Making Your Discretionary Money Last:

Financial Constraints Increase Preference for Material Goods

by Focusing Consumers on Longevity

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Abstract

When discretionary income is limited, consumers face important trade-offs when deciding how to spend it. We suggest that feelings of financial constraint increases consumers’ concern about the lasting utility of their purchase. Further, we propose that this preference for purchases with greater longevity translates into a greater preference for material goods over experiences. Across six studies, we find that the consideration of financial constraints shifts consumers’ preferences toward material goods (rather than experiences), and that this systematic shift is due to an increased concern about the longevity of the purchase. Moreover, this preference shift persists even when the material goods are more frivolous than the experiences, indicating that the effect is not driven by an increased desire for sensible and justifiable purchases. However, the shift towards material purchases disappears when the material purchase is unusually short-lived, indicating that longevity is the key driver of the observed effect.
INTRODUCTION

Many consumers feel financially constrained in their lives. Even before the Great Recession, 40% of Americans actively used budgets to manage their finances (MSN Money 2007), and a more recent survey found that nearly half of all Americans could be described as “financially fragile” —including nearly a quarter of American households with incomes between $100,000 and $150,000 a year (Lusardi, Schneider, and Tufano 2011). The current research focuses on how feeling financially constrained changes the attributes consumers consider when evaluating purchase options and how this subsequently affects preference. Specifically, we examine how financial constraints increase concern about the longevity of a purchase, and how this can systematically influence consumers’ decision to spend on material goods versus experiences—a trade-off with substantial consequences for well-being (e.g., Carter and Gilovich 2010; Dunn, Gilbert, and Wilson 2011; Nicolao, Irwin, and Goodman 2009; Van Boven and Gilovich 2003).

When spending desires exceed financial means, the alternative uses of limited resources are naturally more salient. Accordingly, financial constraints highlight opportunity costs (Spiller 2011) and encourage consumers to “stretch” their resources (Fernbach, Kan, and Lynch 2014). Building on this research, we suggest that financially constrained consumers may be more attracted to purchases that last over time. Choosing such purchases enables consumers to build an inventory of resources, guaranteeing that – even if they cannot make a later purchase – they will still have something. In turn, by having resources at a later time, lasting purchases may reduce the desire or need for future expenditures. Put another way, we propose that consumers
who consider their financial constraints will want to spend their limited resources on purchases that will provide benefits both now and in the future.

We further propose that this increased concern about longevity can produce a systematic shift in consumers’ budget allocation – namely, in their preference for material goods versus experiences. Since research has often identified experiences as providing greater long-term happiness (e.g., Van Boven and Gilovich 2003), thinking about longevity could potentially increase preference for experiences. Yet, this argument not only assumes that consumers realize that experiences can provide longer-lasting happiness through the memories and social connectedness they create, but also that these long-term effects will reduce the desire for future spending. Instead, we propose that financially constrained consumers’ interest in long-lasting purchases will lead them to focus on a more obvious discrepancy between material goods and experiences: material goods tend to physically persist over time, whereas experiences are fleeting by nature. This physical persistence of material goods ensures that a consumer will have something at a future point in time without needing to spend additional resources. We therefore expect feelings of financial constraint to shift consumers’ preference away from experiences and toward lasting material goods. Note that this preference shift is conditional on material goods being more physically enduring than experiences. We will provide evidence that most material goods do indeed last longer than most experiences. However, we would not expect financial constraints to increase preference for material goods when these goods are not long lasting.

We present six studies that investigate the hypothesized relationship between financial constraints and preference for material goods. Our results indicate that the consideration of financial constraints shifts consumers’ preferences toward material goods (rather than experiences), and that this systematic shift is due to an increased concern for how long the
purchase will last. We rule out alternative explanations for this shift in preference, including a reduced interest in social interaction, an avoidance of risky outcomes, and effects of negative mood. Moreover, we find that the increased preference for material purchases in the face of financial constraints persists even when the material options are more frivolous than the experiences, indicating that the effect is not driven by an increased desire for sensible and justifiable purchases. Finally, we demonstrate that the increased preference for material purchases only extends to material purchases that physically persist over time. When material options are unusually short-lived, financial constraints no longer enhance preference for material purchases over experiences.

THEORETICAL BACKGROUND

Feeling Financially Constrained

We define feelings of financial constraint as the extent to which people believe that their financial situation restricts desired consumption. As such, feeling financially constrained is a psychological state that is not inherently dependent on income level and does not necessarily imply poverty or a literal absence of money. A millionaire, for example, may feel financially constrained if she feels her (high) income is not sufficient for fulfilling her consumption desires. Conversely, a person making minimum wage need not feel financially constrained if she does not have any salient consumption desires that exceed her financial means. Of course, keeping consumption desires constant, a reduction in income is likely to increase feelings of financial constraint.
Despite the relative prevalence of financial constraints in the United States (Lusardi, Schneider, and Tufano 2011; Moore 2013), research on its effect on consumption is still limited, with the majority of studies focusing on normative changes in non-discretionary purchases. For instance, past research has shown that more financially constrained consumers reduce overall spending (Karlsson et al. 2004; Karlsson et al. 2005) and are more value and price conscious than less financially constrained consumers (Ailawadi, Neslin, and Gedenk 2001).

The present research focuses on discretionary purchases (i.e., non-necessities) and examines how feeling financially constrained changes how consumers allocate their limited discretionary income. Although financially constrained consumers do spend more on necessities than on discretionary purchases (Cole, Thompson, and Tufano 2001), most consumers still spend a substantial amount of discretionary money. In fact, as of 2011, consumers making less than $25,000 annually still spent approximately $5,500 or more on discretionary purchases (Experian Simmons 2011). Yet, little is known about how feeling financially constrained may influence the allocation of discretionary spending.

**What Financial Constrained Consumers Care About**

Financial constraints increase consumers’ awareness of opportunity costs (Spiller 2011), and may therefore encourage consumers to consider how a purchase today will affect the ability to make purchases in the future. This notion is consistent with ongoing research by Fernbach, Kan, and Lynch (2014) who demonstrate that financial constraints encourage consumers to efficiently plan ways to “stretch” their resources. One way to do so is to invest in purchases that last over time. This idea is consistent with recent research on savoring, which shows that when
resources are scarce, people try to prolong positive experiences (Quoidbach et al. 2010). Consider Consumer A, who has plenty of resources and wants to have consumption utility at time 1 and at time 2. If she makes a purchase at time 1 and that purchase does not last over time, she can simply purchase something new at time 2 (given her abundant financial resources). By contrast, a financially constrained Consumer B may be unable to make a new purchase at time 2 (given her limited financial resources). Consumer B might accordingly choose a purchase that will provide obvious consumption utility both now (i.e., time 1) and in the future (i.e., time 2), and in doing so, reduce her need or desire to make another purchase at time 2.

Material Goods versus Experiences

Being more attuned to the lasting impact of a purchase may systematically shift consumers’ spending on different categories. In the current work, we explore the relative preference for material goods versus experiences—one of the most essential consumer trade-offs with substantial consequences for well-being (e.g., Carter and Gilovich 2010; Dunn et al. 2011; Nicolao et al. 2009; Van Boven and Gilovich 2003). Although one can conceptualize material versus experiential as a continuum on which purchases can be positioned depending on consumers’ personal motivation for making the purchase (e.g., Van Boven and Gilovich 2003), we instead use the terms “material goods” and “experiences” to denote an objective, categorical distinction, consistent with the way consumers view their choices in the marketplace, as well as with the way it has been defined (Pine and Gilmore 1998) and operationalized (e.g., Carter and Gilovich 2010; Nicolao et al. 2009) in prior research. Material goods are tangible products that
are typically retained over time, while experiences are intangible events that a person lives through.

While there are many other ways to categorize purchases (e.g., hedonic versus utilitarian, Hirschman and Holbrook 1982), the distinction between material goods and experiences is essential for several reasons. First, the categorization of purchases as material goods versus experiences is a distinction that consumers are aware of and readily recognize (e.g., Pine and Gilmore 1999; Van Boven and Gilovich 2003). Second, for decades, theorists and researchers have discussed the various ways that pursuing material goods versus experiences affects personal and societal well-being (e.g., Fromm 1976). More recent research has found that experiences can often provide greater long-term happiness than material goods (e.g., Van Boven and Gilovich 2003), leading to calls for consumers to spend their money accordingly (e.g., Dunn et al. 2011; Dunn and Norton 2013). However, little is currently known about why consumers purchase one type over the other. Third, and germane to the current work, the distinction between material goods and experiences is strongly linked to the longevity of the purchase.

Current Research

If feeling financially constrained increases consumers’ concern about the lasting impact of their purchases, how might this affect their preference for material goods versus experiences? As mentioned earlier, prior research has demonstrated that experiences can lead to greater long-term happiness than material goods. One of the primary reasons proposed for the difference in future happiness is because experiences provide more memories and storytelling capacity than material goods do. As a consequence, consumers think more about past experiences than about
material purchases (Van Boven and Gilovich 2003), and feature experiences more prominently in their self-narratives (Carter and Gilovich 2012), resulting in greater retrospective utility (Elster and Loewenstein 1992). Additionally, because experiences are often more social than material purchases, experiences are more likely to foster social connectedness (Caprariello and Reis 2013). Thus, through memories, stories, and enhancing relationships with others, experiences often provide more long-term utility. If financially constrained consumers are trying to maximize future happiness, and readily anticipate and appreciate the future utility from retrospection and social connectedness, then any increased concern about the lasting impact of their purchases might shift their spending towards experiences. However, if, as we suggest, financially constrained consumers seek purchases that last to reduce the desire or need for future expenses, then the intangible long-term benefits of social connectedness and positive memories may not suffice. In fact, these intangible benefits are likely benefits that people can continue to accumulate indefinitely. For example, people may not feel a reduced desire to travel once they return from a trip because they have the memories of the past trip. In fact, these memories may even heighten the desire to travel again. As such, the longevity of intangible benefits may not reduce the desire for future expenses and thus fail to serve the long-term interests of financially constrained consumers.

Rather than focusing on the intangible long-term effects of experiences, financially constrained consumers are more likely to focus on the discrepancy between the physical persistence of material goods and the fleeting nature of experiences. Indeed, in most cases, when consumers consider spending their discretionary income on a material good or an experience, the material good tends to last longer than the experience. To verify this assertion, we asked members of an online panel (n = 110) to list one material good and one experience they planned
to purchase in the near future, and found that 98% of participants believed that they would have the material good for more time than the experience would last. Because material goods persist over time and provide continued utility, a consumer who buys a material good has less need to make another purchase in the future. Thus, if financially constrained consumers are looking for ways to make their purchases last to secure future resources and reduce the desire for future spending, they should be attracted by the physical persistence of material goods rather than by the intangible long-term benefits of experiences.

We therefore hypothesize:

**H1:** Feelings of financial constraint will increase consumers’ preference for material goods over experiences.

**H2:** Concern about the purchase’s longevity will mediate the effect of feelings of financial constraint on consumers’ preference for material purchases.

The mediating role of longevity suggests an important boundary condition for the effect of financial constraints on material preferences. Specifically, financially constrained consumers should only prefer material goods if those goods obviously last over time. Although most material purchases persist longer than most experiences, there are unusual cases in which the usefulness of a material purchase is short-lived and will not reduce the need or desire for future spending (e.g., a set of glow sticks). In those cases, financially constrained consumers should not have a greater preference for the material good, even when it lasts marginally longer than the alternative experience (e.g., a game of skee-ball). Hence:

**H3:** Financially constrained consumers’ increased preference for material purchases will be reduced when material purchases do not provide long-lasting consumption utility.
We test our hypotheses by examining how feelings of financial constraint influence participants’ preferences for material goods versus experiences in a variety of shopping tasks. Across the studies, we both measure (studies 1-3) and manipulate (studies 4-6) feelings of financial constraint, and we vary the specific material goods and experiences participants consider across the studies, using both consumer-generated and standardized options.

STUDY 1: CONSUMER-GENERATED EXPERIENCES AND GOODS

In study 1, we explored the relationship between consideration of financial constraints and preference for material goods versus experiences using participants’ own desired purchases. Specifically, we examined whether the extent to which consumers spontaneously consider their real-life financial constraints predicts their relative preference for choosing (self-generated) material goods over experiences. We further investigated whether this relationship could be explained by changes in participants’ self-reported concern about the longevity of the purchase.

Method

Two hundred and fifty-four Mechanical Turk participants completed the study in exchange for financial compensation. Fourteen participants failed an Instructional Manipulation Check (Oppenheimer, Meyvis, and Davidenko 2009, detailed below) and were excluded from all analyses.

Participants were asked to think about one material good and one experience that they would like to purchase in the next few months. Specifically, they read the following prompt:
Please think about one discretionary material good [experience] that you would like to purchase in the next few months. This purchase should cost more than $50 but less than $1,000. Please make sure that the purchase is: - discretionary (i.e., not a necessity) - a material good (i.e., not an experience) [an experience (i.e., not a material good)].

The order of the material good and the experience was counterbalanced. The second prompt added the following request, “Ideally, it should be similar in price to the previous purchase you specified.” After each prompt, participants provided a short description of the purchase.

Next, participants were asked to imagine that they could only make one of the two purchases and to indicate which purchase they would make (using a 7-point scale: 1 = Definitely [experience], 7 = Definitely [material], with each participant’s individually chosen material good and experience being listed within the brackets). We then measured financial constraints by asking participants to what extent they thought about their current financial constraints while considering which option they would purchase (1= not at all, 7 = very much). Note that we chose to measure the salience of financial constraints rather than participants’ objective financial constraints, given that it is the consideration of the constraints that is expected to influence consumers’ choices (Weber and Johnson 2009). Next, we measured the proposed mediator by asking participants to what extent they had considered which of the two purchases would last longer (1 = not at all, 7 = very much).

As controls, we asked participants to self-code each of their purchases as being a material good or an experience (using a binary choice) and to indicate how the purchases compared on price (using a 3-point scale: -1 = [experience] is cheaper, 0 = they are similar in price, 1 = [material] is cheaper). All participants then completed demographic questions including age, sex, and native language. Finally, participants answered an Instructional Manipulation Check.
question (Oppenheimer et al. 2009). This question asked participants to demonstrate that they were taking the time to read the instructions by ignoring the options below (i.e., “single”, “married / in a relationship”, and “divorced”) and instead type the word “neither” at the bottom of the choices. Participants who failed this check were excluded from all analyses. A similar Instructional Manipulation Check question was used in all subsequent studies.

Results and Discussion

Twenty people indicated that their self-generated purchase was not of the requested type (i.e., indicated that their material good description was actually an experience or vice versa) and are thus excluded from the analysis, leaving a final sample of 220 participants ($M_{\text{age}} = 31.1, \text{SD} = 9.7; 59.1\% \text{ male}$).

In line with hypothesis 1, consideration of financial constraints ($M = 4.31, \text{SD} = 2.14$) was positively correlated with preference for the self-generated material good over the self-generated experience ($\beta = 0.18, t(218) = 2.69, p = .008$). Furthermore, participants who thought more about their financial constraints were also more concerned about the longevity of their purchase ($\beta = 0.17, t(218) = 2.56, p = .011$), and this concern about longevity significantly predicted preference for the material good ($\beta = .631, t(218) = 11.99, p < .001$). A bootstrapping test confirmed that the increased focus on longevity mediated the relationship between thinking about financial constraints and preference for the material good (95% CI = 0.02, 0.22; $n = 220$; 10,000 re-samples; Preacher and Hayes, 2008). Finally, after controlling for this mediation path, there is no reliable direct relationship between consideration of financial constraints and preference ($\beta = 0.07, t(217) = 1.38, \text{NS}$).
In sum, we found initial evidence of a relationship between financial constraints and a preference for material goods. The more participants considered their financial constraints, the more likely they were to prefer the material good over the experience. This relationship was mediated by an increased concern about the longevity of their purchase. Note that this finding cannot be attributed to the material goods being systematically cheaper than the experiences, as there was no systematic price difference between the purchase types. While 50 participants stated that their material good was cheaper, another 50 participants stated that their experience was cheaper (119 participants indicated they were similar in price and 1 participant declined to answer the question).

**STUDY 2: INCENTIVE-COMPATIBLE CHOICES**

Although study 1 provided initial evidence of a relationship between financial constraints and a preference for material goods, the study had several limitations. For instance, perhaps the types of purchases people consider differ depending on whether the participant is the type of person who naturally considers financial constraints when evaluating purchases. Additionally, the shift in preferences could be due to a belief that the material goods could be resold at a later time. Study 2 was designed with these limitations in mind. We used gift cards to stores that sell relatively more material goods or more experiences. While using gift cards was relatively conservative since observing a preference shift required participants to think about what they would buy with the gift card, it did offer some advantages over self-generated purchases. First, all participants considered the same “material good” and “experience” options. Second, both options could be resold. Finally, by using gift cards, we were able to make the choices incentive-
compatible by informing participants that some of them would receive all of their chosen options.

Method

Five hundred and five Mechanical Turk participants completed the study in exchange for financial compensation. Seventy-four participants failed an Instructional Manipulation Check and were excluded from all analyses, leaving a final sample of 431 participants (54% male, $M_{\text{Age}} = 33.1$).

All participants received the same prompt to introduce the choice task and to explain the incentive-compatible structure. Specifically, participants read:

*On the next few pages, you will make a choice between 5 sets of gift certificates that you might actually receive. All survey participants will be entered into a lottery. If you are one of the two winners of the lottery, you will receive ALL FIVE gift certificates that you’ve selected (each worth $25 with a total value of $125) to spend on yourself to increase your happiness. Therefore, keep in mind that these choices have real consequences as you may receive each of the gift certificates that you select.*

Participants then saw five pairs of gift cards, each consisting of one gift card for a company that sells more material goods and one gift card for a company that sells more experiences, which had been pretested to be approximately equally desirable. For each pair, participants indicated which of the gift certificates they would rather receive using a binary choice. We randomized both the order of the five pairs as well as the position of the “material good” and “experience” gift card on each page. The same randomization procedure was followed in all subsequent studies.
As in study 1, after the choice task we asked participants to what extent they thought about their current financial constraints while choosing between the gift certificates (1 = not at all, 7 = very much). In addition, we subsequently asked participants to what extent they felt financially constrained (1 = not financially constrained at all, 7 = very financially constrained), which we expected would be significantly correlated with how much they considered their financial constraints during the choice task. We did not measure concerns about longevity.

All participants then completed demographic questions including age, sex, native language, and income. Finally, participants answered an Instructional Manipulation Check question.

Results and Discussion

We summed the number of material gift cards that each participant chose (for a possible score from zero to five) and regressed this number on the extent to which they considered their financial constraints while choosing between gift cards. As predicted, participants who thought more about their financial constraints chose a greater number of material gift cards (β = 0.12, \( t(429) = 2.58, p = .010 \)). See figure 2 for results by replicate.

Insert figure 1 about here

Participants in this Mechanical Turk sample generally felt financially constrained, given that self-reported feelings of financial constraint were relatively high (\( M = 5.00, SD = 1.66 \)). Furthermore, self-reported financial constraint (\( M = 4.56, SD = 2.03 \)) was positively correlated
with the consideration of constraints during choice \( r = .56, p < .001 \) and showed a trend-level association with more material choices \( \beta = 0.08, t(429) = 1.63, p = .104 \).

In sum, we replicated the relationship between financial constraints and material preferences found in study 1 with consequential choices of gift cards, which could both be resold. The more participants considered their financial constraints, the more they chose gift cards to stores that sell more material goods. A similar relationship was found between general feelings of financial constraint and preference for the material gift cards. However, this latter relationship was considerably weaker, indicating that it is the awareness of these constraints during the purchase decision that is shifting consumers’ preferences towards the material options.

**STUDY 3: FRIVOLOUS MATERIAL PURCHASES**

The aim of study 3 was to rule out two potential alternative explanations for our earlier findings. First, it is possible that consumers who are considering financial constraints may prefer material goods because they are trying to avoid purchases that are seen as more frivolous and wasteful—assuming that experiences are generally seen as less essential than material goods. For instance, participants could have imagined buying more useful items with the “material good” gift cards compared to the “experience” gift cards. Since this aversion to frivolousness is a plausible alternative account, study 3 was designed to explicitly test whether consumers considering their financial constraints are still more likely to prefer material options when those material options are perceived as *more* frivolous and wasteful than the experiences.
Second, we sought to provide additional evidence for the role of longevity. Although we asked participants how much they considered longevity in the first study, longevity was the only reason examined. In study 3, we measure how often longevity, among other reasons, is considered to ensure people considering their financial constraints are not simply checking off any reason provided to demonstrate they have thought carefully about their choice.

Method

Two hundred and three Mechanical Turk participants completed the study in exchange for financial compensation. Nineteen participants failed an Instructional Manipulation Check (Oppenheimer et al. 2009) and were excluded from all analyses, leaving a final sample of 184 participants (57% male, $M_{\text{Age}} = 33.3$).

Participants completed a hypothetical shopping task. They were shown five pairs of items, each consisting of one material good and one experience, and asked to indicate their preference between the options using an unnumbered 9-point scale anchored by “More likely to buy A” and “More likely to buy B.” The options were selected so that, in each of the pairs, the material option seemed more frivolous and wasteful than the experience (e.g., a revolving tie rack versus dinner at an Indian restaurant), as established in a separate pre-test (frivolousness: $M_{\text{Material}} = 4.86$, SD = 1.84; $M_{\text{Experience}} = 4.16$, SD = 1.77; $F(1, 190) = 11.83$, $p < .001$; wastefulness: $M_{\text{Material}} = 4.47$, SD = 1.91; $M_{\text{Experience}} = 3.79$, SD = 1.71; $F(1, 190) = 10.39$, $p = .002$; for the list of options, see appendix A).

After the shopping task, we asked participants to indicate the reasons for their choices by selecting from the following options: (1) “How much I liked one of the options,” (2) “How much
I disliked one of the options,” (3) “How long my chosen option would last for,” and (4) “Other” (next to which participants could write a reason of their own). They did this for each of the five pairs they had just considered. We separated liking and disliking as possible reasons to test for the alternative account that more financially constrained participants may be less attracted to experiences because experiences seem less pleasurable when in a negative mood. Such an inability to enjoy experiences may be reflected in reduced liking or increased disliking.

At the end of the survey, we used two questions to measure the extent to which participants were considering their financial constraints while making their choices (i.e., the salience of their financial constraints): “To what extent did you think about your current financial situation while making your choices in the shopping task?” (1 = not at all, 7 = very much) and “To what extent did you think about your current financial constraints while making your choices in the shopping task?” (1 = not at all, 7 = very much). Participants then completed demographic questions including age, sex, native language, and income. Finally, participants answered an Instructional Manipulation Check question.

Results and Discussion

Financial Constraints. The two questions measuring participants’ consideration of their financial constraints were highly correlated and thus averaged and pooled (α = .97; M = 3.28, SD = 2.09).

Preference. In this study and in subsequent studies, participants’ shopping decisions were coded so that higher numbers indicate a preference for the material goods. As predicted, a repeated measures ANOVA with pair as a within-subjects variable and consideration of financial
constraints as a continuous between-subjects variable revealed a significant effect of financial constraints. In line with hypothesis 1, participants who thought more about their financial constraints were more likely to prefer the material goods \( F(1, 182) = 8.69, p = .004 \). There was no significant interaction between pair and consideration of financial constraints \( F(4, 728) = 1.03, \text{NS} \), indicating that the pattern of results did not reliably differ across pairs. Figure 2 shows the preference for the material good in each pair at different levels of self-reported consideration of financial constraints (based on the regression slopes).

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Insert figure 2 about here

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*Reasons.* Scores for liking, disliking, and longevity were computed by summing the number of times a participant selected the respective reason across all five pairs. We regressed these sums on participants’ consideration of financial constraints. In line with hypothesis 2, the more participants considered their financial constraints, the more often they selected longevity as the reason for their choices \( \beta = 0.29, t(182) = 4.07, p < .001 \), and this concern about longevity significantly predicted preference for the material goods \( \beta = 0.58, t(182) = 9.67, p < .001 \). A bootstrapping test confirmed that an increased focus on longevity mediated the relationship between thinking about financial constraints and preference for the material goods (95% CI = 0.06, 0.20; \( n = 184 \); 10,000 re-samples; Preacher and Hayes, 2008). After controlling for this mediation path, there was no reliable direct relationship between financial constraints and preference \( \beta = 0.05, t < 1 \). Neither liking, nor disliking was significantly related to participants’ consideration of their financial constraints (liking: \( \beta = 0.11, t(182) = 1.48, \text{NS} \); disliking: \( \beta = - \).
0.10, \( t(182) = -1.33, \) NS). This suggests that the effect of considering financial constraints on preferences is not driven by a decreased liking (or enhanced disliking) of the experiences.

In sum, study 3 demonstrates that consumers who consider their financial constraints have an increased preference for material goods over experiences—even when those material goods are comparatively more frivolous and wasteful. Thus, the shift toward material purchases does not constitute a shift toward more practical or prudent expenditures. Instead, the shift toward material purchases coincides with an increased concern about the longevity of the purchase, providing support for hypothesis 2.

Post-test

New research suggests that it may be easier to justify material goods compared to experiences (Dalton and Goodman 2014), which suggests a possible alternative account for the effect of financial constraints on material preferences. Although the material options in study 3 were seen as significantly more frivolous and wasteful than the experiences, it is possible that the ability to justify a purchase is orthogonal to this. To address this concern, we conducted a post-test asking participants to explicitly rate how easy or hard it would be to justify each of the ten purchases used in study 3 on a 7-point scale (1 = very easy, 7 = very hard). In all pairs, the material good was rated as more difficult to justify than the experience (all \( t > 2.49, p < .015 \)). Thus, the results of study 3 indicate that consideration of financial constraints increases consumers’ preference for material goods over experiences, even when those material purchases are less prudent and harder to justify.
STUDY 4: MANIPULATING THE SALIENCE OF FINANCIAL CONSTRAINTS

Although the first three studies provide evidence consistent with our hypotheses, they all rely on correlational data. We can therefore not rule out that these findings are the result of a third variable that happens to correlate with consideration of financial constraints. In study 4, we addressed this by directly manipulating the salience of consumers’ financial constraints and testing how this manipulation affects consumers’ preference for material goods over experiences. Additionally, in this study, we used pairs that were more typical of discretionary purchases than the rather unusual options used in study 3 (e.g., revolving tie rack), and that were pretested to make sure that, in each pair, the material good and the experience were similar in value and desirability.

Method

One hundred ninety-five Mechanical Turk participants completed the study in exchange for financial compensation. Thirty-three participants failed an Instructional Manipulation Check (Oppenheimer et al. 2009) and were excluded from all analyses, leaving a final sample of 162 participants (53% male, $M_{\text{Age}} = 34.2$).

We manipulated the extent to which participants considered their financial constraints while making their choices. Specifically, participants in the financial constraint condition were asked to consider their current financial situation using the following instructions:

Please describe your current financial situation. For example, do you have to be careful with how you spend your money? Do you sometimes feel as though you cannot spend
your money on what you want? Would you consider yourself financially constrained? Or, would you consider yourself financially comfortable? Do you feel as though you have the financial resources to live the way you want? Please take a few minutes and describe your financial situation in as much detail as possible.

They were then given another short essay prompt that asked:

Now, please list the aspects of your daily life and spending decisions that are affected by your current financial situation.

Note that this is a conservative manipulation since the prompt does not explicitly force participants to only think about constraints, but rather about their financial situation in general. This was done to minimize any potential demand effects. However, because participants’ reports of their financial situation and their financial constraints correlated so highly in the previous study, and because the previous studies suggest that this population is generally financially constrained, we assumed that most respondents would feel financially constrained when considering their current financial situation. Participants in the control condition were not given any essay prompt.

As in study 3, participants then completed a hypothetical shopping task that was introduced as follows: “imagine that these are actual choices you have to make given the financial situation that you are currently in” (in the financial constraint condition) or “imagine that these are actual choices you have to make” (in the control condition). The shopping task again included five pairs, each consisting of one material good and one experience, which were equated on desirability, expected happiness at time of purchase, and value at the stated price in a pre-test using a different Mechanical Turk sample (see appendix A). Participants indicated their preference on an unnumbered 9-point scale anchored by “More likely to buy A” and “More
likely to buy B.” After the shopping task, participants were asked to indicate the reasons for their choices using the same questions as used in study 3.

To ensure that our subtle manipulation caused participants to think about their financial constraints, we presented participants with the following manipulation check: “To what extent did you think about your current financial situation while making your choices in the shopping task?” (7-point scale, 1 = not at all, 7 = very much). We also asked participants to what extent they felt financially constrained (1 = not at all, 7 = very much). While the first question was a manipulation check (to make sure that highlighting financial constraints made participants more likely to consider them), the second question was meant to confirm that this sample considered themselves to be financially constrained in general (as seen in previous studies). Participants then completed demographic questions including age, sex, native language, and income. Finally, participants answered an Instructional Manipulation Check question.

Results and Discussion

*Manipulation check.* As intended, participants who had written about their financial situation reported thinking about their financial situation more ($M_{\text{Financial}} = 5.61, \text{SD} = 1.68$) than did participants in the control condition ($M_{\text{Control}} = 3.80, \text{SD} = 2.25; F(1, 160) = 31.81, p < .001$). The manipulation did not significantly affect participants’ responses to the second question, which measured their self-reported feelings of financial constraint ($M_{\text{Financial}} = 5.20, \text{SD} = 1.69; M_{\text{Control}} = 4.80, \text{SD} = 1.79; F(1, 160) = 2.04, \text{NS}$). The relatively high means do again indicate that participants in this Mechanical Turk sample generally felt financially constrained. In sum, our manipulation increased the extent to which people thought about their financial situation.
while making their choices, but it did not significantly change the extent to which they perceived their financial situation as constrained (which tended to be high across participants).

Preference. A repeated measures ANOVA with pair as a within-subjects factor and financial constraint condition as the between-subjects factor revealed a significant effect of the financial constraint manipulation. As predicted, participants who considered their financial constraints were (marginally) more likely to prefer the material goods than were participants in the control condition \((F(1, 160) = 3.89, p < .06)\). Additionally, there was no pair by financial constraint interaction \((F < 1)\), indicating that the pattern of results did not reliably differ across pairs (see figure 3).

Reasons. As in study 3, we summed the number of times a participant selected liking, disliking, and longevity as a reason for their choice. In line with hypothesis 2, participants who considered their financial constraints were significantly more likely to select longevity as a reason for their choice \((M_{\text{Financial}} = 2.79, \text{SD} = 1.78; M_{\text{Control}} = 1.83, \text{SD} = 1.65; F(1, 160) = 12.60, p < .001)\) and concern about longevity significantly predicted preference for the material goods \((\beta = 0.53, t(160) = 7.82, p < .001)\). A bootstrapping test confirmed that the increased concern about longevity significantly mediated the effect of the financial constraint manipulation on preference for the material goods \((95\% \text{ CI} = 0.24, 0.94; n = 160; 10,000 \text{ re-samples})\). Finally, after controlling for this mediation path, there is no reliable direct effect of condition on preference \((\beta = 0.01, t < 1)\).
Participants in the financial constraint condition were marginally less likely to select liking as a reason for their choice ($M_{\text{Financial}} = 2.93, \ SD = 1.68; \ M_{\text{Control}} = 3.35, \ SD = 1.50; \ F(1, \ 160) = 2.80, \ p = .096$), but also marginally less likely to select disliking as a reason for their choice ($M_{\text{Financial}} = 1.20, \ SD = 1.48 \ vs. \ M_{\text{Control}} = 1.65, \ SD = 1.49; \ F(1, \ 160) = 3.67, \ p = .057$). Neither of these reasons mediated the preference for material goods (liking: $95\% \ CI = -0.02, 0.30$; disliking: $95\% \ CI = -0.25, 0.33; \ n = 160; \ 10,000 \ re-samples$).

In sum, participants who were asked to think about their real financial constraints prior to a shopping task were more likely to prefer material goods. This effect was mediated by a heightened concern about the longevity of the purchase. Thus, this study provides causal evidence that thinking about financial constraints makes consumers more concerned about the lasting impact of their purchase, which in turn increases preference for material goods over experiences.

**STUDY 5: HOLDING PURCHASE GOAL CONSTANT**

Study 4 provided causal evidence that increasing the salience of participants’ financial constraints increases their preference for material goods. It also provided further evidence that the shift in preference towards material purchases is due to an increased concern about the longevity of the purchase. Study 5 extends the previous studies in three important ways.

First, a potential concern in the previous studies is that the material goods and experiences differed in many ways. That being said, aside from the difference in product category (i.e., material good or experience), none of these differences occurred systematically across all pairs; and the effect of financial constraints did not depend on the nature of the pair in
any of the preceding studies. However, it is still possible that the options used in previous studies were seen as fulfilling different types of needs (e.g., making a fashion statement versus being sociable) and that the effect is dependent on this difference in need fulfillment. Therefore, in study 5, we use a scenario for each pair that keeps the purchase goal constant (e.g. getting in shape), while offering a material good (e.g., gym equipment) and an experience (e.g., gym membership) to fulfill this purchase goal.

Second, a potential concern with the measurement of participants’ self-reported reasons for the choices is that longevity was the only reason that systematically differed between material goods and experiences. In study 5, we address this by including multiple attributes that systematically differ across material goods and experiences in the list of reasons provided to participants. In addition to how long the options last, we include how social the options are, since experiences are typically shared with others (Caprariello and Reis 2013). We include how risky the options are perceived to be, given that experiences are perceived to be more risky than material goods (Murray and Schlacter 1990) and people may be concerned that the experiences will turn out poorly, which could reduce long-term happiness (Nicolao et al. 2009). We also included how normatively appropriate the options are to provide an additional test of the ease of justification alternative account.

Finally, study 5 was also designed to more conclusively rule out another important alternative explanation: that considering financial constraints puts people in a negative mood, which in turn increases their preference for material purchases—since it may be harder to enjoy experiences when in a negative mood. Although we found that selecting liking and disliking of options could not explain the effects found in previous studies, it is possible that these measures
were not able to accurately capture the effect of mood on preference. Thus, in study 5 we explicitly measure mood.

Method

Four hundred and seven Mechanical Turk participants completed the computer-based study in exchange for financial compensation. Thirty participants failed an Instructional Manipulation Check (Oppenheimer et al. 2009) and were excluded from all analyses, leaving a final sample of 377 participants (60% male, $M_{\text{Age}} = 32.3$).

We again manipulated the salience of financial constraints. However, we used a stronger manipulation than in the previous study by asking participants to think about the factors contributing to their financial constraints:

*Everyone has financial constraints in their lives, but the factors that contribute to these constraints tend to vary. What are the factors that require you to be careful with how you spend your money? What limits your monthly discretionary income? Include the aspects of your current situation that most contribute to your financial constraints (e.g., mortgage or rent, family expenses, uncertainty of future income, health care costs, student loans, lack of income, limited savings, bills that need to be paid, expensiveness of entertainment...). Please be as detailed as possible and write at least a couple of sentences*

To provide a similarly demanding task for participants in the control condition, we asked them to list ten facts that they knew to be true (adapted from Vohs, Lasaleta, and Chaplin 2014).
Participants next read five scenarios in which they had decided to spend money for a specific purpose (e.g., getting in shape) and could do so in two ways, one of which was a material good (e.g., buying gym equipment), and one of which was an experience (e.g., buying a gym membership). See appendix B for the scenarios and options provided. For each scenario, participants indicated their preference between the two options on a 7-point scale. After the shopping task, participants were asked to indicate the reasons for their choices. In addition to how long each option would last for, the possible reasons provided in this study included the social nature of the options, the possible risk resulting from each choice, which option they felt was normatively appropriate to choose, and a field in which they could type their own reason.

As a manipulation check, participants were asked to what extent they thought about their financial constraints while making their choices (1 = not at all, 7 = very much). As in previous studies, we also asked participants to what extent they felt financially constrained (1 = not at all, 7 = very much). To further examine the mood explanation, we next presented a four-item mood measure. Participants were asked to indicate the extent to which they felt happy, felt sad, were in a good mood, or were in a bad mood (1 = not at all, 7 = very). Participants completed demographic questions including age, sex, and native language. Finally, participants answered an Instructional Manipulation Check question.

Results and Discussion

**Manipulation check.** As intended, participants who had written about their financial constraints reported thinking about their financial constraints more ($M_{\text{Financial}} = 5.61$, $SD = 1.62$) than did participants in the control condition ($M_{\text{Control}} = 4.19$, $SD = 2.09$; $F(1, 375) = 53.91$, $p <$
Additionally, while participants generally felt financially constrained, participants in the financial constraint condition reported feeling more financially constrained than those in the control condition ($M_{\text{Financial}} = 5.43, \text{SD} = 1.546; M_{\text{Control}} = 5.02, \text{SD} = 1.65; F(1, 375) = 6.48, p = .011$).

Preference. A repeated measures ANOVA with pair as a within-subjects factor and financial constraints as a between subjects factor revealed a significant effect of financial constraints. As predicted, participants who were asked to consider their financial constraints were more likely to prefer the material options than were participants in the control condition ($F(1, 375) = 10.02, p = .002$). There again was no pair by financial constraint interaction ($F(4, 1500) = 1.24, \text{NS}$), indicating that the effect did not reliably vary by replicate. The results for the five scenarios are shown in figure 4.

Insert figure 4 about here

Reasons. We summed the number of times a participant selected each reason (i.e., longevity, the social nature, the risky consequences, the normative appropriateness, or any reason provided by the participant) as a reason for their choice. As predicted, participants who were asked to consider their financial constraints were more likely to select longevity as a reason for their choice ($M_{\text{Financial}} = 3.54, \text{SD} = 1.40; M_{\text{Control}} = 3.14, \text{SD} = 1.49; F(1, 375) = 7.15, p = .008$) and this concern about longevity significantly predicted preference for the material goods ($\beta = 0.40, t(375) = 8.39, p < .001$). A bootstrapping test confirmed that the increased concern about longevity mediated the effect of the financial constraint manipulation on preference for the material options (95% CI = 0.03, 0.23; $n = 377; 10,000$ re-samples). Finally, after controlling for
this mediation path, there still was a weaker, but reliable direct effect of condition on preference 
($\beta = 0.11, t(374) = 2.29, p = .022$).

We next examined whether any of the alternative reasons could similarly account for the 
effect of financial constraints on participants’ preferences. There were no significant differences 
between conditions for any of the alternative reasons (all $F(1, 375) < 2.16$, NS). However, 
although the financial constraint manipulation did not affect participants’ likelihood of selecting 
any of the alternative reasons, it may instead have affected the \textit{impact} of these reasons. For 
instance, participants in the control condition may have selected the social reason as an argument 
for selecting the experience (i.e., being social is positive), whereas participants in the financial 
constraint condition may have selected the social reason as an argument for \textit{avoiding} the 
experience (i.e., being social is negative). If this were the case, then selecting the social reason 
would be negatively correlated with preference for the material option in the control condition, 
but positively correlated with preference for the material option in the financial constraints 
condition. However, this correlation was similarly negative in both conditions (control: $r = -.16$; 
financial constraints: $r = -.28$; difference: $z = 1.26$, NS). In the same way, the two conditions also 
did not differ in the relationship between preference for the material options and selecting risk as 
a reason (control: $r = -.10$; financial constraints: $r = -.19$; difference: $z = 0.92$, NS) or selecting 
normative appropriateness as a reason (control: $r = -.13$; financial constraints: $r = -.09$; $z = -0.40$, NS). Thus, not only did the manipulation not affect the likelihood of selecting any of the 
alternative reasons, it also did not affect the impact of these alternative reasons.

Finally, we assessed the effect of mood. The two negative mood measures were reverse 
coded so that higher numbers indicated less negative moods. The four mood measures were then 
combined into a single composite measure ($\alpha = .85$). Not surprisingly, participants who wrote
about their financial constraints reported a less positive mood than those in the control condition ($M_{\text{Financial}} = 5.14, \ SD = 1.28$; $M_{\text{Control}} = 5.44, \ SD = 1.14$; $F(1, 375) = 5.87, \ p = .016$). However, mood did not mediate the relationship between the financial constraint manipulation and preference for the material option (95% CI = -0.08, 0.97; $N = 160$; 10,000 re-samples).

In sum, participants asked to consider their real financial constraints were more likely to prefer material purchases even when both the material good and the experience served the same purchase goal. This effect was mediated by a heightened concern about the longevity of the purchase. Thus, this study provides additional evidence that consumers who think more about their financial constraints are more likely to consider how long their purchase will last for, which in turn increases preference for material goods over experiences. There were no significant differences on other potential differences between material goods and experiences, including the riskiness of the option, the social nature of the option, or whether it seemed normatively appropriate. Finally, the mood measure, although significantly different across conditions, did not account for the increased preference for material goods by participants considering financial constraints.

**STUDY 6: MODERATION BY LONGEVITY**

The previous studies indicated that the consideration of financial constraints increases consumers’ preference for material goods over experiences by increasing their concern about the longevity of the purchase. If the shift towards material purchases is indeed driven by concerns about longevity, and specifically the desire to obtain a purchase which will provide utility over time (reducing the desire or need for future expenditures), then this suggests a clear boundary
condition for the effect: consideration of financial constraints should not increase preference for material goods if these goods do not provide lasting utility. In all of the previous studies, we compared experiences that were limited in time to material purchases that would provide extended utility over time. While our pre-test and the results of study 1 suggest that material goods do indeed last longer than experiences in most cases, there are some material purchases that do not provide lasting utility. For example, a single-use, disposable poncho is a tangible, physical product, and thus is a material good. However, since this poncho is only used once, for a short time, our reasoning suggests that financially constrained consumers should be no more likely to prefer the poncho over experiences (such as buying a cup of coffee). Note that a disposable poncho may be still used for longer than it takes to drink a cup of coffee. However, its disposable nature does not make it a suitable option for securing lasting utility and reducing the need for future expenses. Study 6 tests this proposed boundary condition.

Study 6 again manipulated the consideration of financial constraints, and then provided a series of four scenarios, each of which involved a choice between an experience and a material good. Critically, some participants were asked to choose between experiences and long-lasting material options (as before), whereas others were asked to make choices between experiences and short-lived material options. Thus, study 6 was a 2 (financial constraints: salient vs. not) x 2 (material longevity: long-lasting vs. short-lived) between-subjects design. We predicted that making financial constraints salient would increase participants’ preference for the material options, but only when these options were long-lasting.

Method
Four hundred and four Mechanical Turk participants completed the computer-based study in exchange for financial compensation. Thirty-four participants failed an Instructional Manipulation Check (Oppenheimer et al. 2009) and were excluded from all analyses, leaving a final sample of 370 participants (59% male, $M_{age} = 29.9$).

As in study 5, we manipulated the salience of financial constraints by asking some participants to write about the factors affecting their financial constraints and asking other (control) participants to write ten facts they know to be true. Participants next read four scenarios in which they imagined needing to spend money for a specific purpose (e.g., staying dry in the rain), and could do so by purchasing either a material good or an experience. All participants were presented with the same experience (e.g., buying a drink at Starbucks and waiting for the rain to pass), while the material option differed by condition. Depending on the material longevity condition, participants were either presented with a long-lasting material option (e.g., a reusable poncho) or a short-lived material option (e.g., a single-use disposable poncho). See appendix C for the scenarios and options provided. For each scenario, participants indicated their preference between the material good and the experience on a 7-point scale.

As a manipulation check, participants were asked to report how much they thought about their financial constraints while making their choices (1 = not at all, 7 = very much). As in previous studies, we also asked participants to what extent they felt financially constrained (1 = not at all, 7 = very much). Participants completed demographic questions including age, sex, and native language. Finally, participants answered an Instructional Manipulation Check question.

Results and Discussion
**Manipulation check.** As intended, participants who had written about their financial constraints reported thinking about their financial constraints more ($M_{\text{Financial}} = 5.09$, SD = 1.86) than did participants in the control condition ($M_{\text{Control}} = 4.12$, SD = 2.06; $F(1, 366) = 20.93, p < .001$). Additionally, participants in the financial constraint condition reported feeling more financially constrained than did those in the control condition ($M_{\text{Financial}} = 5.38$, SD = 1.54; $M_{\text{Control}} = 4.83$, SD = 1.73; $F(1, 366) = 10.60, p = .001$).

There was an unexpected marginally significant effect of material condition on thinking about financial constraints. Participants were more likely to think about their financial constraints in the long-lasting material condition ($M_{\text{Long}} = 4.84$, SD = 1.96) than in the short-lived material condition ($M_{\text{Short}} = 4.36$, SD = 2.05; $F(1, 366) = 3.72, p = .055$).

**Preference.** A repeated measures ANOVA revealed a significant financial constraint by material longevity interaction ($F(1,366) = 12.58, p < .001$). A series of follow-up analyses support our hypothesis that financial constraints only increase preference for material options when these options are long-lasting. First, replicating earlier studies, in the long-lasting material condition, participants who considered their financial constraints showed an increased preference for the material options compared to those who did not consider their financial constraints ($F(1, 366) = 9.16, p = .003$). However, in the short-lived material condition, thinking about financial constraints actually reduced participants’ preference for the material options ($F(1, 366) = 3.95, p = .048$). Additionally, the pattern of results did not differ across the four scenarios, as indicated by the absence of a reliable three-way interaction ($F < 1$). Results for the four scenarios are shown in figure 5.

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Insert figure 5 about here
We earlier reported an unexpected effect of the material longevity manipulation on participants’ consideration of their financial constraints. This effect suggests a possible alternative explanation for our findings. The reduced impact of financial constraints in the short-lived material condition may have been due to the reduced strength of the financial constraint manipulation, rather than a different impact of those financial constraints. However, there are two findings that are inconsistent with this interpretation. First, we observe a reversal in the short-term material condition, which is not in line with a difference in magnitude interpretation. Second, the relationship of self-reported consideration of financial constraints with preference for material options does differ between conditions, \( z = -3.92, p < .001 \). In the long-lasting material condition, how much participants report thinking about their financial constraints is positively correlated with preference for the material options \( (r = .395, p < .001) \). Yet in the short-lived material condition, how much participants report thinking about financial constraints is unrelated to their preference for material options \( (r = .007, \text{NS}) \). Therefore, the results of this study cannot be explained by differences in the effectiveness of the financial constraint manipulation across the material conditions.

In sum, participants asked to consider their financial constraints were more likely to prefer material goods, but only when these material goods were long-lasting. When the material goods were clearly short-lived, the pattern reversed. Although we did not anticipate this reversal, we speculate that the description of the material goods in the short-lived condition could have made the ephemeral nature of these items particularly salient. This study provides additional evidence that concern about longevity mediates the relationship between financial constraints and preference for material purchases. Further, this study suggests an important boundary
condition. Material goods that are ephemeral will not benefit from consumers’ consideration of financial constraints. Additionally, because some of the short-lived material items objectively lasted longer than the experience (e.g., glow sticks last for hours while a game of skee-ball lasts only a few minutes), the disappearance of the effect in this condition indicates that financially constrained consumers are not merely maximizing the length of the benefits, but instead are looking to secure lasting utility to reduce the need or desire for future spending.

**GENERAL DISCUSSION**

We have proposed that feelings of financial constraint systematically increase consumers’ concern about the lasting impact of their purchases, and that this increased attention to longevity in turn increases preference for material goods over experiences. As a result, feelings of financial constraint will tend to shift consumers’ preferences toward material goods and away from experiences. This basic effect is observed across all six studies and across a wide variety of both self-generated and controlled replicates. In addition, the key role of increased concern about the purchase’s longevity is demonstrated both through mediation (studies 1, 3, 4, and 5) and through moderation (study 6): when material purchases are unusually short-lived, feeling financially constrained does not increase preference for material goods, and even increases preference for experiences instead.

Our results rule out a number of alternative accounts. They indicate that the preference shift is not driven by financially constrained consumers finding experiences less appealing for a variety of reasons other than their limited longevity: because they don’t like the social aspect of
experiences, because they are concerned about possible negative outcomes, or because they are in a negative mood. Most important, our results offer substantial evidence that the preference shift cannot be attributed to financially constrained consumers making purchasing decisions that are more sensible and easier to justify. Study 3 indicates that the shift towards more material purchases persists even when those material goods are more frivolous, more wasteful, and harder to justify than the experiences. While these findings already cast substantial doubt on an ease-of-justification based account, one other way to test this possibility is to examine the impact of financial constraints on the number of reasons participants offer. If the consideration of financial constraints made participants more concerned about justifying their choices, then this should be reflected in a greater number of self-reported reasons for their choices. To test this possibility, we summed the number of times a participant selected a reason other than longevity across the pairs for each of the studies measuring multiple reasons (studies 3-5). However, we found no evidence of a greater need for justification. The number of alternative reasons selected did not correlate with thoughts of financial constraints in study 3 (r = .01, NS) and did not differ between conditions in study 4 (Mfc = 4.94 vs. Mcontrol = 5.54, F(1, 160) = 2.42, p = .12). Finally, in study 5, participants in the financially constrained condition were marginally less likely to select reasons other than longevity (Mfc = 3.75 vs. Mcontrol = 4.18, F(1, 375) = 2.83, p = .09).

We have argued that financial constraints increase concern about the longevity of a purchase because financially constrained consumers want to maximize utility over time. That is, they want to choose purchases that will secure lasting benefits and thus reduce the need or desire for future purchases. One concern might be that the types of experiences we used in our studies did not lend themselves to the long-term intangible benefits found in previous literature on material and experiential purchases (such as memories and storytelling). In this case, our
experimental paradigms might have artificially forced a preference for longevity to translate into a greater desire for material purchases. Yet, we find this possibility unlikely for two reasons. First, in study 1 in which participants wrote about their own desired purchases, many participants wrote about trips, vacations, and concerts, that is, experiences that are likely to offer intangible long-term benefits. Second, in study 5, we deliberately included short-lived experiences that offered long-term benefits (e.g., music lessons where one can retain information and skills). However, participants considering their financial constraints still preferred the material options in these situations. These findings provide support for the contention that intangible benefits (e.g., social connectedness) are not sufficiently attractive to financially constrained consumers. Instead, financially constrained consumers appear to be attracted to purchases that provide lasting, tangible resources (a music instrument rather than skills from a music lesson) and thus reduce the need or desire for future expenditures.

In this paper, we examined how financial constraints influence the choice between material goods and experiences when making discretionary purchases. This decision is particularly important given the growing research suggesting that purchasing experiences may provide greater long-term happiness (e.g., Van Boven and Gilovich 2003). However, because this effect is driven by a heightened concern about longevity, our findings suggest that the consideration of financial constraints will result in other changes in consumer behavior when longevity is involved. For instance, advertisements or promotions that increase or decrease the salience of the longevity of purchasing options may disproportionately influence financially constrained consumers. Additionally, our findings have implications for purchases within each of the material good and experience categories that vary along the longevity dimension (e.g.,
durable versus non-durable goods, memberships versus day passes) and for spending decisions that vary along this dimension (e.g., renting versus buying).

If financial constraints systematically increase preference for material goods, we may also be able to observe this in macro-level data since average feelings of financial constraint should predictably vary with observable macro-level variables, such as unemployment and consumer confidence. In fact, a cursory analysis of aggregate U.S. expenditure data from the Bureau of Economic Analysis (BEA) shows a correlation between the proportion of money spent on goods and proxies of feelings of financial constraint in society. Specifically, consumers spend proportionately more on goods (compared to services) in quarters of greater unemployment ($r = 0.34, p < .001$) and in quarters with lower levels of consumer confidence (as measured by the University of Michigan Consumer Confidence Index; $r = -0.46, p < .001$), both controlling for a general time trend. Although these measures of discretionary spending and financial constraint are imperfect, they do suggest a positive relationship between financial constraints and preference for material goods on an aggregate level, a potential relationship that could be studied in more detail in future research.

This research is among the first to explore how consideration of financial constraints influences discretionary purchases (with a few notable exceptions, e.g., Kamakura and Du 2012; Sharma and Alter 2012), and brings to light potentially important implications for consumer welfare. Our research demonstrates that financially constrained consumers opt for material purchases because they are more concerned with lasting utility. Previous research suggests that this shift towards more material purchases may be suboptimal for well-being since experiential purchases have been shown to lead to greater long-term happiness than do material ones in many cases (e.g., Dunn et al. 2011). The reasons suggested for this finding have been varied:
experiences are more self-defining than material goods (Van Boven and Gilovich 2003), experiences are less easily comparable to alternatives than products are (Carter and Gilovich, 2010), experiences tend to provide greater social connections (Caprariello and Reis 2013), and consumers think about past experiences more than they do about material purchases (Van Boven and Gilovich 2003). On the surface, the current findings suggest that the extent to which a consumer considers his or her financial constraints could have a negative impact on future well-being. Despite being more concerned with longevity, by shifting their purchases towards material purchases, these consumers may be undermining their future well-being.

On the other hand, it is possible that consumers experiencing financial constraints in fact do derive relatively more utility from material goods, and thus the observed preference shift is actually in their best interest. Indeed, while most research has suggested a hedonic advantage from experiences, an early correlational study (Van Boven and Gilovich 2003) indicates that this advantage does not extend to the lowest income brackets, a group that is likely feeling financially constrained. While this attenuation may be due to differences in the types of purchases made by people across the income spectrum (e.g., poorer people choose less satisfying experiences), it may also be a direct result of feelings of financial constraint. For instance, consumers considering financial constraints, and for whom discretionary purchases are in fact more limited, may appreciate having something at a later time rather than having the memories of a past purchase. In sum, it is not yet clear whether this shift towards material purchases is a hedonically efficient way for financially constrained consumers to allocate their limited resources, which is an issue to be explored by future research.

Research into the hedonic efficiency of the observed shift toward material purchases is obviously relevant for formulating recommendations for financially constrained consumers.
Because limited resources highlight the need to spend one’s money wisely, financially constrained consumers may be particularly sensitive to advice on how best to spend their money. It is therefore important that any spending advice given to all consumers also applies to this particular group. On the one hand, if the shift toward material purchases by consumers considering financial constraints is suboptimal for well-being, then the general advice for consumers to spend more on experiences (e.g., Dunn et al. 2011; Dunn and Norton 2013) is advantageous. On the other hand, if financially constrained consumers actually do get more happiness from purchasing material goods, the prevailing advice to spend more on experiences could do more harm than good for this particular group.
Appendix A: Pretest Data

**Study 2: Gift Card Study Pretest** \( (n = 102) \)

<table>
<thead>
<tr>
<th>Material Goods (M), Experiences (E)</th>
<th>Number of participants who ranked option in top 10</th>
<th>Mean Rank</th>
<th>Mode Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barnes &amp; Noble (M)</td>
<td>61</td>
<td>5.31</td>
<td>2</td>
</tr>
<tr>
<td>AMC Movie Theaters (E)</td>
<td>53</td>
<td>6.32</td>
<td>5</td>
</tr>
<tr>
<td>Kohls Department Store (M)</td>
<td>48</td>
<td>6.06</td>
<td>5</td>
</tr>
<tr>
<td>Red Lobster restaurant (E)</td>
<td>45</td>
<td>6.24</td>
<td>5</td>
</tr>
<tr>
<td>Gap (M)</td>
<td>41</td>
<td>5.05</td>
<td>4</td>
</tr>
<tr>
<td>iTunes (E)</td>
<td>43</td>
<td>4.84</td>
<td>2</td>
</tr>
<tr>
<td>Bed Bath &amp; Beyond (M)</td>
<td>35</td>
<td>6.03</td>
<td>8</td>
</tr>
<tr>
<td>Redbox movie and video game rentals (E)</td>
<td>37</td>
<td>5.84</td>
<td>10</td>
</tr>
<tr>
<td>Zappos online shoe store (M)</td>
<td>30</td>
<td>5.93</td>
<td>10</td>
</tr>
<tr>
<td>Fandango movie tickets (E)</td>
<td>27</td>
<td>6.04</td>
<td>8</td>
</tr>
</tbody>
</table>

**Study 3: Frivolousness Study Pretest** \( (n \text{ ranges from } 22 \text{ to } 35) \)

<table>
<thead>
<tr>
<th>Material Goods (M), Experiences (E)</th>
<th>( M_{\text{Frivolousness}} )</th>
<th>( M_{\text{Wasteful}} )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shower radio (M)</td>
<td>4.52 (1.78)</td>
<td>3.88 (1.62)</td>
</tr>
<tr>
<td>Movie theater tickets (E)</td>
<td>3.87 (1.59)</td>
<td>3.60 (1.61)</td>
</tr>
<tr>
<td>Revolving tie rack (M)</td>
<td>4.89 (1.60)</td>
<td>4.57 (1.70)</td>
</tr>
<tr>
<td>Dinner at Indian restaurant (E)</td>
<td>3.87 (1.75)</td>
<td>3.74 (1.63)</td>
</tr>
<tr>
<td>Heated toilet seat (M)</td>
<td>5.42 (2.05)</td>
<td>4.84 (2.24)</td>
</tr>
<tr>
<td>Material Goods (M), Experiences (E)</td>
<td>M_{Desirable}</td>
<td>M_{Happy}</td>
</tr>
<tr>
<td>-------------------------------------------------------</td>
<td>---------------</td>
<td>------------</td>
</tr>
<tr>
<td>Gap scarf (M)</td>
<td>3.93 (1.82)</td>
<td>3.78 (1.78)</td>
</tr>
<tr>
<td>Hour of bowling (E)</td>
<td>4.17 (1.85)</td>
<td>4.02 (1.85)</td>
</tr>
<tr>
<td>Pair of Thinsulate gloves (M)</td>
<td>4.52 (1.70)</td>
<td>4.31 (1.75)</td>
</tr>
<tr>
<td>Baseball game bleacher tickets (E)</td>
<td>4.34 (1.94)</td>
<td>4.16 (2.00)</td>
</tr>
<tr>
<td>xBox game (M)</td>
<td>3.94 (2.03)</td>
<td>3.65 (2.10)</td>
</tr>
<tr>
<td>Upper deck baseball tickets (E)</td>
<td>3.69 (1.97)</td>
<td>3.64 (2.03)</td>
</tr>
<tr>
<td>Kindle Touch (M)</td>
<td>4.98 (1.86)</td>
<td>4.78 (1.92)</td>
</tr>
<tr>
<td>Dinner cruise (E)</td>
<td>5.12 (1.57)</td>
<td>5.13 (1.68)</td>
</tr>
<tr>
<td>Winter coat (M)</td>
<td>4.90 (1.60)</td>
<td>4.73 (1.61)</td>
</tr>
<tr>
<td>Broadway show tickets (E)</td>
<td>4.81 (1.94)</td>
<td>4.84 (1.94)</td>
</tr>
</tbody>
</table>
Appendix B: Study 5 Stimuli

Scenario 1: Sports
You save up $150 that you have set aside for your sports interests (e.g., golf, ice skating/hockey). You can spend this money in two ways:
(a) You can buy $150 worth of sports equipment (e.g., a new golf club or ice skates).
(b) You can get $150 worth of hours of access to a sports facility (e.g., a driving range, an ice rink).
[Keeping in mind your financial constraints, how / How]¹ are you likely to spend your $150?

Scenario 2: Movies
For your birthday, you decide to treat yourself to some movies. You are prepared to spend about $40 on movies and are considering the following options:
(a) You can buy yourself some new movies to own on DVD.
(b) You can get some tickets for a movie theater nearby (valid for 1 month).
[Keeping in mind your financial constraints, how / How] are you likely to spend your $40?

Scenario 3: Gym
For the new year, you make a resolution to get into better shape. You consider different ways of making this happen. You find out:
(a) You can buy gym equipment for your home for $100.
(b) You can buy a two (2) month gym membership at a local gym for $100.
Assume that you currently have neither a gym membership nor the necessary equipment to exercise at home. [Keeping in mind your financial constraints, how / How] are you likely to spend your $100?

Scenario 4: Musical Instrument
You would like to learn to play a new musical instrument. You can make this happen in one of two ways:
(a) You can buy the musical instrument for $200.
(b) You can buy three months of lessons and use their instruments during the lessons for $200. [Keeping in mind your financial constraints, how / How] are you likely to spend your $200?

Scenario 5: Painting
You have decided to take up painting. You can make this happen in two ways.
(a) You can buy painting supplies to own for $75.
(b) You can take one day painting class for $75.
[Keeping in mind your financial constraints, how / How] are you likely to spend your $75?

¹ Wording varied by financial constraint condition.
Appendix C: Study 6 Stimuli

Scenario 1: Rain
You are walking around the city and it starts to pour. Unfortunately, you are unprepared for the rain. You are considering these two options, each of which costs $5.00. You can:
(a) Buy a one-time, single use (disposable) poncho  [Short-lived]

(b) Buy a reusable poncho [Long-lasting]

(b) Buy a drink at Starbucks and sit until the rain passes

[Keeping in mind your financial constraints, how / How]² would you spend your $5.00?

Scenario 2: Arcade
You are at an arcade and you have some tickets that you decide to trade in. You can use them to:
(a) Get a set of disposable glow sticks to wear that night [Short-lived]

(a) Get a yo-yo [Long-lasting]

² Wording varied by financial constraint condition.
(b) Play one game of Skee Ball

[Keeping in mind your financial constraints, how / How] would you spend your tickets?

Scenario 3: Back Pain
Your shoulders and back have been feeling sore. You are at the mall and want to make your back feel better. You are considering these two options, each of which costs $5.00. You can:
(a) Get a one-time, single use heating pad to use when you get home [Short-lived]

(a) Get a reusable heating pad to use at home [Long-lasting]

(b) Get 20 minutes on a massage chair at the mall

[Keeping in mind your financial constraints, how / How] would you spend your $5.00?

Scenario 4: Guests
You have some people coming over tonight. You want to make the place feel welcoming. You are considering these two options, each of which costs $20.00. You can:
(a) Buy a nice bouquet of fresh flowers [Short-lived]
(a) Buy a resilient flowering house plant \([\text{Long-lasting}]\)

(b) Buy some gourmet nuts for people to eat

[Keeping in mind your financial constraints, how / How] would you spend your $20.00?
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Figure 1. Proportion of participants choosing the material option across 5 pairs at mean thoughts of financial constraints +/- 1 SD (Study 2)
Figure 2. Preference for the material options across 5 pairs at mean thoughts of financial constraints +/- 1 SD (Study 3)
Figure 3. Preference for the material option across 5 replicates by condition (Study 4). Error bars represent standard error of the mean.
Figure 4. Preference for the material option across 5 replicates by condition (Study 5). Error bars represent standard error of the mean.
Figure 5. Preference for the material option across 5 replicates by condition (Study 6). Error bars represent standard error of the mean.