

Doing It the Hard Way: How Low Control Drives Preferences for High-Effort Products and Services

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Consumers often face situations in which their feelings of personal control are threatened. In such contexts, what role should products play in helping consumers pursue their goals (e.g., losing weight, maintaining a clean home)? Across five studies, we challenge the traditional view that low control is detrimental to effort and demonstrate that consumers prefer products that require them to engage in hard work when feelings of control are low. Such high-effort products reassure individuals that desired outcomes are possible while also enabling them to feel as if they have driven their own outcomes. We also identify important boundary conditions, finding that both the nature of individuals' thoughts about control and their perceived rate of progress toward goals are important factors in the desire to exert increased effort.

The belief that we have control over outcomes in our lives is thought to be a primary motivator of behavior—the reason we keep fighting toward our goals and the reason we are not paralyzed by fears of what the future holds (Kelley 1971; Miller 1979). However, events often arise that threaten this belief. Certainly, horrific acts of violence, devastating natural disasters, and political and economic turmoil cause consumers to question their ability to control the outcomes in their lives. So too can the experiences of everyday life, such as being stuck in seemingly endless traffic, being placed on hold after a frustrating in-

teraction with the cable company, or not having the means to buy the medicine or food your family needs. As consumers face such threats to their control, what role should products play in helping them pursue their goals? Should they help consumers reach desired outcomes by making the path as effortless as possible? Consumers are certainly accustomed to hearing such messaging: Reebok's EasyTone shoes tone your calves while you relax; Swiffer's cleaning products power through more dirt with less effort. Or, should products require consumers to exert meaningful hard work to reach the same outcomes, as with Nike's Trainer One shoes that only "work if you do" and Carhartt's attire that helps you "outwork them all"?

Based on research that demonstrates that low control often leads individuals to exhibit lower levels of persistence and effort (e.g., Bandura 1977; Dweck and Reppucci 1973; Maier and Seligman 1976), one might emphatically conclude that the former approach is most desirable—that individuals would prefer products that require little personal effort. We, however, present evidence to the contrary. We begin by noting that individuals have a natural desire to restore control when it is threatened (Fiske, Morling, and Stevens 1996), but also acknowledge that the effort and persistence required to reassert control are often thwarted by the fear of not being able to do so (i.e., the sense that effort and outcomes are independent of one another; e.g., Lefcourt 1973). We suggest that products that require high effort may be uniquely able to resolve this tension because

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Laura Peracchio served as editor and Jennifer Escalas served as associate editor for this article.

Electronically published July 15, 2014

they reassure individuals that desired outcomes are possible, while also allowing consumers to exert hard work, enabling them to feel as if they have driven their own outcomes.

We demonstrate this basic effect and the proposed process across five studies. While challenging the long-standing notion that low control is detrimental to effort, we also provide new insight into consumers' desired relationships with brands and products by identifying when consumers desire two distinct types of partners: products that require high personal effort versus those that require little personal effort. Finally, we enhance our understanding of consumer effort by focusing not on the effort that people are willing to invest to attain or construct a product, but on the subsequent phase: the effort that people wish to invest in collaboration with the product to achieve their goals. We counter the seemingly rational assumption that once consumers attain an item, they want to minimize the effort required to make the item work.

THE DESIRE TO RESTORE CONTROL

Believing that one is in control of his/her outcomes in life is considered by many to be a basic human need and a primary driver of behavior (e.g., Heider 1958; Kelley 1971; Kelly 1955). Formally defined as the perception that one can make positive things happen and avoid negative things, personal control is often studied with respect to outcomes in one's external environment (control over grades, income, health) but is also applicable to emotional outcomes, behaviors, and thoughts (Skinner 1996). Decades of research suggest that feeling control over one's life is associated with many positive outcomes, including greater psychological well-being (e.g., Abramson, Seligman, and Teasdale 1978; Lazarus and Averill 1972; Thompson 1981), physical health (e.g., Karasek 1990; Rodin and Langer 1977), and financial health (e.g., Perry and Morris 2005). Given the benefits of high control and the stress associated with low control, people naturally have a strong desire to restore control when it is threatened. For example, they more closely monitor situations (e.g., Fiske et al. 1996) or attempt to gain "secondary control" by adjusting themselves to fit in with the existing reality and the entities deemed to be in control (e.g., Heckhausen and Schulz 1995; Rothbaum, Weisz, and Snyder 1982). People also respond to threats to their control by not necessarily seeking personal control but by searching for a sense that things are structured and "under control" via external forces such as religion, politics, and the aesthetic elements in their environment (e.g., Cutright 2012; Kay et al. 2008).

This desire to restore control is consistent with research on motivation. A vast body of literature on self-regulation and goal pursuit suggests that when individuals perceive a discrepancy between their desired state and their current state, they are motivated to reduce the discrepancy (e.g., Carver and Scheier 2001; Duval and Wicklund 1972; Locke and Latham 2002) and continuously assess their progress toward this end state until they either arrive at the end state or abandon these goals (e.g., Atkinson and Birch 1970; Fishbach, Dhar, and Zhang 2006; Huang, Zhang, and Broniar-

czyk 2012). Thus, when individuals' feelings of control are low, they desire to reduce the discrepancy between their current and desired levels of control.

CHALLENGES IN RESTORING CONTROL

While individuals may possess a desire to restore control, they must also face the fear that they do not have the ability or resources to do so, or that their outcomes are independent of their efforts (i.e., useless). Accordingly, low control is often associated with lower persistence and less effort. For example, when individuals have chronically low feelings of control or find themselves in uncontrollable situations, they are less likely to persist at unsolvable tasks or to withstand painful experiences (e.g., Glass, Singer, and Friedman 1969; Lefcourt 1973; Mischel, Zeiss, and Zeiss 1974; Staub, Tursky, and Schwartz 1971). Further, when effort (in attaining a product) is truly pointless and irrelevant to regaining control (e.g., difficulty of reading a package), individuals with low control have negative reactions to a product requiring effort to attain it (Kim and Labroo 2011).

Interestingly, just as the desire to restore control is consistent with general motivation principles, the notion that people persist less and give up in the face of low control is also consistent with these principles. When individuals recognize a discrepancy between their current and ideal states, they assess their likelihood of reducing the discrepancy (Bandura 1977; Lazarus 1966) and determine whether or not it makes sense to pursue their goals (Carver and Scheier 2001). Various factors can lead people to disengage from goal pursuit, including perceptions that they are too far from the goal (e.g., Huang et al. 2012; Kivetz, Urminsky, and Zheng 2006; Liberman and Förster 2008), that their rate of progress is too slow, or that the ultimate likelihood of achieving the goal seems too low (e.g., Huang and Zhang 2011; Hull 1932). Individuals feeling a lack of control over their outcomes should readily face such discouraging perceptions, whether in a laboratory setting where there are no clear signs of progress on an unsolvable puzzle, or in real life where they see no signs of improvement in their academic achievements, health, or income. A tension therefore exists between individuals' desire to restore control and the assessment that the goal is attainable and the effort worthwhile.

WHY ARE PRODUCTS IMPORTANT?

We argue that products play a nontrivial role in resolving the tension that arises in the face of low control because consumers believe that products serve as external resources that provide functional tools and benefits that make achieving an outcome more feasible. This belief can be seen in the way that individuals form different types of relationships and connections with brands (e.g., Aggarwal and McGill 2012; Deighton 1992; Escalas and Bettman 2005; Fournier 1998) and how they use products to signal desired traits, from high status to intelligence and beyond (e.g., Gao, Wheeler, and Shiv 2008; Rucker and Galinsky 2008; Wick-

lund and Gollwitzer 1982). Importantly, while offering functional and symbolic assistance, products can also leave room for consumers to contribute their own hard work in pursuit of desired outcomes, which leads to feelings of empowerment (i.e., the sense that you can determine your own outcomes). We suggest that when feelings of control are low, consumers will want tools to ensure that it is feasible to achieve positive outcomes, which products provide, but they also want to be able to contribute their own hard work and feel empowered.

WHY IS HARD WORK IMPORTANT?

The assumption that working hard with a product will lead to empowerment and increased feelings of personal control is based on the link that people often make between effort and control. Effort is one of the primary attributions for individuals' achievement outcomes (Weiner 1972), and individuals who experience success at an effortful task experience a greater sense of efficacy (a key predecessor to control) than those who experience the same success on an easy task (Schunk 1983). The link is also clear in research showing that people exert more effort to attain the outcomes that they desire most, suggestive of a belief that effort will help them control the outcomes (e.g., Atkinson 1957; Carver and Scheier 2001; Higgins 1997).

The value that people assign to effort and hard work is also clear from individuals' enhanced evaluations for organizations and items after they have invested their own effort (e.g., Aronson and Mills 1959; Kim and Labroo 2011; Kivetz and Simonson 2002; Nielsen and Escalas 2010; Norton, Mochon, and Ariely 2012), especially in the context of gift giving (Moreau, Bonney, and Herd 2011), or after others have invested effort (e.g., Kruger et al. 2004; Morales 2005). Consumers also actively choose more effortful experiences when energy levels are high versus low (Gibbs and Drolet 2003), when they believe a decision process has been too easy (Schrift, Netzer, and Kivetz 2011), when they believe they have a competitive advantage over others (Kivetz and Simonson 2003), or when pain and effort suggest greater meaning in an activity (Olivola and Shafir 2013) or efficacy of a product (Kramer et al. 2012). In addition, customers' increasingly active roles in the production and customization of goods and services suggest that effortful processes often provide a meaningful sense of value and competence (e.g., Bendapudi and Leone 2003; Mochon, Norton, and Ariely 2012).

This evidence of the high value that is assigned to hard work, coupled with research suggesting that consumers often see effort as a primary means of control, drives our hypothesis that when control is low, consumers seek to restore this control by embracing hard work. Importantly, while we leverage the insights of prior work regarding the value of effort, we also adopt a unique lens to study consumer effort. We essentially ask: "How hard do you want to have to work to make the product deliver its benefits?" or, posed differently, "How effective do you want the product to be on its own?" We reason that when control is low, individuals will

ironically prefer to invest more (vs. less) effort alongside a product to deliver the same benefits. Thus, this research provides a departure from prior research that demonstrates that low control often leads to lower persistence and less effort. We expect this reversal to appear in the present research largely because consumers are given access to tools (i.e., products) that they believe can enhance the feasibility of restoring control, thus minimizing feelings of helplessness.

SUMMARY OF PREDICTIONS

In sum, we predict that low feelings of personal control should cause people to prefer products that require high personal effort over those that require low personal effort. Of note, and consistent with prior research, we consider the relevant baseline state for purposes of comparison to be one of high control (Cutright 2012; Kay et al. 2008), as people generally possess unrealistically high feelings of control (e.g., Alloy and Abramson 1979; Langer 1975; Taylor and Brown 1988). We expect that at baseline, individuals will find value not only in working hard but also in efficiency and leisure given that people often behave in line with the "principle of least effort" and choose the easiest route to their goals (e.g., Child 1946; Hoyer and Brown 1990; Payne, Bettman, and Johnson 1993). Thus, we do not expect the baseline (high control) condition to show systematic preferences for products that require high versus low effort.

In what follows, we demonstrate the preference for high versus low effort products (studies 1–3) and identify boundary conditions relating to the domain specificity of this effect (study 4) and individuals' beliefs about attaining desired outcomes (study 5). Together, these studies reveal a pattern whereby consumers with low control eschew brands requiring little effort, preferring instead to expend higher levels of their own effort to reach the same outcomes.

STUDY 1: NIKE PRINT AD STUDY

Study 1 seeks to establish that when control is low, consumers desire to partner with brands that require high effort. We manipulate control via a writing task. We manipulate effort by adapting a real Nike print ad, holding outcomes constant and making the ads identical except for their effort emphasis. We also assess how participants anticipate feeling after using the product. We predict that anticipated use of a high (vs. low) effort product under low control will lead to greater empowerment, or the feeling that one has the ability and drive to regain control.

Study 1 also investigates potential alternative explanations for why low control may lead to a preference for high-effort products. For example, low-control consumers may shift their goals downward and hence feel that since they are aiming for less ambitious goals, they do not need a low-effort product that does all of the work. It is also possible that when individuals feel low control, they have a greater concern that others will take advantage of them, heightening a fear of gullibility and leading them to be especially likely

to avoid products that seem too good to be true (i.e., low-effort products). We test these alternatives by including measures of individuals' goals (weight) and anticipated feelings of gullibility.

Method

Participants and Procedure. Two hundred and seventeen Mechanical Turk (median age = 32, 71% female) participants (one participant was omitted due to missing data on the dependent variables) were randomly assigned to this 2 (personal control: low vs. high) \times 2 (effort required: low vs. high) between-subjects experiment. Participants first completed a control manipulation that asked them to write about something positive that happened because of something they did (i.e., something they had control over) or not because of something they did (i.e., something they did not have control over; Kay et al. 2008), keeping mood constant. (Both positive and negative contexts can elicit an underlying discomfort with a lack of control (Kay et al. 2008; Whitson and Galinsky 2008). Participants next viewed an ad for a real shoe, Nike Trainer One (see app. A, available online). The low-effort ad emphasized that by using the shoe, limited consumer effort was required to obtain desired results. The high-effort ad emphasized that high consumer effort was required to obtain the same results. Participants then rated how likely they would be to purchase the product (1 = very unlikely, 7 = very likely). Next, they thought about how they would feel by using the shoe and rated to what extent they would experience 7 states consistent with the notion of empowerment (i.e., the sense that one has the ability and drive to regain control and deliver desired outcomes). The highly correlated index ($\alpha = .95$) included strong, confident, empowered, self-sufficient, determined, driven, and in control (1 = would clearly not describe my feelings, 5 = would clearly describe my feelings), which all loaded on the same factor. We included other filler measures (e.g., embarrassed, fearless, gullible, relaxed) to ensure that the construct of empowerment (and not positive emotion or arousal) drove the key effects. Finally, participants indicated their current and ideal weight.

As an effort manipulation check, participants rated their agreement with the statements, "If the product works as indicated, 1) I will need to do a lot in order to see positive results" and "2) I will need to do little in order to see positive results" (1 = strongly disagree, 7 = strongly agree, reverse scored; $r = .60$). As a control manipulation check, two independent coders rated the sense of control reflected in each essay (-5 = extremely low control, 5 = extremely high control). These formed a highly correlated index ($r = .79$, $\kappa = .74$).

Results

We predicted that under low control, people would prefer a high- versus low-effort shoe. We predicted that this would be mediated by the extent to which people anticipated feeling empowered by the shoe. We therefore expected mod-

erated mediation such that empowerment would mediate the impact of the shoe on purchase likelihood only when control was low.

Effort Manipulation Check. A 2 (personal control: low vs. high) \times 2 (effort required: low vs. high) ANOVA was performed on the effort check index. There was a significant effect of effort ($M_{hi\ effort} = 4.81$ vs. $M_{lo\ effort} = 4.04$; $F(1, 212) = 14.13$, $p < .001$). There was no effect of control ($F(1, 212) = .42$, NS) nor a control \times effort interaction ($F(1, 212) = .61$, NS).

Control Manipulation Check. A one-way ANOVA on the coded control responses (these responses came prior to the effort manipulation) revealed that the high (vs. low) control passages reflected greater control ($M_{hi\ con} = 2.76$ vs. $M_{lo\ con} = -1.90$; $F(1, 214) = 413.72$, $p < .001$).

Main Results. A 2 \times 2 ANOVA on purchase likelihood did not reveal main effects of control ($F(1, 212) = 2.07$, $p = .15$) or effort ($F(1, 212) = 1.60$, $p = .21$), yet there was a significant control \times effort interaction ($F(1, 212) = 3.87$, $p = .05$; see fig. 2). Planned contrasts revealed that low-control participants were more likely to purchase the shoes when they were portrayed as requiring high (vs. low) effort ($M_{lo\ con, hi\ effort} = 4.06$ vs. $M_{lo\ con, lo\ effort} = 3.24$; $F(1, 212) = 5.09$, $p = .03$). Under high control, there were no differences in purchase likelihood ($M_{hi\ con, hi\ effort} = 3.92$ vs. $M_{hi\ con, lo\ effort} = 4.10$; $F(1, 212) < 1$, NS; fig. 1).

Mediator. A 2 \times 2 ANOVA on the empowerment index revealed no effect of control ($F < 1$), yet a main effect of effort such that participants felt more empowered by the high (vs. low) effort ads ($M_{hi\ effort} = 3.51$ vs. $M_{lo\ effort} = 3.20$;

FIGURE 1

STUDY 1: LIKELIHOOD OF PURCHASING SHOE AS A FUNCTION OF PERSONAL CONTROL AND PRODUCT EFFORT



$F(1, 212) = 5.13, p = .02$). There was a nonsignificant control \times effort interaction ($F(1, 212) = .99, p = .32$). Notably, planned contrasts revealed the same pattern as observed with purchase likelihood: low-control participants felt they would be more empowered by the high (vs. low) effort shoes ($M_{\text{lo con,hi eff}} = 3.54$ vs. $M_{\text{lo con,lo eff}} = 3.09$; $F(1, 212) = 5.18, p = .02$). Under high control, there were no differences ($M_{\text{hi con,hi eff}} = 3.48$ vs. $M_{\text{hi con,lo eff}} = 3.31$; $F(1, 212) < 1, \text{NS}$). A test of moderated mediation (using model 8 of the bootstrapping process described by Hayes 2013) with 5,000 bootstrapped samples revealed that in the low-control conditions, empowerment mediated the effect of product effort on purchase likelihood ($B = .44$, with a 95% CI exclusive of 0 [.05, .86]). In the high-control conditions, however, empowerment did not mediate the effect of product effort on purchase likelihood ($B = .17$, with a 95% CI that included 0 [−.17, .54]).

Alternatives. An examination of ideal weight (controlling for current weight) revealed no significant effects of personal control, product effort, or their interaction (all $F < 1$), suggesting that consumers are not changing their reference points. We also assessed whether using the product would make participants feel gullible. Results revealed no main effect of control ($F < 1$) but a significant effect of product effort whereby anticipating using a high-effort product decreased perceived gullibility ($M_{\text{hi eff}} = 1.99$ vs. $M_{\text{lo eff}} = 2.36$; $F(1, 212) = 4.86, p = .03$). There was no significant interaction on gullibility ($F < 1, \text{NS}$). Moreover, neither ideal weight (with and without controlling for current weight) nor gullibility mediated purchase likelihood.

Discussion

Study 1 demonstrates that low-control consumers view high-effort products more favorably than low-effort products and make the intriguing decision to reject high levels of help from the low-effort product in favor of exerting more of their own effort alongside a more demanding high-effort product. As described above, we believe that this reversal of classic findings (that low control leads to reduced effort) occurs precisely because consumers view the Nike shoe as a legitimate partner to support them as they engage in the hard work necessary to feel a sense of personal empowerment.

STUDY 2: GOLF PUTTING BEHAVIOR STUDY

We have shown that individuals feeling low control value hard work and prefer partnerships with high-effort products. However, it is unclear whether low-control individuals actually exert more effort when given the opportunity. In study 2, we examine whether consumers are just saying they want to work harder when control is low or whether they actually do so.

We propose that, consistent with the motivation literature, the discrepancy between current and desired control should

cause consumers to behave in a manner consistent with their goal to restore control. Given the perceived role of effort in restoring control, we propose that consumers with low control should be motivated to leverage their own effort to reassert control and, hence, actually work harder. Importantly, this should be independent of the type of product they use. However, they should only desire to purchase products that will give them credit for that effort. In other words, while low-control consumers should work harder when using the low- or high-effort product, they should only prefer to purchase the high-effort product. To examine this, we manipulate personal control in athletics and ask participants to use a golf club framed as requiring low or high effort to improve putting performance. We measure the time spent practicing with the club as a proxy for effort, feelings of empowerment following club use (as opposed to only anticipated use measured previously), and purchase intent.

Method

Participants and Procedure. One hundred and sixty-two undergraduate students at Arizona State University (median age = 21, 51.6% female) participated in this 2 (personal control: low vs. high) \times 2 (effort required: low vs. high) experiment in exchange for course credit. One participant was omitted due to missing data on the dependent variables. Participants first read a press release describing how people had higher or lower control over their athletic outcomes than originally anticipated (app. B, available online). Participants were next told that as a separate task, they would read about and rate a popular golf club (app. C, available online). The high-effort (low-effort) putter was described as being designed to improve performance alongside “diligent practice and effort” (“with limited practice or effort”).

Next, participants went into a separate room to use the club they read about. Participants were handed a PING putter and told that their putting would be separated into two parts, “practice” and “performance.” They could take as much time as they liked to get used to the putter (it was a distinctive shape and size) and practice putting on a synthetic and slightly sloping putting green from a distance of 5.6 feet. Once comfortable, participants indicated that they were ready to begin the performance phase, where they attempted five putts. The experimenter surreptitiously recorded the time spent practicing and the number of successful putts.

After the putting task, participants completed follow-up measures. First, they were asked to think about how they felt while using the golf club. They then rated the extent to which they felt empowered (using the index from study 1; $\alpha = .90$). Next, participants rated how likely they would be to purchase the golf club (1 = very unlikely, 7 = very likely). They then completed a manipulation check of the control article, rating their agreement with: (1) people have a great deal of control over their athletic outcomes, (2) people have a great deal of control over how they perform on athletic tasks, and (3) people can significantly improve their athletic skills if they really want to (1 = completely disagree, 7 = completely agree; $\alpha = .92$). Participants com-

pleted the same effort manipulation check questions as in study 1 ($r = .50$). Finally, participants completed demographic measures and indicated whether they had ever purchased a PING putter before as a covariate. (Prior preference for and experience with this distinct club should influence practice time, feelings following product use, and likelihood of future purchase).

Results

We predicted that participants would work harder under low (vs. high) control and ultimately prefer the high-effort product. We also expected empowerment to mediate purchase intentions as in study 1. The purchase history covariate significantly affected all key dependent measures (practice time, performance, empowerment, and purchase intent). All analyses are performed as ANCOVAs that include only this covariate.

Product Effort Manipulation Check. A 2 (personal control: low vs. high) \times 2 (effort required: low vs. high) ANCOVA revealed that the high-effort club was perceived to require greater investment to see results ($M_{hi\ effort} = 4.60$ vs. $M_{lo\ effort} = 3.91$; $F(1, 156) = 9.36$, $p < .01$). The main effect of control and the control \times effort interaction were not significant (all $p > .10$).

Control Manipulation Check. A 2 \times 2 ANCOVA revealed a main effect of control such that participants in the high (vs. low) control condition felt greater control over their athletic outcomes ($M_{hi\ con} = 5.58$ vs. $M_{lo\ con} = 5.05$; $F(1, 156) = 6.86$, $p < .01$). There was not a main effect of effort nor a significant control \times effort interaction (all $F < 1$, NS).

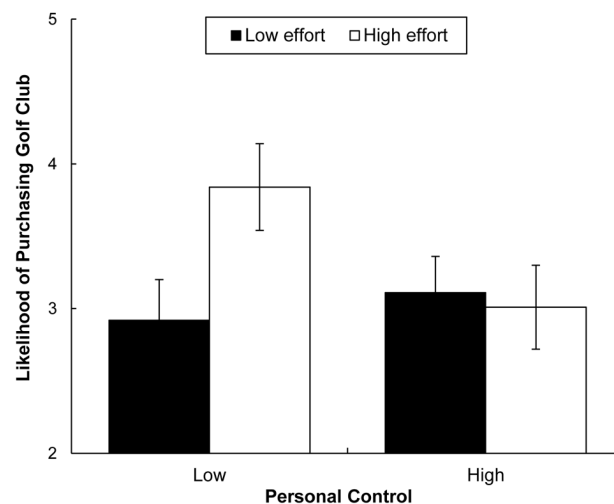
Main Results. To control for outliers, we winsorized practice time at the 99th percentile. (The results below were even more pronounced prior to winsorizing.) A 2 \times 2 ANCOVA revealed a significant effect of control such that low-control individuals practiced longer than high-control individuals ($M_{lo\ con} = 51.39$ seconds vs. $M_{hi\ con} = 37.34$ seconds; $F(1, 156) = 4.41$, $p = .04$). There was no main effect of effort nor was there a control \times effort interaction (all $F < 1$). This result suggests that when feelings of control are low, beyond merely wanting products that tout higher effort required, individuals do work harder.

We also measured overall putting performance. A 2 \times 2 ANCOVA revealed no main effect of control, but an unexpected effect of effort such that participants did marginally better in the low-effort conditions ($M_{lo\ effort} = 1.83$ putts vs. $M_{hi\ effort} = 1.46$ putts; $F(1, 156) = 3.45$, $p = .07$). There was no significant control \times effort interaction ($F(1, 256) < 1$, NS).

A 2 \times 2 ANCOVA on purchase intent did not reveal a main effect of control ($F(1, 156) = 1.69$, $p = .20$) but did reveal a marginal effect of product effort ($F(1, 156) = 2.75$, $p < .10$). This was qualified by a significant control \times product effort interaction ($F(1, 156) = 4.29$, $p = .04$; see fig. 2). Consistent with the prior studies, contrasts revealed

FIGURE 2

STUDY 2: LIKELIHOOD OF PURCHASING CLUB AS A FUNCTION OF PERSONAL CONTROL AND PRODUCT EFFORT



that low-control individuals had more interest in purchasing the high-effort club than the low-effort one ($M_{lo\ con,hi\ effort} = 3.84$ vs. $M_{lo\ con,lo\ effort} = 2.92$; $F(1, 156) = 6.59$, $p = .01$). This result was mediated by feelings of empowerment following use of the high-effort club ($B = .20$, with a 95% CI exclusive of 0 [.01, .44]). (See app. D, available online, for details.) There were no differences across individuals in the high-control conditions ($M_{hi\ con,hi\ effort} = 3.01$ vs. $M_{hi\ con,lo\ effort} = 3.11$; $F(1, 156) < 1$, NS) and no mediation by empowerment among these individuals.

Discussion

Again reversing prior work on low control, these findings suggest that low feelings of personal control can cause individuals to work harder, regardless of whether they use a high- or low-effort product. In terms of what they purchase, however, they ultimately prefer a product congruent with their desire to expend (and receive credit for) higher effort.

We should also note that the interaction pattern appears to be more strongly driven by a heightened preference for the high-effort club under low control as opposed to a derogation of the low-effort club in this state. Unlike Nike (see studies 1 and 3), a brand that generates high preferences at baseline (which effectively limits further enhancement of the high-effort option), the PING brand reflects much lower preferences. (A within-subjects pretest [$N = 70$] revealed that people like Nike significantly more than PING ($M_{Nike} = 5.30$ vs. $M_{PING} = 4.08$; $p < .001$). This therefore creates a very different baseline comparison. Thus, consumers would be less apt to derogate the low-effort PING club (given that liking for it is already low), but more likely to

enhance preferences for the high-effort good, exhibiting the present results.

STUDY 3: BASKETBALL FIELD STUDY

In study 3, we look at how naturally occurring fluctuations in control influence desire for high-effort products, using winning or losing a game as a natural manipulation of control within an intramural basketball context. We predicted that players on teams that had recently won a game would feel greater control than those who had lost, based on work suggesting that people credit their own efforts for success but often attribute failure to outside factors such as luck (Weiner 1972). We predicted that this feeling of low control would cause players who had lost to prefer a basketball shoe positioned as requiring higher effort.

Method

Participants and Procedure. Eighty-seven intramural basketball players at the University of Pennsylvania were offered a \$10 Amazon gift card and Gatorade at the university gym to complete a short survey (one person failed to complete the survey) and randomly assigned to read a high- or low-effort ad for a basketball shoe (see app. E, available online). This resulted in a 2 (outcome: win [high control] vs. loss [low control]) \times 2 (effort required: low vs. high) experiment. Players were approached immediately after their games and informed that we were interested in their opinions regarding potential Nike product concepts. Players first completed measures of whether their team had won or lost that day (each team played one game per day) and by how many points their team had won or lost. Next, to assess perceived control, participants rated agreement with the statement “whether or not our team wins is within our control” (1 = strongly disagree, 7 = strongly agree). Next, players viewed an ad for a basketball shoe that required little effort (“Work less, Jump higher”) or great effort (“Work harder, Jump higher”). They rated their interest in purchasing the shoe (1 = not at all, 7 = extremely) and their willingness to pay for it (open ended). Finally, as potential control variables, players rated their mood (1 = very unhappy, 7 = very happy), skill level (1 = worse than average, 2 = average, 3 = better than average), average points scored per game, number of points scored in the recent game, and the importance of winning.

Results

We predicted that players would be more likely to purchase the high-effort shoe when they were feeling low control, that is, after losing. We first present the control manipulation check followed by the key purchase intent and willingness to pay measures.

Control Manipulation Check. A 2 (outcome: win vs. loss) \times 2 (product effort: low vs. high) ANOVA on feelings of control after the game revealed that players who won felt

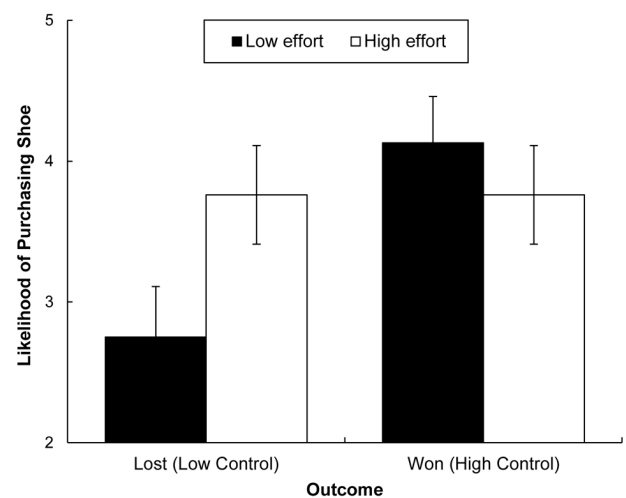
higher control than those who lost ($M_{\text{win}} = 6.04$ vs. $M_{\text{loss}} = 5.02$; $F(1, 85) = 10.03$, $p < .002$). There was not a main effect of effort or a significant control \times effort interaction (all $p > .54$).

Main Results. A 2 (outcome: win vs. loss) \times 2 (effort required: low vs. high) ANOVA on purchase intent revealed no main effect of product effort ($F(1, 82) < 1$, NS), but a main effect of winning such that individuals who won were more interested in purchasing the shoe ($M_{\text{won}} = 3.94$ vs. $M_{\text{lost}} = 3.26$; $F(1, 82) = 3.91$, $p = .05$). This was qualified by a significant outcome \times product effort interaction ($F(1, 82) = 3.91$, $p = .05$; fig. 3). As predicted, players who lost showed greater interest when the shoe was positioned as requiring high versus low effort ($M_{\text{lost,hi eff}} = 3.76$ vs. $M_{\text{lost,lo eff}} = 2.75$; $F(1, 82) = 4.06$, $p < .05$). Those who had won (high control) did not exhibit such differences ($M_{\text{win,hi eff}} = 3.76$ vs. $M_{\text{win,lo eff}} = 4.13$; $F(1, 82) < 1$, NS). The same pattern was obtained for willingness to pay (see app. F, available online). Examinations of covariates including mood, skill level, points scored (today and on average), and the degree to which winning was important only strengthened the reported effects.

Discussion

Study 3 demonstrates that the relationship between feelings of control and the preference for high (vs. low) effort products is not confined to a lab environment and simulated manipulations of control. In the common context of recreational sports, wins and losses can induce higher and lower feelings of control. Replicating prior studies, these lower

FIGURE 3
STUDY 3: LIKELIHOOD OF PURCHASING SHOE AS A FUNCTION OF OUTCOME-INDUCED PERSONAL CONTROL AND PRODUCT EFFORT



feelings of control drive increased purchase intent and valuation of less accommodating high-effort products. Moreover, as in study 1 (also a Nike shoe), the pattern of results and significant contrasts reveal greater derogation of low effort than enhancement of high effort. Of course, important limitations stem from using a field-based measure of control. While we attempted to account for differences related to mood, skill, and motivation, we return to more tightly controlled manipulations of control in the remaining studies.

STUDY 4: DOMAIN SPECIFIC THREAT, ACADEMIC VERSUS HEALTH STUDY

The objective of study 4 is to examine how the nature of individuals' thoughts about low control influences product preferences. Thus far, our studies have progressed from activating very broad thoughts of control (study 1) to asking consumers to focus on narrow areas of control, such as athletic skill (studies 2 and 3). More specifically, our first study asked participants to think about any time where they felt reduced control, a manipulation that causes individuals to scan their memory and think of instances of low control across a wide variety of domains (only one of which they actually discuss). Indeed, this was confirmed by pretests indicating that after such manipulations, individuals report thinking about control in over 50% of seven key domains of life satisfaction (e.g., material well-being, health, and productivity; Cummins 1995). Conversely, our later studies narrowed consumers' attention to specific areas of control (also confirmed via pretests available from the authors). This raises the question of the role of domain specificity with respect to control. That is, does thinking about control in limited, specific areas lead consumers to reassert control with high-effort products within those same domains or will any high-effort product suffice? While it makes sense that when a broad sense of control is threatened, individuals will seek to restore control in a number of areas using a broad set of products, when a narrower sense of control is threatened, it may be more important and more efficient for consumers to focus on the specific domain of concern. Moreover, research suggests that when people are exposed to narrow categories, they discern between attributes more carefully than those who are primed with broad categorizations (Ülkümen, Chakravarti, and Morwitz 2010). Thus, more narrow manipulations of control may lead consumers to be more discerning between control restoration opportunities. Unlike studies 2–3, where the domain of the control threat and the focal product were always the same (e.g., athletic control threat/athletic product; basketball control threat/basketball shoes), the present study provides an opportunity to test the role of domain specificity by varying these contexts.

We present participants with specific manipulations of control in either an academic or health domain, followed by low- and high-effort products from either domain. They then rate their likelihood of purchasing the product. We expect that threats to one's control in a specific domain (e.g., ac-

ademics) should only lead to a preference for high-effort products in the same domain.

Method

Participants and Procedure. Three hundred and twenty-three students at Arizona State University (median age = 21, 45% female) participating in this study (and several others) in exchange for course credit were randomly assigned to the conditions of a 2 (control: low vs. high) × 2 (effort required: low vs. high) × 2 (control domain: health vs. academics) × 2 (product domain: health vs. academics) between-subjects experiment. This 16-cell design enabled us to test two domains simultaneously for both the control and product manipulations, and then collapse into control domain and product domain “match” and “mismatch” conditions. Participants were told that they would first learn about recent research developments on the controllability of our actions and read a press release describing how people have more (less) control over their health (academic) outcomes than previously thought (app. G, available online). Next, in an ostensibly separate task, participants evaluated an ad for a fitness package or GRE study kit (app. H, available online). The high-effort ad stressed the importance of working hard while using the product to see results in either fitness or GRE performance; the low-effort ad stressed the ease of seeing results without needing to work hard in these areas. Participants rated how likely they would be to purchase the product presented to them (1 = very unlikely, 7 = very likely). Next, they completed the same effort manipulation check items as in study 1. As a check on control, participants selected their takeaway from the article: either that individuals are (1) in control of the outcomes discussed, (2) not in control of the outcomes, or (3) none of the above.

Results

We predicted that after experiencing a threat to control in a specific domain, participants would only be attracted to high-effort products within that domain. That is, individuals learning they had low control over their health (academic) outcomes would be more likely to purchase only the high-effort fitness (GRE) product.

Effort Manipulation Check. Individuals believed that the high (vs. low) effort product required greater effort ($F(1, 315) = 21.90, p < .0001$). This did not interact with domain match/mismatch ($F(1, 315) = 0.10, NS$). There was a marginal effort × control interaction ($F(1, 315) = 3.70, p = .06$) as individuals in the low-control condition perceived the low-effort product to require even less effort than individuals in the high-control condition ($p = .01$).

Control Manipulation Check. The control manipulation was also successful ($\chi^2 = 79.06, p < .0001$): 83% of participants in the high-control condition indicated that people have “high control” over outcomes while only 22% said the same in the low-control condition. There were no interac-

tions with effort ($\chi^2 = .03$, NS) or domain match ($\chi^2 = .17$, NS).

Main Results. As discussed, because of the nature of the study, we collapsed across domains, coding conditions where the control threat and product were from the same domain as a “domain match” and conditions where the control threat and product were from different domains as a “domain mismatch.” This yielded a 2 (control: low vs. high) \times 2 (domain match: match vs. mismatch) \times 2 (effort required: low vs. high) design. A 2 \times 2 \times 2 ANOVA on purchase likelihood revealed a marginal control \times effort interaction ($F(1, 315) = 3.56$, $p = .06$). There was also an unexpected effort \times domain match interaction ($F(1, 315) = 8.25$, $p = .004$). These were qualified by a significant control \times domain match \times effort interaction ($F(1, 315) = 4.34$, $p = .04$); see figure 4. Planned contrasts revealed that consistent with prior results, low control drove a preference for high-effort products, but only when they matched the domain in which control was threatened. Specifically, when control was low in a specific area, individuals preferred high-effort products that matched the threatened domain over high-effort products that were mismatches ($M_{\text{lo con,hi eff,match}} = 3.79$ vs. $M_{\text{lo con,hi eff,mismatch}} = 2.54$; $F(1, 315) = 14.16$, $p = .0002$) and over low-effort products that were matches ($M_{\text{lo con,hi eff,match}} = 3.79$ vs. $M_{\text{lo con,lo eff,match}} = 2.37$; $F(1, 315) = 15.53$, $p < .001$). None of the corresponding contrasts were significant under high control (all $p > .13$). Of note, the patterns under low control were consistent in both the academic and fitness domains prior to collapsing the data. Under low control in the health domain, the high-effort health product ($M = 3.59$) was preferred over the low-effort health product ($M = 2.45$; $p = .01$). However, there were no differences in preferences between the high- and low-effort academic products ($p = .31$) under low health control. Similarly, under low control in the academic domain, the high-effort academic product ($M = 4.04$) was preferred over the low-effort academic product ($M = 2.28$; $p = .01$). There were no differences between the low- and high-effort health products ($p = .54$) under low academic control.

Discussion

Study 4 reveals an important boundary condition of the effect of control on desire for high-effort products: when consumer perceptions of control are threatened in a specific domain, the avenues through which consumers desire to reinstantiate control are limited to the same domain. This is important given that day-to-day contexts often involve specific threats to control. This result should also minimize concerns that people facing control threats are simply motivated to act (i.e., engage in any effort), even if the action is not relevant to their sense of control.

Notably, we have replicated the effect that low feelings of personal control drive preferences for higher (vs. lower) effort products across multiple studies, challenging the intuition that low control should drive preferences for lower effort. We believe this occurs because products provide sup-

port and make the restoration of control seem feasible, thereby encouraging consumers to take opportunities for empowerment through hard work. In study 5, we demonstrate how our current findings (i.e., low control drives a preference for increased effort) can be reconciled with prior work suggesting that low control should decrease persistence. We suggest that if consumers feel that they cannot efficiently restore control in their lives, they should instead prefer to engage in as little effort as possible and decrease persistence.

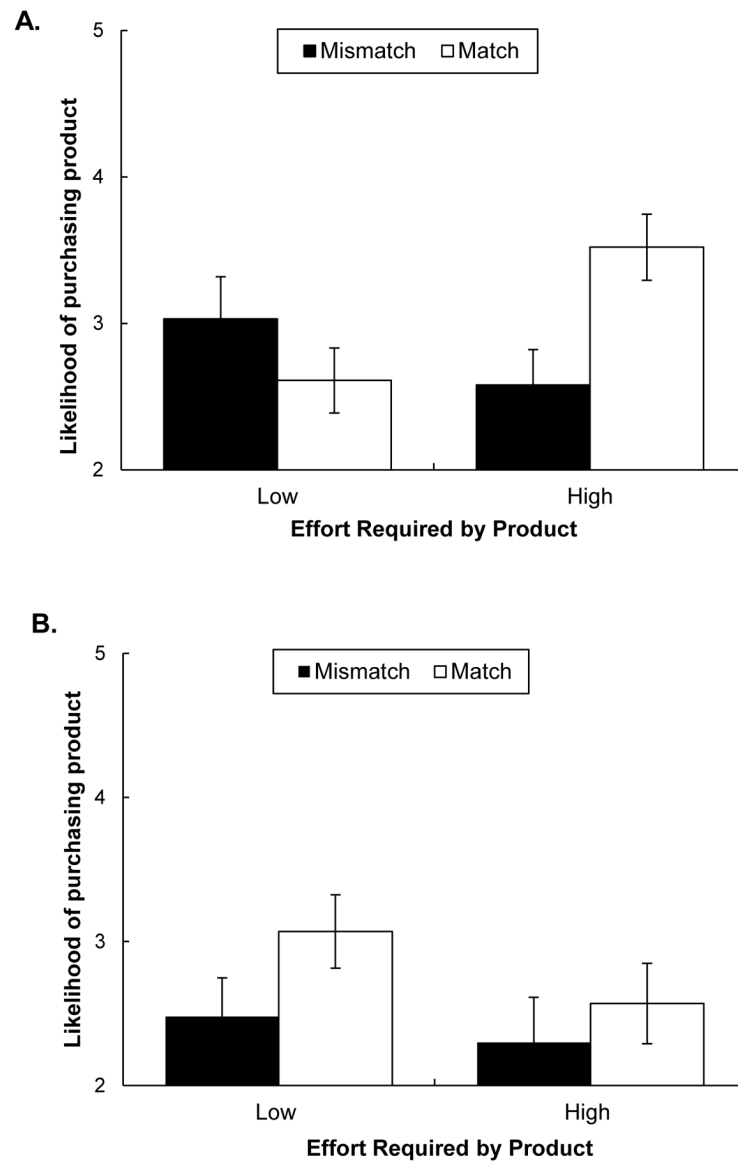
STUDY 5: CONTROL RESTORATION SHOPPING STUDY

The goal of study 5 was to explore an important moderator to distinguish when low-control individuals prefer low versus high effort. In our prior studies, we threatened participants' sense of control, creating a discrepancy in actual and desired control, and then presented them with a product that promised improvement outcomes with relatively low or high effort. Importantly, based on the advertisements and descriptions of the products provided, these products gave consumers the impression that if used as directed, both the outcomes and rates of progress (e.g., a 75% increase in muscle tone after 4 weeks of use) would be the same across products, and would be significant (“you’ll see amazing changes”). While this is consistent with persuasive strategies where fast progress toward goal completion is implicit, there are many contexts where consumers must deliberately appraise how quickly they will arrive at their desired outcomes. We argue that this appraisal influences goal pursuit and hence preferences for high- versus low-effort products when control is low. Based on research highlighted previously suggesting that rate of progress is an important determinant of whether individuals will engage in goal pursuit (Duval, Duval, and Mulilis 1992; Huang and Zhang 2011), we propose that if goal progress is appraised to be too slow, low-control consumers will choose an easier path. This is consistent with findings of prior research where consumers were unable to see a sufficient path for achieving desired outcomes and thus persisted less (e.g., Lefcourt 1973).

To test this hypothesis, we first manipulated feelings of control over shopping outcomes. Next, to make rate of progress salient, we presented participants with a fashion quiz described as a tool to assess how quickly participants might regain control over their shopping outcomes. This quiz was employed to measure a construct orthogonal to discrepancy—how quickly one can close the discrepancy—by prompting participants to think about their rate of progress, which would in turn influence their preferences to exert lower or higher effort. Following the quiz, participants learned about and indicated their interest in a personal shopping service described as requiring high or low consumer effort. We also assessed how happy individuals expected to be after receiving a highly desirable outfit from their high- or low-effort personal shopper. Importantly, even though all participants would be considering a highly desirable outfit,

FIGURE 4

STUDY 4: LIKELIHOOD OF PURCHASING PRODUCT AS A FUNCTION OF PRODUCT EFFORT AND DOMAIN MATCH AT (A) LOW PERSONAL CONTROL AND (B) HIGH PERSONAL CONTROL



and basic outcomes should therefore be the same, we expected the source of their outfit (i.e., a high- vs. low-effort shopper) to influence happiness. We expected that individuals would be happiest with their outfit when the personal shopper effort was congruent with their needs. Specifically, we expected that when control was low, individuals with high rates of progress (who thus expected to regain control relatively quickly) would expect to be happiest with a high-effort personal shopper, while individuals with low rates of

progress (who expected that regaining control would be slow) would expect to be happiest with a low-effort shopper. Moreover, while individuals with low or high rates of progress would both find happiness in the outfit from their desired shopper, we expected happiness to be uniquely driven by anticipated empowerment for individuals who had high rates of progress and had the opportunity to engage in hard work with the high-effort shopper. In sum, we expected that by making consumers' rate of progress toward their

control goals salient and measuring this rate, we could identify what types of low-control consumers would prefer a low- versus high-effort shopper. Consistent with our prior studies, when control is low and a sufficient rate of progress is expected, the need for empowerment should drive a desire for hard work. However, when progress is slow and hence the feasibility of reaching desired outcomes (in a reasonable amount of time) is questioned, individuals should behave consistently with prior research and prefer to engage in less effort.

Method

Participants and Procedure. One hundred and sixty undergraduate participants from the University of Pennsylvania (median age 21, 61% female) were randomly assigned to the conditions of a 2 (personal control: low vs. high) \times 2 (effort required: low vs. high) \times rate of progress (continuous) experiment and were paid \$10 for participating in an hour-long session of studies. Participants were told that we were interested in their “shopping savvy,” or their ability to control shopping outcomes. Specifically, “shopping savvy” referred to their ability to “find what you want, pay what you want, and look how you want.” Next, as our control manipulation, participants wrote about a time when they felt (did not feel) particularly shopping savvy, or, in control (out of control) of their shopping outcomes. As a control manipulation check, participants thought back to the recalled experience and assessed how much control they felt they had over shopping outcomes (1 = completely out of my control, 7 = completely under my control). Next, participants were told that we were interested in people’s knowledge regarding a variety of different brands because this was ostensibly correlated with how quickly people could improve their shopping savvy over time. As such, participants took a brand recognition quiz. This quiz presented the images of 10 different items or logos and asked participants to select the correct brand name. This quiz, designed to be challenging, contained logos and pictures of both high-familiarity (e.g., Coach) and low-familiarity brands (e.g., Audemars Piguet). It thus served to make individuals’ rates of progress salient and served as a tool with which participants could assess their potential rate of progress (based on how difficult the quiz felt to them) in improving future shopping savvy.

Upon completing the quiz, participants indicated the rate at which they felt they would be able to enhance their shopping savvy, or control over shopping outcomes, over time (1 = very slow rate, 7 = very fast rate). Next, participants read a passage about personal shoppers. In this passage, participants in the low-effort condition were told that the goal of the personal shopper was to make it very easy to buy desired products. Participants in the high-effort condition were told that the goal of the personal shopper was to help consumers find desired products, but that it was not an easy way out. Participants then indicated how much they liked the idea of having a personal shopper (1 = dislike extremely, 9 = like extremely). They also indicated how

they would feel if the personal shopper found an outfit that they really liked, responding to both general happiness measures (i.e., “how happy” and “how satisfied” they would be) and measures assessing anticipated empowerment, selected based on measures used in prior studies (“how empowered” and “how confident”) on 7-point scales (1 = not at all, 7 = very). In addition, as a manipulation check, participants rated how much of their own effort it would have required to find the outfit that they liked with a personal shopper (1 = no effort, 7 = a great amount of effort). Finally, to address a potential alternative explanation suggesting that low-control participants simply want to avoid seeming lazy, participants also reported the extent to which it was important that others notice that they work hard for their outcomes (1 = not at all, 7 = very much).

Results

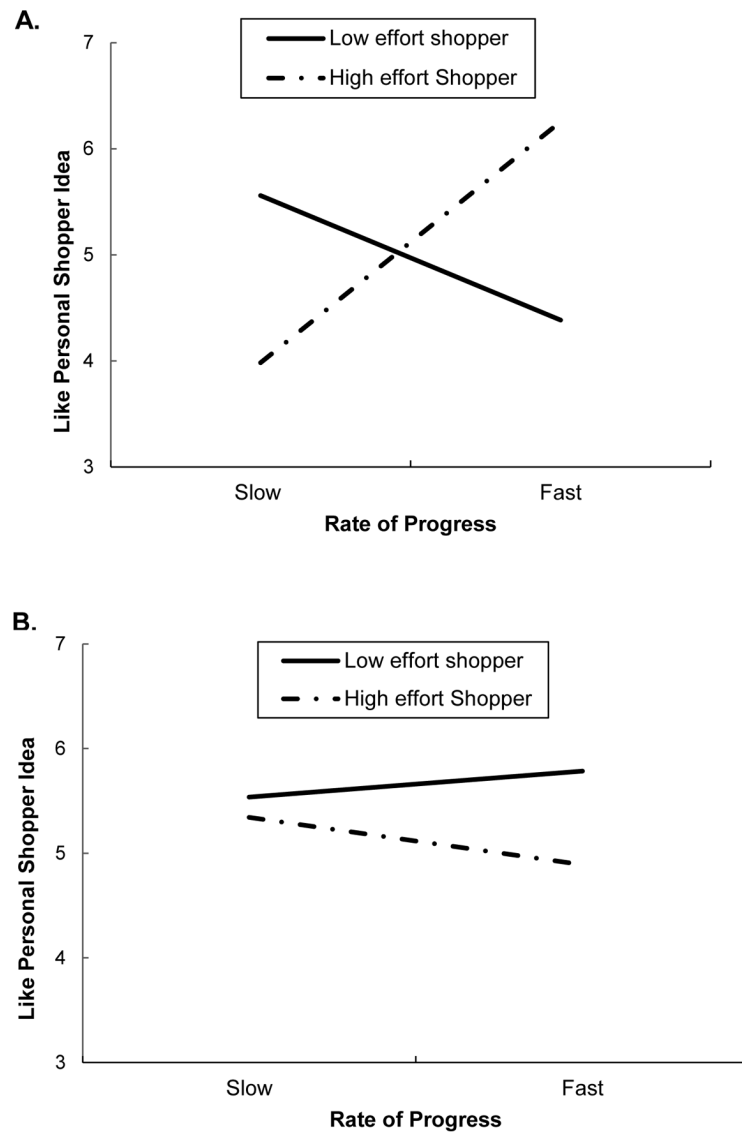
Personal Shopper Effort Manipulation Check. A 2 (control: low vs. high) \times 2 (effort required: low vs. high) \times rate of progress regression on the amount of personal effort required when using the shopper was performed. As expected, individuals believed that the high-effort personal shopper required greater investment to see results ($M_{hi\ eff} = 3.24$ vs. $M_{lo\ eff} = 2.61$; $t(152) = 3.10$, $p = .002$). This did not interact with the control manipulation ($p > .11$) or the rate of progress measure ($p > .34$), nor was there a three-way interaction ($p > .83$).

Control Manipulation Check. The same 2 \times 2 \times continuous regression on perceptions of control over shopping outcomes revealed a main effect of control such that participants in the high (vs. low) control condition felt more control over their shopping outcomes ($M_{hi\ con} = 5.79$ vs. $M_{lo\ con} = 2.83$; $t(152) = 12.24$, $p < .001$). The control manipulation did not interact with the shopper effort manipulation or the rate of progress measure (all $p > .20$). Moreover, the control manipulation did not influence individuals’ report of their future rate of progress ($p > .93$), nor could the shopper manipulation influence perceived rate of progress, given that it was introduced after the progress measure ($p > .33$).

Main Results. We predicted that under low control, a fast rate of progress would increase liking of a high-effort personal shopper, while a slow rate of progress would increase liking of a low-effort personal shopper. A 2 (control: low vs. high) \times 2 (product effort: low vs. high) \times continuous rate of progress multiple regression on how much participants liked the idea of having a personal shopper revealed no main effects of control, shopper effort, or rate of progress (all $p > .18$). There were no control \times rate of progress or control \times personal shopper effort interactions (all $p > .20$). There was a significant shopper effort \times rate of progress interaction ($B = 1.25$, $t(152) = 2.81$, $p = .006$), which was qualified by the predicted control \times shopper effort \times rate of progress interaction ($B = -1.50$, $t(152) = -2.64$, $p = .009$; see fig. 5).

FIGURE 5

STUDY 5: LIKING OF THE IDEA OF A PERSONAL SHOPPER AS A FUNCTION OF PRODUCT EFFORT AND RATE OF PROGRESS AT (A) LOW PERSONAL CONTROL AND (B) HIGH PERSONAL CONTROL



To probe the three-way interaction, we focus on the low-control condition and examine the impact of the personal shopper manipulation among individuals feeling a high rate of progress, using spotlight analyses at 1 standard deviation above and below the mean rate of progress (Aiken and West 1991). As predicted, under low control, individuals perceiving a high rate of progress liked the personal shopper idea more when the shopper required high (vs. low) effort ($B = 1.87, t(152) = 2.28, p = .02$). However, individuals who perceived a low rate of progress liked the shopper idea marginally more when the shopper required low effort ($B =$

$-1.58, t(152) = -1.88, p = .06$). These results hold when controlling for individuals' reported importance of being perceived as hard working by others (three-way interaction, $p = .01$). Importantly, this pattern is not evident in the high-control conditions. The interaction of personal shopper effort and perceived rate of progress was not significant within high control ($p > .37$).

To assess the downstream emotional consequences of individuals' interest in the personal shopper, we analyzed individuals' expected happiness if the personal shopper found an outfit that they liked. With the happiness index (i.e.,

satisfied, happy, $\alpha = .96$) as the dependent measure, a $2 \times 2 \times$ continuous regression revealed an interaction of the personal shopper effort manipulation and rate of progress ($B = .87$, $t(152) = 2.97$, $p = .004$), which was qualified by a three-way control \times personal shopper effort \times rate of progress interaction ($B = -1.29$, $t(152) = -3.44$, $p < .001$). Spotlight analyses were consistent with the results reported for the main dependent variable reported previously. Specifically, under low control, individuals who perceived a high rate of progress expected to be happier after receiving an outfit from the high-effort shopper ($B = 1.42$, $t(152) = 2.64$, $p = .009$). Those perceiving a low rate of progress felt marginally happier when the shopper required low effort ($B = -.97$, $t(152) = -1.76$, $p = .08$).

Importantly, while participants with low or high rates of progress both anticipated being happiest with the shopper that was the best fit for them (low or high effort, respectively), we anticipated that happiness would be driven by expectations of empowerment only for individuals feeling low control who perceived high rates of progress and were introduced to the high-effort shopper. A $2 \times 2 \times$ continuous regression on the empowerment index (i.e., empowered, confident, $\alpha = .76$) revealed a personal shopper \times rate of progress interaction ($B = .69$, $t(152) = 2.40$, $p = .02$), which was qualified by a control \times personal shopper \times rate of progress interaction ($B = -1.08$, $t(152) = -2.92$, $p = .004$). Spotlight analyses were conducted at 1 standard deviation above and below the mean to assess the effect of the low- versus high-effort shopper on empowerment. Under low control, individuals perceiving a high rate of progress felt significantly more empowered when the personal shopper required high relative to low effort ($B = 1.20$, $t(152) = 2.24$, $p = .03$). However, individuals perceiving a low rate of progress did not feel any more empowered from the personal shopper regardless of effort level ($B = -.71$, $t(152) = -1.31$, $p = .19$). Moderated mediation results suggest that such feelings of empowerment mediated the effect of the shopper manipulation on individuals' perceptions of happiness when control was low and rates of progress were perceived to be high ($\beta = .97$, with a 95% CI exclusive of 0 [.09, 1.91]). This mediation pattern did not exist when control was low and rate of progress was low, nor did it exist when control was high at any level of perceived progress.

Discussion

Using a novel context, study 5 reconciles our current findings with those of prior literature by identifying when it is that low-control consumers will choose low-effort or high-effort products and services. As opposed to merely assessing individuals' beliefs that they could someday regain control (which prior research suggests is an important driver of effort and persistence), we focused on a more fine-grained measure of that assessment by focusing on individuals' perceived rate of progress. We find that when consumers perceive that they have the potential to regain control at a high rate of progress, they like services that require high (vs.

low) effort. This is consistent with our previous studies, where the ads and product descriptions implied a reasonably high rate of progress. When participants felt they would move slowly or at a low rate of progress in restoring personal control, they viewed the lower effort personal shopper, or the easier path, more favorably. In addition, study 5 extended our analyses beyond purchase intent measures to a broader assessment of well-being, demonstrating that empowerment through hard work can be a unique driver of happiness when control is low.

GENERAL DISCUSSION

Across five studies, we demonstrate how low feelings of control motivate consumers to partner with products requiring higher effort as a means to empower the self and reestablish control. In study 1, we demonstrate that low feelings of control lead to a preference for higher effort products. In study 2, we extend to a performance context, demonstrating that low control not only influences attitudes and preferences, but also relevant behaviors, such as increased athletic effort following a threat to control over athletic outcomes. Next, in study 3, we demonstrate how low control can be instantiated through variations in control in the field, replicating our effects with intramural basketball players who had won or lost a game. We then identify specific boundary conditions regarding the pursuit to restore control via high effort. In study 4, we examine the domain specificity of the desire for high-effort products under low feelings of control, showing that when the threat to control narrows to a specific domain, consumers only seek out higher effort products in that same domain. Study 5 revealed that consumers' perceived rate of progress toward their goals shapes their desires for high- vs. low-effort products. When consumers feel they can make fast progress in restoring control, low control causes them to prefer high-effort products. However, when consumers feel they can only make slow progress, they opt for the low-effort product.

Together, our results suggest that while often viewed as detrimental to effort and performance, low feelings of control may cause individuals to work harder, particularly when consumers are aided by the reassuring functionality of brands. It therefore suggests a positive side of low control, building on work indicating that low control may at times be more desirable, as in the face of negative decisions (Botti and Iyengar 2004; Botti, Orfali, and Iyengar 2009).

Further, in demonstrating how consumers respond to low control when they have the support of products as partners, this work also extends prior work on the relationship between control and structure or consistency. While low control enhances the desire for consistency and order in consumption (e.g., Cutright 2012, Cutright, Bettman, and Fitzsimons 2013), in the present research it is not clear that individuals see the high- or low-effort options as providing differential levels of order or structure (and initial pretests suggest that they do not). Instead, the question for low-control participants is now "who" is asserting the structure, that is, who is engaging in effort and putting things in place?

In addition to providing new insight into the nature of control and how it motivates individuals, this work also contributes to brand relationship research by identifying when consumers will prefer partnerships that require more or less work with brands. Finally, this research contributes to a growing body of work that suggests that people compensate for perceived deficits in psychological states through consumption (e.g., Inesi et al. 2011; Mead et al. 2011; Sivanathan and Pettit 2010; White and Argo 2009; Wu, Cutright, and Fitzsimons 2011). For example, Gao et al. (2008) show that when individuals' feelings of competence or excitement are threatened, they are more likely to choose products (e.g., magazines, computers) that reflect such traits. In other words, people often seek products that signal that they possess desired or threatened traits. Our research extends this area by showing that beyond seeking products that merely symbolize a given trait, consumers sometimes prefer products that give them an opportunity to actually demonstrate that they possess a trait. Highlighting the idea that consumers may often seek products that serve as complements as opposed to mere substitutes, this research illustrates the importance of consumers' desired interactions with products as drivers of their product preferences.

Accordingly, these findings are important for practitioners to consider. Marketers' intuition is often to provide consumers with the easiest, most high-tech routes to achieve their goals. However, our studies suggest that a focus on ease over effort may be counterproductive. The most effective approach will depend on consumers' feelings of control.

Future Research

This work also raises several questions for future research. For example, as our studies have focused on situationally induced feelings of control, one might wonder how results would differ with chronically low feelings of control. One might speculate that individuals with chronically low feelings of control would be less apt to see any hope for regaining control and thus less likely to prefer high-effort goods. However, one could also speculate that individuals with chronically low feelings of control would be the most appreciative of high-effort goods that give them a chance to assert control and feel empowered. A similar question involves understanding what happens when consumers are in an objective state of extremely low control or no control at all. Our manipulations relied on subjective perceptions of control where consumers felt low control (e.g., after reading that they had "little" control over health), but also had room to consider that they could regain control. Participants were never told that it was impossible to regain control or placed in situations where it was objectively impossible to control outcomes. Given people's tendencies to be overly optimistic in their assessments of control and the strong motive to restore control when it is threatened (e.g., Alloy and Abramson 1979), consumers saw enough potential for restoring control to seek the high-effort goods. However, when regaining control feels truly impossible, people should be less eager to work hard (as in prior research) and should

prefer lower effort products. Finally, future research might also explore the factors, in addition to baseline preferences, that lead individuals in low-control states to devalue low-effort products versus praise high-effort products.

In sum, this research explores important implications of low control for consumers. Providing theoretical and practical insights, it highlights how low control leads individuals to eschew heroics from brands and instead seek partnerships that allow them to expend more of their own effort to reach the same outcomes. It hints in a small way at what Mahatma Gandhi said on a much grander scale, "Full effort is full victory" (Gandhi 1996, 41).

DATA COLLECTION INFORMATION

All data were collected by both authors and their research assistants between June 2012 and December 2013 through Amazon Mechanical Turk (study 1), Arizona State University (studies 2 and 4), and the University of Pennsylvania (studies 3 and 5). All data were analyzed by the authors.

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