This article investigates the consequence of the choice process for mental resources and the desire to obtain the selected products. The authors draw a distinction between instrumental choice, which serves preexisting consumption goals, and experiential choice, which serves as its own end. Across four studies, they find that instrumental choice undermines mental resources and experiential choice increases these resources. As a result, although experiential choice is made with no consumption goal in mind, compared with instrumental choice, it increases the desire to obtain the selected product. The authors demonstrate these effects on choice among a variety of consumer products (e.g., vacation packages, novels, flower bouquets).

Keywords: experiential choice, instrumental choice, depletion, intrinsic, extrinsic

Choice as an End Versus a Means

Are all choices instrumental? The majority of research on consumer choice has been conducted under the assumption that choosing is for getting, such that the sole purpose of making a choice is to obtain a selected product (Payne, Bettman, and Johnson 1992; Shafir, Simonson, and Tversky 1993). However, although choice is often instrumental in satisfying preexisting needs, it can also serve as its own end. For example, choice is an end for a person who goes on a shopping spree with no specific purchase in mind or for a consumer at the grocery store who tries several food samples and chooses his or her favorite without having intended to purchase. This mode of choice also characterizes choices among hypothetical outcomes, which can be no less engaging than real ones—for example, when a person chooses the movie star from whom he or she would like to get a kiss (Loewenstein 1987). What characterizes these choices is the absence of an external need the choice satisfies. As a result, the choice is an end in itself, and the person making the choice is less concerned with obtaining the selected option than with simply expressing his or her desires or taste.

This article addresses these different choice modes: the one that satisfies an external need versus the one in which the choice is the end. We distinguish between two possible benefits of choosing: external benefits, which include the utility from the product choosers receive, and internal benefits, which include the utility from the act of choosing. When the act of choosing is mainly a means to obtain some product, we label it “instrumental.” When the act of choosing is itself the goal, we label it “experiential” because its main purpose is to experience choosing. We examine the consequences of instrumental versus experiential choices on people’s mental resources and the likelihood they will act on their choice by purchasing the selected products.

THEORETICAL BACKGROUND

We position our theorizing in the conceptualization of the structure of action. Research on motivation distinguishes between extrinsic and intrinsic actions (Deci and Ryan 1985; Sansone and Harackiewicz 1996; Shah and Kruglanski 2000). Extrinsic actions serve as a means to an end, whereas intrinsic actions serve as their own end. In other words, people engage in extrinsic actions to achieve external goals, whereas they engage in intrinsic actions for the reward of engagement. Previous research has indicated that introducing external incentives for pursuing an activity reduces the intrinsic value of that activity. Then, because the status of the activity changed, when the incentives are removed, the likelihood of pursuing this activity is lower than before they were introduced (Kruglanski, Friedman, and Zeevi 1971; Lepper, Greene, and Nisbett 1973).

In line with motivation theory, the act of choosing can be either extrinsically or intrinsically motivated. When people have an external purchase goal, the act of choosing is extrinsically motivating. In contrast, when they want to express their preference or taste, their choice is intrinsically motivating; that is, it is its own goal. For example, utilitarian
versus hedonic shoppers often differ in their motivation to choose products (Babin, Darden, and Griffin 1994; Botti and McGill 2010; Dhar and Wertenbroch 2000). Utilitarian shoppers obtain value from getting products they need, whereas hedonic shoppers obtain value through choosing and are less concerned with getting the products than with expressing their personal taste (Hirschman and Holbrook 1982). Also in congruence with motivation theory, these two choice modes are not mutually exclusive; however, the more emphasis a chooser puts on the goal of choosing, the more instrumental a choice is and the less experiential it becomes.

THE CONSEQUENCES OF CHOICE

The motivation to perform an action—extrinsic versus intrinsic— influences people’s experience during and after pursuing the action. Extrinsicly motivating actions are associated with more negative, chorelike experiences. In contrast, intrinsically motivating actions are associated with more positive experiences of goal attainment (Fishbach, Shah, and Kruglanski 2004; Higgins and Trope 1990). Often the experience of the same action differs depending on the extrinsic versus intrinsic representation of that action. For example, studying for an exam is an effortful experience, whereas reading the same course materials for the sake of expanding knowledge (a goal that co-occurs with the reading activity and is not external to it) is an enjoyable experience.

We draw a similar prediction for the experience of choice and expect the consequences of instrumental choices to differ from those of experiential choices. Instrumental choices are extrinsically motivating and therefore should be effortful and resource-consuming. In support of this notion, a growing body of literature shows that choosing is difficult, paralyzing, and debilitating (Chernev 2003; Luce, Bettman, and Payne 1997; Simonson 1992). Part of the difficulty stems from choice requiring a cognitively complex process that involves weighing many options (Amir and Ariely 2007). But even simple choices (e.g., items from a menu) often involve painful trade-offs that can be emotionally taxing. Because of the emotional toll, people often defer making a choice beyond what is necessary (Dhar 1997; Iyengar and Lepper 2000).

Consequently, instrumental choices deplete mental resources by drawing from the same pool as other effortful mental operations, such as exercising self-control (Baumeister et al. 2008; Schmeichel, Vohs, and Baumeister 2003). These mental resources increase the ability or willingness to exert effort, and thus they are useful for various mental self-regulatory functions. Because resources are limited, any activity requiring executive function (e.g., choosing) reduces the available resources, resulting in poorer performance on the subsequent activity (Baumeister 2002; Muraven, Tice, and Baumeister 1998). In particular, choice depletion is likely when choosing is conscious and deliberate (Vohs et al. 2008) and includes difficult trade-offs (Wang et al. 2010).

In contrast to instrumental choices, experiential choices are intrinsically motivating and therefore can be pleasant to make. Indeed, other choice research has identified the act of choosing as an expression of a person’s sense of control (Taylor 1989) and selfhood (Deci and Ryan 1985). In Western culture, freedom of choice is considered a basic human right and an expression of a person’s free will (Savani, Markus, and Conner 2008; Stephens, Markus, and Townsend 2007). By choosing, people express their unique tastes, desires, and goals, and their stated preferences define them not only as consumers but as autonomous human beings. Notably, in this experiential choice mode, the act of choosing matters because choosing is itself the goal.

Although much research has established that instrumental choices are difficult and depleting, researchers have not yet explored the consequences of experiential choices for mental resources. We predict that experiential choices have the opposite effect of instrumental choices; that is, choices made only for the sake of expressing a person’s preference increase mental resources. We base our prediction on research that indicates that when a person engages in an action for its own end, the act evokes a positive experience of resourcefulness (Muraven, Shmueli, and Burkley 2006; Shah 2005) and enhances subjective vitality and energy (Nix et al. 1999; Ryan and Deci 2008; Ryan and Frederick 1997). Indeed, Moller, Deci, and Ryan (2006) find that participants in their study believed that making autonomous (free) choices was less depleting than being advised to choose a particular item (forced choice). Whereas their research compares forced and free choices, we compare two modes of free choice—experiential versus instrumental—and predict that experiential choices increase mental resources.

Acting on a Choice: Interest in the Selected Item

We predict that instrumental choices decrease mental resources, whereas experiential choices increase these resources. In turn, these effects have implications on the likelihood that people will act on their choices—for example, that a consumer will decide to purchase a chosen item.

We expect experiential choices to increase the interest in obtaining the selected options compared with depleting instrumental choices, because some of the positive experience from the experiential choice process transfers to the selected product, thereby increasing its favorability (Fishbach, Shah, and Kruglanski 2004). Similarly, some of the depleting experience from the instrumental choice process is associated with the selected product and decreases the appeal of that product. Thus, holding the objective need for the product constant, experiential choice will increase the interest in obtaining the selected product more than instrumental choice. For example, shoppers without specific goals will find their selected items more appealing than shoppers who hold a list of their needs. This effect can be ironic when an emphasis on why consumer should get some products results in decreasing the likelihood that the consumer acts on (i.e., purchases) a particular choice of items.

Current Research

In four studies, we investigate how choice mode influences mental resources and interest in the selected products. We define “mental resources” as a sustained willingness to exert effort, and we measure those resources using performance on effortful tasks and self-reported feelings of energy. These resources have a clear motivational component: People are more motivated to engage in effortful tasks. These resources might also have physiological components (e.g.,
changes in level of glucose increase the ability to exert effort; however, we do not test for those (for a similar treatment of resources, see Tice et al. 2007). We predict that instrumental choices decrease and experiential choices increase mental resources. As a result of these differences in the experience of choice, experiential (vs. instrumental) choice mode increases interest in obtaining the selected product.

We operationalize instrumental versus experiential choice on the basis of whether people hold a consumption goal that is external to the choice process—that is, whether some of the benefits of choosing are delivered at a later point in time. Specifically, Study 1 manipulates choice mode by asking participants to choose for the sake of choosing (experiential) versus to prepare for an upcoming vacation (instrumental). Study 2 manipulates choice mode by asking participants to choose what they like most (experiential) versus what they would like to buy (instrumental). In Study 3, we operationalize choice mode by asking participants to consider the means of choosing (experiential) versus the goal of choosing (instrumental). Finally, in Study 4, participants choose an item after considering reasons they want (experiential) versus need (instrumental) the item.

STUDY 1: VACATION PLANNING

Planning a vacation involves making multiple choices (e.g., destination, accommodation) and often can be a chore. But planning a vacation can also be a relaxing activity in which people engage to express their preferences in the absence of an actual vacationing goal. Accordingly, participants in Study 1 chose a vacation package either with an external goal in mind (instrumental choice) or in the absence of such a goal (experiential choice). Another group of participants evaluated the same amount of information on destinations without making choices, and we used them as a control, baseline condition for evaluating the impact of choice (e.g., Vohs et al. 2008).

We predict that experiential choice increases mental resources such that the experiential choice participants will perform better on a subsequent cognitive task requiring inhibition of irrelevant responses (the vowel-hunting task; see Baumeister et al. 1998; Moller, Deci, and Ryan 2006) compared with those who make an instrumental choice. In addition, we predict that the experience of choice transfers to wanting the selected item, thereby increasing participants’ interest in taking their vacation when the choice mode is experiential versus instrumental.

Method

We recruited 47 students (30 women) from a large midwestern university to participate in this study for monetary compensation. This study employed a 3 (experiential choice vs. no choice vs. instrumental choice) between-subjects design. We invited participants to take part in a study on vacation planning. Their task was to use a travel website (expedia.com) to create a vacation package in the United States. We used an existing website to ensure that the selected options were real (i.e., available for purchase). Participants in the experiential choice condition read, “People often plan a vacation for the sake of planning and without having any upcoming vacation in mind.... We are giving you an opportunity to engage in such planning activities.” Participants in the instrumental choice condition read, “People often make vacation plans in preparation for an upcoming vacation.” The rest of the instructions were identical across these two conditions. Participants chose one destination in the United States, a flight, and a hotel with a specific room type. Then, they recorded the total price of the package. In the no-choice condition, the participants’ task was to browse through the website and find certain vacation destinations and hotels. To ensure that participants in the third condition spent about the same amount of time and effort on the task as the rest of the participants, we asked them to search for the destinations in the United States with the longest/shortest name and the hotels in that destination with the longest/shortest name. This task was piloted to require a similar amount of time as building a vacation package, without involving choices. We recorded the total time spent completing the task in each condition.

To measure postchoice mental resources, we asked participants to move to another, supposedly unrelated “Cognitive Exercise Study,” which comprised a “vowel-hunting task” (adapted from Baumeister et al. 1998, Study 4; Moller, Deci, and Ryan 2006, Study 3). In this task, participants crossed out each letter “e” in two pages of text unless doing so violated one of three rules: (1) the “e” is adjacent to another vowel, (2) the “e” is the first letter of a word, and (3) the “e” is followed by two consonants in the same word. To do well on this task, participants had to override the impulse to simply cross off every letter “e,” which required mental resources.

Finally, to measure participants’ interest in executing their vacation choices, we gave a follow-up survey to those who made choices as part of the first experiment. The survey first reminded them of the trip they had selected and then instructed them to indicate the extent to which (1) they wanted to take the trip and (2) they wanted to take it as soon as possible (1 = “strongly disagree,” and 5 = “strongly agree”).

Results and Discussion

The average prices of the selected vacation packages were not significantly different between the experiential (M = $2,180.24, SD = $1,568.11) and instrumental choice conditions (M = $2,221.18, SD = $1,343.15; t < 1). This suggests that experimental choices were no less within reach than instrumental choices.

Mental resource. We used performance on the vowel-hunting task as a proxy for available mental resources. We calculated performance scores by subtracting the number of “false alarms” (incorrectly crossing out unqualified “e”s) from the number of “hits” (correctly crossing out qualified “e”s; Moller, Deci, and Ryan 2006). In this calculation, the number of hits includes information on misses (failing to cross out qualified “e”s) because the two numbers add up to the total of qualified “e”s. The number of false alarms includes information on correct rejections (not crossing out unqualified “e”s) because the two numbers add up to the total of nonqualified “e”s. Misses and false alarms (or hits and correct rejections) were positively correlated (r = .38, p < .01).

An analysis of variance (ANOVA) of task performance revealed the predicted effect for experimental condition (F(2, 44) = 3.40, p < .05; Figure 1). Contrast analysis
revealed that participants in the experiential choice condition performed better (M = 234.68, SD = 37.45) than participants in the no-choice (M = 182.57, SD = 75.28; F(1, 30) = 6.38, p < .05) and instrumental choice (M = 169.63, SD = 102.56; F(1, 30) = 5.96, p < .05) conditions. The difference between the no-choice and instrumental choice conditions was not significant (F < 1). These results indicate that participants who made their vacation choice without an emphasis on an external goal (experiential choice) did better on a subsequent measure of mental resources than those who made their choice to satisfy some external goal (instrumental choice). However, we found no difference between the instrumental choice and no-choice conditions. Notably, we obtained similar patterns for false alarms (F(2, 44) = 4.21, p < .05) and misses (F(2, 44) = 2.35, p = .09) when we analyzed them separately.

Interest in the selected option. We predicted that an experiential choice increases interest in the selected products more than an instrumental choice. We first collapsed the two items measuring interest in going on the selected vacation trip into a composite score (r(32) = .70, p < .001). In support of the hypothesis, analysis of this score revealed that participants who made an experiential choice were more interested in executing their vacation choice (M = 3.79, SD = 1.06) than those making an instrumental choice (M = 2.83, SD = .96; t(30) = 2.67, p = .01). Ironically, reminding participants of an external reason to plan for an upcoming vacation decreased their interest in going on a selected vacation compared with not having a particular goal in mind. We attribute this effect to the transfer of positive experience from the choice process to the selected items.

Study 1 indicates initial evidence for the effect of experiential choice on increasing mental resources and interest in the selected item. Our results from the control, no-choice condition differed significantly from those from experiential choice but were similar to those from instrumental choice—a pattern supporting the energizing effect of choice more than a parallel effect of the depletion of mental resources. A possible reason we did not find a depleting effect is that participants made few choices, whereas depletion occurs usually after a sequence of many choices (Baumeister et al. 1998; Vohs et al. 2008; Wang et al. 2010). To test this possibility, in our next study, we manipulated the number of choices participants made. We predicted that the energizing effect of choice emerges after a single experiential choice (as in the Study 1), whereas the depleting effect of choice only emerges after a series of instrumental choices.

Study 2 further addresses a possible limitation of the current design, which is that participants did not expect to receive the selected option as part of the experiment. Although we used choice sets that are available for purchase (a common paradigm in the choice literature; e.g., Chernov 2003; Dhar 1997; Iyengar and Lepper 2000), we did not follow up to record whether participants actually went on a similar vacation trip. Accordingly, in our next study, participants made a choice with the expectation of receiving their selected product as part of the experiment.

**STUDY 2: ONE CHOICE VERSUS A SERIES OF CHOICES**

Participants in Study 2 made a series of either experiential or instrumental choices across seven unrelated categories (e.g., coffee, books, magazines, music CDs). We assessed their level of mental resources and interest in the selected product after their first and last choice. We predict that the energizing effect of experiential choices emerges after the first choice, whereas the depleting effect of instrumental choices will build up over a sequence of choices.

Specifically, participants in the experiential choice conditions chose the product they liked most, whereas those in the instrumental choice conditions chose the product they would have liked to buy most. A choice made for the sake of expressing a person’s taste is experiential because the goal of choosing and the act of choosing occur simultaneously. In contrast, an external purchase goal renders the choice instrumental because it serves a subsequent purchase. We compared these choice modes with another no-choice condition, in which participants evaluated each option without choosing. To emphasize that the choices had real consequences, we informed participants that some of them would be selected to receive their products of choice.

**Method**

We recruited 75 students (37 women) from a large midwestern university to participate in this study for monetary compensation. This study employed a 3 (experiential choice vs. no choice vs. instrumental choice) × 2 (one choice vs. several choices) mixed design with the number of choices as a within-subject factor.

Participants completed a “Products Survey” in which they made choices in seven product categories: coffee blends, novels, music CDs, video games, magazines, DVD titles, and calendar designs. In each category, the choice set included ten alternatives, each followed by a short description. For example, in the coffee category, participants read about products such as “Breakfast Blend: bright, sweet, rich taste and medium acidity”; “Hazelnut: buttery, sweet and creamy with the warm flavors of roasted nuts”; and so on. Although we did not display prices, the alternatives in each set were similarly priced and had a similar quality. They varied by subjective features such as flavors and tastes. We

![Figure 1](image-url)
fixed the order of the categories and alternatives across conditions.

Participants in the experiential choice condition read that their task was to choose the one item they liked most in each category. Participants in the instrumental choice condition read that their task was to choose the item they would most like to buy in each category. These instructions focused participants on either expressing their taste (in the experiential condition) or attending to an external purchase goal (in the instrumental condition). Participants further read that they would be entering a lottery to receive their products of choice. Participants in the no-choice condition rated their liking of each option (1 = “I do not like it at all,” and 7 = “I like it very much”). This no-choice condition required a similar amount of processing time as the two choice conditions.

After completing the first (coffee blends) and last (calendar designs) categories, participants in the two choice conditions rated the degree to which they were interested in getting the selected product (1 = “not at all,” and 9 = “very much”). This item was followed by a brief scale of postchoice mental resources, adopted from Thayer’s (1987) subjective energy scale, which participants in all three conditions completed. Specifically, participants rated how they felt at that very moment (1 = “tired,” and 9 = “energized”). Previous research has commonly used a similar measure to assess subjective vitality (Nix et al. 1999; Ryan and Frederick 1997). It assesses people’s general energy level beyond their motivation to perform any specific task. After the experiment was over, we randomly selected five participants to receive their products of choice.

Results and Discussion

Mental resource. Two participants failed to follow the instruction to choose only one item in each category, and we removed them from further analysis. A 3 (experiential choice vs. no choice vs. instrumental choice) × 2 (one vs. several choices) ANOVA of subjective mental resources revealed the predicted interaction (F(2, 70) = 3.30, p < .05; Figure 2). Specifically, after one choice, we obtained a pattern similar to that in Study 1 (F(2, 70) = 3.20, p < .05). Participants in the experiential choice condition felt more energized (M = 5.50, SD = 2.04) than those in the no-choice (M = 4.36, SD = 1.64; t(47) = 2.16, p < .05) and instrumental choice (M = 4.42, SD = 1.59; t(46) = 2.05, p < .05) conditions. The difference between the no-choice and instrumental choice conditions was not significant (t < 1). In contrast, after participants made seven choices, we obtained a linear pattern (F(2, 70) = 22.18, p < .001), suggesting that participants in the experiential choice condition felt more energized (M = 6.08, SD = 1.35) than those in the no-choice condition (M = 4.34, SD = 1.34; t(47) = 4.67, p < .001), who in turn felt marginally more energized than participants in the instrumental choice condition (M = 3.63, SD = 1.52; t(47) = 1.92, p = .06). These results support our hypothesis that the effect of choice on mental resources depends on the choice mode. They further suggest that distinct patterns exist for energizing versus depleting effects. The energizing effect of experiential choices emerges after a single choice, whereas the depleting effect of instrumental choices builds up over a sequence of choices.

An alternative way to analyze the data refers to the effect of one choice versus several choices in each choice mode. We find that participants in the no-choice condition were no more energized after reviewing several sets than after reviewing one set (t < 1). Those in the experiential choice condition felt marginally more energized after making several choices than after making one choice (t(23) = 1.57, p = .10), and those in the instrumental choice condition felt more depleted after making several choices than after making one choice (t(23) = 2.62, p < .05). This finding suggests that making many experiential choices strengthens the energizing effect and making many instrumental choices brings about a depleting effect.

Interest in the selected option. An analysis of the items participants selected yielded similar distribution patterns across the choice conditions (χ² ps > .2), which suggests similar contents of choice. To test our hypothesis, we analyzed participants’ interest in getting their selected items in the two choice conditions. A 2 (experiential choice vs. instrumental choice) × 2 (one vs. several choices) ANOVA revealed the main effect of choice mode (F(1, 46) = 4.95, p < .05). No other effects were significant (Fs < 1). Participants who made an experiential choice expressed greater interest in the selected items (Msfirst vs. last choice set = 4.54 vs. 4.58, SD = 2.65 vs. 2.86) than those making an instrumental choice (Msfirst vs. choice set = 3.54 vs. 2.96, SD = 2.84 vs. 2.03).

Consistent with Study 1, reminding participants of an external reason to choose (i.e., purchase) decreased their interest in the selected items. Possibly, participants in the liking (vs. purchasing) condition expressed lower interest in the items than those in the purchase condition because they experienced their choice as somehow incomplete. However, we believe this latter possibility is less likely because participants did not actually complete a purchase in any of the conditions, and thus, those in the purchasing condition were also unable to complete their choice.

We conducted a series of regressions to test whether the experience of subjective mental resources mediated the effect of choice mode on interest in the selected items. We first collapsed the ratings of interest in first and last items. Then, we found that experiential (vs. instrumental) choice
mode directly increased participants’ interest in getting the selected items ($\beta = .24$; $t(47) = 2.13, p < .05$). In addition, experiential (vs. instrumental) choice mode increased participants’ self-reported mental resources ($\beta = .42$; $t(47) = 3.93, p < .001$), which in turn increased their interest in getting the selected items ($\beta = .42$; $t(47) = 3.60, p = .001$). When controlling for mental resources, the path between the choice mode and interest in getting the items became non-significant ($\beta = .07, t < 1$). The Sobel test statistic indicated the reduction of the choice mode effect was significant ($z = 2.66, p < .01$). We conclude that the experiential (vs. instrumental) choice mode increased mental resources, thereby increasing interest in getting the selected option.

Thus far, our studies have explored the consequences of choosing versus not. A related question involves the consequences of choosing versus not getting an opportunity to choose. For example, consumers do not get an opportunity to choose when they prepare to select a favorite food flavor or brand and then discover only one flavor or brand is available at the local grocer. As a result, consumers may either feel they have been denied the opportunity to express their taste or that they are free from the chore of having to choose, depending on the mode of choice. We predict that when people expect to make an experiential choice, choosing will increase mental resources compared with not getting the opportunity to choose; however, when people expect to make an instrumental choice, choosing will decrease mental resources compared with not getting the opportunity to choose. Accordingly, in our next studies, we move to a new paradigm by first framing a certain choice as experiential versus instrumental and then comparing mental resources of those who make a choice and those who do not. We expect that this paradigm will yield our predicted effects after participants make a single choice.

**STUDY 3: CHOOSING A NOVEL**

Strolling along the virtual bookshelf and choosing a favorite novel can be a pleasurable activity that boosts mental resources or a chore that depletes these resources, and the direction of the effect can depend on the choice mode. Accordingly, participants in Study 3 considered choosing a novel. We framed the choice as experiential or instrumental before giving them an opportunity to actually choose or not. We expect choosers to feel more energized than non-choosers if their choice was experiential, but choosers (vs. nonchoosers) should feel less energized if their choice was instrumental.

To manipulate choice mode, we built on research on goal systems theory (Kruglanski et al. 2002), which asserts that an action is its own goal when a person considers the means to it and the action is a means when a person considers the goals it can serve. Therefore, we manipulated the choice mode by asking participants to list how versus why they choose books. In line with previous research (Freitas, Gollwitzer, and Trope 2004; Vallacher and Wegner 1987), we assumed that to answer the “how” question, people need to consider the means to choosing (e.g., check online books), which frames choice as the goal and therefore experiential. Alternatively, to answer the “why” question, people need to consider what goal choosing serves (e.g., getting educated), which frames choice as a means and therefore instrumental.

We predict that asking how (experiential choice) will increase mental resources among choosers (vs. non-choosers), but asking why (instrumental choice) will reduce mental resources among choosers (vs. non-choosers), as indicated by participants’ motivation to engage in effortful activities afterward. We also predict that those who consider how (vs. why) they choose will have greater interest in getting the chosen book.

**Method**

We recruited 76 students (49 women) from a large midwestern campus to participate in this study for monetary compensation. This study employed 2 (experiential choice vs. instrumental choice) x 2 (choosers vs. nonchoosers) between-subjects design. The first experimental task manipulated choice mode. Participants in the experiential choice condition completed a diagram directing their attention to how they choose a book. We asked them to consider the activity of “choosing a book” and to break this activity down into three levels. For example, one participant indicated that he might choose a book by looking for the inside-cover descriptions, which he could obtain by looking in the back of the book, which he could obtain while walking around a bookstore. The participants in the instrumental choice condition completed a similar diagram, except it directed their attention to why they choose a book. We asked them to trace the causes of their behavior back to broad life goals and delineate three levels up. For example, one participant listed that she might choose a book because she wants to read good literature on an interesting subject, which is because she wants to learn more about this topic, which is because she wants to be smarter.

Participants then moved to a second task in which they read a list of hardcover fiction featuring 15 books (e.g., Child 44, The Appeal, The Whole Truth, Phantom Prey). We adapted this list from the New York Times Best Seller list for that week. For each book, we included the title, author, publisher, a brief synopsis, and a picture of the cover. The choosers read that their task was to review the list and choose one book they would like to read, whereas the non-choosers read that their task was to review the list and rate how much they would like to read each book. Thus, everyone read all the information, but only choosers made a choice. After making their choices, participants rated how much they wanted to get the selected book (1 = “not at all,” and 7 = “very much”) and how soon they wanted to get it (1 = “does not matter,” and 7 = “very soon”). They also indicated how much they would be willing to pay for the selected book as a measure of consumption intention (Carmon and Ariely 2000; Knetsch and Sinden 1984). Nonchoosers did not complete these choice items, because they did not select a book.

To measure mental resources, after completing the book choice or evaluation task, participants completed a supposedly unrelated “After-School Survey” assessing their motivation to engage in three activities, of which one was taxing (studying) and two were relaxing (watching television and getting rest). To the extent that making a choice increases mental resources, participants should have been more motivated to engage in taxing activities. To explore whether choice affects the motivation to engage in taxing activities but not the perception of these activities as taxing, partici-
pants rated their behavioral intentions twice: specifically on that day and in general (1 = “not at all,” and 7 = “very much”). Today’s behavioral intentions reflect available mental resources, whereas general behavioral intentions more likely reflect the perception of the activities as taxing.

Results and Discussion

**Mental resource.** We reverse-coded the two relaxing activities (watching television and getting rest) and collapsed the three measures of behavioral intentions into a composite of motivation to pursue taxing activities in general ($\alpha = .67$) and today ($\alpha = .71$). An ANOVA of this index revealed the predicted 2 (experiential vs. instrumental choice) × 2 (choosers vs. nonchoosers) interaction for motivation to pursue these activities today (F(1, 72) = 8.11, $p < .01$; Figure 3). None of the two-way interactions and main effects were significant (Fs < 1).

To explore the sources of the three-way interaction, we conducted separate ANOVAs in the today versus general conditions. We found no effect on intention to pursue taxing activities in general (F < 1; means are displayed in Figure 3) and a 2 (experiential vs. instrumental choice) × 2 (choosers vs. nonchoosers) interaction for motivation to pursue these activities today (F(1, 72) = 8.83, $p < .01$). Specifically, in the experiential choice condition, choosers expressed greater intention ($M = 4.35$, $SD = 1.48$) than nonchoosers ($M = 3.32$, $SD = 1.65$; $t(36) = 2.03$, $p < .05$) to pursue taxing activities today. In contrast, in the instrumental choice condition, choosers expressed lesser intention ($M = 3.21$, $SD = 1.33$) than nonchoosers ($M = 4.32$, $SD = 1.80$; $t(36) = 2.17$, $p < .05$) to pursue taxing activities today.

We found that although all participants considered choosing a novel, those who focused on the means of choosing (experiential choice) felt more energized if they got to make a choice (vs. not). In contrast, those who focused on the goal of choosing (instrumental choice) felt less energized if they got to make a choice (vs. not). We document these effects on mental resources by asking participants to rate their interest in pursuing everyday activities that were not part of the experiment (e.g., studying); therefore, any effect on depletion or energization would be hard to attribute to resource-management considerations—that is, participants’ desire to monitor the total amount of effort invested in the experimental session. Moreover, we find that these effects exist only for activities that are scheduled for the present, suggesting that the choice mode and choice opportunity manipulations did not affect the perceived effort in pursuing these activities but rather the intention to pursue them right now, which indicates subjective energy.

It is significant that we also find that choosers expressed greater intention to pursue taxing activities in the present when their choice was experiential ($t(36) = 2.50$, $p < .05$). However, nonchoosers were marginally more likely to pursue taxing activities in the present if they could not make an instrumental versus an experiential choice ($t(36) = 1.80$, $p = .08$). This pattern suggests that releasing a person from having to make an instrumental (vs. experiential) choice can also increase the motivation to invest resources somewhere else, in other taxing activities.

**Interest in the selected option.** The choosers indicated their interest in the selected book. We first z-transformed the two scale items of interest in the selected books and the willingness to pay for the book ($\alpha = .86$) into a composite score. Analysis of this score revealed that, in support of our prediction, participants in the experiential choice condition expressed more interest in getting the selected book ($M = .35$, $SD = .85$) than those in the instrumental choice condition ($M = -.38$, $SD = .77$; $t(34) = 2.71$, $p = .01$).

Notably, our manipulation of choice mode in this study (how vs. why) possibly also influenced the level of construal (abstract vs. concrete; e.g., Freitas, Goldwitzer, and Trope 2004). However, differences in level of construal cannot account for the effect on mental resources. High-level construal (why) is associated with better self-regulation (Fujita et al. 2006), which, if anything, is associated with greater mental resources, but we find an increase in mental resources among those in the experiential choice condition (how). Thus, we conclude that focusing on the goal of choosing decreases mental resources. In our final study, we test for yet another operationalization of choice mode. Specifically, we examine whether hedonic versus utilitarian shopping involves experiential versus instrumental choice modes.

**STUDY 4: CHOOSING FLOWERS**

Shopping for a flower bouquet is at times a pleasant, refreshing experience, but at other times it can be an unpleasant, taxing chore. In this study, we sought to influence the experience of a bouquet choice by framing choice as hedonic versus utilitarian (Babin, Darden, and Griffin 1994; Botti and McGill 2010; Dhar and Wertenbroch 2000). Specifically, we asked choosers to consider either the reasons they might want to get flowers or the reasons they might need to get flowers. The “want” question characterizes hedonic purchases, which are optional, whereas the “need” question characterizes utilitarian purchases, which are required to satisfy an external goal (Khan, Dhar, and Wertenbroch 2005). We assume that hedonic purchases are experiential whereas utilitarian purchases are instrumental because framing a purchase decision as a want compared with a need undermines the focus on meeting some external goals.
We followed a similar design as in the previous study. Participants listed reasons for bouquet shopping (want vs. need) before getting an opportunity to choose flowers versus not. We predict that when the choice is experiential (want), getting the opportunity to choose (vs. not) will increase mental resources, which will increase interest in getting the selected flower bouquet. In contrast, when the choice is instrumental (need), getting an opportunity to choose (vs. not) will decrease mental resources, which will decrease interest in getting the bouquet.

Method

We recruited 89 students (42 women) from a large midwestern university to participate in this study for monetary compensation. This study employed a 2 (experiential choice vs. instrumental choice) × 2 (choosers vs. nonchoosers) between-subjects design. The experiment was conducted on computers.

Participants completed a study on “Bouquet Shopping.” Depending on the experimental condition, the participants’ first task was to list five reasons they might want to choose a flower bouquet versus reasons they might need to choose a flower bouquet. Examples for wants in the experiential choice condition include “searching for flowers is fun” and “I want to see something beautiful.” Examples for needs in the instrumental choice condition include “I need a gift for my girlfriend” and “I need to give flowers to my friend on his birthday.”

Then, all participants read about an online flower shop (flowershop.com). The choosers read that their task was to browse through this online store to choose a flower bouquet, whereas the nonchoosers read that their task was to browse the online store and find several bouquets. Specifically, the nonchoosers had to find the most expensive flower in the birthday category and the cheapest flower in the new baby category. Thus, they processed a similar amount of information but did not make a choice. We recorded the total time spent on browsing and making the choices. After finishing the task, participants completed a measure of postchoice mental resources using the same scale as Study 2 (1 = “tired,” and 7 = “energized”) and also rated their general mood (1 = “bad, unhappy,” and 7 = “good, happy”). We expected the choice mode to have a unique impact on feelings of energy, which is distinct from general mood (see Watson and Tellegen 1985).

Finally, participants in the choice conditions completed a postchoice survey measuring their interest in getting the selected bouquet. We asked them to consider their choices and rate (1) whether they wanted to purchase the bouquet they selected and (2) whether they would like to receive it as soon as possible (1 = “strongly disagree,” and 5 = “strongly agree”).

Results and Discussion

The total time participants spent on browsing and choosing was similar across experimental conditions (F < 1). The average price of the selected bouquet was similar between the two choice conditions (t < 1).

Mental resource. A 2 (experiential vs. instrumental choice) × 2 (choosers vs. nonchoosers) ANOVA of mental resources revealed the predicted interaction (F(1, 85) = 15.46, p < .001; Figure 4). No main effect emerged for frame or choice (Fs < 1). Contrast analysis revealed that in the experiential choice condition, choosers (M = 4.93, SD = 1.00) felt more energized than nonchoosers (M = 4.27, SD = 1.04; t(42) = 2.14, p < .05). However, in the instrumental choice condition, choosers (M = 4.07, SD = .87) felt less energized than nonchoosers (M = 5.00, SD = .89; t(43) = 3.54, p < .001). An analysis of the general mood items (feeling good and happy) yielded no effect for experimental condition (F < 1), suggesting that experiential choices bring about energization, which is distinct from general mood.

These results extend our findings from Study 3: Choosing (vs. not) increases mental resources when the choice is experiential but decreases resources for instrumental choice. In addition, whereas choosers felt more energized when their choices were experiential (vs. instrumental; t(43) = 3.10, p < .005), nonchoosers felt more energized when they could not make instrumental (vs. experiential) choices (t(42) = 2.48, p < .05). Releasing a person from making an effortful choice seems to create an experience of energization.

Interest in the selected option. To investigate how the choice mode influences participants’ subsequent interest in the selected product, we first collapsed the two measures that only choosers completed of their interest in getting the flower bouquets (r(45) = .71, p < .001). Analysis of the composite score revealed that participants in the experimental choice condition were more interested in getting the bouquets (M = 2.59, SD = 1.91) than those in the instrumental choice condition (M = 1.83, SD = .72; t(43) = 2.62, p < .05). Thus, experiential versus instrumental choice increases interest in the selected product. We attribute this effect to the transfer of positive experience of boosting mental resources to the selected product and thus tested whether subjective mental resources mediated for choosers the effect of choice mode on interest in the selected product.

The mediation analysis revealed that experiential (vs. instrumental) choice mode directly increased participants’ interest in getting the selected bouquets (β = .38; t(44) = 2.62, p < .05). In addition, the experiential (vs. instrumental) choice mode increased participants’ self-reported mental resources (β = .43; t(44) = 3.09, p < .005), which in turn increased their interest in getting their selected bouquets (β = .41; t(44) = 2.92, p < .01). When we controlled for mental interest in the selected product.
resources, the path between the choice mode and interest in getting the flower bouquets became nonsignificant ($\beta = .25$; $t(44) = 1.60, p > .1$). The Sobel test statistic indicates that the reduction of the choice mode effect was marginally significant ($z = 1.74, p = .08$). We conclude that greater concern with the goal of choosing increases the subjective effort of making the choice, which subsequently diminishes interest in the selected product.

GENERAL DISCUSSION

Not all choices are instrumental; some are experiential and are made to express preferences when people do not hold a salient consumption goal. We find that whereas instrumental choices decrease mental resources, experiential choices boost these resources. We observe this pattern across various operationalizations and choice contexts, including choosing among vacation packages, novels, bouquets, and so on. Moreover, we find this pattern across different measures of mental resources, including performance on cognitive tasks (Baumeister et al. 1998), motivation to pursue effortful activities, and reports of subjective levels of energy (Thayer 1987).

Specifically, in Studies 1 and 2, we manipulated choice mode by either emphasizing or not emphasizing the goal of making a choice. In Study 1, participants choosing a vacation package for its own sake (experiential choice) did better on a subsequent difficult cognitive task than those choosing a vacation package to prepare for an upcoming vacation (instrumental choice). In Study 2, participants choosing products they liked most (experiential choice) felt more energized than those choosing products they would like to buy (instrumental choice). In Studies 3 and 4, we compared choosers with nonchoosers after introducing a choice context. In Study 3, after considering the means of choosing a novel (experiential choice), participants who made a choice (vs. not) expressed greater motivation to pursue effortful activities. However, this effect reversed among those who first considered the goal of choosing a book (instrumental choice). In Study 4, hedonic choice mode increased mental resources among choosers (vs. nonchoosers) of a bouquet, but instrumental choice mode increased mental resources among nonchoosers (vs. choosers).

In our studies, we assessed the motivational component of mental resources—that is, participants’ sustained willingness to exert effort and their subjective feelings of energy. We believe that exhibiting motivational resources often reflects people’ physiological resources (i.e., their ability to exert effort); however, these are theoretically different variables. The extent to which a person is motivated to pursue effortful tasks reflects his or her motivational resources (which is further different than feeling motivated to pursue a specific important task). The extent to which a person is physically able to pursue effortful tasks reflects his or her physiological resources.

Furthermore, across our studies, we find consistent support that, compared with instrumental choices, experiential choices increase interest in the selected products. We attribute this pattern to the positive experience of restoring mental resources, which transfers into positive evaluation of the selected product, thereby increasing interest in it.

Implications for Choice Research

Choices are central to people’s everyday lives, from choosing what to eat to choosing whom to marry. Research on the psychological consequences of choice indicates that choices are an expression of a person’s selfhood and lead to positive experiences (Deci and Ryan 1985; Savani, Markus, and Conner 2008; Stephens, Markus, and Townsend 2007; Taylor 1989) but also that making choices is a difficult, depleting task (Baumeister et al. 1998; Vohs et al. 2008; Wang et al. 2010) people often defer to avoid discomfort (Dhar 1997; Iyengar and Lepper 2000). To explain this discrepancy, previous research has explored the content of choice, showing, for example, that choosing from a positive set is more enjoyable than choosing from a negative set (Botti and Iyengar 2004; Botti and McGill 2006). We explore the structure of choice while holding the choice content similar. We find that a choice among positive-valence options (e.g., vacation packages, flowers) can be experienced as increasing or decreasing resources, depending on whether choice is experiential or instrumental.

We argue that although experiential choices are typically made from a positive set and result in enjoyment, enjoyment is not the goal of the experiential choice. In other words, because enjoyment is not conditional on receiving the selected product (as in instrumental choice), but rather on the act of choosing, we can regard the act of choosing as the end state that (like any other end state) is characterized by positive feelings. Notably, because participants in our studies always made choices from a positive set, we could argue that they derived positive value from savoring—that is, from envisioning potential positive experiences. For example, savoring occurs when choosers envision themselves going on their selected trip (Loewenstein 1987). Similarly, participants might have derived value from fantasizing about the positive aspects of a desired future (Oettingen and Mayer 2002). We believe choices that involve savoring or fantasizing are often experiential. However, because we held the content of the options constant across the choice modes, these possible positive outcomes from imagined future states cannot account for our results. In our studies, choices from the same positive set had distinct consequences.

A related alternative is that hypothetical choices, such as choosing a movie star to receive a kiss from (Loewenstein 1987), which we assume are experiential, are instrumental for enjoying the fantasy. If so, we should expect fantasizing on the outcome of a choice to have even greater impact on mental resources than choosing per se. To test for this alternative, we conducted a follow-up study in which we asked participants to choose a movie star whom they would like to get a kiss from and rate their subjective energy immediately after choosing and after fantasizing about receiving the kiss. Participants (15 women and 12 men from a South Korean university) chose a movie star from a list of 15 Korean movie stars of the opposite sex. They rated their subjective resources ($t = \text{tired,}^*$ and $z = \text{energized*}$) before and after taking a few minutes to imagine the kiss. We found that the act of choosing made participants more ($M = 5.66, SD = 1.26$) energized than fantasizing ($M = 5.10, SD = 1.46; t(26) = 2.67, p = .01$). We found no effect for gender. We take this finding as evidence that experiential (e.g., hypothetical)
choices are energizing because they are their own end and not because they serve another end, such as having a fantasy.

Our results have further implications for research on the relationships among mood, mental resources, and choice overload. Existing research has postulated that positive mood increases ego resources (Tice et al. 2007) and decreases the negative impact of choice overload (Iyengar and Spassova 2009). Thus, it is possible that positive mood engenders perception of choices as more experiential. In addition, our results have implications for research on the size of a choice set. Whereas previous research has found that the size of a choice set decreases choice satisfaction (e.g., Iyengar and Lepper 2000), having more options can have the opposite impact when the choice is experiential. Further research should explore these possibilities.

Implications for Marketers

These findings have important implications for marketers who want to understand consumer choice. Recent goal research has identified the conditions under which a salient goal can ironically decrease motivation (Ordonez et al. 2009). We find parallels with choice. In particular, by deemphasizing the need for a product, marketers can increase interest in that product. This assertion does not imply that consumers are less likely to act on their choices as the objective need for a product increases. On the contrary, consumers are more likely to buy a product if they currently need it. For example, consumers are more likely to purchase an umbrella when it is rainy than when it is sunny. However, given a similar level of need (e.g., it is rainy), marketers who deemphasize the need to act on choice create a more pleasant experience, which is likely to increase interest in the selected product (e.g., buying an umbrella).

Finally, it is important to note that consumers will act on their choices only to the extent that they have made these choices in the first place. Deemphasizing the goal of choosing would not be effective if, as a result, the consumer is less likely to choose. Therefore, encouraging consumers to make choices for the sake of expressing their tastes is an effective strategy. Marketers should realize that giving consumers the opportunity to make such choices without the pressure of acting on them results in increasing the intention to act on those choices.

REFERENCES


