on an 8-point scale ranging from *extremely unconcerned* to *extremely concerned*.

Results

Participants' optimism about their exam performance decreased over time, replicating past research. Participants predicted a higher grade ($M = 89.9$, $SE = .74$) when the exam was temporally distant vs. proximal ($M = 86.8$, $SE = .85$), $F(1, 77) = 22.77$, $p < .001$. Likewise, participants' subjective confidence decreased from 7.73 to 6.68 ($SEs = .10$ and $.15$) as the exam drew nearer in time, $F(1, 77) = 69.29$, $p < .001$.

Regulatory focus items were averaged to produce promotion and prevention subscales of adequate reliability (Cronbach's $\alpha = .78$ and $.74$). Overall, promotion ($M = 6.01$, $SE = .11$) was of greater concern than prevention ($M = 5.36$, $SE = .14$), $F(1, 78) = 44.8$, $p < .0001$. As expected, however, the interaction between temporal perspective and regulatory focus was significant, $F(1, 78) = 4.45$, $p = .04$. Whereas prevention concerns remained steady over time, promotion concerns decreased as the event drew nearer. Participants indicated a higher level of concern with promotion-focused issues 2 weeks prior to the exam ($M = 6.12$, $SE = .12$) than directly before the exam ($M = 5.89$, $SE = .13$), $t(78) = 1.90$, $p = .03$ (one-tailed). In contrast, prevention-focused concerns remained equally salient when the exam was distant ($M = 5.36$, $SE = .15$) and proximate ($M = 5.37$, $SE = .15$), $t(78) = .04$, $p = .97$. Correlations between optimism and regulatory focus difference scores (at Time 1 and 2) are presented in Table 1.

Of additional interest was whether the observed temporal differences in regulatory focus might account for the pattern of lowered expectations. We used techniques suggested by Judd, Kenny, and McClelland (2001) for testing mediation in within-subject designs. To obtain a single measure of optimism, we first standardized and averaged the (percentage) grade estimate and the subjective confidence ratings for each time period. In addition, a regulatory focus difference score (promotion focus minus prevention focus) was created for each time period. The difference in the two optimism scores (Time 1–Time 2) for each participant was then regressed on two predictors: the sum of each participants' regulatory focus scores for Time 1 and Time 2, and the difference in each participants' regulatory focus scores (see Judd et al., 2001). A significant regression coefficient for the regulatory focus difference predictor indicated mediation of the optimism effect by regulatory focus ($B = -.190$, $p = .04$). Furthermore, the estimated intercept was not found to differ from zero ($B = .053$, $p = .56$), indicating complete mediation of optimism shifts by changes in regulatory focus.¹

These results provide support for the argument that regulatory focus is a common thread linking a variety of temporal shifts in judgment. Regulatory focus was shown to shift in importance over the course of goal pursuit. We regard the results of the mediation analysis as intriguing though preliminary. It is important to note that alternative methods of testing mediation (such as examining expected grade and subjective confidence

¹ Corresponding mediational analyses were conducted to examine the reverse causal relationship. Although temporal change in regulatory focus was partially accounted for by declining expectations ($B = -.292$, $p = .04$), the effect of time on focus persisted over and above any change in optimism ($B = .234$, $p = .03$).

Table 1
Zero-order correlations between temporal changes in regulatory focus and expectancies in Study 1

Expectancy type	Regulatory focus	
	Promotion	Prevention
Percentile	.145	.046
Likert	.391**	.098
Index	.273*	.061

Note. Regulatory focus and expectancy ratings are represented by difference scores (Time 1 ratings minus Time 2 ratings).

* $p < .05$.

** $p < .01$.

separately) did not reveal equally strong evidence of mediation.

Study 2

Whereas Study 1 examined changes in objective time, Study 2 examined subjective time. An examination of the actual passage of time offers strong external validity, but also introduces a number of complicating factors, such as differences in the amount of actual task preparation across conditions. To address these issues, in Study 2 we held the actual time span constant and manipulated participants' subjective experience of time using a framing manipulation derived from Wilson and Ross (2001). Students were asked to focus on upcoming final examinations, which for all was approximately 3.5 weeks in the future. These exams were framed as very near or relatively distant; we then assessed participants' promotion and prevention focus regarding this exam.

Method

Fifty students (26 women and 24 men) from the University of Chicago volunteered to participate in a study of goals in exchange for cash payment of \$6.00.

Participants were recruited (via campus fliers) to complete the study soon after midterm exam period (November 14th). In a questionnaire administered via computer, participants were asked to identify a specific task (e.g., exam, paper, and assignment) that they needed to complete during finals week (December 9–14). In the near condition, the next instruction portrayed the final exam period as psychologically close in time:

This study concerns *how people view tasks as they approach in time*. This study is being conducted as we approach "Week 8" of the term. So as of today, "finals week" is only a couple of weeks away.

In the distant condition, finals were described as relatively far away:

This study concerns *how people view tasks at a distance*. This study is being conducted near midterm. So as of today, "finals week" is still a number of weeks in the distance.

Following this paragraph, a timeline approximately 5 in. long appeared on the screen, and participants were asked to locate today on the line ("Please indicate TODAY by selecting a point along the line with your mouse."). Twelve response buttons were evenly spaced across the line. In the near condition, the timeline was anchored by the labels "Beginning of fall term" and "End of term." In the distant condition, the labels "Midterm" and "End of term" were used. This difference in labeling was intended to alter the psychological nearness of the target event by influencing the perceived distance between now and finals (see Wilson & Ross, 2001, Study 6).

Following the temporal distance manipulation, participants specified the exact completion date of their final exam by choosing one of eight response options (corresponding to "before finals," each of the six days of finals week, and "after finals"). This item allowed us to determine whether the manipulation of psychological distance also altered the objective temporal distance upon which participants focused.

As a measure of regulatory focus, participants were presented with the target goal they identified and asked to provide a promotion-focused and prevention-focused rating. The promotion item was, "The goal you listed earlier is printed below. How much do you think it focuses on ACHIEVING SOMETHING YOU WANT?", and the prevention item was, "How much does your goal focus on PREVENTING SOMETHING YOU DON'T WANT?" Participants provided ratings along a 7-point scale ranging from *not at all* to *completely*. Participants also provided a rating of how well they expected to do on the task using a 7-point scale ranging from *extremely well* to *extremely poorly*.

Results

As a manipulation check of the distance manipulation, participants' timeline markings were analyzed. Along the 12-point timeline, participants in the near condition placed "today" significantly closer to the target event ($M = 8.63$, $SE = .12$) than did participants in the distant condition ($M = 4.91$, $SE = .43$), $t(48) = 8.98$, $p < .01$. Importantly, however, the psychological distance manipulation did not affect the objective temporal distance of participants' target. The actual event date provided by participants in the distant condition ($M = 2.91$, $SE = .34$) was no later in time than in the near condition ($M = 3.15$, $SE = .35$), $t(48) = .48$, $p > .60$.

Unexpectedly, participants' performance expectations were not found to differ across conditions. Expectations were equally favorable for participants in the near condition ($M = 2.82$, $SE = .17$) as compared to those in the distant condition ($M = 2.57$, $SE = .18$), $t(48) = 1.02$, $p = .31$. Thus, we were unable to replicate previous

findings on temporal shifts in optimism. We are unaware of any previous research assessing this effect using a psychological or subjective manipulation of time, however, which may account for this result.

A 2 (temporal distance: near vs. far) \times 2 (regulatory focus: promotion vs. prevention) ANOVA revealed a main effect for regulatory focus. Promotion ratings ($M = 5.78$, $SE = .19$) were higher than prevention ratings ($M = 3.43$, $SE = .27$), $F(1, 48) = 39.76$, $p < .01$. Of primary interest, however, was the significant interaction between temporal distance and regulatory focus, $F(1, 48) = 4.49$, $p = .04$. As expected, participants indicated a stronger promotion focus when the goal was made to feel distant ($M = 6.22$, $SE = .28$) vs. near ($M = 5.33$, $SE = .25$), $t(48) = 2.36$, $p = .02$. In contrast, prevention focus did not vary as a function of distance condition ($M_s = 3.08$ and 3.78 , $SE_s = .39$ and $.36$), $t(48) = 1.29$, $p > .20$.

This pattern precisely replicates that of Study 1 and provides especially compelling support for the relationship between temporal distance and regulatory focus. Even when various factors associated with the actual passage of time (such as amount of preparation) were controlled, temporal distance influenced regulatory focus.

Study 3

The findings of Studies 1 and 2 suggested that promotion focus increases with temporal distance to a goal, whereas prevention focus remains stable. Two questions are raised by these findings: (1) does the same pattern hold for retrospective as well as prospective judgments and (2) does this pattern hold across a greater range of specific points in time, such as a week, a month, a year, or even 10 years in the distance? Much previous research into perceptions of time has relied upon measurements at only two points in time. Our understanding of temporal perception would be enriched considerably by examining perceptions over multiple time points. Study 3 took the same general form as the previous studies, in that the effect of temporal distance on regulatory focus was examined. However, Study 3 focused on participants' mental time travels into both the past and future. That is, this study examined variation in individuals' perceptions as a function of momentary consideration of different points in the past and future. In a within-subjects design, participants generated goals that they accomplished or intended to accomplish at 11 specific points in time ranging equivalently over the past and future. For each goal that participants recorded, they rated the extent to which it could be characterized as a promotion goal and a prevention goal.

In addition, this study examined variation in temporal construal over time. Previous research shows that

individuals construe goals at a more abstract level with increasing temporal distance (e.g., Liberman & Trope, 1998). Accordingly, we tested whether regulatory focus and construal level were correlated, and more important, whether the effects observed in Studies 1 and 2 would remain reliable even if construal level were statistically controlled. We expected that construal and focus would indeed be associated. Brendl and Higgins (1996) argued that, as compared to minimal (prevention-focused) goals, maximal (promotion-focused) goals tend to support high-identity goals (p. 110). Maximal goals specify the *most* positive end state one hopes to achieve, a cognition that is likely to be somewhat broad and self-reflective. Conversely, minimal goals have relatively bounded upper limits. As such, we expected a correspondence between promotion focus and high-level construal on the one hand, and prevention and low-level construal on the other. Based upon our speculation that cognitive construal is but one component of the more encompassing motivational constellation of regulatory focus, however; we suspected that temporal changes in regulatory focus would persist even with construal levels statistically controlled.

Method

Subjects were 31 students (22 females and 9 males) enrolled in an introductory psychology course at Simon Fraser University, participating for course credit. The design of the experiment was a 2 (regulatory focus: promotion vs. prevention) \times 11 (temporal distance). Points in time were designed to correspond to 1 week, 1 month, 6 months, 1 year, and 10 years. In order to bypass any assumptions students may hold about these "standard" points in time (e.g., "in 1 year I will be a sophomore," etc.), the time points were shifted by adding minor numerical variation.² Thus, subjects made ratings for 11 points in time corresponding to (1) today, (2) 9 days from today, (3) 9 days ago, (4) 40 days from today, (5) 40 days ago, (6) 7 months from today, (7) 7 months ago, (8) 14 months from today, (9) 14 months ago, (10) 11 years from today, and (11) 11 years ago.

Subjects were asked to record one goal associated with each point in time and were given a single line on which to record each goal. Subjects made three 9-point ratings of each goal with regard to promotion, prevention, and goal importance. The ratings of promotion and prevention ("How much does this goal focus on getting something you want?"; "How much does this goal focus on avoiding something you don't want?") were both anchored by *not at all* and *completely*. The rating of construal level ("When you think about this goal, how much do you focus on the 'big picture'

² Thanks to Tory Higgins for suggesting this procedural improvement.

vs. small details?") was anchored by *small details* and *big picture*.

Results

Promotion vs. prevention goal ratings were compared at each point in time within a 2 (Regulatory Focus) \times 11 (Temporal Distance) ANOVA. The main effect of regulatory focus indicated greater promotion ($M = 7.75$, $SE = .67$) than prevention ($M = 6.19$, $SE = 1.40$) focus overall, $F(1, 30) = 27.72$, $p < .001$. Also, there was a linear main effect of temporal distance, $F(1, 30) = 10.92$, $p = .002$, such that combined promotion and prevention importance increased over the time span from distant past to present to distant future. The linear interaction between the two factors was not significant, $F = .27$, but of central interest was the quadratic interaction between these two factors, $F(1, 30) = 11.86$, $p = .002$, which suggested that the main effect of regulatory focus was minimal in the present but grew with greater prospective and retrospective distance from the present. In order to examine this effect more closely, a regulatory focus difference score was conducted for each point in time (promotion focus minus prevention focus). As expected, single sample t tests indicated that difference in promotion and prevention focus was not significantly different from zero for time periods surrounding the present (9 days ago, now, 9 days from now). As distance from the present increased, however, this difference generally widened (t values are presented in Table 2).

Several further contrasts were conducted to better characterize this pattern. Looking only at prospective judgments, promotion ratings evidenced a linear upward trend with increasing temporal distance, $F(1, 30) = 19.67$, $p < .001$, whereas this same linear test was not significant for prevention ratings, $F = 1.07$, *ns*. This pattern precisely replicates that of Study 1. By contrast, the reverse was evident for retrospective judgments: prevention ratings evidenced a linear downward trend

with increasing temporal distance, $F(1, 30) = 9.36$, $p = .005$, whereas promotion ratings did not vary as a linear function of temporal distance, $F(1, 30) = 3.37$, $p = .08$.

Looking at the pattern of construal ratings across the 11 time points, we see that the predictions of temporal construal theory were confirmed, but only for prospective judgments. That is, looking only at the 6-time points ranging from present to future ($M_s = 6.33, 4.53, 5.73, 5.93, 6.80, 7.40$), the upward linear effect was reliable, $F(1, 30) = 14.54$, $p < .001$, but the same test conducted on the 6-time points from present to past was not, $F(1, 30) = 2.30$, $p = .14$ ($M_s = 6.33, 5.43, 4.57, 5.73, 5.70, 4.57$). In other words, with increasing time from the present into the future, subjects generated goals focusing more on the "big picture" as opposed to small details. But with increasing time from the present into the past, construal level showed no such stable linear pattern.

We anticipated that construal levels and regulatory focus would be associated, with promotion focus leading to more abstract thinking (i.e., a positive correlation), and prevention focus to concrete thinking (negative correlation). This prediction received only weak support. For judgments of the future, promotion was modestly correlated with construal ($r = .32$, $p = .08$). Construal was uncorrelated with prevention in the future, however ($r = .15$, $p = .87$). For retrospective judgments, neither promotion ($r = -.16$, $p = .39$) nor prevention ($r = .10$, $p = .59$) was associated with construal.

Although promotion focus was only weakly associated with abstract thinking overall, we conducted additional analyses to conclusively determine whether the temporal pattern of construal might partially account for the regulatory focus effects described previously. A separate growth curve analysis (Karney & Frye, 2002; Singer, 1998) was used for each of the promotion and prevention ratings over the full time range, each with construal level ratings entered into the model. The restricted maximum likelihood approach tests degree of fit between the data and a quadratic vs. linear model of change over time in within-subject data.

We first looked at promotion ratings. In order to determine whether construal ratings reduced or eliminated the obtained effects, we compared a model containing intercept, a linear effect of time, and a quadratic (i.e., parabolic) effect of time to the same model with construal ratings additionally entered (both models achieved good fit, $\chi^2 = 30.2, 35.8$, both $ps < .001$). A confirmatory test of the curvilinear effect of time on promotion scores indicated that the quadratic effect of time ($t(318) = 3.75$, $p < .001$) remained significant with construal ratings entered, $t(317) = 3.59$, $p < .001$. With regard to prevention ratings, we again compared the same models with and without construal ratings entered

Table 2
Promotion and prevention scores as a function of temporal distance (Study 3)

Distance	Mean score		Statistics	
	Promotion	Prevention	t	p
11 years ago	7.81	4.61	4.852	.000
14 months ago	7.68	6.10	2.608	.014
7 months ago	7.74	6.16	2.958	.006
40 days ago	7.65	6.32	2.135	.041
9 days ago	7.48	7.29	.434	.667
Today	6.84	6.16	.950	.350
9 days from now	7.35	6.35	1.755	.089
40 days from now	7.94	5.97	3.555	.001
7 months from now	7.61	6	2.719	.011
14 months from now	8.52	6.1	4.870	.000
11 years from now	8.65	7.03	3.416	.002

(both models achieved good fit, $\chi^2 = 36.4, 56.3$, both $ps < .001$). Because our primary analyses revealed only an overall linear effect of time on prevention scores, we considered only the confirmatory test pertaining to that effect. As expected, the linear effect of time was reliable without construal ratings entered, $t(318) = 1.98, p = .05$, and remained so with construal ratings entered, $t(317) = 2.57, p = .01$. In sum, construal level of a goal was not able to account for the observed effects of time on regulatory focus.³

In addition to replicating the results of Studies 1 and 2 for judgments of the future, Study 3 revealed both an interesting similarity and a divergence between judgments of the future vs. past. Consistent with findings for prospective judgment, the relative difference between promotion and prevention focus increased with retrospective temporal distance. In contrast to previous prospection findings, however, this widening was a function of changes in *prevention focus* rather than changes in promotion focus. This exact pattern has been replicated in additional studies in our lab (e.g., see footnote 4).⁴

Study 4

Whereas the previous studies examined the effect of temporal distance on regulatory focus, Study 4 tested the reverse relation, the effect of regulatory focus on temporal distance. Like Study 3, this experiment assessed both retrospective as well as prospective judgments. The design was a 2×2 between-subject manipulation of regulatory focus (promotion vs. prevention) and temporal direction (prospective vs. retrospective).

Our interest was in determining whether adoption of a distinct type of regulatory focus would affect individuals' temporal scope. Whereas previous research has demonstrated that future prevention goals tend to be initiated sooner than promotion goals (Freitas et al., 2002), it remains unclear whether promotion vs. prevention goals (as well as goals of the past vs. future) differ with regard to how long one must spend working

to complete them. Study 4 assessed both goal initiation and completion time, to provide a clearer glimpse of the time span individuals recall or expect to dedicate to promotion vs. prevention goals. Promotion-focused goals, as maximal standards, were hypothesized to invite lofty, resource-hungry agendas, whereas prevention-focused goals (minimal standards) were expected to necessitate focused, immediate attention. Thus, we expected that promotion-focused goals to be temporally distant from the present time relative to prevention-focused goals, with regard to both initiation and ultimate completion. While our theorizing pertained most markedly to judgments of the future, we expected a similar pattern to be evident in judgments of the past. The increased salience of prevention in the 'here-and-now' was expected to result in prevention-focused goals being most readily identified for time periods in the recent past.

As discussed by Madey and Gilovich (1993), goal completion may be more or less *temporally focused* (i.e., specifiable in terms of a discrete point in time). For example, the goal of completing taxes on time is temporally focused, whereas the goal of being financially cautious is unfocused—one can be financially judicious in an ongoing and continuous manner. Promotion success (presence of positive) and prevention failure (presence of negative) tend to be focused, in that they both involve the presence of a particular outcome, whereas promotion failure (absence of positive) and prevention success (absence of negative) tend to be less focused, in that they involve a non-occurrence. Of course, even non-occurrences may be temporally focused (e.g., Janice failed to pay her taxes before April 15), but given that a natural correspondence is evident between temporal focus and commission/omission, we attempted to hold both temporal focus and outcome valence constant. All participants thus completed a questionnaire formatted to elicit temporally focused (rather than unfocused) responses, and all conditions focused on successful (rather than unsuccessful) completion of goals.

Method

Participants were 56 students at Simon Fraser University (30 women and 26 men) who participated in exchange for bottled water or candy bars; 1 outlier was removed leaving a final sample of 55. The design of the experiment was a 2 (regulatory focus: promotion vs. prevention) \times 2 (temporal direction: prospective vs. retrospective) factorial.

Participants were asked to generate and record three goals. Instructions in the promotion focus condition, varying by temporal direction, were: "What are some positive things that you expect to be successful at achieving [have been most successful at achieving]? Please take a moment to think about your future [past],

³ In a replication of Study 3, ratings of goal importance were obtained for each point in time. Similarly, analyses indicated that perceived importance of the goal could not account for the overall pattern of regulatory focus change across time.

⁴ In an additional study ($n = 30$) using an identical 2 (Regulatory Focus) \times 11 (Temporal Distance) design, we replicated the temporal pattern to regulatory focus. As in Study 3, results indicated that the main effect of regulatory focus was minimal in the present but grew with greater prospective and retrospective distance from the present. Promotion ratings evidenced a linear upward trend with increasing temporal distance in the future, but not the past ($ps = .001$ and $.12$, respectively), whereas prevention ratings evidenced a linear downward trend with increasing distance in the past ($p = .02$), but not the future.

focusing on desirable things that you expect to attain [have attained]. In the space below, please record three of these things, using no more than one sentence for each. Then try to estimate when you might start [started] working actively toward achieving each, and when each might be [was] achieved. BE SURE TO FOCUS ON GOALS THAT HAVE A CLEAR COMPLETION DATE (e.g., winning a tournament, getting a job) RATHER THAN GOALS THAT ARE ONGOING.” Instructions in the prevention focus condition, also varying by temporal direction, were: “What are some negative things that you expect to be successful at avoiding [have been most successful at avoiding]? Please take a moment to think about your future, focusing on undesirable things that you expect to prevent [that you have avoided or prevented]. In the space below, please record three of these things, using no more than one sentence for each. Then try to estimate when you might start [started] working actively toward preventing each, and when each might be [was] prevented. BE SURE TO FOCUS ON GOALS THAT HAVE A CLEAR COMPLETION DATE (e.g., not missing classes during fall semester, not creating a huge student loan debt before graduation) RATHER THAN GOALS THAT ARE ONGOING.” Three labeled lines appeared next, with blanks underneath for participants to provide time estimates for both goal initiation (“will start [started] working toward it”) and completion (“can be [was] achieved/prevented”). Participants filled in initiation and completion times in “year(s) and month(s) from now.”

Results

Participants recorded goals centering on a variety of events of personal importance. Examples of promotion focused goals include “getting my driver’s license (past)” and “starting on the varsity team (future).” Examples of prevention goals include “not spending money so that I can afford my trip to Australia (past)” and “not getting any *F*s during spring semester (future).” Because the distribution of time estimates was skewed, analyses were performed using natural log transformed data (all means presented here are untransformed). One outlier subject was dropped because the goal initiation time estimate provided (16.0 years) was 4.58 *SD*s above the mean for the rest of the sample ($M = 2.31$, $SD = 2.99$). Analyses reported below were performed on the resulting sample of 55 subjects.

Completion time estimates for the three goals were averaged to produce a single index of temporal distance (Cronbach’s $\alpha = .57$). In the 2 (Regulatory Focus) \times 2 (Temporal Direction) ANOVA, the main effect for regulatory focus was reliable, $F(1, 51) = 4.39$, $p = .04$. Participants focusing on promotion gave more temporally distant goal completion estimates ($M = 2.13$ years)

than those focusing on prevention goals ($M = 1.53$ years). Planned contrasts revealed that this difference held only for judgments of the future, however. Although the regulatory focus effect was reliable for prospective estimates (M s = 2.34 vs. 1.10 years, SE s = .45, .29), $t(28) = 2.86$, $p = .001$, it was not reliable for retrospective estimates (M s = 1.92 vs. 1.95 years, $SE = .59$, .54), $t(23) = .37$, $p = .71$.

Looking at the goal initiation time estimates (Cronbach’s $\alpha = .81$), the most obvious (and least interesting) effect was that goals of the past have initiation points further removed from the present ($M = 4.33$ years, $SE = .68$) than goals of the future ($M = .63$ years, $SE = .13$), $F(1, 51) = 4.39$, $p = .04$. More interesting is the replication of the findings of Freitas et al. (2002), in that subjects expected promotion goals to be initiated further in the future ($M = .88$ years, $SE = .19$) than prevention goals ($M = .37$ years, $SE = .15$), $t(28) = 2.45$, $p = .02$. Goals of the past did not differ in initiation times (M s = 4.27 vs. 4.38, SE s = 1.25, .77), $t(23) = .27$, $p = .79$.

To put the goal completion time findings Study 4 into clearer perspective, we may summarize the above effects by averaging across initiation and completion times to produce an estimate of the midpoint of the temporal deviation from present for the entire period spent on a particular goal. This midpoint between initiation and completion of goals was further in the future for promotion goals ($M = 1.61$ years, $SE = .31$) than prevention goals ($M = .73$ years, $SE = .21$), $t(28) = 2.82$, $p = .009$. This midpoint did not vary as a function of regulatory focus for judgments of the past (M s = 3.10 vs. 3.17, SE s = .89, .59), $t(23) = .22$, $p = .83$.

Yet another way to frame these data centers on the total amount of time that individuals expect to spend on a particular goal, which may be defined as the absolute difference between initiation and completion time estimates. The reliable main effect for temporal direction suggests the operation of a bias similar to the planning fallacy: subjects judged their task durations to be briefer in the future ($M = 1.17$ years, $SE = .20$) than in the past ($M = 3.13$, $SE = .50$), $F(1, 51) = 6.32$, $p = .02$. Importantly, however, participants nevertheless intended to spend more time implementing promotion goals ($M = 1.45$ years, $SE = .29$) than prevention goals ($M = .73$ years, $SE = .19$) in the future, $t(28) = 2.36$, $p = .03$. This variable did not vary as function of regulatory focus within judgments of the past (M s = 2.40 vs. 2.90, SE s = .82, .72), $t(23) = .28$, $p = .78$.

These findings offer an intriguing contrast to the previous studies, which focused on the effect of temporal distance on regulatory focus. Here, we found that regulatory focus influences temporal distance, such that promotion goals prompt greater distance of temporal gaze. Further, this effect occurred for judgments about

the future but not the past, a finding we have replicated in independent investigations.⁵

General discussion

A range of prior research on temporal distance effects in both prospective and retrospective judgment is consistent with a relation between temporal distance and regulatory focus. Looking across these varied literatures, we noticed that greater temporal distance increases the relative impact of promotion over prevention focus. In conducting a series of studies to test our suspicions, we took two approaches, that of measuring the effect of temporal distance on regulatory focus and the reverse approach of assessing the effect of regulatory focus on temporal distance.

In the first approach, time appears to be a mental quantity: large vs. small amounts of time alter judgmental strategy. With increasing amounts of time, individuals become more attuned to acquisition, achievement and the presence of things desired as opposed to caution, security, and the prevention of things unwanted. We found this pattern using three distinct methods. In Study 1, we used a longitudinal design to examine students' expectations of exam performance. We found that individuals place greater weight on promotion than prevention, an effect which is stronger when goals are temporally distant than proximate. Stated somewhat differently, promotion concerns shrank as goals drew near, but prevention goals remained unchanged over time. In Study 2, we varied subjective as opposed to objective temporal distance. Participants who considered an event expected to occur several weeks hence evidenced greater promotion vs. prevention focus when that event was framed as distant vs. near. Finally, in Study 3, participants' perceptions of various points in time, both in the future and past, were assessed for the importance placed on promotion vs. prevention concerns. Again, the difference between promotion and prevention grew with temporal distance, and moreover, this effect was roughly equivalent for both prospective and retrospective judgments. When we say "roughly," we mean that although the mean difference between promotion and prevention looks the same in judgments of the future and past, the curves of each reversed their form. Replicating the findings of the first two studies, Study 3 revealed that, when looking to the future, as temporal distance increased promotion goals grew while prevention goals remained constant. However, when

looking to the past, as temporal distance increased promotion goals remained constant while prevention goals shrank.

We believe that this difference may speak to the process underlying the effect of temporal distance on regulatory focus. The processes that drive self-regulatory strategies toward future goals are likely to have a subsequent effect on one's recollection of goal striving in the past. In other words, we view the key process as unfolding during future-oriented goal pursuit, with later ramifications for retrospective judgments. Regulatory focus theory (Higgins, 1998) is essentially oriented towards future goal attainment. Promotion and prevention strategies are two distinct ways individuals attempt to close the gap between the current self and a desired future self. We believe that differences in the emphasis placed on these strategies over time are a function of perceived resource availability.

Actual and/or psychological distance from an event provides a cushion of resources; distance affords individuals greater opportunity for taking risks and making mistakes because it provides some latitude for correction. Thus, at a distance individuals are better equipped to adopt a promotion focus and to pursue maximal goals. As previous research indeed attests, a promotion focus fosters greater creativity, risk-taking, information search, hypothesis generation, and openness to change (Liberman et al., 1999, 2001)—all strategic practices that one is only free to engage in provided sufficient time and resources. In contrast, actual or perceived proximity to an event signals resource depletion. One no longer has the cushion of time to correct mistakes. Thus, a more restrained and cautious approach to goal attainment is likely to be more functional, and a decreased emphasis on promotion strategies should ensue. According to this perspective, prevention-focused concerns typically occur relatively late in goal striving.

As such, when individuals reflect upon goal striving in their past, prevention-focused concerns should be most salient for goals near to the present time. Only within the sphere of the present are prevention-focused concerns highly salient. Both the need and the ability to recall security-focused information should be greatly reduced the longer the temporal distance from the present. The relative prevalence of promotion focus throughout goal striving should make promotion-focused information easiest to recall and more resistant to decay. In sum, our current theorizing suggests that individuals are prompted to adjust self-regulatory focus and strategies in response to perceived reductions in resources as events draw nearer in time. The processing differences individuals engage in during goal pursuit then feed back to influence what is remembered about goal striving in the near and distant past. Certainly, our account of these processes remains to be rigorously

⁵ The results of Study 4 have been replicated with regard to goal completion estimates. In this replication ($n = 59$), a significant interaction emerged between regulatory focus and temporal direction, such that a regulatory focus effect was reliable only for prospective judgments ($p = .02$), not for retrospective judgments ($p = .34$).

tested, and we regard this framework as a promising avenue for future research.

Whereas our primary focus was on the effect of temporal perspective on regulatory focus, the findings of Study 4 make an additional, distinct contribution to our understanding of the relationship between these variables. This study examined whether the induction of either promotion or prevention focus would launch people on mental time travels of a particular duration. This is a very different question from those of Studies 1–3. Whereas those studies examined the impact of mental time, which is akin to a resource that can facilitate or hinder goal completion, Study 4 focused on the effect of goal-related cognitions themselves on assumptions about time. Referring back to the idea of perceived resource availability, we assumed that promotion-focused, maximal goals would be regarded as resource-demanding, and that as a consequence, individuals would regard the completion of such goals in the future as distant in time. In contrast, we expected that prevention goals, as perceived necessities, would be regarded as essential and thus resource-independent (i.e., this needs to be done here-and-now). As such, we expected participants to identify future prevention goals as being satisfied more immediately.

Participants in Study 4 made estimates of both goal completion and goal initiation times. We found that promotion goals, on average, were seen as more temporally removed from the present than prevention goals. Unlike the “rough” equivalence of prospection and retrospection found in the first three studies, however, Study 4 indicated an effect only for perceptions of the future, not the past. The lack of an effect for retrospective judgments was somewhat unexpected, in that we anticipated participants would be best able to remember prevention goals that were located in the recent past (as the result of increased salience, consistent with the logic presented above). One possible reason that these results do not mirror those found in Study 3 may be that in Study 4, participants were directly asked to identify goals with a specific type of regulatory focus. Even though prevention goals may be most salient for periods of time in the recent past, these results suggest that individuals may be perfectly capable of identifying prevention goals from both the recent and distant past when they are directly asked to recruit examples of prevention goals.

Another interpretation of the pattern is that completion times for future promotion goals are greater than the three other means because of essentially the same factor twice implemented. Depth of temporal gaze is unlocked by *open-ending thinking*; the future is more open-ended than the past, and (according to the linkage between Gilovich & Medvec, 1995 and Roese et al., 1999 with regard to the time course of regret) promotion focus tends to be more open-ended than

Table 3
Temporal estimates as a function of direction and regulatory focus (Study 4)

Condition	Time measure		
	Completion	Initiation	Total spent
Past			
Promotion	1.92	4.27	2.40
Prevention	1.95	4.38	2.90
Future			
Promotion	2.34	.88	1.45
Prevention	1.10	.37	.73

Note. Values represent time in years.

prevention focus. Together, these factors produce the additive pattern represented in Table 3. Relatedly, Newby-Clark and Ross (in press) showed that individuals, when asked to recall personal memories, tended to retrieve a mix of successes and failures, but when asked to generate expectations for personal experiences, they focused almost exclusively on successes and positive experiences. Our Studies 3 and 4 required subjects to focus only successes, and it is important to emphasize that valence and regulatory focus are conceptually orthogonal (one can successfully learn to drive and successfully avoid gaining weight). Even so, Newby-Clark and Ross’s studies dovetail with our studies to indicate that when individuals focus on future personal goals, they aim high, emphasize promotion, neglect prevention, and generate optimistically rosy images.

Overall, the findings support for our interpretation that draws together prior research on optimism shifts (e.g., Shepperd et al., 1996), temporal construal theory (Liberman & Trope, 1998), the planning fallacy (Buehler et al., 1994), the “rosy view” (Mitchell et al., 1997), durability bias (Gilbert et al., 1998), and counterfactual thinking and emotions of regret (Gilovich & Medvec, 1995; Roese et al., 1999). We argue that all contain shards of evidence consistent with the view that regulatory focus shifts with temporal distance from goals. Our findings are compatible, for example, with findings from research on temporal construal theory, which has demonstrated that individuals give less weight to desirability (a promotion-focused concern) when making decisions for immediate events vs. temporally distant events (Liberman & Trope, 1998). However, Study 3 showed that temporal construal theory could not subsume our findings: temporal distance produced an effect on regulatory focus that was independent of temporal construal. An additional, and we think highly interesting, discovery was that we replicated the previously noted effect that more abstract construals are associated with more temporally distant goals, but only for prospective but not retrospective judgment. Although temporal construal theory (Trope & Liberman, 2002)

seems at first glance applicable to retrospective judgment, this preliminary evidence suggests otherwise.⁶

Relation to classic research on approach/avoidance conflict

Our conception of temporal shifts in regulatory focus (at least with regard to future goals) shares similarities with classic work on approach/avoidance conflict (e.g., Lewin, 1935; Miller, 1944, 1959). Early research on this conflict theory (e.g., Brown, 1948) explored differences in the strength of approach vs. avoidance tendencies as a function of an organism's closeness to a goal. Our results are consistent with one basic assumption of this work—namely, that approach (promotion-oriented motivation) is relatively stronger than avoidance (prevention-oriented motivation) when goals lie in the distance (spatially or temporally). Our results for prospective judgments do not converge, however, with two other fundamental assumptions of conflict theory. First, approach and avoidance gradients in past research were generally characterized by a positive slope. Second, in earlier work, the gradient for avoidance was found to increase more steeply than the approach gradient over the course of goal pursuit. In contrast, our findings reveal a stable focus on prevention over time. We found that prevention focus indeed exerted a greater *relative* influence when a goal is near vs. distant, but this influence stemmed from dampened promotion focus rather than any increase in prevention focus.

In comparing our findings to this older body of work, it is important to emphasize some key conceptual differences that render direct comparison less informative. First, our research centers on a higher level of analysis. Conflict theory centered on simple behaviors (moving toward or away) conditioned by directly presented stimuli (food or shock) most typically in animals (rats and mice), and thus spoke to the simplest hedonic mechanisms of pleasure and pain. Our research, by contrast, encompasses the more complex inferences processes involved in information selection, reasoning, and decision-making. Even when this older research focused on humans rather than animals, there was a tendency to assess avoidance with regard to immediate termination goals, as when Epstein and Fenz (1965) assessed avoidance in parachutists using such Likert items as “wanting to turn back and call the jump off.” Our research instead emphasizes the manner in which individuals frame a goal as they continue to approach it

in time. Finally, conflict theory targeted situations in which approach and avoidance responses were incompatible. Miller (1944), for example, described the approach and avoidance behaviors in his research as “obviously mutually exclusive” (p. 456)—an organism could not both approach and avoid the target event. Our work, on the other hand, illuminates situations in which the target event (e.g., an exam) may be simultaneously construed in terms of approach (promotion) and avoidance (prevention). Overall, our research is aimed more at higher, multifaceted human cognition embracing both tactical and strategic goals.

Relation to recent research on regulatory focus

Our findings also share some resemblance to those from two recent lines of research. First, Förster et al. (1998) explored the “goal looms larger” effect (i.e., the finding that motivational strength increases with proximity to a goal) and found that effort and persistence on a task increased as one moves closer to goal completion, particularly when there is a match between regulatory focus and the immediate demands and format of the task. At first glance, the Förster research might be construed to suggest that promotion focus gets stronger rather than weaker with goal proximity. However, the Förster research held regulatory focus constant then examined effort/persistence over time. By contrast, our research suggests that regulatory focus qualitatively shifts as events draw nearer in time. Further, our findings pertain to the overall importance individuals assign to promotion- and prevention-framed concerns rather than motivational strength as measured by Förster and colleagues (e.g., arm flexion/extension). Freitas et al. (2002) also examined the relation between time and regulatory focus, showing that individuals prefer to initiate prevention goals earlier than promotion goals. This finding is certainly compatible but does not overlap with our findings. The results of Studies 4a and 4b replicate the Freitas et al. finding for goal initiation time, and also indicate the overall effect on goal duration and completion latency. We concur with Freitas et al. (2002) that prevention focus motivates individuals to begin goal pursuit immediately, and provide a broader theoretical framework to encompass these effects.

Implications

A temporal shift in regulatory goal strength may be a specific example of a more general proximity effect in judgment. For example, analogous findings may emerge for spatial proximity as for temporal proximity. Promotion focus may typically involve activities ranging further from home (vacationing, exploring strange new worlds, and seeking out new life and new civilizations) than does prevention focus (keeping the grass trimmed,

⁶ It is also interesting to note the discrepancy between these results and past findings suggesting that abstract memories tend to persist longer than specific ones. Although it is beyond the scope of the current paper to speculate about potential reasons for this disconnect, it is certainly an interesting avenue for further research. Our thanks to an anonymous reviewer for raising this issue.

the toilets clean, and the furniture dusted). Even more generally, psychological distance might embrace both temporal and spatial proximity as well as conceptual proximity, defined in terms of hypothetical vs. actual activity engagement (Van Boven, Loewenstein, Welch, & Dunning, 2003). We are presently conducting further investigations of this compelling question.

To conclude, individuals may be said to inhabit “spheres of the present” marked by both promotion and prevention concerns. Initially, promotion tends to dominate prevention focus, but this disparity decreases with temporal distance. As people gaze further into the future and past, they see through rosier lenses to a place where action easily makes dreams come true unfettered by obstacles and hindrances. Merely focusing on acquisition vs. obstacle, moreover, induces a gaze with further temporal reach, especially to the future.

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