TIAA Institute

Research Dialogue | Issue no. 223
December 2024

The life you save (for): Experiences dominate goods in motivating savings

Abstract

Prior research suggests that when consumers think about spending, experiences tend to take priority over goods. But does this experiential dominance extend to motivation to save, which requires long-term planning and constant motivation to achieve their goal in the future? Across two field studies and six preregistered experiments, consumers are more motivated to initiate a savings goal, save toward, and protect their progress toward experiential versus material goals. Further, analyses of real saving behavior further support experiential dominance in success rates and persistence in streaks. We suggest that this effect arises because consumers perceive experiential goals as more versatile, which can be adapted to satisfy more needs and better accommodate the uncertain preferences of their future selves. Supporting this account, we demonstrate that the effect of experiential (versus material) goals is stronger over a longer goal period and is less subject to goal gradient effects. Further, we reveal the effect is moderated by goal specificity. Together, these findings demonstrate that goals that are either related to or framed in terms of experiences better motivate savings, making both the encouragement of experiential goals and experiential framing a useful tool for policymakers, researchers, and consumers focusing on promoting saving and improving financial well-being.

Siyuan Yin
The Wharton School, University of Pennsylvania

Grant E. Donnelly
Fisher College of Business, Ohio State University

Cait Lamberton
The Wharton School, University of Pennsylvania

Michael I. Norton
Harvard Business School, Harvard University

Many consumers struggle with saving for the future (Baumeister, 2002; O'Donoghue & Rabin, 1999; Strotz, 1955; Thaler & Benartzi, 2004). In 2020, nearly half of all Americans reported having no money saved (Board of Governors of Federal Reserve, 2020) and an additional 27% reported they wouldn't be able to cover an expected $2,000 expense (Yakoboski et al., 2022). Despite a growing portfolio of interventions that have shown to support savings (e.g., tax incentives, Chetty et al., 2014; automatic enrollment with defaults, Thaler and Benartzi, 2004; age-progression and imagining the future, Hershfield et al., 2011, and Ellen, Weiner, and Fitzgerald, 2012), this deficiency appears to have become more pronounced in recent years, as the personal saving rate dropped to 3.9% in 2023, "well below a decades long average of roughly 8.9%" (Dickler, 2023; U.S. Bureau of Economic Analysis, 2024).

We propose that because savings goals necessarily relate to future consumption, consumers face uncertainty about the degree to which those goals will be desirable at the time the account is fully funded. As a result, goals that are seen as more versatile—that is, able to satisfy a wider range of future preferences or meet a wider variety of future needs—are more likely to motivate savings than those that are less versatile. Experiential goals, which are focused on attaining a life experience that may include many different types of events, opportunities, and perspectives, are on average perceived as more versatile than material goals, which are focused on ownership and possession of a fixed set of attributes and values (Van Boven & Gilovich, 2003). As such, we predict and find that consumers are more motivated to save for experiential goals than for material goals, as evidenced not only in self-reported savings intentions, but also in actual savings data, responses to advertisements for savings programs, and protection of savings-goal-related accounts.

We offer evidence consistent with this conclusion in one field study (N = 93,577), one field dataset evaluating real saving behavior over a 15-month period (N = 38,503), and six preregistered experiments (N = 5,813) across multiple saving contexts, including savings goal initiation, goal commitment, and goal persistence. We show process evidence that consumers perceive experiential (versus material) goals as more versatile, being able to adapt to meet different needs and preferences, and thus become more motivated to save toward their goal. In doing so, we also cast doubt upon alternative accounts, including the need for excitement, uniqueness, and perceived timing importance. Across these studies, we observe effect sizes range from .20 to .59, suggesting a finding that is not only consistently statistically significant, but that may be of substantial practical importance.

This research makes several contributions to the literature. First, while a vast body of research has examined the dominance of experiences over material goods in purchase preferences primarily focuses on the present (Goodman et al., 2019; Richins, 2013; Tully & Sharma, 2018; Van Boven & Gilovich, 2003), whether and why this dominance might extend to motivation to save has been underexplored. Our work converges with prior research in suggesting that experiences generally trump goods. Importantly, however, we find that the mechanism involved in savings differs from the mechanism that motivates spending and borrowing behaviors in that it reflects consumers' desire for goal versatility. Thus, though experiences win in savings as they do for many spending situations, we suggest a novel mechanism underlying this priority.

Second, we demonstrate that experiential goals are perceived as more versatile, being able to adapt to different purposes and satisfying multiple needs. Though past research had argued that consumers hedge against changes in future preferences by variety-seeking (e.g., Ratner et al., 1999), no prior work had identified a focus on experiences as another way for consumers to hedge against future uncertainty about their own preferences. Thus, we highlight goal versatility as an important new dimension of goals and demonstrate a particular case where it's a critical consumer perception.

Third, we introduce a simple tool—framing the same saving goal as experiential (versus material)—that can be utilized to design interventions to encourage consumers to save and achieve their goals by increasing the perceived versatility of saving goals, especially for those who are uncertain about their future needs and preferences. As framing is both low-cost and scalable, it may offer real potential for widespread use as well as, we hope, further real-world testing and investigation.

We next discuss the theoretical framework that drives our predictions and report one field study, one field dataset of real saving behavior, and six preregistered studies designed to test our account. We close with a discussion of the limitations the present studies include, as well as suggestions about future work that may help convert our findings into powerful tools for consumers wishing to save, policymakers wishing to promote savings, or firms or financial institutions that center the long-term financial well-being of their customers.

Theoretical framework

When consumers begin to experience utility very close to the time of a decision, that is, in spending, goods dominate experiences for many reasons. For example, consumers

prefer to spend a windfall on material items (Zhang, 2017), and when financially constrained, consumers prefer to purchase material goods because of their longevity (Tully et al., 2015). Consumers also associate material goods with more frequent momentary happiness (Weidman & Dunn, 2016) and may believe a material purchase will meaningfully transform their lives (Richins, 2013). Similarly, consumers prefer to give material gifts because of their tangible nature (Goodman & Lim, 2018). Further, material purchases feel more tangible and concrete (Goodman et al., 2016) and may generate greater commitment (Naylor & Ilgen, 1984; Wright & Kacmar, 1994).

However, savings present a fundamentally different challenge. Savings require consumers to contribute funds in the present in the interest of utility they won't experience until the savings goal is complete. Because this requires both planning and self-control, many consumers struggle to save (Baumeister, 2002; O'Donoghue & Rabin, 1999; Strotz, 1955; Thaler & Benartzi, 2004). Rather, they're likely to prioritize more immediate needs when given the choice to do so (Frederick et al., 2002).

One way, then, to promote savings, is by connecting consumers to their future self, who will ultimately experience the utility associated with the present actions. Tools like the activation of future orientation (Donnelly et al., 2012) and imagination of the future self (Ellen, 2012; Hershfield et al., 2011; Macrae et al., 2017; Robalino et al., 2023) bring the future into sharper focus and can therefore help consumers save.

We argue, however, that it's not only a focus on the future, but also consumers' intuitions about their preferences over the timespan evolving in a goal pursuit process that may alter their motivation to save for experiences as opposed to goods. This theory takes into account the gap between the decision to initiate a savings goal and its completion when consumers can experience utility. Past research suggests that consumers may anticipate that their preferences may not remain completely stable during this gap. For example, prior work on variety-seeking yields the classic finding that people overestimate the variability in their preferences over time, presuming they won't want the same yogurt three days ahead (Ratner et al., 1999). This argument is in line with work showing that when consumers consider longer temporal perspectives, the appeal of experiences as opposed to goods rises. For example, experiences are often evaluated with a higher-level construal (with more abstract, central features) and thus create more happiness than goods (Van Boven & Gilovich, 2003).

In the case of goals, the nature of experiential (versus material) goals thus helps us predict an advantage for the latter in motivating savings. Because experiences are inherently more multifaceted (Weingarten & Goodman, 2021), they tend to be subjectively defined and malleable in their interpretation or design. For example, experiences allow the consumer to build memories and experience a variety of emotions (Gómez-Corona & Valentin, 2019); are often shared with others or not, based on one's preferences (Caprariello & Reis, 2013); can help realize lower-level functional purposes and higher-level needs (Carter & Gilovich, 2010); and create a sense of achievement by building an experiential CV (Keinan & Kivetz, 2011). As such, an experience can often be redesigned to meet a consumer's present preferences. By contrast, consumers think of a good in terms of a specific set of attributes, which are expected to be fairly stable and enduring. Thus there's more risk in saving for a material good than for an experience, and the material good will be less motivating.

For example, one might have the goal to save for a guitar. If this goal is framed in terms of a good, motivation to save might be contingent on one's belief that by the time their savings account is funded, they still want a guitar—a specific item with specific attributes. However, if this goal is framed in terms of the experience the guitar provides— playing music for friends and family—the consumer will have more latitude to reinterpret the goal at the time of account funding in ways that match their preferences. For example, at that time they may decide that they like their friends much more than their family and will only play for a subset of the group, decide that they want to play different types of music, or decide to also take the guitar to local guitar events to make more connections with others.

Because experiential goals are perceived as more versatile, being able to adapt to different purposes to satisfy multiple needs and accommodate uncertain future preferences, we propose that consumers will be more motivated to save toward their experiential (versus material) goal. This is consistent with past research suggesting that experiential purchases increase happiness (e.g., Goodman et al., 2019; Kumar & Gilovich, 2016; Rosenzweig & Gilovich, 2012; Tully & Sharma, 2018; Van Boven & Gilovich, 2003; Weingarten & Goodman, 2021), create more intense positive feelings on individual occasions (Weidman & Dunn 2016), and offer slower adaptation over time (Nicolao et al., 2009).

If this theory is apt, we should see specific patterns in motivation to save. First, if it's true that consumers' preferences vacillate throughout the course of goal pursuit, our theory would predict not only greater initial motivation to save, but also higher tendencies to persist in savings for an experiential goal as opposed to a material goal. Second, if our theory is correct, we should observe differences in goal-pursuit patterns that differentiate further between experiential and material goals. When people save for a material goal, we expect typical goal gradient effects that link goal proximity to action (Hull, 1932; Kivetz et al., 2006), such that motivation increases strongly as people near

the completion of their savings goal. However, because versatility—the ability for an experiential goal to meet a range of consumer preferences—remains valued until the moment of goal completion, we expect this goal gradient effect to be weaker when people pursue experiential savings goals.

Alternative accounts. Though we predict an experiential advantage in goal pursuit, we note that this advantage emerges for savings in a way different than as previously shown for spending or borrowing decisions. One possible reason experiential goals may promote motivation to save is that consumers perceive paying for experiences as more urgent. Prior research suggests consumers are more likely to use financing options (i.e., borrowing money) to purchase experiential (versus material) goods due to perceived urgency or timing importance (Tully & Sharma, 2018). That is, when consumers consider experiential (versus material) purchases, they perceive a higher level of urgency and are reluctant to miss out on the focal experience, leading to a greater likelihood of borrowing. We first note that borrowing and saving are distinctly different behaviors, in that borrowing allows immediate access to utility, but savings do not. In that sense, it may be unlikely that the urgency associated with paying for experiential purchases will explain savings decisions in the same way as it does for borrowing. However, if urgency does play a role in the experiential dominance in savings, then we would expect the effect to primarily emerge when the time horizon to goal completion is shorter—such that the urgency can be satisfied quickly but weaken as the time horizon becomes longer, since longer time horizons are non-responsive to consumers' sense of urgency. If we observe this experiential dominance in savings becomes stronger with longer time horizons, we have reason to question whether perceived urgency is driving greater motivation associated with saving for experiential goals.

Another account for experiential dominance in savings concerns perceived uniqueness, as an experience tends to be subjectively defined, forms an essential part of one's identity, and thus is unique to each individual (e.g., Carter & Gilovich, 2012). We argue, however, unlike purchases, both experiential and material, that are often realized immediately and can allow unique interpretations to oneself, saving goals tend to be less specific, more uncertain, and thus more difficult for consumers to evaluate the uniqueness before they reach their goal. Therefore, the uniqueness account should not predict differences in saving motivation across goal types.

Third, past research indicates that consumers are less likely to seek fun and thus less likely to prefer mystery options when making material (versus experiential) purchases (Urumutta Hewage & He, 2022), suggesting that consumers may be less excitement-seeking when considering saving for their future material (versus experiential) goal. This account would predict that because people are less likely to seek excitement with material goals, they'll be less motivated to save toward their *uncertain* material (versus experiential) goal. However, we suggest this need for excitement account should not be at play because saving goals are predetermined and don't involve uncertainty in goals.

Overview of studies

To test our theory, we present one field study (N = 93,577), one field dataset that captures savings over an 18-month period (N = 38,503), and six preregistered studies (N = 5,813). Study 1 provides initial evidence that consumers are more likely to create a savings goal when prompted to consider a bucket list of experiences rather than a wish list of material goods. Studies 2A through 2C replicate the same effect of saving goals on saving motivations using multiple operationalizations of both goal type and saving motivation (e.g., goal commitment and goal protection). Study 3 presents an incentive-compatible savings context where saving decisions involve multiple rounds of trade-offs. Study 4 then examines the underlying mechanism, showing the mediating role of perceived versatility in explaining experiential dominance in motivating savings and ruling out alternative accounts along the way. Further supporting our proposed mechanism, Study 5 shows that the effect of experiential advantages is weakened when consumers consider saving for a general (versus specific) goal. Finally, Study 6 evaluates consumers' real savings behavior at an international bank over an 18-month period, examining the effects on goal achievement and persistence in goal pursuit.

In all studies except for Studies 1 and 6, we determined sample size in advance based on the effect size from pilot studies. For Studies 1 and 6, sample sizes were determined by our field partners' permitted reach.

Study 1: Initial evidence of experiential advantage in savings motivation

As an initial test of our theory, we partnered with HelloWallet, a financial management online and mobile application that provides personalized financial guidance to members. After manipulating savings prompts to be either experiential or material, we assessed members' likelihood to create a savings goal.

Methods

We sent a promotional email to a segment of HelloWallet users (N = 93,577), encouraging them to create a savings goal in the HelloWallet application. The email was deployed on December 18, 2016, with the subject, "Save More with HelloWallet in 2017." In the body of the email, we varied the text and imagery used to encourage people to create

a savings goal. Specifically, participants assigned to the experiential [material] savings goal condition were presented with an image of a person's bucket list (or wish list) with three items: 1. dinner at a nice restaurant (or a pair of jeans), 2. tickets to a show (or a designer watch), 3. beach vacation (or a laptop). Following the image, a headline read: "Are you ready to cross off the next item on your bucket list [wish list]?" Additional text read: "Everyone has something on their bucket list [wish list]. What's next on yours? See if you can afford the next experience [thing] you want in life with HelloWallet's Savings & Debt Guidance. HelloWallet will provide guidance on the spending goal you create, helping you plan your savings so that you can confidently spend on what will make you happy."[1] Below this prompt we provided users with a button that read "Create a Savings Goal," which would allow them to create a savings goal account they could allocate money into in the new year. Our dependent variable of interest was whether a user clicked this button in the data collection window (between December 18 and December 21, 2016). Thus, we operationalized motivation as interest in establishing a savings goal.

Results

To test our theory, we analyzed data that captured whether users opened the email and whether they clicked the button to create a savings goal.

Likelihood of opening the email. We first established that we didn't observe different open rates based on message type, which might have explained subsequent differences in clicks on the focal button. A logistic regression predicting whether the email was opened (1 = yes, 0 = no) from experimental condition (1 = experiential, 0 = material) revealed a nonsignificant effect ($M_{\text{experiential}}$ = 19.70%, versus M_{material} = 19.80%; $b_{\text{experiential}}$ = .01, SE = .016, $Wald$ = .109, p = .74).

Likelihood of creating a savings goal. We next assessed whether there was a difference by condition as to whether users clicked to start a savings goal. As only those who opened the email were exposed to our experimental treatment, we conducted a treatment-on-treated analysis, only evaluating participants who had opened the email across conditions (N = 18,505). A logistic regression predicting whether the button was clicked (1 = yes, 0 = no) from experiential condition (1 = experiential, 0 = material) also revealed a significant effect ($M_{\text{experiential}}$ = 1.3%, versus M_{material} = 0.5%; $b_{\text{experiential}}$ = .89, SE = .17, $Wald$ = 27.06, p < .001). Thus, the treatment-on-treated analysis revealed that users who read an experiential prompt were 160.00% more likely to click the button to create a savings goal. When those who were not exposed to the experimental conditions were included, with an intent-to-treat analysis, we also observed a significant effect of goal type ($M_{\text{experiential}}$ = 0.3%, versus M_{material} = 0.1%; $b_{\text{experiential}}$ = .87, SE = .17, $Wald$ = 26.59, p < .001). Across the sample as a whole, those who were sent the experiential (versus material) prompt were 138.78% more likely to click the button to create a savings goal.

Discussion

This study provides initial evidence that consumers are more likely to click the button to create a savings goal when they read about a prompt encouraging saving for a bucket list or wish list of three experiential (or material) items. Because a goal can only be pursued once it's set, this initial motivation is a critical step in consumers' progress toward their desired financial objectives. Further, even when accounting for consumers who may not attend to email communications, this study suggests that firms using experiential prompts may see very substantial aggregate increases in consumers' interest in savings programs.

However, a one-click decision is a limited operationalization of motivation. Unfortunately, in Study 1 we were unable to capture evidence of consumers' intention to carry out their savings plan, and this exploration stops far short of allowing exploration of actual goal pursuit behavior. Thus, subsequent studies attempt to both replicate effects on motivation in controlled settings and, in later studies, examine incentive-compatible sequential saving decisions and real savings behavior to see if these differences in motivation manifest in consumers' decisions. Studies 2 through 6 also control for differences in the inherent likeability of goals and examine other potential alternate explanations.

Study 2: Replication and robustness of experiential advantage in savings

Studies 2A through 2C seek conceptual replication of the differential motivation observed in Study 1 in more controlled environments, with different operationalizations of goal type and motivation. Study 2A uses self-generated savings goals and captures motivation in the form of intended savings amounts. Study 2B examines commitment to experiential versus material savings goals in the face of the immediate affordability of an inferior substitute. Study 2C considers an

1 HelloWallet also administered an additional independent variable outside the goals of this study to evaluate the effectiveness of goals for the self versus others. The text remained the same except people were prompted to think of their loved one's bucket list or wish list instead of their own. This variable didn't produce any significant effects, nor did it produce any significant interactions with our experiential versus material manipulation (ps > .95), see Web Appendix for full reporting with this variable. Unfortunately, we weren't able to obtain any data about members' behavior after clicking the button to indicate interest in setting up a goal.

alternate operationalization of commitment, examining the extent to which the existing experiential (or material) savings account is protected from being drawn for an emergency expense.

Study 2A

Methods

This study was preregistered (https://aspredicted.org/7RM_K3H) for 1,000 participants on Prolific Academic. A total of 1,000 participants completed the study. We excluded 42 participants who failed to follow instructions to think of an experiential or material purchase, thus data were analyzed with the remaining 958 individuals (49% females; M_{age} = 39.24, SD = 13.82, Range = [18, 93]).

We randomly assigned participants to either the experiential or material saving goal condition. In the *experiential savings goal* condition, participants read, "Many people try to make themselves happier. One way of doing this is by purchasing experiences. These purchases involve spending money with the primary intention of acquiring a life experience—an event or series of events that you personally encounter or live through (rather than a tangible object). In the space below, we would like you to think of one experiential purchase that would make you happier. This should be a purchase that you currently cannot afford but would like to save money for. It costs less than $2,000." They were then asked to describe one experiential savings goal that would make them happier. In the *material savings goal* condition, participants read, "Many people try to make themselves happier. One way of doing this is by purchasing material items. These purchases involve spending money with the primary intention of acquiring a material possession—a tangible object that you obtain and keep in your possession (rather than a life experience). In the space below, we would like you to think of one material purchase that would make you happier. This should be a purchase that you currently cannot afford but would like to save money for. It costs less than $2,000." They were then asked to describe one material savings goal that would make them happier. In both conditions, participants were asked to think of one savings goal that should involve a purchase they currently couldn't afford but would like to save money for.

After thinking of one savings goal, all participants were asked to imagine they had $200 in discretionary money. They were asked how much they'd save toward that savings goal on a sliding scale ranging from $0 to $200. This served as our measure of motivation to save. Following this measure, participants were asked (1) how desirable is [piped savings goal] to you from 1 (*Not at all desirable*) to 7 (*Very desirable*); (2) how much they liked [piped saving goal] from 1 (*Not at all*) to 7 (*A lot*); and (3) how much they cared about [piped saving goal] from 1 (*Not at all*) to 7 (*A lot*). All three questions were on a seven-point scale. We computed the average of these three measures to create a liking composite (Cronbach's α = .85) and controlled for differences in the inherent likeability of goals subsequently.

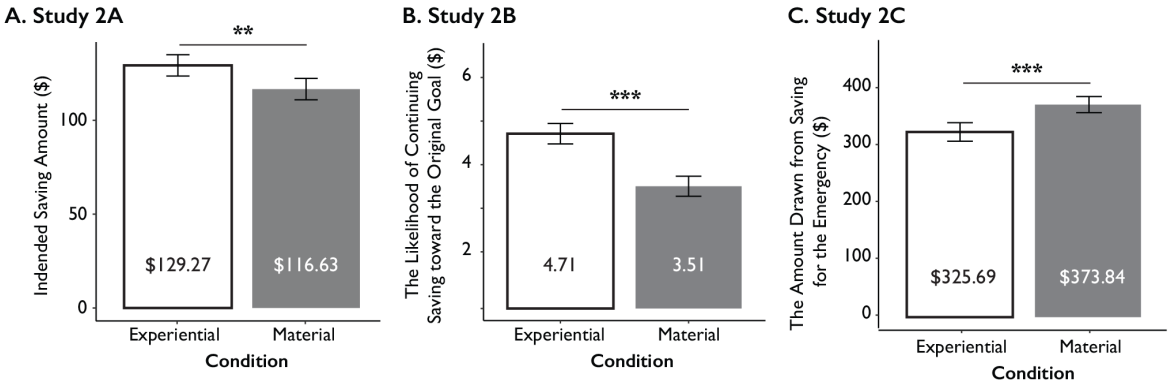
At the end of the survey, participants were introduced to the definition of experiential and material goals and then asked to rate their savings goal from 1 (*Definitely material*) to 7 (*Definitely experiential*) as a manipulation check and reported general demographics.

Results

Manipulation check. As intended, participants in the experiential goal condition rated their saving goal as more experiential than those in the material goal condition: $M_{experiential}$ = 6.32, SD = 1.21 versus $M_{material}$ = 2.27, SD = 1.39, d = 3.11; $b_{experiential}$ = 4.06, SE = .08, $t(956)$ = 47.99, p < .001, 95% CI = [3.89, 4.22], β = .84.

Motivation to save. A linear regression predicting the saving amount from a dummy variable of the saving goal conditions (experiential = 1, versus material = 0) revealed that participants were motivated to save more when considering an experiential (versus material) goal ($M_{experiential}$ = $129.27, SD = $61.95 versus $M_{material}$ = $116.63, SD = $64.78, d = .20; $b_{experiential}$ = 12.64, SE = 4.10, $t(956)$ = 3.08, p = .002, 95% CI = [4.59, 20.69], β = .10). Importantly, the same effect of experiential (versus material) goal on saving intention remained significant when we controlled for the liking index ($b_{experiential}$ = 10.04, SE = 3.85, $t(955)$ = 2.61, p = .009, 95% CI = [2.48, 17.60], β = .079).

FIGURE 1
STUDIES 2A–2C: SAVINGS INTENTIONS ACROSS GOAL TYPES



Note: Participants reported saving more toward a self-generated experiential (versus material) goal (Study 2A), were more likely to continue saving for their primary experiential (versus material) goal (versus spending on a immediately affordable, inferior substitute; Study 2B), and drew less from their existing savings for an experience (versus good) to cover an emergency expense (Study 2C). All error bars represent 95% confidence intervals. ** $p < .01$, *** $p < .001$.

Study 2B

Methods

Building on past work (e.g., Frederick et al., 2002) that identifies the opportunity to access utility in the short-term as a common threat to long-term goals, despite the greater value of the latter, this study captures motivation to save in terms of participants' resistance or willingness to spending on an inferior, immediately affordable substitute rather than continue saving for an experiential versus material goal.

This study was preregistered (https://aspredicted.org/5G8_4JS) for 600 participants on Prolific Academic. A total of 603 participants completed the study. We excluded seven participants who failed to recall the item in the scenario, so data were analyzed with the remaining 596 individuals (50% females; M_{age} = 36.96, SD = 12.96, Range = [18, 75]).

We randomly assigned participants to one of two between-subject conditions: experiential versus material saving goal. In the *experiential saving goal* condition, participants imagined they'd been saving for a seven-day trip to a country they'd always wanted to visit, and the estimated cost of the trip was about $5,000. We then introduced the option to buy an immediately affordable inferior substitute: They received an email advertisement about a three-day trip to a country they also liked, but not as much as the country they always wanted to visit, for a lower price (approximately $500).

In the *material saving goal* condition, participants imagined they'd been saving for a luxury smartwatch made by their favorite brand with seven features they really liked. The estimated cost of the smartwatch was about $5,000. As in the experiential condition, we then introduced the option to spend $500 an immediately affordable inferior substitute: They received an email advertisement about a smartwatch from a brand they liked, but not as much, and which had three features that they really liked, for a lower price (approximately $500).

After reading the advertisement, participants were then asked how likely they would be to keep their savings (versus spending $500 on the immediately affordable, inferior substitute) on a seven-point scale from 1 (*Definitely spend on the three-day trip to the country [the smartwatch with three features from a brand] that you like, but not as much*) to 7 (*Definitely keep saving for seven-day trip to the country you always wanted to visit [luxury smartwatch made by your favorite brand, which has seven features that you really like]*).

In addition, participants were also asked about the desirability of the original, larger savings goal and the alternative, smaller purchase on a seven-point scale from 1 (*Not at all*) to 7 (*Very desirable*). At the end of the survey, participants reported their demographic information.

Results

Motivation to save. To test motivation to save in this study, we examined the effect of experiential (versus material) savings goal on the likelihood of continuing to save for the original goal (instead of opting for the immediately affordable inferior substitute). A linear regression predicting the likelihood that the participant would keep saving for the original, larger goal from a dummy variable of the savings goal

conditions (experiential = 1, versus material = 0) revealed a greater likelihood to keep saving for the original, larger goal (versus spending $500 on the inferior substitute) when saving for an experiential (versus material) goal ($M_{experiential}$ = 4.71, SD = 2.05 versus $M_{material}$ = 3.51, SD = 2.02, d = .59; $b_{experiential}$ = 1.21, SE = .17, $t(594)$ = 7.22, p < .001, 95% CI = [.88, 1.53], β = .28). Results held when controlling the desirability of the original savings goal and the immediately affordable inferior substitute ($b_{experiential}$ = .98, SE = .15, $t(592)$ = 6.39, p < .001, 95% CI = [.67, 1.28], β = .23).

Study 2C

Methods

This study was preregistered (https://aspredicted.org/QJ7_R8H) for 1,000 participants on Amazon Mechanical Turk. A total of 1,004 participants completed the study. We excluded forty-four participants who failed to recall the item in the scenario and eighty-four participants who indicated drawing more than $460 from their savings, so data were analyzed with the remaining 876 individuals (54% females; M_{age} = 40.44, SD = 12.57, Range = [18, 83]).

We randomly assigned participants to either the experiential or material savings account condition. In the *experiential savings account* condition, participants imagined that they had been saving for a seven-day trip to a country they'd always wanted to visit at an estimated trip cost of about $2,000. In the *material saving account* condition, participants imagined they'd been saving for a luxury smartwatch made by their favorite brand with seven features they really like and an estimated cost of about $2,000.

All participants then imagined they'd saved $460 so far. Participants then learned they needed to quickly obtain $800 to pay for an emergency, and the only money they had available was the $460 in savings, intended for the trip [smartwatch] and earning 1% interest. They could withdraw this money with no penalty. They could also borrow from a credit card at a low interest rate of 2%. Participants were asked to state how much money they'd take from the savings they set aside for the trip [smartwatch], and how much they'd borrow using a credit card, with the sum to be $800. Our primary dependent variable is how much participants would take from the earmarked savings account. Higher amounts indicated weaker protection for the savings account, and thus signaled lower motivation related to the savings goal.

As a covariate, participants were also asked how desirable they thought this trip [smartwatch] would be on a seven-point scale from 1 (*Not at all*) to 7 (*Very desirable*) and the extent to which they considered a trip [smartwatch] to be more material or more experiential on a seven-point scale from 1 (*Definitely material*) to 7 (*Definitely experiential*). At the end of the survey, participants reported their demographic information.

Results

Manipulation check. As intended, participants in the experiential saving account condition considered a trip to be more experiential (M = 6.60, SD = .84) and those in the material saving account condition considered a smartwatch to be more material (M = 2.30, SD = 1.60).

Motivation to save. To test motivation to save in this study, we estimated a linear regression predicting the amount participants would draw from their savings for the emergency from a dummy variable of the savings goal conditions (experiential = 1 versus material = 0). This analysis revealed that participants drew less money from an experiential saving account than from a material saving account ($M_{experiential}$ = $325.69, SD = $176.71 versus $M_{material}$ = $373.84, SD = $148.42, d = .29; $b_{experiential}$ = -48.15, SE = 11.07, $t(874)$ = -4.35, p < .001, 95% CI = [-69.87, -26.42], β = -.15). These results remained when controlling for the desirability of the savings goal ($b_{experiential}$ = -25.64, SE = 12.20, $t(874)$ = -2.10, p < .001, 95% CI = [-49.59, -1.69], β = -.078).

Discussion

Studies 2A through 2C provide robust evidence for the effect of experiential (versus material) goals on saving motivations. Specifically, consumers save more toward a self-generated experiential (versus material) goal, are more committed to saving for an experiential (versus material) saving goal when offered an immediately affordable inferior good, and protect an experiential (versus material) savings account more by drawing less from their existing savings to cover emergency expenses. Further, we find that these effects persist even when potential differences in the inherent desirability of savings goals were controlled for. While these differences may exist in some contexts, it appears they don't fully explain the effects observed in these experiments.

To this point, however, we haven't observed actual savings behavior. Thus, it's unclear whether the motivation to save may simply reflect a momentary difference, but not one that would persist between the time when the savings goal is initiated and when it's complete. We designed Study 3 to allow us to experimentally examine motivation over a more extended period.

Study 3: Experiential advantage in incentive-compatible sequential decisions

So far, we demonstrate that consumers reported higher savings intentions when considering saving for experiential (versus material) goals across various contexts, including saving goal initiation, saving intentions for self-generated

goals, protecting and commitment to existing saving goals. Study 3 explores the experiential advantage in motivating savings with an incentive-compatible design that involves multiple saving decisions. We manipulated the framing of savings goals either as experiential (e.g., hiking trip) or material (e.g., hiking gear). All participants first earn points toward their savings account by completing a ten-trial counting task. They then view a series of items, one at a time, and decide whether to keep their savings for the primary goal or spend their savings on an item. The items weren't directly related to the primary goal, so any spending on these items would reduce the savings for their primary goal. We measure the number of points participants keep in their savings account as saving motivation. We suggest that the more points participants keep in their savings account, the more motivated they are to save toward their primary goal. Thus, we predict that participants who consider an experiential (versus material) goal will be more motivated to keep saving for their primary goal, instead of spending on items at the moment.

Methods

This study was preregistered (https://aspredicted.org/VZB_5VT) for 800 participants on Prolific Academic. A total of 792 participants completed the study. We excluded four participants who failed to recall their savings goal, so data were analyzed with the remaining 788 individuals (49% females; M_{age} = 44.35, SD = 13.84, Range = [18, 81]).

We randomly assigned participants to either the experiential or material goal condition. In the *experiential goal* condition, participants first chose one of the five trips to a national park as their saving goal (i.e., Yellowstone, Yosemite, Zion, Rocky Mountain, and Acadia National Park). In the *material goal* condition, participants first chose one of the five well-rated camping tents as their saving goal (i.e., NEMO Hornet OSMO Ultralight 3P, Duplex, Big Agnes Copper Spur HV UL2, REI Co-op Half Dome SL 2+, and SlingFin Portal). Participants in both conditions considered saving $500 for their primary goal.

All participants were then asked to complete ten trials of a counting task adapted from Yin and Sharif (2024). They earned 100 points per trial and for a total of 1,000 points. Following the counting task, participants viewed a series of 20 products, one at a time, and decided whether to spend their points on these products or keep their points for their primary goal. The 20 products were randomly presented to participants sequentially and approximately equally valued ranging from $10 to $20, such as Magnelex Magnetic Wristband for Holding Tools, Screws, Nails, Bolts, Drilling Bits ($9.99), Pineapple Shaped Bamboo Serving and Cutting Board ($19.99), Wooden Wood Clock ($15.99), and Etched Wooden Coaster Set ($19.98). Each product costs 200 points. Participants learned that two participants would be randomly selected to implement their decisions for real. That is, they would actually receive the points from the counting task, and their decisions of how to spend the money would be implemented (i.e., they would receive their chosen items and/or receive a bonus on a gift card that can be used toward their primary goal, which was the remaining points divided by a random number ranging from 12.5 to 25). Our primary dependent variable was how many points participants kept in their savings account for their primary goal.

Lastly, participants were asked the extent to which they thought their saving goal as experiential versus material as a manipulation check on a seven-point scale from 1 (*Purely material*) to 7 (*Purely experiential*). Participants reported their demographic information at the end of the survey.

Results

Manipulation check. As intended, participants who considered a hiking trip in the experiential condition perceived their goal as more experiential than those who considered a hiking tent in the material condition ($M_{experiential}$ = 6.49, SD = .94 versus $M_{material}$ = 4.08, SD = 1.70, Cohen's d = 1.76; p < .001, 95% CI = [2.20, 2.61]).

Motivation to save. To compare saving motivation across conditions, we conducted a linear regression to regress the remaining points in the savings account on a dummy variable of the savings goal condition (experiential = 1, material = 0). Replicating the same effect in previous studies, participants with an experiential goal saved more points toward their primary goal than those with a material goal, $M_{experiential}$ = 734.17, SD = 339.19 versus $M_{material}$ = 653.33, SD = 369.01, Cohen's d = .23; $b_{experiential}$ = 80.80, SE = 25.24, t(786) = 3.20, p = .001, 95% CI = [31.29, 130.39], β = .11. Further, we found that participants who considered saving for a hiking trip were more likely to save all points (no spending at all; 49.25%, SD = .50) than those who considered saving for a hiking tent (40.26%, SD = .49), Cohen's d = .18, $b_{experiential}$ = .36, SE = .14, z = 2.53, p = .011, 95% CI = [.08, .65], β = .37.

Discussion

Study 3 demonstrates the robustness of the effect of an experiential (versus material) goal on savings in an incentive-compatible design that involves a series of tradeoffs between saving for a primary future goal and spending now for immediate satisfaction. Not only were participants more motivated to save toward their primary goal by spending less on items that were irrelevant to their goal, but also they were more likely to keep all their savings without spending at all. The results provide further support for the effect especially when multiple tradeoff decisions were required.

Study 4: The role of perceived versatility

We suggest that consumers are more motivated to save toward their experiential (versus material) goals, because experiential goals are perceived more versatile, which can be adapted to different activities and functions to satisfy multiple needs and accommodate future preferences, thus leading consumers to become more motivated to pursue their goals. Studies 4A through 4B tested the proposed mechanism by measuring the extent to which people perceive their saving goal to be versatile to meet their future preferences, in comparison with a series of alternative accounts, including sociality, need for excitement, timing importance and perceived uniqueness of saving goals. Notably, Study 4 held constant the saving goal across conditions by merely manipulating the framing of the saving goal (saving for a guitar).

Method

This study was preregistered (https://aspredicted.org/NLP_SPY) for 1,000 participants on Prolific Academic. A total of 999 participants completed the study. We excluded one participant who failed to recall the item in the scenario, so data were analyzed with the remaining 998 individuals (48% females; M_{age} = 42.05, SD = 13.87, Range = [18, 81]).

We randomly assigned participants to one of two between-subject conditions: experiential versus material framing. All participants imagined they'd been saving for a new guitar. In the *experiential framing* condition, participants read, "When you think about a new guitar, you think about it in terms of a specific event or series of events you live through. For example, you may appreciate its sound and life experiences it brings to you when you play it." In the *material framing* condition, participants read, "When you think about a new guitar, you think about it in terms of being a physical object. For example, you may appreciate its material, color, and other aesthetic features on the wall." Participants then imagined that this summer they were considering a number of attractive guitars available on the market for purchase and had $200 in discretionary money. They were asked how much they would save toward this new guitar on a slider scale ranging from $0 to $200.

After participants reported their savings intention, they were asked to list all the ways they'd benefit from acquiring this new guitar (across conditions, we required participants to list at minimum one benefit, but they could list up to 10 benefits), and the extent to which they thought this new guitar would be versatile (able to be adapted to many different purposes, e.g., different activities or different functions) on a seven-point scale from 1 (*Not at all*) to 7 (*Very versatile*). We counterbalanced the order of the versatility and listing measures. We asked two hypothesis-blind, independent research assistants to code the number of unique ways participants listed they'd benefit from acquiring the guitar. After removing seven nonsensical responses, we had 991 responses for this measure.

To examine alternative accounts for the effect, we also asked the following questions: (1) perceived timing importance (two items; adapted from Tully and Sharma, 2018; Cronbach's α = .94) from 1 (*Not at all*) to 7 (*Very*): "To what extent do you think purchase timing is important for the purchase of the guitar?" and "To what extent do you think purchase timing is relevant for the purchase of the guitar?" (2) uniqueness (four items, adapted from Şimşek and Yalınçetin, 2010; Cronbach's α = .96) from 1 (*Not at all*) to (*Very much*): "The guitar is unique," "The guitar has characteristics that distinguish it from others," "The features that make up this guitar are different from others," "Some of the characteristics of the guitar are completely unique to it;" and (3) need to excitement (three items, adapted from Urumutta Hewage and He, 2022; Cronbach's α = .94) from 1 (*Not at all*) to 7 (*Very much*): "While thinking about the guitar, to what extent do you feel like you need excitement [liveness, simulation]?"

Lastly, we asked participants the estimated cost and the same three-item desirability scale of their saving goal as covariates (Cronbach's α = .97) as in Study 2A. Also, participants were asked the extent to which they thought of a guitar as experiential versus material as a manipulation check on a seven-point scale from 1 (*Purely material*) to 7 (*Purely experiential*). Participants reported their demographic information at the end of the survey.

Results

Manipulation check. We examined whether framing the same item (i.e., guitar) was effective in changing the perception of a guitar by comparing the manipulation check questions across framing conditions. As expected, participants in the experiential framing condition considered a guitar to be more experiential than those in the material framing condition ($M_{experiential}$ = 4.47, SD = 1.52 versus $M_{material}$ = 3.78, SD = 1.67, Cohen's d = .43; $b_{experiential}$ = .69, SE = .10, $t(996)$ = 6.86, p < .001, 95% CI = [.50, .89], β = .21).

Motivation to save. We examined participants' savings intention in a linear regression, predicting savings intentions from a dummy variable of the goal framing conditions (experiential = 1 versus material = 0). As predicted, participants saved more toward a guitar framed as experiential than toward a guitar framed as material ($M_{experiential}$ = $121.50, SD = $53.37 versus $M_{material}$ = $102.64, SD = $51.69, d = .36; $b_{experiential}$ = 18.82, SE = 3.33, $t(996)$ = 5.66, p < .001, 95% CI = [12.29, 25.29], β = .18) (Figure 1D). The same results remained when controlling for the desirability of the saving goal and perceived cost of the guitar ($b_{experiential}$ = 13.39, SE = 3.26, $t(994)$ = 4.10, p < .001, 95% CI = [6.99, 19.80], β = .13).

Mediators. We then compared the difference in the mechanism measures between experiential and material framing conditions. See Table 1 for full reporting of all measures. As predicted, participants listed more ways they'd benefit from acquiring the new guitar and perceived it to be more versatile when the guitar was framed as experiential rather than material. Consistent with prior research, participants also reported greater need for excitement and timing importance when considering a guitar framed as experiential (versus material). We didn't observe significant differences in uniqueness across framing conditions.

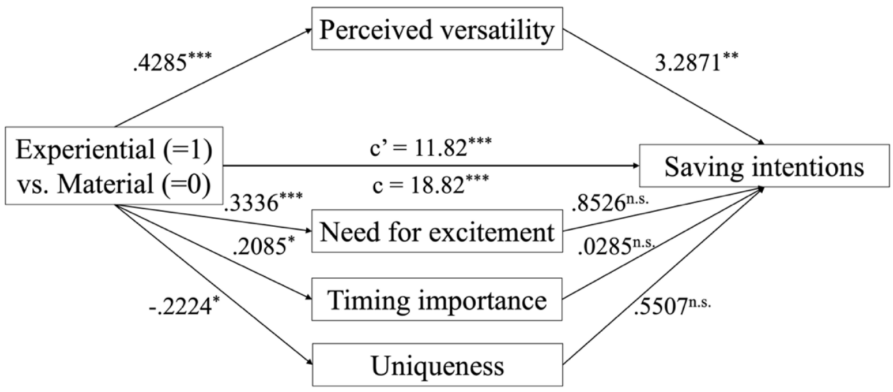
TABLE 1
STUDY 4: MEAN, STANDARD DEVIATION AND REGRESSION RESULTS OF MECHANISM MEASURES

Measures	Framing conditions		*b*(experiential)	*t*	Cohen's *d*
	Experiential	Material			
Number of benefits	3.72 (1.93)	3.40 (1.70)	.32	2.78**	.18
Perceived versatility	4.60 (1.59)	3.95 (1.61)	.62	6.49***	.41
Need for excitement	5.15 (1.47)	4.51 (1.64)	.65	6.56***	.42
Timing importance	4.63 (1.67)	4.23 (1.70)	.40	3.80***	.24
Uniqueness	4.31 (1.50)	4.25 (1.56)	.06	.58	.04

Note: The standard deviation is included in parentheses. ** $p < .01$, *** $p < .001$.

We next tested the role of these potential mechanisms in mediating the effect of goal framing (experiential = 1 versus material = 0) on saving intentions. Specifically, we conducted a bootstrapped parallel mediation analysis with 10,000 samples (Model 4; Hayes, 2013) with perceived versatility, need for excitement, timing importance and uniqueness as parallel mediators, including desirability and estimated cost as covariates (Figure 2). We found that perceived versatility significantly mediated the effect of experiential (versus material) framing on saving intentions, thus confirming our proposed mechanism: $a \times b$ = 1.4084, SE = .6473, 95% CI = [.2926, 2.8221]. However, the other measures didn't mediate the effect: need for excitement $a \times b$ = .2844, SE = .5435, 95% CI = [-.7570, 1.4136]; timing importance $a \times b$ = .0059, SE= .2595, 95% CI = [-.5334, .5604]; uniqueness $a \times b$ = -.1225, SE = .3165, 95% CI = [-.7720, .5233].

FIGURE 2
STUDY 4: POTENTIAL MEDIATORS



Moreover, we conducted a bootstrapped parallel mediation analysis with 10,000 samples (Model 4; Hayes 2013) with the number of ways participants would benefit from acquiring the guitar that was framed as experiential (versus material), need for excitement, timing importance, and uniqueness as parallel mediators, including desirability and estimated cost as covariates. We found that participants listed more ways they'd benefit from acquiring a guitar when framed as experiential (versus material) (Table 1). Further, we also found that the number of unique ways participants listed they'd benefit from acquiring a guitar in terms of experiences (versus material) aspects also significantly mediated the effect of experiential framing on saving intentions: $a \times b$ = .6740, SE = .3888, 95% CI = [.0492, 1.5582], further supporting our proposed mechanism.

Discussion

Study 4 further provides supportive evidence for the experiential dominance over goods in saving. Holding constant the savings goal (saving for a guitar) but framing it as experiential (versus material), consumers perceived their saving goal as more versatile, being able to adapt to satisfy multiple needs and accommodate future uncertain preferences, which leads them to become more motivated to save toward their goal as a result. Importantly, we don't find evidence for other alternative accounts including sociality, need for excitement, timing importance, and perceived uniqueness of the saving goal, suggesting they may not account for the experiential dominance in motivating savings.

Furthermore, Supplemental Study A reconciles the current and prior research by demonstrating differences in the way experiences promote savings as compared with the mechanisms that underlie borrowing.

Study 5: Moderation by goal specificity

We've shown that consumers are more motivated to save toward their experiential (versus material) goal because experiential goals are perceived to be more versatile and can be adapted to satisfying different needs and future preferences. If this versatility account is true, when considering a savings goal at an abstract level, such as a category (e.g., electronics and trips), consumers should perceive their savings goal to be more versatile. This is because within a category, multiple options allow consumers to adapt to satisfying their needs and preferences. In contrast, when considering a savings goal that is specific, such as a trip to Rome and an espresso machine, consumers should perceive that specific savings goal to be less versatile. Therefore, we expected the effect of experiential (versus material) saving goals on saving to attenuate with saving categories. To test this account, in Study 5, we manipulated whether consumers consider saving toward a specific goal or a saving category.

Methods

This study was preregistered (https://aspredicted.org/BZP_SPF) for 1,600 participants on Connect. A total of 1,606 participants completed the study. We excluded thirteen participants who failed to recall the item in the scenario, so data were analyzed with the remaining 1,593 individuals (50% females; M_{age} = 38.69, SD = 13.52, Range = [18, 83]).

We randomly assigned participants to one of two goals (experiential versus material) by two between-subject conditions (abstract versus concrete). In the *abstract experiential goal* condition, participants considered saving for a vacation trip. In the *abstract material goal* condition, participants considered saving for an electronic appliance. In the *concrete experiential goal* condition, participants considered saving for a vacation trip to one of the five cities: Rome, Geneva, Munich, Marseille and Vienna. In the *concrete material goal* condition, participants considered saving for one of the five electronic appliances: an outdoor grill, an espresso machine, a stereo system, a laser projector and a juicer. All participants learned that their target goal was $2,000 and they planned to reach their goal in the next two years. After learning about their savings goal, participants imagined they had $400 in discretionary money and indicated how much they'd save toward their goal on a slider from $0 to $400. Participants next reported, as in Study 4, the extent to which they thought their saving goal would be versatile (adapt to many different purposes, e.g., different activities or different functions) on a seven-point scale from 1 (*Not at all*) to 7 (*Very versatile*). Lastly, participants indicated the desirability of their saving goal and responded to a manipulation check question as in previous studies.

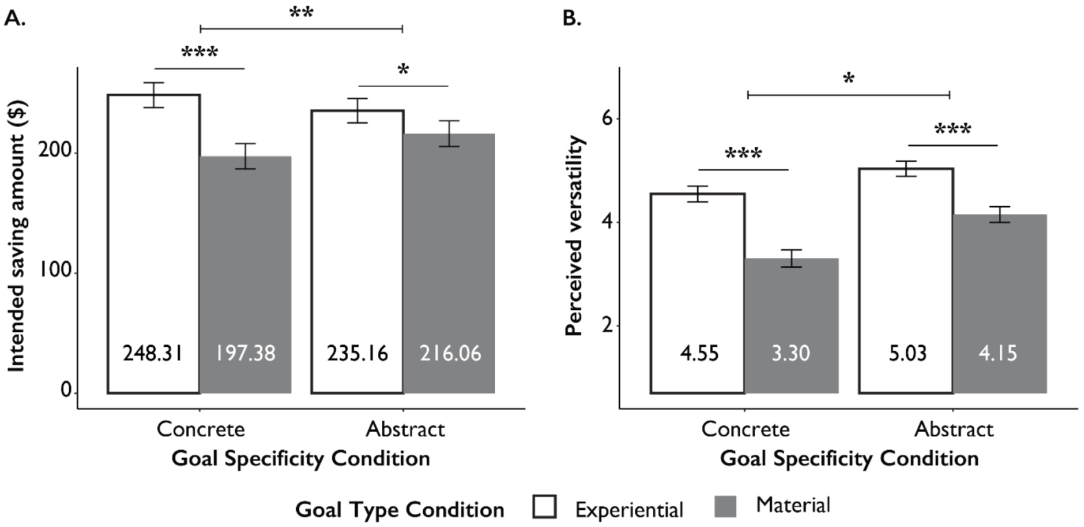
Results

Manipulation check. As intended, participants in the experiential goal conditions perceived a trip to be more experiential (M = 5.77, SD = 1.30) than those in the material goal conditions considered a smartwatch to be more material (M = 3.04, SD = 1.61; b = 2.73, SE = .073, t(1,591) = 37.27, p < .001).

Motivation to save. To test motivation to save in this study, we estimated a linear regression predicting the amount participants would save for their goal from a dummy variable of the savings goal conditions (experiential = 1 versus material = -1), a dummy variable of the goal specificity conditions (abstract = 1, concrete = -1), and their interaction. This analysis revealed a significant main effect of saving goals that participants saved more for a trip than for an electronic appliance (b = 17.51, SE = 2.65, t(1,589) = 6.60, p < .001, 95% CI = [12.30, 22.71], β = .16). There was no significant main effect of goal specificity conditions (b = 1.39, SE = 2.65, t(1,589) = .52, p = .60, 95% CI = [-3.82, 6.59], β = .01). More important to our theory, a significant interaction occurred between savings goal type and

goal specificity conditions, b = -7.96, SE = 2.65, t(1,589) = -3.00, p = .003, 95% CI = [-13.16, -2.75], β = -.07. Specifically, an analysis of simple effects with dummy variables showed that participants saved more for a vacation trip for a specific destination than for a specific electronic appliance ($M_{experiential}$ = 248.31, SD = 104.70 versus $M_{material}$ = 197.38, SD = 106.17, Cohen's d = .48; b = 50.93, SE = 7.55, t(1,589) = 6.75, p < .001, 95% CI = [36.13, 65.73], β = .24), and the effect was weakened when the saving goal was abstract ($M_{experiential}$ = 235.16, SD = 103.05 versus $M_{material}$ = 216.06, SD = 109.58, Cohen's d = .18; b = 19.10, SE = 7.47, t(1,589) = 2.56, p = .011, 95% CI = [4.46, 33.74], β = .09).

FIGURE 3
STUDY 5: SAVING MOTIVATION AND PERCEIVED VERSATILITY

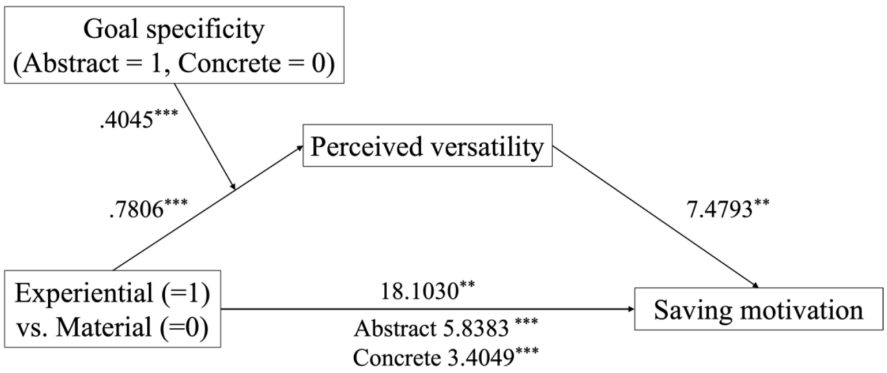


Note.—* p < .05, ** p < .01, *** p < .001.

Perceived versatility. We further tested our proposed mechanism with a linear regression predicting the perceived versatility of saving goals from a dummy variable of the savings goal conditions (experiential = 1 versus material = -1), a dummy variable of the goal specificity conditions (abstract = 1, concrete = -1), and their interaction. We observed a significant main effect of experiential (versus material) goal conditions (b = .53, SE = .04, t(1,589) = 13.54, p < .001, 95% CI = [.46, .61], β = .31) that participants perceived a vacation as more versatile than an electronic appliance. We also observed a significant main effect of goal specificity conditions (b= .33, SE = .04, t(1,589) = 8.45, p < .001, 95% CI = [.26, .41], β = .20) that participants perceived greater versatility of an abstract goal that consists of multiple possibilities than a concrete goal. Aligned with our predictions, we found a significant interaction between saving goal and goal specificity conditions, b = -.09, SE = .04, t(1,589) = -2.29, p = .022, 95% CI = [-.17, -.01], β = -.05. Specifically, an analysis of simple effects showed that participants perceived a vacation trip with a specified destination as more versatile than a specific electronic appliance ($M_{experiential}$ = 4.55, SD = 1.53 versus $M_{material}$ = 3.30, SD = 1.68, Cohen's d = .78; b = 1.25, SE = .11, t(1,589) = 11.13, p < .001, 95% CI = [1.03, 1.47], β = .37) and the effect was weakened with abstract saving goals ($M_{experiential}$ = 5.03, SD = 1.50 versus $M_{material}$ = 4.15, SD = 1.57, Cohen's d = .58; b = .89, SE = .11, t(1,589) = 8.00, p < .001, 95% CI = [.67, 1.10], β = .26).

We predicted goal specificity moderated the effect of saving goals on saving motivation. To test this hypothesis, we conducted a bootstrapped moderated mediation analysis using PROCESS Macro, Model 7 (10,000 samples; Hayes & Preacher, 2014). We present the path coefficients in Figure 3. The goal specificity conditions moderated the effect of experiential (versus material) saving goals on perceived versatility (b = -.33, SE = .15, t(1,588) = -2.21, p = .027, 95% CI = [-.61, -.04]). Greater perceived versatility was associated with higher saving motivation, b = 7.48, SE = 1.77, t(1,589) = 4.22, p < .001, 95% CI = [4.00, 10.96]. The overall moderated mediation model was supported with the index of moderated mediation = -2.43, SE = 1.35, 95% CI = [-5.49, -.23]. The conditional indirect effect was stronger in the concrete saving goal conditions (effect = 5.84, SE = 1.74, 95% CI = [2.73, 9.55]) and weaker in the abstract saving goal conditions (effect = 3.40, SE = 1.15, 95% CI = [1.38, 5.81]).

FIGURE 4
STUDY 5: A MODERATING ROLE OF GOAL SPECIFICITY



Discussion

Study 5 provides further evidence that the perceived versatility of experiential (versus material) saving goals promotes saving motivations by demonstrating the moderating role of goal specificity. In particular, consistent with previous studies, when considering a concrete saving goal, consumers perceive experiential (versus material) goals as more versatile and thus reported higher saving intentions. Importantly, when considering an abstract saving goal that includes different possibilities, consumers perceived greater versatility of saving goals, resulting in higher saving motivation for material saving goals and weaker experiential dominance in motivating savings.

Study 6: Savings in the field

Study 6 examines how experiential (versus material) saving goals influence real saving behavior with a large-scale dataset spanning an 18-month time period of customers at a central bank in Australia. We examine not only the outcome (the extent to which customers are successful in achieving their goals) but also how persistence of goal pursuit behavior (how continuously consumers keep saving toward their goal in the long term). Further, we test the extent to which experiential (versus material) saving goals are subject to goal gradient effects that link goal proximity to action (Hull, 1932; Kivetz et al., 2006). Based on our proposed perceived versatility account, we predict that customers with experiential saving goals would be more motivated to achieve their goals and more persistent in their goal pursuit relative to those with material saving goals, thus leading them to be less subject to goal gradient.

Methods

We partnered with a central bank in Australia to investigate the effect of experiential (versus material) goals on saving behavior. The dataset records saving goals initiated between January 1, 2022, and June 30, 2022, and savings between goal initiation and June 30, 2023. Customers at the bank set their saving goals by providing a customized goal amount, goal length and goal descriptions (e.g., car, holiday to Europe, phone, holiday). We limited the goal amount to be between $100 and $999,999 AUD. Given the diversity of goal descriptions in this dataset, we referred to a similar bank that uses default savings goal categories. That is, we asked independent coders to rate those savings goal categories as more experiential or more material and classified the goal descriptions in the data based on the crowdsourced ratings as the independent variable (experiential = 1, material = 0; see Web Appendix II for details). We excluded all goal descriptions that have less then 20 unique customers linked to it for data privacy reasons. We excluded 1,605 accounts as multiple goals were assigned to them such that we could attribute the savings balance to one specific goal without attribution ambiguity or double attribution. We further removed consumers who didn't provide a valid address and account during the observational period to ensure the analysis controlling for demographic information. A final sample of 38,503 saving goals was included in the data analysis (37,452 customers, 59.41% females; M_{age} = 25.36, range = [15, 83]; $M_{\text{tenure at the bank}}$ = 10.52 years, SD = 8.77). 20,122 (52.26%) and 18,381 (47.74%) saving goals were experiential and material, respectively.

We're primarily interested in two goal pursuit outcomes in the analyses below. We first examined the extent to which

customers achieve their goals, termed as proximity to success, which indicates the proportion of account balance to the target goal amount at their preset goal date or the end of the observational period, ranging from 0 and 1 (we coded any values above 1 as 1). Second, we examine the persistence during the goal pursuit process. To do so, we coded the saving contribution to the saving account each month as 1 if a customer saved toward their saving account, otherwise 0 if they did not or withdrew from their saving account. We then computed the average and maximal saving streaks (i.e., the average and maximal length of an unbroken series of consecutive saving behavior) until customers reach their goal or the end of the observational period.

Notably, we had a series of robustness checks of the effect and replicated the same results (1) when we included the full sample without exclusions and (2) when we relaxed the fixed goal deadline to be 100 days before and after customers' preset goal deadline. In Web Appendix III, we reported the proximity to success with (1) and (2), and streaks with (1).

Results

Table 2 illustrates the goal amount and goal length by goal type. A two-sample *t* test showed that experiential and material goals didn't differ in goal amount ($t(38{,}501) = .10$, $p = .92$) and differed only marginally in goal length ($t(38{,}501) = 1.91$, $p = .057$). Overall, 15,826 (out of 37,452, 41.82%) customers achieved at least one of their saving goals during the time period.

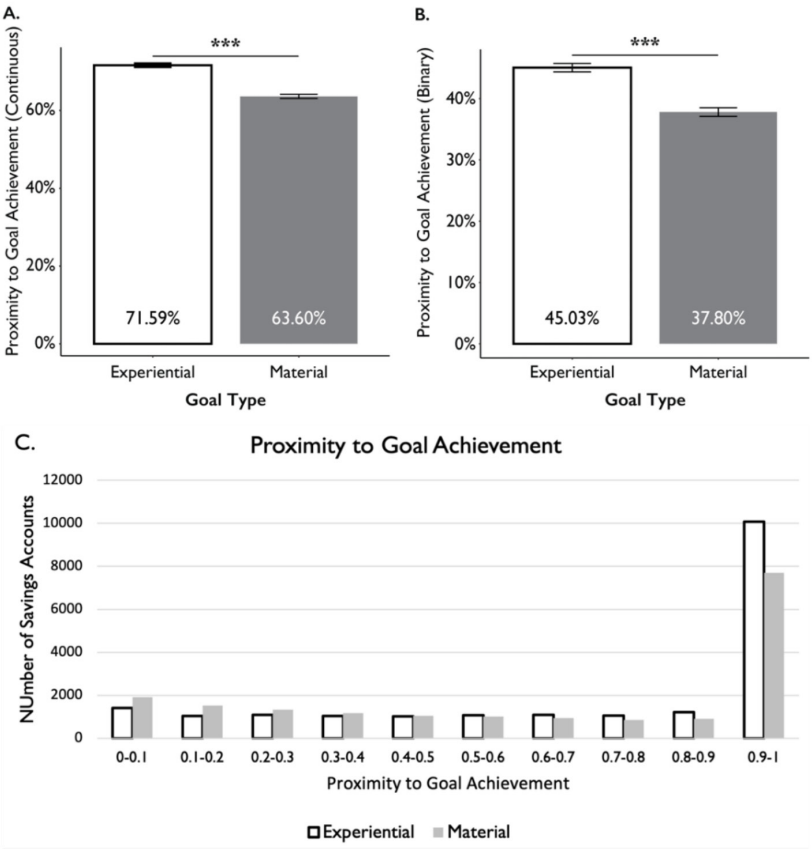
TABLE 2
STUDY 6: GOAL AMOUNT AND GOAL LENGTH OF SAVINGS GOALS BY GOAL TYPE

	Goal type	Mean	Median	Standard deviation
Goal amount (AUD)	Experiential	$7,112.15	$4,576.40	11,174.08
	Material	$7,123.13	$4,000.00	10,807.21
Goal length (months)	Experiential	6.33	6.00	4.00
	Material	6.40	6.00	4.00

Proximity to success. We first examined the effect of experiential (versus material) savings goals on the proximity to success. A linear regression predicting the proximity to success from a dummy variable representing goal type (experiential = 1, material = 0) revealed that experiential savings goals were closer to success than material savings goals ($M_{\text{experiential}} = 71.59\%$, SD = .34 versus $M_{\text{material}} = 63.60\%$, SD = .37, $d = .36$; $b = .08$, $SE = .004$, $t(38{,}501) = 22.27$, $p < .001$, 95% CI = [.07, .09], β = .11). The same results remained when we controlled for goal amount, goal length, customer tenure at the bank, age, gender, income level and geographic locations, $b = .05$, $SE = .004$, $t(38{,}485) = 13.86$, $p < .001$, 95% CI = [.04, .06], β = .07.

In addition, we conducted a logistic regression predicting whether a savings goal was achieved from a dummy variable representing goal type (experiential = 1, material = 0). Experiential goals were more likely to be achieved (9,062 achieved, 45.03%) than material goals (6,948 achieved, 37.80%, $d = .22$; $b = .30$, $SE = .02$, $z = 14.37$, $p < .001$, 95% CI = [.26, .34], β = .30). The same results remained when we controlled for goal amount, goal length, customer tenure at the bank, age, gender, income level, and geographic locations ($b = .04$, $SE = .005$, $z = 7.79$, $p < .001$, 95% CI = [.13, .22], β = .18).

FIGURE 5
STUDY 6: PROXIMITY TO SUCCESS BY GOAL TYPE



Average and maximal streaks. We next compared goal persistence between experiential and material saving goals, which was operationalized as average and maximal streaks until the end of goal period or the end of the observational period. To capture the long-term persistence in saving behavior, we examined how the closeness to goal achievement, or goal gradient, influences the effect of goal types on saving streaks.

First, a linear regression predicting the average streaks from a dummy variable representing goal type (experiential = 1, material = 0) revealed that customers with experiential goals were more persistent and exhibited longer streaks by contributing positively toward their savings goal for a longer consecutive period ($M_{\text{experiential}}$ = 1.03, SD = 1.13 versus M_{material} = .94, SD = 1.14, d = .53; $b_{\text{experiential}}$ = .09, SE = .01, t(38,405) = 7.74, p < .001, 95% CI = [.07, .11], β = .04). The same results remained when we controlled for goal amount, goal length, average proportion of savings balance relative to goal amount during the corresponding streak period, $b_{\text{experiential}}$ = .08, SE = .01, t(38,402) = 7.44, p < .001, 95% CI = [.06, .11], β = .04.

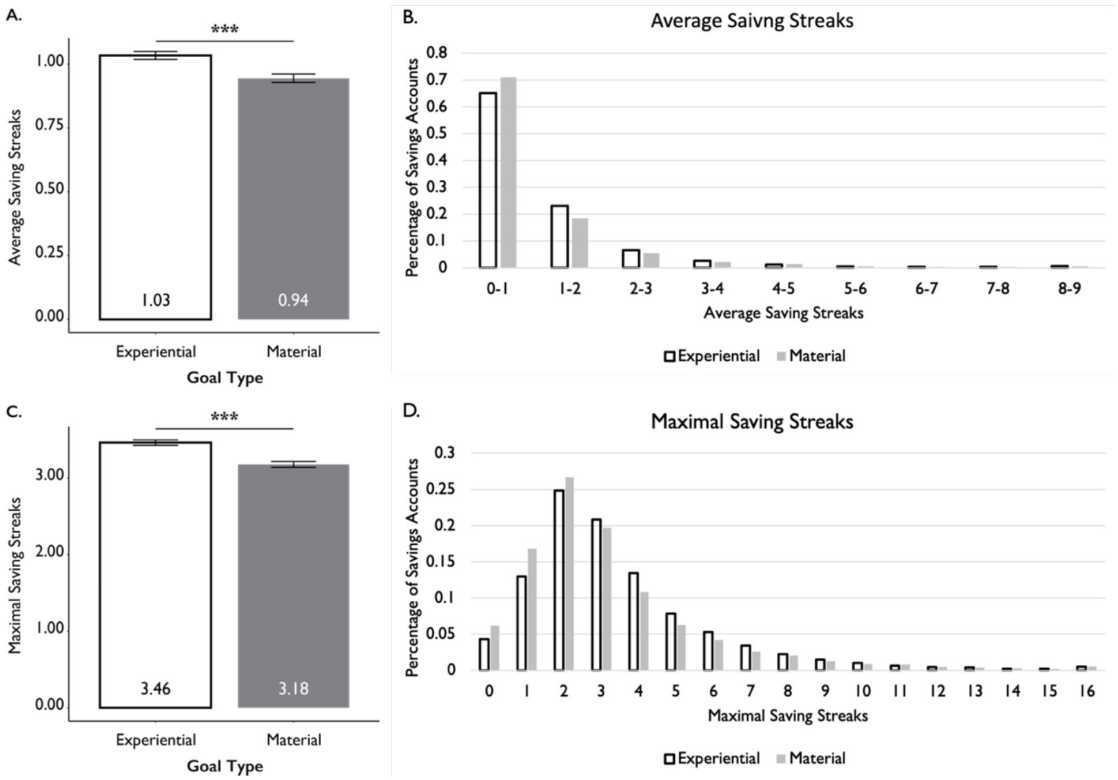
Importantly, to examine the effect of savings goals on saving streaks, we conducted a linear regression to regress the average streaks on a dummy variable representing goal type, the average proportion of account balance relative to goal amount during the corresponding streak period, and their interaction. We found a significant interaction between goal type and goal gradient (b = -.13, SE = .006, t(38,403) = -20.64, p < .001, 95% CI = [-.14, -.12], β = -.25) such that experiential goals were less subject to goal gradient than material goals. The same results remained when we controlled for goal amount, goal length, customer tenure at the bank, age, gender, income level, and geographic location, b = -.13, SE = .006, t(38,387) = -21.35, p < .001, 95% CI = [-.14, -.12], β = -.25. An analysis of simple effects revealed experiential goals were more motivating than material goals when consumers initiated their saving goals (i.e., the proportion of saving balance relative to goal amount was low) b = .06, SE = .01, t(38,387) = 5.27, p < .001, 95% CI = [.04, .09], β = .03. Further, material goals were subject to goal gradient: The closer to goal achievement, the longer streaks, b = .17, SE = .005, t(38,387) = 31.14, p < .001, 95% CI = [.16, .18], β = .36.

Second, we conducted the same linear regression predicting the maximal streaks from a dummy variable representing goal type (experiential = 1, material = 0) and replicated the same effect: The maximal saving streaks during goal pursuit of experiential goals were longer than those of material goals ($M_{experiential}$ = 3.46, SD = 2.57 versus $M_{material}$ = 3.18, SD = 2.61, d = 1.50; $b_{experiential}$ = .28, SE = .03, t(38,405) = 10.76, p < .001, 95% CI = [.23, .34], β = .05). The same results remained when we controlled for goal amount, goal length, average proportion of monthly savings relative to goal amount during the corresponding streak period, $b_{experiential}$ = .27, SE = .03, t(38,402) = 10.56, p < .001, 95% CI = [.22, .32], β = .05.

Similarly, we conducted a linear regression to regress the maximal streaks on a dummy variable representing goal type, the average proportion of account balance relative to goal amount during the corresponding streak period, and their interaction. We found a significant interaction between goal type and goal gradient (b = -.30, SE = .01, t(38,403) = -21.10, p < .001, 95% CI = [-.33, -.27], β = -.25) such that experiential goals were less subject to goal gradient than material goals. The same results remained when we controlled for goal amount, goal length, customer tenure at the bank, age, gender, income level, and geographic location, b = -.30, SE = .01, t(38,387) = -21.77, p < .001, 95% CI = [-.33, -.27], β = -.26. An analysis of simple effects revealed experiential goals induced longer maximal streaks than material goals during goal initiation period, b = .06, SE = .01, t(38,387) = 8.07, p < .001, 95% CI = [.17, .27], β = .04. Further, material goals were subject to goal gradient: the closer to goal achievement, the longer maximal streaks, b = .40, SE = .01, t(38,387) = 31.88, p < .001, 95% CI = [.37, .42], β = .37.

Taken together, the results suggest that consumers contributed to their experiential saving goals more constantly instead of speeding up closer to the goal deadline, compared to material goals.

FIGURE 6
STUDY 6: AVERAGE AND MAXIMAL STREAKS BY GOAL TYPE



Discussion

Study 6 further demonstrates real behavioral evidence for our proposed experiential dominance over goods in motivating savings in the field: Compared to those with material saving goals, customers with experiential saving goals are more likely to achieve their goals and reach a greater proportion of their goals, but also are more persistent by contributing to their savings account for a longer unbroken consecutive period. The findings reveal the benefits of experiential goals in terms of goal achievement and goal persistence during goal pursuit. Moreover, the evidence of saving streaks casts further doubt upon the account timing importance. That is, experiential saving goals are more effective in promoting saving due to intrinsic motivation such as perceived goal versatility instead of extrinsic factors such as perceived urgency.

General discussion

Consumer savings is undoubtedly critical to financial well-being and understanding how the types of saving goals affect saving behavior contributes to helping consumers initiate savings goals, better achieve goals, and improve their financial well-being. Does experiential dominance over goods extend to motivating savings? The current work highlights a novel experiential advantage—experiential dominance over goods in motivating savings. Across one field study, one large-scale field dataset of real saving behavior, and six preregistered experiments, we demonstrate that consumers are more motivated to save toward their experiential rather than material goals. This effect remains robust across various contexts—saving goal initiation, saving for self-generated goals, committing to original savings goals (rather than spending on suboptimal purchases at present), and protecting existing savings account by drawing less for emergency expenses. The effect persists even when the same saving goal is framed as experiential relative to material. We further reveal that the experiential dominance in motivating savings is mainly driven by the enhanced perception of goal versatility, being able to adapt to different purposes and satisfying multiple needs, leading consumers to be motivated to pursue their saving goals. This mechanism is unique to savings and different from borrowing. Supporting the versatility account, the effect is moderated by goal specificity and anticipated preference change. Lastly, we show the impact of experiential dominance with real saving behavior in the field that consumers are not only more likely to achieve their experiential (versus material) saving goals but also more persistent in continuously saving toward their goal during goal pursuit. Furthermore, we demonstrate that the experiential dominance in motivating savings is stronger over a longer goal period and is less subject to goal gradient.

Theoretical implications

The current research makes several important theoretical contributions to our understanding of how the type of saving goals, experiential versus material, influence consumer saving behavior and the underlying mechanism. First, we contribute to the experiential-material literature that mainly focuses on the present by expanding experiential dominance to savings, an action that requires long-term planning and constant self-control and helps curb spending and accumulate savings for the future. We show the effect remains robust throughout the goal-pursuit process, including saving goal initiation, goal commitment and goal persistence.

Second, we demonstrate a novel mechanism that experiential goals are perceived as more versatile, being able to adapt to different purposes and satisfying multiple needs, thus leading consumers to be more motivated to save toward their goal. The findings identify perceived versatility as a novel antecedent of higher valuation of experiential (versus material) goals. We also reconcile the existing literature on borrowing for experiences with this research by contrasting the different processes. Furthermore, we find that the experiential dominance in motivating savings is more constant and less subject to goal gradient during goal pursuit process.

These findings also suggest a simple, useful tool—framing the same saving goal as experiential (versus material)—that can be utilized to design interventions to encourage consumers to save and achieve their goals by increasing the perceived versatility of saving goals, especially for those who are uncertain about their future needs and preferences, and those who consider long-term saving plans.

Practical implications

Our research has a series of practical implications for marketers as well as consumers who are considering saving goals. The findings suggest potential interventions that can increase perceived versatility of a saving goal to encourage consumers to save and curb impulsive spending. For example, marketers designing retirement accounts communications might consider framing saving for retirement as experiential (e.g., saving for the life after retirement) versus material (e.g., saving for housing, insurance, and maintenance) to enhance goal versatility and promote consumers' motivation to save for the future.

Financial management companies and apps might consider designing and framing saving goals as experiential rather than material to help consumers achieve their goals. In addition, marketers and others might consider staging

material goods with experiences to increase perceived goal versatility and heighten consumers' motivation to save for their future purchases.

For consumers, especially those who feel uncertain about their future preferences, considering saving goals in terms of experiences may help them to evaluate their saving goals in terms of goal versatility and thus become motivated to pursue their saving goals. After all, saving requires a future-oriented focus, consistent self-control and advance planning for a longer period of time. It also demands thinking about the different possibilities of a saving goal and how it may meet their future needs and preferences. Framing saving in terms of experiences may be an effective tool to increase the likelihood of engaging in the stages of saving (e.g., goal initiation, goal commitment and goal persistence).

Directions for future research

Our work primarily focuses on the interest in initiating a savings goal, commitment in saving, and saving behavior. Fisher (1930) proposes five characteristics of personal saving: foresight, self-control, habits, expectation of life and love for posterity. Given saving requires long-term planning and making trade-offs between immediate temptation and future benefits, planning and forming good habits may play an important role in achieving savings goals (Wood & Neal, 2016). For example, experiential-material goal classification might not be binary (Weingarten et al., 2022), which leaves flexibility for consumers to reclassify their saving goal and engage in malleable mental accounting (Cheema & Soman 2006; Poynor & Haws 2009), especially when consumers' willpower becomes weak (Neal et al., 2013). Thus, future work should examine the effect of experiential (versus material) goals on how consumers make plans as well as long-term benefits of helping consumers form habits of saving for the future, including education, retirement and emergency.

In our studies, participants consider a single saving goal that was either experiential or material. But consumers often have multiple goals. Future work should explore the effect of experiential (versus material) goals on saving when consumers have multiple savings accounts and how the dynamics and hierarchy of saving goals might impact the experiential dominance in savings (e.g., Dalton & Spiller, 2012; Soman & Zhao 2011). For example, framing two material saving goals under the same experiential saving goal, such as framing saving for a hiking tent and a hiking backpack as saving for a hiking trip, may be perceived more versatile and thus more motivating.

While we examined a range of saving goals that varied from low to high goal amount and from self-generated to given specific saving goals, multiple factors may affect perceived versatility of saving goals. For example, it would be interesting to examine how perceived uncertainty associated with saving goals may influence the effect of experiential (versus material) goals on saving intentions.

Conclusion

Many consumers struggle with saving for the future. The present research introduces and examines how the type of saving goals influences saving motivation. Because savings goals necessarily relate to future consumption, consumers face uncertainty about the degree to which they'll be desirable at the time the account is fully funded. Experiential goals that are perceived as more versatile—i.e., satisfying a wider range of future needs and preferences—are more likely to motivate savings than those that are less versatile. The positive effect of experiential goals remains robust throughout the goal-pursuit process. The findings suggest a novel framing intervention for marketers and consumers focusing on promoting saving for the future.

References

Baumeister, R. F. (2002). Yielding to temptation: Self-control failure, impulsive purchasing, and consumer behavior. *Journal of Consumer Research 28*(4), 670–76.

Board of Governors of the Federal Reserve System. (2020, Sep.). Changes in U.S. family finances from 2016 to 2019: Evidence from the Survey of Consumer Finances. *Federal Reserve Bulletin 106*(5). https://www.federalreserve.gov/publications/files/scf20.pdf

Caprariello, P. A., and Reis, H. T. (2013). To do, to have, or to share? Valuing experiences over material possessions depends on the involvement of others. *Journal of Personality and Social Psychology 104*(2), 199–215.

Carter, T. J., and Gilovich, T. (2010). The relative relativity of material and experiential purchases. *Journal of Personality and Social Psychology 98*(1), 146–59.

Cheema, A., and Soman, D. (2006). Malleable mental accounting: The effect of flexibility on the justification of attractive spending and consumption decisions. *Journal of Consumer Psychology 16*(1), 33–44.

Chetty, R., Friedman, J. N., Leth-Petersen, S., Nielsen, T. H., and Olsen, T. (2014). Active vs. passive decisions and crowd-out in retirement savings accounts: Evidence from Denmark. *Quarterly Journal of Economics 129*(3), 1141–1219.

Dalton, A. N., and Spiller, S. A. (2012). Too much of a good thing: The benefits of implementation intentions depend on the number of goals. *Journal of Consumer Research 39*(3), 600–614.

Dickler, J. (2023, Oct. 3). Savings rate for Americas is falling. "I'm concerned," top economist says. https://www.cnbc.com/2023/10/03/americans-are-saving-less-in-2023-im-concerned-top-economist-says.html

Donnelly, G., Iyer, R., and Howell, R. T. (2012). The big five personality traits, material values, and financial well-being of self-described money managers. *Journal of Economic Psychology 33*(6), 1129–42.

Ellen, P. S., Wiener, J. L., and Fitzgerald, M. P. (2012). Encouraging people to save for their future: Augmenting current efforts with positive visions of the future. *Journal of Public Policy & Marketing 31*(1), 58–72.

Federal Reserve Bank of St. Louis [FRED] (2024, Jan. 10). Personal Saving Rate (PSAVERT). https://fred.stlouisfed.org/series/PSAVERT

Fisher, I. (1930). *The theory of interest*. Macmillan.

Frederick, S., Loewenstein, G., and O'Donoghue, T. (2002). Time discounting and time preference: A critical review. *Journal of Economic Literature 40*(2), 351–401.

Gómez-Corona, C., and Valentin, D. (2019). An experiential culture: A review on user, product, drinking and eating experiences in consumer research. *Food Research International 115*, 328–37.

Goodman, J. K., and Lim, S. (2018). When consumers prefer to give material gifts instead of experiences: The role of social distance. *Journal of Consumer Research 45*(2), 365–82.

Goodman, J. K., Malkoc, S. A., and Rosenboim, M. (2019). The material-experiential asymmetry in discounting: When experiential purchases lead to more impatience. *Journal of Consumer Research 46*(4), 671–88.

Goodman, J. K., Malkoc, S. A., and Stephenson, B. L. (2016). Celebrate or commemorate? A material purchase advantage when honoring special life events. *Journal of the Association for Consumer Research 1*(4), 497–508.

Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. Guilford Press.

Hershfield, H. E., Goldstein, D. G., Sharpe, W. F., Fox, J., Yeykelis, L., Carstensen, L. L., and Bailenson, J. N. (2011). Increasing saving behavior through age-progressed renderings of the future self. *Journal of Marketing Research 48*(SPL), S23–37.

Hull, C. L. (1932). The goal-gradient hypothesis and maze learning. *Psychological Review 39*(1), 25–43.

Keinan, A., and Kivetz, R. (2011). Productivity orientation and the consumption of collectable experiences. *Journal of Consumer Research 37*(6), 935–50.

Kivetz, R., Urminsky, O., and Zheng, Y. (2006). The goal-gradient hypothesis resurrected: purchase acceleration, illusionary goal progress, and customer retention. *Journal of Marketing Research 43*(1), 39–58.

Kumar, A., and Gilovich, T. (2016). To do or to have, now or later? The preferred consumption profiles of material and experiential purchases. *Journal of Consumer Psychology 26*(2), 169–78.

Macrae, C. N., Mitchell, J. P., Golubickis, M., Ho, N. S. P., Sherlock, R., Parlongo, R., Simpson, O. C. M., and Christian, B. M. (2017). Saving for your future self: The role of imaginary experiences. *Self and Identity 16*(4), 384–398.

Naylor, J. C., and Ilgen, D. R. (1984). Goal setting: A theoretical analysis of a motivational technology. *Research in Organizational Behavior 6*, 95–140.

Neal, D. T., Wood, W., and Drolet, A. (2013). How do people adhere to goals when willpower is low? The profits (and pitfalls) of strong habits. *Journal of Personality and Social Psychology 104*(6), 959–75.

Nicolao, L., Irwin, J. R., and Goodman, J. K. (2009). Happiness for sale: Do experiential purchases make consumers happier than material purchases? *Journal of Consumer Research 36*(2), 188–98.

O'Donoghue, T., and Rabin, M. (1999). Doing it now or later. *American Economic Review 89*(1), 103–24.

Poynor, C., and Haws, K. L. (2009) Lines in the sand: The role of motivated categorization in the pursuit of self-control goals. *Journal of Consumer Research 35*(5), 772–87.

Ratner, R. K., Kahn, B. E., and Kahneman, D. (1999). Choosing less-preferred experiences for the sake of variety. *Journal of Consumer Research 26*(1), 1–15.

Richins, M. L. (2013). When wanting is better than having: Materialism, transformation expectations, and product-evoked emotions in the purchase process. *Journal of Consumer Research 40*(1), 1–18.

Robalino, J. D., Fishbane, A., Goldstein, D. G., and Hershfield, H. E. (2023). Saving for retirement: A real-world test of whether seeing photos of one's future self encourages contributions. *Behavioral Science & Policy 9*(1), 1–9.

Rosenzweig, E., and Gilovich, T. (2012). Buyer's remorse or missed opportunity? Differential regrets for material and experiential purchases. *Journal of Personality and Social Psychology 102*(2), 215–23.

Şimşek, Ö. F., and Yalınçetin, B. (2010). I feel unique, therefore I am: The development and preliminary validation of the personal sense of uniqueness (PSU) scale. *Personality and Individual Differences 49*(6), 576–81.

Soman, D., and Zhao, M. (2011). The fewer the better: Number of goals and savings behavior. *Journal of Marketing Research 48*(6), 944–57.

Strotz, R. H. (1955). Myopia and inconsistency in dynamic utility maximization. *Review of Economic Studies 23*(3), 165–80.

Thaler, R. H., and Benartzi, S. (2004). Save More Tomorrow™: Using behavioral economics to increase employee saving. *Journal of Political Economy 112*(S1), S164–87.

Tully, S. M., Hershfield, H. E., and Meyvis, T. (2015). Seeking lasting enjoyment with limited money: Financial constraints increase preference for material goods over experiences. *Journal of Consumer Research 42*(1), 59–75.

Tully, S. M., and Sharma, E. (2018). Context-dependent drivers of discretionary debt decisions: Explaining willingness to borrow for experiential purchases. *Journal of Consumer Research 44*(5), 960–73.

Ülkümen, G., and Cheema, A. (2011). Framing goals to influence personal savings: The role of specificity and construal level. *Journal of Marketing Research 48*(6), 958–69.

Urumutta Hewage, G. S., and He, X. (2022). The mysteries of mystery deals: The roles of purchase type (material vs. experiential purchases) and excitement neglect. *Journal of Experimental Psychology: Applied 28*(1), 179–88.

Van Boven, L., and Gilovich, T. (2003). To do or to have? That is the question. *Journal of Personality and Social Psychology 85*(6), 1193–1202.

Weidman, A. C., and Dunn, E. W. (2016). The unsung benefits of material things: Material purchases provide more frequent momentary happiness than experiential purchases. *Social Psychological and Personality Science 7*(4), 390–99.

Weingarten, E., and Goodman, J. K. (2021). Re-examining the experiential advantage in consumption: A meta-analysis and review. *Journal of Consumer Research 47*(6), 855–77.

Wood, W., and Neal, D. T. (2016). Healthy through habit: Interventions for initiating & maintaining health behavior change. *Behavioral Science & Policy 2*(1), 71–83.

Wright, P. M., and Kacmar, K. M. (1994). Goal specificity as a determinant of goal commitment and goal change. *Organizational Behavior and Human Decision Processes 59*(2), 242–60.

Yakoboski, P., Lusardi, A., and Hasler, A. (2022). How financial literacy varies among U.S. adults. TIAA Institute and Global Financial Literacy Center. https://www.tiaa.org/content/dam/tiaa/institute/pdf/research-report/2022-04/tiaa-institute-gflec-2022-personal-finance-p-fin-index-ti-yakoboski-april-2022.pdf

Yin, S. and Sharif, M. A. (2024). How and when does a used (vs. unused) account affect consumption behavior? *Journal of Experimental Psychology: General 153*(4), 939–956.

Zhang, C. Y. (2017). Consumption responses to pay frequency: Evidence from "extra" paychecks. *ACR North American Advances.* https://api.semanticscholar.org/CorpusID:155570409

Appendix I. Supplemental studies

Supplemental Study A: Saving versus borrowing

Supplemental Study A aimed to contrast saving with borrowing for experiences (versus material goods) and compare the underlying mechanisms. Prior research suggests that consumers are more likely to use financing options (i.e., borrowing money) to purchase experiential (versus material) goods due to timing importance (Tully & Sharma, 2018). That is, when consumers consider experiential (versus material) purchases, they perceive a higher level of urgency and are reluctant to miss out on the focal experience, leading to a greater likelihood of borrowing. In contrast, we suggest that when consumers consider an experiential (versus material) savings goal, they perceive their goal to be more versatile, being able to adapt to different purposes to satisfy multiple needs, and thus become more motivated to save toward their goal. To test these predictions, we measure the likelihood of using a financial option (either saving or borrowing) to make a purchase in the future (either experiential or material). We held constant the cost of these purchases across conditions to avoid potential confounds due to cost inferences. Importantly, we reconcile the existing and current literature by examining the underlying mechanism of saving and borrowing behavior.

Methods

This study was preregistered (https://aspredicted.org/X49_4B8) for 1,200 participants on Prolific Academic. A total of 1,199 participants completed the study. We excluded thirteen participants who failed to recall the item in the scenario, so data were analyzed with the remaining 1,186 individuals (46% females; M_{age} = 43.62, SD = 12.62, Range = [18, 81]).

We randomly assigned participants to one of two (experiential versus material goal) by two (financial option: saving versus borrowing) between-subject conditions. In the *experiential goal* conditions, participants imagined that they had been planning for a weekend trip in the future and the estimated cost was about $1,000. In the *material goal* conditions, participants imagined that they had been planning for a smartwatch in the future and the estimated cost was about $1,000.

All participants learned that on the market, there were a number of attractive options of [weekend trips/smartwatches] available that they might also be interested in. They didn't have the money needed to make a purchase outright this month. In the *saving* conditions, participants were asked how likely they were to use a saving option (e.g., a savings account) so they could make a purchase next year on a seven-point scale from 1 (*Not at all likely*) to 7 (*Very likely*). In the *borrowing* conditions, participants were asked how likely they were to use a financing option (e.g., a credit card) to make a purchase today on a seven-point scale from 1 (*Not at all likely*) to 7 (*Very likely*).

After responding to the saving or borrowing intention questions, participants were asked about perceived versatility and timing importance as in Study 4B. At the end of the survey, participants were asked the extent to which they thought a [weekend trip/ smartwatch] was more experiential or more material on a seven-point scale from 1 (*Purely material*) to 7 (*Purely experiential*). Lastly, they reported their demographic information.

Results

Manipulation check. We examined the extent to which participants considered a weekend trip versus a smartwatch as experiential (versus material). Participants considered a weekend trip to be more experiential than a smartwatch ($M_{experiential}$ = 6.38, SD = .98 versus $M_{material}$ = 3.32, SD = 1.62, Cohen's d = 2.28; $b_{experiential}$ = 3.06, SE = .08, t(1184) = 39.22, p < .001, 95% CI = [2.90, 3.21], β = .75).

Saving versus borrowing intentions. We conducted a linear regression predicting the intended saving amount from a contrast variable of the saving goal conditions (experiential = 1, material = -1), a contrast variable of the financial option conditions (saving = 1, borrowing = -1), and their interaction. As expected, the model revealed a significant main effect of experiential (versus material) saving goal on saving intentions (b = .38, SE = .06, t(1182) = 6.52, p < .001) and a significant main effect of using a saving (versus borrowing) option (b = .57, SE = .06, t(1182) = 9.82, p < .001). There was no interaction between the saving goal and financial option conditions (b = .011, SE = .06, t(1182) = .18, p = .86).

A simple effect analysis revealed that participants were more likely to use a saving option for a weekend trip (versus a smartwatch) ($M_{experiential}$ = 4.92, SD = 1.81 versus $M_{material}$ = 4.14, SD = 1.96, Cohen's d = .42; b = .78, SE = .16, t(1182) = 4.74, p < .001, 95% CI = [.46, 1.10], β = .18). Similarly, participants were also more likely to use a financing option for a weekend trip (versus a smartwatch) ($M_{experiential}$ = 3.76, SD = 2.14 versus $M_{material}$ = 3.02, SD = 2.11, Cohen's d = .35; b = .74, SE = .17, t(1182) = 4.48, p < .001, 95% CI = [.42, 1.63], β = .17).

Mechanisms of saving versus borrowing intentions. We next examined the underlying mechanism of saving versus borrowing intentions between experiential and material goals. The results are reported in Table S1 for saving and borrowing intentions, respectively.

TABLE S1. SUPPLEMENTAL STUDY A: MEAN, STANDARD DEVIATION AND REGRESSION RESULTS OF MECHANISM MEASURES OF SAVING AND BORROWING INTENTIONS

Decisions	Measures	Framing conditions		t	Cohen's d
		Experiential	Material		
Saving	Perceived versatility	5.26 (1.29)	4.99 (1.42)	2.45*	.20
	Timing importance	5.40 (1.25)	4.81 (1.60)	5.03***	.41
Borrowing	Perceived versatility	5.01 (1.49)	5.01 (1.43)	.03	.002
	Timing importance	5.20 (1.54)	4.74 (1.79)	.46***	.28

Note: The standard deviation is included in parentheses. * $p < .05$, *** $p < .001$.

Importantly, we examined the role of these mechanisms in mediating the effect of experiences (versus material goods) on saving and borrowing intentions. For saving intentions, a bootstrapped mediation analysis with 10,000 samples (Model 4; Hayes, 2013) with perceived versatility and timing importance as parallel mediators, revealed perceived versatility significantly mediated the effect of experiential (versus material) goal on saving intentions: indirect effect $a \times b = .0873$, $SE = .0378$, 95% CI = [.0183, .1661]. However, timing importance did not mediate the effect: $a \times b = .0495$, $SE = .0381$, 95% CI = [-.0205, .1311].

In contrast, for borrowing intentions, a bootstrapped mediation analysis with 10,000 samples (Model 4; Hayes 2013) revealed that timing importance significantly mediated the effect of experiential (versus material) goal on borrowing intentions: indirect effect $a \times b = .0772$, $SE = .0335$, 95% CI = [.0222, .1526]. However, perceived versatility did not mediate the effect: $a \times b = .0013$, $SE = .0469$, 95% CI = [-.0900, .0960].

Discussion

This study demonstrates that the underlying mechanism of the effect of experiential (versus material) goal on savings intentions is distinct from borrowing intentions. When consumers consider an experiential (versus material) saving goal, they perceive their goal to be more versatile such that it can be adapted to different purposes satisfying multiple needs and thus become more motivated to save as a result. By contrast, when consumers consider borrowing for experiences (versus material goods), the perceived timing importance leads to a greater likelihood of using a financing option, which appears more impulsive and requires less self-control and planning (than saving behavior). The findings further shed light upon why consumers report higher saving intentions for experiential (versus material) saving goals.

Appendix II. Pretest of saving goals

To examine how experiential and material saving goals are prevalent in consumer daily life, we conducted a pretest based on the existing classifications of saving accounts in a large-scale field dataset from a multinational banking and financial services corporation (N = 1,370,331). The dataset recorded savings from the first quarter of 2014 to the third quarter of 2020. Bank customers can choose to classify their saving accounts into twenty-one categories,[2] including cars, wedding, electronics, party. We excluded the category of "Others" (11.94%) given its ambiguity and included the remaining twenty categories.

TABLE S2.EXPERIENTIAL AND MATERIAL SAVING CATEGORIES

Experiential saving categories				Material saving categories			
Category	**%**	**Rating**	***t***	**Category**	**%**	**Rating**	***t***
Party	1.18%	6.87 (1.82)	22.5***	Household appliance	0.04%	2.38 (1.87)	-12.40***
Holidays	6.37%	6.80 (1.51)	26.6***	Clothing	0.94%	2.46 (1.92)	-11.40***
Wedding	1.14%	6.53 (1.81)	20.0***	Cars	4.27%	2.62 (1.90)	-10.40***
Education	1.65%	6.36 (1.73)	19.5***	Motorcycle	0.48%	2.68 (2.04)	-9.23***
Future	0.73%	5.73 (1.90)	13.0***	Motor scooter	0.02%	2.70 (2.08)	-8.95***
Hobby	0.60%	5.73 (1.90)	13.0***	Houses	3.45%	2.83 (2.05)	-8.18***
Kids	22.72%	5.60 (1.89)	12.1***	Toys	0.47%	2.84 (2.25)	-7.36***
Medical Expenses	1.16%	5.27 (2.32)	7.86***	Electronics	0.58%	2.86 (2.01)	-8.08***
Emergency	3.42%	5.13 (2.21)	7.29***	Home improvement	1.74%	3.34 (1.86)	-5.11***
Paying off debt	1.94%	5.05 (2.32)	6.46***				
Buffer	7.20%	4.41 (2.04)	2.88**				

Note: Savings categories are ranked based on average ratings. Standard deviation is included in parentheses. ** $p < .01$, *** $p < .001$.

We first examined the extent to which each of the categories was considered as experiential or material in a preregistered study (https://aspredicted.org/4YW_PMD). In this study, we introduced the definition of experiential and material saving goals to two hundred and five independent coders on Amazon Mechanical Turk. We then asked them to indicate the extent to which they considered each of the saving goals as an experiential or material saving goal on a seven-point scale from 1 (*Definitely material*) to 7 (*Definitely experiential*). As preregistered, we compared the average ratings of each category with the midpoint of the scale (i.e., 4 of 7) with t tests. Among the twenty categories, eleven categories were rated as experiential, and nine categories were rated as material. Table 1 reported the average rating and t tests. In this dataset, 48.10% and 11.99% of saving accounts were experiential and material, respectively.

Next, we conducted a preregistered pretest (https://aspredicted.org/1FG_92X) with two hundred participants on Prolific Academic. We asked all participants if they currently had or considered having saving goals in the next three years. If they did, we then asked them to list at least three (up to 10) saving goals (text entry). Excluding those who did not have saving goals, one hundred and seventy participants reported that they had or considered having saving goals in the next three years, which yielded 666 saving goals in total (such as guest room remodel, vacation, and cars).

We then recruited three hundred independent coders on Prolific Academic to classify these saving goals into the twenty-one categories including Others from the field dataset, which was preregistered (https://aspredicted.org/5ML_3HT). Each participant was asked to classify fifteen randomly selected saving goals. We applied the majority rule to code each saving goal and then computed the percentage of saving categories in self-generated saving goals. Most of the saving goals (67.13%) had

2 Translated from Dutch, the twenty-one categories are paying off debt, cars, wedding, buffer, electronics, party, motorcycle, motor scooter, hobby, houses, household appliance, clothing, kids, emergency, toys, education, holidays, home improvement, future, medical expenses, and others. Customers may also choose no labels for their saving accounts, which was the case for 27.97% of the saving accounts.

at least three coders who reached agreement, so we focused on these saving goals. Among these saving goals, we found that 50.61%, 46.88%, and 2.49% saving goals were experiential, material, and others.

TABLE S3. PREVALENCE OF EXPERIENTIAL AND MATERIAL SAVING GOALS

Experiential category	%	Material category	%
Party	0.00%	Household appliance	1.24%
Holidays	13.07%	Clothing	0.41%
Wedding	2.90%	Cars	16.18%
Education	3.11%	Motorcycle	0.21%
Future	11.41%	Motor scooter	0.00%
Hobby	1.24%	Houses	12.24%
Kids	2.70%	Toys	0.00%
Medical expenses	1.45%	Electronics	3.32%
Emergency	8.71%	Home improvement	13.28%
Paying off debt	6.02%		
Buffer	0.00%		
Total	52.08%	Total	41.92%

Appendix III. Additional analyses of saving behavior in Study 6

As additional robustness checks of the effect of experiential (versus material) saving goal on saving behavior, we conducted the same analyses reported in the paper when (A) we included the full sample without exclusions and (B) we relaxed the fixed goal deadline to be 100 days before and after customers' preset goal deadline. We reported the proximity to success with (A) and (B), and streaks with (A). Specifically, we reported the means and standard deviation of binary proximity to success, continuous proximity to success, average streaks, and maximal streaks before goal deadline or by the end of the observation period by goal types in Table S3 and regression results in Table S4-6. In sum, we replicated the same results as in Study 6 that customers with experiential saving goals were more likely to achieve their goals, reached greater proportion of their goal, exhibited greater commitment and persistence by continuously making positive contributions to their savings accounts.

TABLE S3. MEANS AND STANDARD DEVIATION OF DEPENDENT VARIABLES OF SAVING AND EFFECT SIZES

	Proximity to success						Saving streaks					
	Binary (0, 1)			Continuous (0-1)			Average			Maximal		
Goal type	Experiential	Material	*d*	Experiential	Material	*d*	Experiential	Material	*d*	Experiential	Material	*d*
Dataset A N = 46,888	41.13% (.49)	32.16% (.47)	.28	67.97% (.35)	57.53% (.38)	.28	1.12 (1.30)	1.03 (1.32)	.58	3.63 (2.82)	3.34 (2.88)	1.46
Dataset B N = 47,404	35.58% (.49)	27.60% (.45)	.38	64.83% (.35)	54.40% (.37)	.22						

Note: Standard deviations are included in the parentheses.

TABLE S4. LOGISTIC REGRESSION PREDICTING BINARY PROXIMITY TO SUCCESS FROM GOAL TYPE

	A. Full sample			B. Relaxing goal deadline		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
Intercept	-.747***	.017	-.309*	-.964***	-.444***	-.717***
Goal type	**.388*** **	**.317*** **	**.174*** **	**.371*** **	**.321*** **	**.175*** **
Goal amount		-.00005***	-.00003***		-.00003***	-.00004***
Goal length		-.057***	-.057***		-.029***	-.029***
Customer tenure			.000007			.002
Age			.014***			.014***
Gender			-.146***			-.149***
Annual income			.000007***			.000006***
AIC	61224	57661	56983	58797	56947	56348

Note: Goal type is coded with dummy variables (1 = experiential, 0 = material). Gender is coded with dummy variables (1 = male, 0 = female). All models included geographic locations as fixed effects (not reported in the table). *** p < .001

TABLE S5. LINEAR REGRESSION PREDICTING CONTINUOUS PROXIMITY TO SUCCESS FROM GOAL TYPE

	A. Full sample			B. Relaxing goal deadline		
	Model 1	**Model 2**	**Model 3**	**Model 1**	**Model 2**	**Model 3**
Intercept	.575***	.638***	.578***	.544***	.583***	.528***
Goal type	**.104*** **	**.092*** **	**.064*** **	**.104*** **	**.096*** **	**.067*** **
Goal amount		-.000002***	-.000002***		.00000#	.00000*
Goal length		-.004***	-.004***		-.003***	-.003***
Customer tenure			.001***			.001***
Age			.001***			.001***
Gender			-.031***			-.038***
Annual income			.000002***			.000001***
Adjusted R^2	.01998	.07087	.09337	.02007	.04887	.06921

Note: Goal type is coded with dummy variables (1 = experiential, 0 = material). Gender is coded with dummy variables (1 = male, 0 = female). All models included geographic locations as fixed effects (not reported in the table). # $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$

TABLE S6. LINEAR REGRESSION PREDICTING AVERAGE AND MAXIMAL STREAKS FROM GOAL TYPE

	Average streaks			Maximal streaks		
	Model 1	**Model 2**	**Model 3**	**Model 1**	**Model 2**	**Model 3**
Intercept	.973***	.832***	.629***	3.208***	2.916***	2.543***
Goal type	**.132*** **	**.154*** **	**.057*** **	**.383*** **	**.427*** **	**.199*** **
Average proportion	.174***	.182***	.175***	.403***	.419***	.402***
Goal type x average proportion	**-.134*** **	**-.140*** **	**-.134*** **	**-.309*** **	**-.322*** **	**-.305*** **
Goal amount		.00001***	.00001***		.00002***	.00002***
Goal length		.004***	.004***		.006***	.006***
Customer tenure			.003***			.026***
Age			.001***			.006***
Gender			-.162***			-.382***
Annual income			.00003***			.000007***
Adjusted R^2	.02100	.04227	.05995	.02509	.04569	.06716

Note: Goal type is coded with dummy variables (1 = experiential, 0 = material). Gender is coded with dummy variables (1 = male, 0 = female). All models included geographic locations as fixed effects (not reported in the table). *** $p < .001$

About the authors

Siyuan Yin is a PhD candidate in the Wharton Marketing Doctoral Program. She holds a BSc in Psychology, an MD (specializing in neurosurgery) jointly from Zhejiang University and the University of California, Los Angeles, and an MSc in Psychology from Vanderbilt University. Prior to joining the program, Siyuan served as a research associate at the Fuqua School of Business at Duke University.

Grant E. Donnelly joined The Fisher College of Business in 2018 after graduating from Harvard Business School with a doctorate in Business Administration. He also received a Masters of Arts in Psychological Research from San Francisco State University in 2013 and a Bachelors of Arts in Environmental Studies from San Francisco State University in 2005. Prior to his academic career, Grant worked for Rainbow Grocery, a cooperatively run vegetarian health food store located in San Francisco, California (rainbow.coop).

Cait Lamberton is the Alberto I. Duran President's Distinguished Professor of Marketing at the University of Pennsylvania's Wharton School. Her research addresses a wide range of consumption-related phenomena, spanning topics related to retail environments, responses to taxation, emotions, and the role of dignity and respect in marketplace experiences. Professor Lamberton has been named a Marketing Science Institute Scholar, a Penn and Wharton Fellow, was winner of the Erin Anderson Award, and has received the Kinnear Prize for work related to public policy and marketing as well as the AMA's Hunt/Maynard Award for conceptual contribution.

Beginning in 2022, Dr. Lamberton has served as editor of the *Journal of Marketing*. She has previously been Associate Editor at the *Journal of Consumer Research* and *Journal of Consumer Psychology*, and senior editor at the *International Journal of Research in Marketing*. Published books include two editions of the Cambridge Handbook of Consumer Psychology and "Marketplace Dignity." She has been retained as a consultant by the US Departments of Education and Labor, as well as by major corporations in the pharmaceutical and finance industries. Cait has an undergraduate degree in English Literature from Wheaton College) an MBA and PhD from the University of South Carolina, and an Honorary Doctorate from the University of Lucerne, Switzerland.

Michael I. Norton is the Harold M. Brierley Professor of Business Administration at the Harvard Business School. He holds a BA in Psychology and English from Williams College and a PhD in Psychology from Princeton University. Prior to joining HBS, Professor Norton was a Fellow at the MIT Media Lab and MIT's Sloan School of Management.

He is the author of the forthcoming book, *The Ritual Effect: From Habit to Ritual, Harness the Surprising Power of Everyday Actions*. He is also the co-author—with Elizabeth Dunn—of the book, H*appy Money: The Science of Happier Spending*.

About the TIAA Institute

The TIAA Institute helps advance the ways individuals and institutions plan for financial security and organizational effectiveness. The Institute conducts in-depth research, provides access to a network of thought leaders, and enables those it serves to anticipate trends, plan future strategies, and maximize opportunities for success.

To learn more, visit tiaainstitute.org.

Join the conversation online: @TIAAInstitute

Note: Siyuan Yin (syyin@wharton.upenn.edu) is a doctoral student of marketing at the Wharton School, University of Pennsylvania, 3730 Walnut Street, Philadelphia, PA 19104, USA. Grant E. Donnelly (donnelly.177@osu.edu) is assistant professor of Marketing and Logistics at Fisher College of Business, Ohio State University, 2100 Neil Ave, Columbus, OH 43210, USA. Cait Lamberton (catlam@wharton.upenn.edu) is Alberto I. Duran President's Distinguished Professor of Marketing at The Wharton School, University of Pennsylvania, 3730 Walnut Street, Philadelphia, PA 19104, USA. Michael I. Norton (mnorton@hbs.edu) is the Harold M. Brierly Professor at Harvard Business School, Harvard University, Soldiers Field Road, Boston, MA 02163, USA. The authors have no conflict of interest to disclose. This article is based on a portion of the first author's dissertation. Correspondence about this article can be sent to syyin@wharton.upenn.edu.

This research was supported by the Wharton Behavioral Lab and Quartet Pilot Research Project Funding awarded to Siyuan Yin. The project received funding from the TIAA Institute and The Wharton School's Pension Research Council/Boettner Center. The content is solely the responsibility of the author(s) and does not necessarily represent official views of the TIAA Institute or Wharton School's Pension Research Council/Boettner Center. We thank Stephanie Tully and the members of Michael Norton's lab meeting for their valuable feedback as well as Nathan Damaj for his technical support.

4168432-0127

TIAA Institute

(12/24)