Put Your Imperfections behind You: Temporal Landmarks Spur Goal Initiation When They Signal New Beginnings

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Abstract

People often fail to muster the motivation needed to initiate goal pursuit. Across five laboratory experiments, we explore when people naturally experience enhanced motivation to take actions that facilitate goal pursuit and why certain days are more likely to spur goal initiation than others. We provide causal evidence that emphasizing a temporal landmark marking the beginning of a new time period increases people's intentions to initiate goal pursuit. In addition, we propose and show that people's strengthened motivation to begin pursuing their aspirations following such temporal landmarks originates in part from the psychological disassociation these landmarks induce from a person's past, imperfect self.

Introduction

Initiating goal pursuit is challenging: People often fail to muster the requisite motivation to begin a diet or initiate a new gym habit, for example. In this paper, we consider *when* people naturally experience enhanced motivation to begin pursuing their goals and *why* that motivation is greater on certain days than others. Addressing these questions can advance understanding of naturally arising points in time that spur goal initiation and suggest when it may be most effective to provide people with tools known to facilitate goal pursuit.

We propose that temporal landmarks spur goal initiation when they signal new beginnings, or the start of new time periods. Temporal landmarks are days that "stand in marked contrast to the seemingly unending stream of trivial and ordinary occurrences" (Shum, 1998, p.423) in people's lives. They include transition points on social timetables (e.g., holidays, the start of a new week/month/year/semester; Robinson, 1986) and personal life events, such as first

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experiences (e.g., a first date), developmental milestones (e.g., a wedding), and recurring significant occasions (e.g., birthdays; Shum, 1998). Some temporal landmarks stand out more starkly on socially shared calendars or personal life timelines. The extent to which a temporal landmark is perceived as opening a new time period (or a new beginning) may depend on whether it resonates with our cultural, occupational, or religious identity (Shum, 1998) and how meaningful the landmark feels to us. For example, 36th birthdays, which correspond to the start of a new, 12-year Chinese zodiac cycle, should feel more like a new beginning to someone of Chinese descent than to others. Also, first experiences (e.g., first move to a new city) are viewed as more momentous (LeBoeuf, Williams, & Brenner, 2014) and should feel more like the beginning of a new cycle than similar later experiences (e.g., ninth move to a new city; Shum, 1998).

Past research has shown that temporal landmarks (e.g., holidays, birthdays, traumatic life events) stand out as barriers separating our past, current, and future selves, weakening the psychological connection between our temporal selves (Bartels & Rips, 2010; Peetz & Wilson, 2013, 2014). Objects separated into distinct mental categories are perceived as more distant from one another than objects in the same category (Burris & Branscombe, 2005; Mishra & Mishra, 2010). Thus, we expect that the more starkly a temporal landmark marks the beginning of a new time period, the more psychological distance it will create between past and current selves.

We theorize that salient temporal landmarks signaling new beginnings can open new "mental accounts" and alter self-evaluations. Specifically, people tend to attribute negative traits and failures to their past self to maintain a positive image of their current self; however, this tendency only flatters the current self when the past and current selves are not closely connected (Wilson & Ross, 2001, 2003; Ross & Wilson, 2000). We therefore postulate that by psychologically separating people from their past selves and failures, temporal landmarks that open new time periods can help people relegate their missteps to the past and elevate their self-image and confidence.

We argue that feeling separated from past imperfections should stimulate several psychological processes that promote goal initiation. First, feeling disconnected from past failures may boost people's self-efficacy, or belief in one's ability to carry out plans and reach goals (Bandura, 1997; Libby & Eibach, 2002). When experiencing high self-efficacy, people set more challenging goals and work more persistently in the face of obstacles (Bandura, 1977; Schmidt & DeShon, 2010). By increasing self-efficacy, the relegation of past failures to a preceding time period should motivate goal initiation. Second, people prefer to behave consistently with their self-perceptions (Festinger, 1962; Cialdini, 2007). Thus, feeling less tarnished by the looming specter of past failures may motivate people to behave consistently with their new, positive self-view (Festinger, 1962; Cialdini, 2007) and act on self-improvement goals. Finally, after a temporal landmark creates a clean slate, deviating from a goal (e.g., cheating on a diet) may feel, in prospect-theory terms, like a large, initial loss relative to a reset reference point (where the utility curve for losses is steepest) rather than like another small loss added to many others (where the utility curve for losses has flattened; Colby & Chapman, 2013; Heath, Larrick, & Wu, 1999; Soman & Cheema, 2004).

These theories lead to our central prediction that temporal landmarks signaling new beginnings will facilitate goal initiation. To initially explore this hypothesis (see the Supplement), we asked online respondents interested in dieting to reflect on 94 days that might arise in their lives, ranging from the relatively mundane (e.g., a 23rd birthday) to the significant (e.g., a 30th birthday). We found that people's self-reported likelihood of starting a diet on a given date was positively correlated with the extent to which that day felt like the beginning of a new time period (correlation coefficient = 0.53; $p<.001$).

Across five experiments, this paper examines how and why temporal landmarks affect goal initiation when they are highlighted as the beginning of a new time period. It extends past research in several important ways. First, it provides a critical first *causal* test of whether temporal landmarks spur goal initiation, building on recent research showing *correlational* evidence that goal-related activities (e.g., dieting, exercising) increase following temporal landmarks (e.g., the start of the week/month/year, holidays, and birthdays; Dai, Milkman, & Riis, 2014). Second, it is the first to explore *which* temporal landmarks motivate goal initiation. Finally, we provide evidence for one psychological mechanism that we hypothesize contributes to the link between landmarks signaling new beginnings and goal initiation: psychological segregation between the present self and past imperfections.

Study 1

Across two experiments examining real decisions, Study 1 tests the hypothesis that temporal landmarks signaling the beginning of a new time period motivate people to engage in activities that facilitate goal pursuit. Receiving reminders about goals has been shown to facilitate goal achievement (Karlan et al., forthcoming). Study 1 investigates whether people are more likely to choose to receive a goal reminder on a given date when that date is associated with the beginning of a new calendar period than when it is not.

Study 1A

Method—In early March 2014, participants interested in learning how to more effectively tackle their goals were recruited through Amazon's Mechanical Turk for a short survey. Participants were first instructed to describe a personal goal they planned to begin pursuing in April 2014 and then were asked to list one thing they planned to do to facilitate their pursuit of this goal. Next, we offered to send participants an email reminder in late March that would describe their goal and their plan for accomplishing it and include a motivating message they could customize. Only participants who signed up to receive a reminder then completed our survey and comprised our actual study sample; participants who chose not to receive a reminder exited our survey.

At this stage in the study, participants were randomly assigned to one of two experimental conditions: the *new-beginning-landmark condition* or the *control condition*. In both conditions, participants chose when to receive their personalized reminder from a list of seven consecutive dates ranging from March 18, 2014 (Tuesday) to March 24, 2014 (Monday) with the day of the week indicated in parentheses following the date. Our subtle manipulation in the *new-beginning-landmark condition* involved highlighting March 20, 2014 as the first day of spring: "March 20, 2014 (Thursday; The First Day of Spring 2014)."

In the *control condition*, the description following March 20, 2014 framed it as an ordinary day: "March 20, 2014 (Thursday; The Third Thursday in March 2014)." After choosing a date from the list, participants could customize the text of their email reminder. Finally, participants provided their email address so they could receive the goal reminder. Complete stimuli for all studies are available in our Supplemental Materials.

We aimed for a sample of 100 participants per experimental condition. Based on pretests, we estimated that approximately 50% of people who entered our survey would sign up for a reminder. Thus, we invited 400 people to participate. Data collection ceased when the total sample size reached our target number. Our final study sample included 165 participants (64 women, 100 men, with 1 person of unspecified gender; mean age = 32 years, with 1 person of unspecified age) who signed up for a reminder.

Results—We first conducted a manipulation check with a non-overlapping sample of participants ($N = 141$) from our target study population and confirmed that the first day of spring felt more like a new beginning to respondents ($M = 3.40$, $SD = 1.98$) than the third Thursday in March ($M = 1.55$, $SD = 1.47$, $t(139) = 6.33$, $p < .0001$).

Turning to our study sample, our dependent measure was whether or not participants chose to receive a goal reminder on March 20, 2014. We predicted that participants would choose to receive a message reminding them to initiate goal pursuit on March 20, 2014 at a higher rate when it was described as a temporal landmark marking the beginning of a new period (the first day of spring) than when it was described as an ordinary day (the third Thursday in March). Indeed, participants in the *new-beginning-landmark condition* were significantly more likely to choose to receive a goal reminder on March 20, 2014 than were participants in the *control condition* (25.61% vs. 7.23%, $\chi^2(1) = 10.18$, $p = .001$; Figure 1). This is a remarkably large response (a 354% increase in sign-ups on March 20th) to a very subtle intervention: relabeling a date many would have already recognized as the first day of spring. Notably, the last day on the list (March 24, 2014) was selected significantly more frequently than any other days in both conditions (all p-values < .002). The likelihood that the focal date (March 20, 2014) was selected in the *control condition* was not significantly lower than the selection rates of any other days except the last day; thus, the finding that March 20 was selected more frequently in the *new-beginning landmark condition* than in the *control condition* cannot simply be explained by a dislike for March 20 when it was labeled an ordinary day.

Study 1B

Method—Study 1B extends Study 1A by leveraging a different landmark that opens a new time period relevant to a different subject population. In December 2013, we invited individuals (primarily students) who were signed up to participate in studies at the behavioral lab of a large northeastern U.S. university to engage in an online survey for a chance to win a $50 Amazon gift card. Study 1B resembled Study 1A with a few key differences. First, participants were asked to describe a goal they planned to begin pursuing in *summer* 2014 (rather than April 2014) and were offered the opportunity to receive an email reminder about their goal sometime in the spring. Second, participants who signed up

to receive a future reminder were asked to choose from a list of 14 consecutive dates ranging from May 3, 2014 (Saturday) to May 16, 2014 (Friday). We manipulated our description of May 14, 2014 to read as either "(Wednesday; First Day of Penn's Summer Break)" (*new-beginning-landmark condition*) or "(Wednesday; Penn's Administrative Day)" (*control condition*).

We aimed to recruit a sample of 100 participants per experimental condition and invited the entire population of our university's research pool to participate in the hopes of reaching our target sample size. In total, 582 participants responded. Our sample consisted of 278 participants (169 women, 106 men, and 3 people of unspecified gender; mean age = 23 years, 3 people of unspecified age) who signed up for a reminder and completed the survey. Three participants completed our survey twice; only their first response was included in our analysis, as our results remain virtually identical if we exclude them entirely or include each of their multiple responses.

Results—We first conducted a manipulation check with a non-overlapping group of participants ($N = 248$) from our target study population. We confirmed that the first day of the university's summer break felt more like a new beginning ($M = 5.35$, $SD = 1.74$) than the university's Administrative Day ($M = 1.37$, $SD = 1.06$, $t(246) = 21.80$, $p < .0001$).

Turning to our study sample, consistent with Study 1A, participants in the *new-beginning-landmark condition* were significantly more likely to choose to receive a reminder to pursue their goal on May 14, 2014 than were participants in the *control condition* (28.57% vs. 4.35%, $\chi^2(1) = 29.53$, $p < .0001$; Figure 1), again a remarkably large response (a 657% increase in sign-ups on May 14th) to a subtle relabeling intervention.

Discussion

Study 1 provides causal evidence that engagement in an activity facilitating goal initiation (i.e., electing to receive a goal reminder) is more appealing on temporal landmarks that are framed as demarcating adjacent seasons (Study 1A) or academic periods (Study 1B) than as ordinary days. In an additional, similar study that offered participants an opportunity to receive a future goal reminder on one date from a list (see the Supplement), we described the same date (October 5) as either "the first day after Yom Kippur" (*new-beginning-landmark condition*) or "the 278th day of year" (*control condition*). In a manipulation check survey, Jewish participants ($n=19$) confirmed that the first day after Yom Kippur felt significantly more like a new beginning than the 278th day of the year ($p=.02$), whereas non-Jewish participants reported the opposite ($n=369$; $p=.06$). Consistent with our hypothesis that goal initiation is more appealing on landmarks that more strongly signal new beginnings, October 5 was chosen 25.88% more frequently[1] by Jewish participants in our reminder date choice study ($n=86$) when it was labeled as the day after Yom Kippur; our framing manipulation had the opposite effect on non-Jewish participants ($n=892$). The interaction between our

[1]We were unable to recruit our target number of Jewish participants ($n=160$) before the holiday. Our manipulation directionally increased reminder take-up right after Yom Kippur among Jewish participants, but our sample was too small for this main effect to reach statistical significance, although the well-powered interaction effect was significant.

manipulation and whether or not a participant was Jewish in predicting the choice to receive a reminder on October 5 was significant (p=.02).

Study 2

In Study 2, we use a guided writing task to manipulate the salience of New Year's Day—a landmark demarcating adjacent years—and then examine participants' engagement in activities that facilitate goal initiation.

Method

In early 2014, participants were recruited from Amazon's Mechanical Turk for a survey about goal pursuit. They were asked first to describe one goal they had failed to achieve in 2013 and then to indicate what category in a dropdown menu best captured their goal. Next, participants indicated whether they planned to pursue the aforementioned goal again in 2014. Participants who did not plan to pursue the goal in 2014 exited our survey and were not included in our sample. Participants who planned to pursue their goal again in 2014 comprised our study sample and went on to engage in a directed writing task.

In the directed writing task, we told participants that we were interested in learning how different people view the start of a New Year, and we randomly assigned them to one of two conditions. In the *new-beginning-landmark condition*, we enhanced the salience of New Year's as the beginning of a new time period by asking participants to list three to five reasons why the start of this New Year felt meaningful to them. In the *control condition*, we decreased the salience of New Year's as the beginning of a new time period by asking participants to list three to five reasons why this New Year felt ordinary to them. Across experimental conditions, New Year's marks the beginning of a new calendar period, but when its personal relevance is highlighted, it should be perceived as a more salient new beginning.

Next, we presented participants with information about and links to six different websites that could help them achieve their personal goals, including (a) a website that would allow them to put money on the line that they would forfeit if they failed to follow through on their goal, (b) four popular goal-tracking websites, and (c) a *New York Times* article summarizing insights from recent behavioral science research about how people could increase their chances of achieving their goals. We tracked the number of websites participants clicked on (min = 0, max = 6) and the amount of time they spent reviewing the descriptions of the goal-related websites provided.

We aimed for a sample of 100 participants per experimental condition and assumed that most participants would plan to pursue their personal goal again in 2014. Thus, we invited 250 participants to participate. Data collection ceased when total sample size reached our target number. Our final sample included 216 participants (78 women, 138 men; mean age = 29 years) who planned to pursue their goal again in 2014 and completed our survey. For three participants, the amount of time they spent reviewing website descriptions was not successfully recorded. We included these participants in our other analyses; removing them does not meaningfully alter our results.

Results

Having people reflect on the personal significance of a recent New Year's Day should amplify the salience of New Year's Day as a calendar landmark separating the past and present time periods. Indeed, in a manipulation check that relied on a non-overlapping sample of participants from our study's target population ($N = 141$), we confirmed the success of our treatment: New Year's Day felt more like a new beginning to participants prompted to reflect on the personal significance of the start of the last New Year ($M = 5.10$, $SD = 1.62$) than to participants prompted to reflect on its ordinary features ($M = 2.41$, $SD = 1.55$, $t(139) = 10.08$, $p < .0001$).

We predicted that participants would engage more in activities designed to facilitate goal initiation in our *new-beginning-landmark condition* than our *control condition*. While most participants did not click on a website (82% clicked zero links in the *new-beginning-landmark condition* versus 90% in the *control condition*), probably due to an eagerness to complete the task quickly and earn their pay, participants in the *new-beginning-landmark condition* clicked on three times as many goal-related websites ($M = 0.62$, $SD = 1.54$) as participants in the *control condition* ($M = 0.21$, $SD = 0.75$, $t(214) = 2.47$, $p = .01$), consistent with our prediction. Similarly, participants in the *new-beginning-landmark condition* spent 46% more time reading our descriptions of these websites ($M = 41.37$ seconds, $SD = 60.09$) than participants in the *control condition* ($M = 28.39$ seconds, $SD = 29.62$, $t(211) = 2.00$, $p = .047$).

Discussion

Study 2 demonstrates that when the same landmark (New Year's) is made more salient such that it feels more like a new beginning, it increases people's engagement in goal-related activities.

Study 3

An alternative explanation for the findings in our previous studies is that people are inclined to start any new activity (goal-congruent or not) when the outset of a new time period is highlighted. To address this possibility, Study 3 explores whether temporal landmarks marking the start of new cycles increase *both* new goal-aligned and goal-misaligned behaviors or, as we expect, only the former.

Method

This study involved a 2×2 between-subjects design. Participants were recruited through Amazon's Mechanical Turk for a short survey and randomly assigned to one of four experimental conditions. We aimed for a sample of 100 participants per experimental condition. Data collection ceased when total sample size reached our target number. A total of 399 participants (163 women, 234 men, 2 people of unspecified gender; mean age = 32 years) completed our survey.

In all conditions, participants read a scenario about a man named Chang who lived in China. They were asked to imagine that during Chang's recent visit to his primary care doctor, he

was told that he was at high risk of contracting lung cancer and should avoid smoking. Half the participants were assigned to read a *goal-aligned scenario;* they were told that Chang had wanted to quit smoking for a few years but he had never succeeded. The other half were assigned to read a *goal-misaligned scenario;* they were told that Chang had been tempted to start smoking a few years ago but he had never done so. Then all participants were told that Chang had just celebrated his 36th birthday the day before. Half the participants were assigned to the *new-beginning-landmark condition;* they were introduced to the concept of the 12-year Chinese zodiac cycle and were told that Chang's 36th birthday represented the beginning of a new zodiac cycle. The other half were assigned to the *control condition* and were not told about the Chinese zodiac cycle. Across experimental conditions, the 36th birthday marks the beginning of a new year for Chang, but when associated with the start of a new zodiac cycle it should be a stronger signal that Chang is beginning a substantially new phase.

Participants rated how motivated Chang would be to quit smoking (in the *goal-aligned scenario*) or start smoking (in the *goal-misaligned scenario*) the day after his 36th birthday (1 = not at all motivated to 7 = very motivated).[2] Then they rated to what extent the 36th birthday would feel like a new beginning to Chang (1 = not at all to 7 = very much). At the conclusion of our study, to confirm that participants had paid attention to the scenario they read, we asked them to select the correct description of Chang's nationality and smoking status from a multiple choice list. All of the results we report here are the same (in terms of statistical significance) whether or not we exclude the 25 participants who failed our comprehension check. We report the more conservative results below based on an analysis of our full participant sample; our Supplement reports even stronger results based only on participants who correctly answered our comprehension-check question.

Results

Our manipulation was effective: participants believed that Chang's 36th birthday would feel more like a new beginning to him in the *new-beginning-landmark condition* where his 36th birthday was described as corresponding to the start of a new zodiac cycle than in the *control condition* ($M_{new\_beginning}$= 4.95, *SD* = 1.73 vs. $M_{control}$ = 3.87, *SD* = 1.83, *t*(397) = 6.09, *p* < .0001).

Our theory predicts that by making people feel separated from their past imperfections, temporal landmarks signaling the beginning of a new period should increase the initiation of goal pursuit (such as the adoption of healthy habits) but should not stimulate engagement in *any* new activities, particularly not goal-incongruent activities (such as the adoption of bad habits). Consistent with our theory, we found that participants believed Chang would be more motivated to quit smoking in the *new-beginning-landmark condition* (*M* = 5.52, *SD* =

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[2]It is important to note that starting to smoke is not a neutral act but in fact a goal-incongruent one. Had we instead described an activity that was *not* incongruent with Chang's goals, in the context of a scenario it would likely be perceived as aspirational for Chang. Any neutral activity would naturally be viewed as goal-congruent if described as something an individual had intended to do but had not yet begun – that is, essentially, the definition of a goal (Fishbach & Ferguson, 2007). Thus, in order to rule out the possibility that people are inclined to start any new activity at the outset of a new time period (rather than solely activities related to goal initiation, as we hypothesize), the critical test was to find an activity that was clearly goal misaligned, hence our decision to study the choice to "start smoking."

1.29) than in the *control condition* ($M = 4.93$, $SD = 1.48$, $t(198) = 3.00$, $p = .003$), whereas participants believed Chang's motivation to start smoking would not differ between the *new-beginning-landmark condition* ($M = 1.49$, $SD = 1.12$) and the *control condition* ($M = 1.40$, $SD = 0.92$, $t(197)$, $p = .51$). A two-way ANOVA with Chang's motivation to adopt a new habit as the dependent variable confirmed that the interaction between the type of habit (quitting smoking vs. starting smoking) and the type of landmark (marking the beginning of a new zodiac cycle vs. control) was statistically significant ($F(1, 395) = 4.10$, $p = .044$). Figure 2 depicts the results of this experiment.

Discussion

When the same temporal landmark (a birthday) was associated with the start of a new zodiac cycle, people expected the landmark to motivate the pursuit of a goal (quitting smoking) but not the adoption of a goal-incongruent, unhealthy habit (starting smoking). These results alleviate the concern that our previous findings can simply be explained by people's inclination to start *any* new activity at the beginning of a new period.

Study 4

Study 4 examines a mechanism that we hypothesize contributes to the motivating effect of landmarks marking new beginnings: people feel more psychologically separated from their past, imperfect selves following such landmarks, which motivates goal initiation. Following previous research (e.g., Cryder, Loewenstein, & Scheines, 2013), we use mediation analysis to test our proposed underlying mechanism.

Method

We recruited 300 participants (123 women, 176 men, 1 person of unspecified gender; mean age = 32 years) online through Amazon's Mechanical Turk and randomly assigned them into one of two experimental conditions. We aimed for a sample of 150 participants per experimental condition. Data collection ceased when total sample size reached our target number. Participants were first asked to think of and briefly describe one goal they had not achieved and would like to pursue in the future.

Participants were then asked to imagine they had just moved to a new apartment that had a similar layout, rent, and commute to work as their previous apartment. They were randomly assigned to imagine either that they had moved for the first time since coming to this city nine years ago (*new-beginning-landmark condition*) or that they had moved every year since coming to this city (*control condition*). Participants then rated how motivated they would be after moving to this apartment to begin pursuing the personal goal they had described earlier (1 = not at all motivated to 7 = very motivated).

Next, participants were given the following prompt to think about the comparison between their current and past selves:

> Most people agree that they have not behaved perfectly in the past (or that their past self has imperfections). There are always some aspects of ourselves and our lives

that we would like to improve. Sometimes our imperfect, past self feels very far away, while at other times our past imperfections feel very close.

They were then asked to rate the psychological distance between their present and imperfect, past selves on three different scales. First, participants were presented with six pairs of Euler circles, which overlapped to varying degrees. Within each pair, one circle represented their imperfect past self one year ago (prior to the apartment move) and the other represented their current self. Participants were instructed to select whichever pair of circles best reflected their opinion of how far away they would feel today from their imperfect past self, where no overlap between circles meant "extremely far away" and complete overlap meant "extremely close" (adapted from Bartels & Rips, 2010). A second question (adapted from Wilson & Ross, 2001) asked participants to predict the extent to which they would feel *distant* from their imperfect past self (one year prior) (1 = extremely close to 7 = extremely far away). A final question (adapted from Bartels & Rips, 2010) measured participants' perceptions of the extent to which they would feel *different* from their imperfect past self (one year prior) (1 = exactly the same to 7 = completely different).

Results

We first conducted a manipulation check with a non-overlapping group of participants ($N = 141$) from our target study population. We confirmed that moving to a different apartment for the first time in nine years felt more like a new beginning ($M = 5.36$, $SD = 1.81$) than moving for the ninth time in nine years ($M = 2.54$, $SD = 1.79$, $t(139) = 9.29$, $p < .0001$).

Turning to our study sample, participants reported that they would be more motivated to start tackling their personal goal following a move in the *new-beginning-landmark condition* ($M = 5.05$, $SD = 1.73$) than in the *control condition* ($M = 4.42$, $SD = 1.89$, $t(298) = 2.98$, $p < .01$). We next standardized each of our three *psychological disassociation* ratings and averaged them (with the first rating reverse-coded) to create an index of *psychological dissociation* (Cronbach's $\alpha = .88$) in order to conduct mediation analyses. We followed standard procedures to test whether *psychological dissociation* mediated the relationship between landmarks signaling a new beginning and goal motivation (Preacher & Hayes, 2008). Consistent with our hypothesized mechanism, participants expected to feel more disconnected from their imperfect, past selves in the *new-beginning-landmark condition* ($M = 0.15$, $SD = 0.79$) than in the *control condition* ($M = −0.15$, $SD = 0.96$, $t(298) = 3.00$, $p < .01$). The composite *psychological-disassociation* score was a significant, positive predictor ($\beta = 0.24$, $p = .042$) when we included this measure and a *new-beginning-landmark condition* indicator variable in an ordinary least squares regression to predict participants' motivation to pursue their goals after an apartment move. A 5,000-sample bootstrap analysis showed that the 95% biased-corrected confidence interval for the size of the indirect effect ($b = 0.07$, $SE = 0.05$) excluded zero [0.003, 0.22], indicating a significant, positive indirect effect of the *new-beginning-landmark condition* (relative to the *control condition*) through the *psychological-disassociation* measure.

We replicated this mediation result in another scenario study (see the Supplement). As in Study 3, participants ($N = 200$) forecast a Chinese man's motivation to quit smoking and his perceived separation from his past imperfections following his 36th birthday. We found that

when this birthday was described as corresponding to a new 12-year zodiac cycle, participants predicted Chang would be more motivated to pursue his goal of quitting smoking ($p < .0001$), an effect mediated by psychological dissociation from past imperfections (95% biased-corrected CI = [0.01, 0.29]).

Discussion

Study 4 shows that when the same landmark (a move) is made to feel more like the beginning of a new period, it boosts goal-pursuit motivation in part by increasing the subjective distance separating the current self from the imperfect past self.

General Discussion

Our motivation to begin pursuing our aspirations fluctuates and can fail us entirely. The present research addresses major gaps in understanding of *when* people feel motivated to initiate goal pursuit. First, we demonstrate that temporal landmarks strongly associated with the beginning of a new period *cause* people to (a) engage in activities designed to facilitate goal initiation and (b) forecast that their and others' motivation to tackle goals will be higher. Only correlational evidence had previously linked temporal landmarks with goal initiation (Dai et al., 2014). Further, we proposed and show that temporal landmarks marking new beginnings inspire goal initiation in part by creating a psychological disconnect between a person's current and past inferior self. Thus, we elucidate *why* landmark-induced discontinuities in individuals' perceptions of time promote goal initiation.

Our investigation suggests opportunities for future research. First, future research should explore additional psychological processes that may contribute to our documented effect, which is likely multiply determined. For example, landmarks associated with a new beginning (e.g., a 40th birthday, a graduation) may disrupt individuals' attention to day-to-day minutiae (Smith, 2014) and stimulate big-picture thinking (Liu, 2008; Alter & Hershfield, 2014), which past research has shown promotes a focus on goals (Trope & Liberman, 2003). Second, landmarks that signal new beginnings may feel more meaningful to individuals and there may be a more general relationship between the perceived meaningfulness of a landmark and its motivating effect on goal pursuit. Future research could explore whether making a landmark event feel more meaningful without signaling that it represents a new beginning (e.g., by having people counterfactually simulate why the event might not have happened; Kray et al., 2010) may still spur goal initiation. In addition, some landmarks may trigger new beginnings by relegating a painful episode to the past (e.g., a divorce, a loved one's death; Schultz, Price, & Coulter, 2014). Future research could explore how landmarks associated with distressing closure change people's perspectives on life and intentions to take on new challenges.

Our findings have numerous practical implications. First, for individuals who hope to curtail bad behaviors but struggle with initiating goal pursuit, temporal landmarks that open new time periods may prevent vicious cycles of impulsive behavior stimulated by "what the hell" rationalizations (Cochran & Tesser, 1996). For managers and policymakers, tools and interventions designed to facilitate the pursuit of long-term goals (e.g., social comparisons, commitment devices; Chapman et al., 2014; Schwartz et al., 2014) may be better-received if

provided following landmarks at the beginning of a new cycle. Further, our work suggests that highlighting temporal landmarks that signal new beginnings may be a "nudge" (Thaler & Sunstein, 2008) capable of bolstering people's interest in engaging in goal-directed behaviors.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

Acknowledgments

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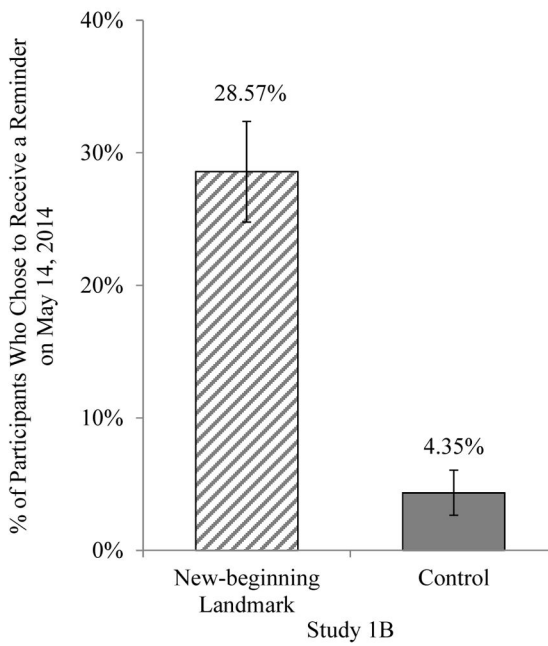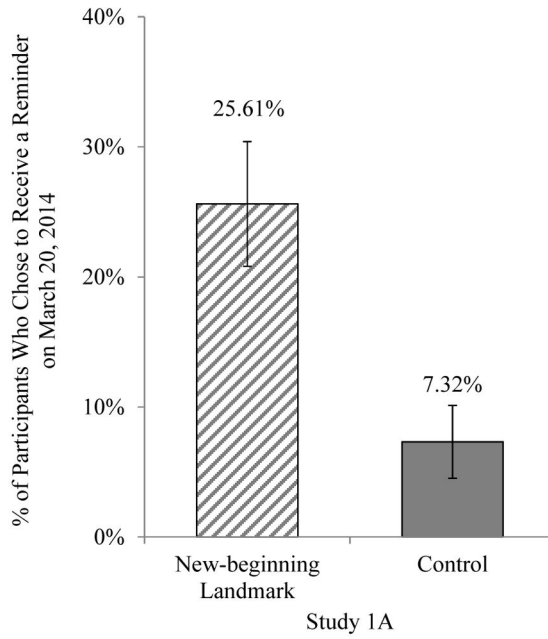
Figure 1.

Framing an otherwise identical date as a landmark corresponding to a new calendar period increases the likelihood that participants choose to receive a reminder about a goal on the date in question.
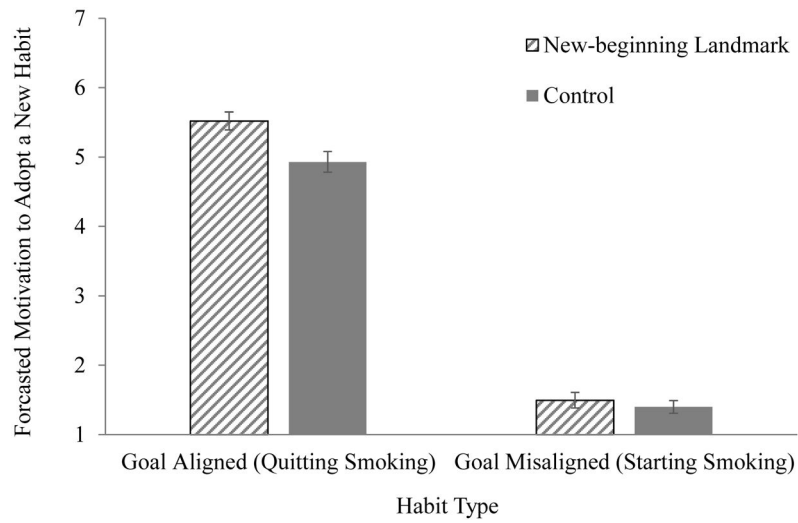
Figure 2.
Associating an otherwise identical landmark with the beginning of a new Chinese zodiac cycle increases the forecasted motivation of a Chinese man to adopt a goal-aligned healthy habit (but not a goal-misaligned unhealthy one).