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A central question in consumer and happiness research is whether happiness depends on absolute or relative levels of wealth and consumption. To address this question, the authors evaluate a finer level than overall happiness and distinguish three specific types of happiness: with money, with the acquisition of an item, and with the consumption of an item. They find that happiness with money and with acquisition is relative and that happiness with consumption can be either absolute or relative, depending on whether the consumption is inherently evaluable or not. Including both lab and field data, this research yields implications for how to increase consumer happiness from one generation to the next.

*Keywords:* happiness, money, acquisition, consumption evaluability, relative versus absolute

## Wealth, Warmth, and Well-Being: Whether Happiness Is Relative or Absolute Depends on Whether It Is About Money, Acquisition, or Consumption

A central, still unresolved question in happiness and consumer research is whether happiness depends on absolute or relative levels of wealth and consumption. This question has intrigued scholars and laypeople alike and has generated extensive research (e.g., Blanchflower and Oswald 2004; Brickman and Campbell 1971; Diener and Biswas-Diener 2002; Diener et al. 1993; Diener and Seligman 2004; Easterlin 1974, 1995; Hsee, Hastie, and Chen 2008;

Johnson and Krueger 2006; Kahneman et al. 2004; Layard 2005; Layard, Mayraz, and Nickell 2007; Luttmer 2005; McBride 2001; Stevenson and Wolfers 2008; Stutzer 2004; Veenhoven 1991). Whereas some people adopt an absolute view, assuming that absolute wealth and consumption levels are important determinants of happiness, others hold a relative view, arguing that absolute values are not important and that happiness depends primarily on wealth and consumption levels relative to others. For example, Frank (2005, p. 67) concludes that “relative income is a far better predictor of happiness than absolute income;... absolute income may not matter at all.”

The relative–absolute debate is more than a mere intellectual curiosity; it carries immense social implications. Understanding whether happiness is relative or absolute can help inform whether improving wealth and consumption levels from one generation to the next can make the next generation happier. If happiness is relative, the improvement will be a zero-sum game and will not make the new generation happier. If happiness is absolute, the improvement will make the new generation happier.

To facilitate the discussion, imagine two societies, one relatively rich and one relatively poor. Members in the rich society earn more money and enjoy better consumption levels than members in the poor society. Within each society,

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some members earn more and enjoy better consumption levels than other members. Even poor members in the rich society earn more money and enjoy better consumption levels than rich members in the poor society. These societies are isolated enough that members in one society cannot easily compare themselves with members in the other; however, members within each society can and often do compare with each other.

What are the happiness levels of these members, *ceteris paribus*? A strictly relative view suggests that happiness depends only on social comparison and not on absolute wealth or consumption level. Therefore, within each society, rich members are happier than poor members, but members in the rich society are not any happier on average than members in the poor society, and the rich members in the poor society are happier than the poor members in the rich society. The light bars in Figure 1 illustrate this pattern. In contrast, a strictly absolute view suggests that happiness depends on absolute wealth and consumption levels. Therefore within each society, rich members are happier than poor members. Furthermore, members in the rich society are happier on average than members in the poor society, and the poor members in the rich society are happier than the rich members in the poor society. The dark bars in Figure 1 illustrate this pattern.

The two societies in this example can be construed as two generations in a country, one old and poor and one new and rich. The relative view implies that members in the newer generation will not be happier than members in the old generation, and the absolute view implies that they will be happier. (The cross-generation analogy is disputable because in the two-society example, the societies are isolated, but people in a new generation may compare themselves with an old generation. Indeed, they may, but people

in the old generation may also have compared themselves with an even older generation. To the extent that a new generation is always better off than an old generation by roughly the same rate, this cross-generation comparison will yield a constant effect on each generation and will not make one generation happier than another. Thus, our previous analysis still holds; namely, only if happiness is absolute will the new generation be happier than the old.)

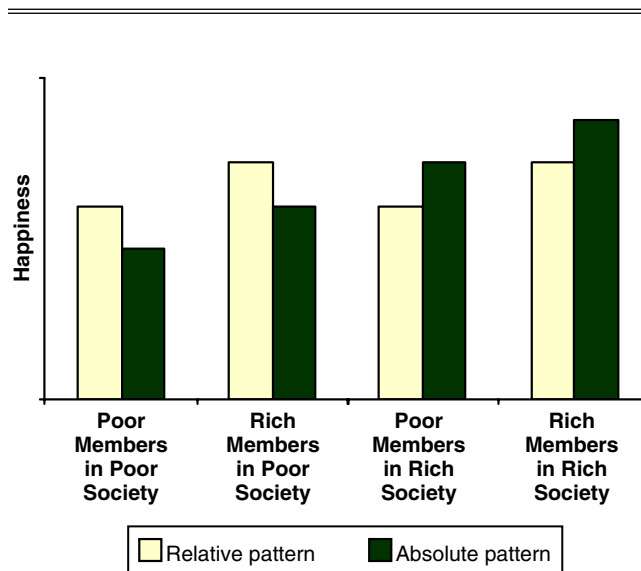
Which view, the absolute or the relative, better reflects reality? Existing findings are mixed. Some suggest that raising wealth cannot raise happiness, consistent with the relative view. For example, although real (inflation-adjusted) income in developed countries—in particular, the United States—has increased multiple times in the last half century, reported life satisfaction has not systematically increased at all (e.g., Blanchflower and Oswald 2004; Easterlin 1974, 1995). Other data suggest that raising wealth can raise happiness, consistent with the absolute view. For example, on average, reported life satisfaction is higher in wealthy countries than in poor countries (e.g., Diener et al. 1993; Kahneman 2008; Leigh and Wolfers 2007; Stevenson and Wolfers 2008), and increases in reported happiness are associated with increases in gross domestic product per capita (e.g., Di Tella, MacCulloch, and Oswald 2003). Moreover, the relationship (slope) between income and happiness across countries has been found to be as large as the relationship between income and happiness across people within a country (Stevenson and Wolfers 2008), indicating that relative income may not play an important role at all.

Although most research on this topic has studied overall subjective well-being or life satisfaction, these holistic concepts are influenced by myriad factors, including religion, culture, marriage, unemployment, political system, and so on. To address the relative–absolute question, it is important to evaluate a finer level than overall subjective well-being and explore specific hedonic experiences. In particular, we focus on three consumer-related hedonic experiences: monetary experience (how a person feels about a given amount of money), acquisition experience (how a person feels when acquiring a consumption item), and consumption experience (how a person feels when consuming the item), holding everything else (e.g., marriage, religion) equal.<sup>1</sup> Accordingly, in this article, the terms “happiness” and “experience” refer to such specific hedonic experiences and encompass both positive experiences (normally described as “happy”) and negative experiences (normally described as “unhappy”).

Other researchers have also studied hedonic experiences and have compared momentary hedonic experience during an event (experienced utility) with prediction of the experience (predicted utility or affective forecasting) or recollection of the experience (remembered utility) (e.g., Kahneman 2000). Unlike prior studies, the current research compares the three types of experiences we outlined—experience with money, experience with the acquisition of a

Figure 1

TWO HYPOTHETICAL PATTERNS: HAPPINESS MAY FOLLOW EITHER A RELATIVE PATTERN OR AN ABSOLUTE PATTERN



<sup>1</sup>Our “acquisition experience” is different from Thaler’s (1985) “acquisition utility.” Acquisition utility refers to the utility consumers derive from using a good, and it is more akin to our definition of consumption experience than to acquisition experience.

good, and experience with the consumption of a good. Our objective is to understand which of these experiences better fits the relative pattern and which better fits the absolute pattern. At the end of the article, we discuss the implications of this research for overall life satisfaction and return to the question whether increasing wealth from one generation to the next can raise the happiness of the new generation.

### MONEY, ACQUISITION, AND CONSUMPTION

#### *Money Versus Consumption*

Suppose that a consumer earns a certain amount of money, which allows him or her to enjoy a certain level of consumption (e.g., a certain amount of bread when hungry, a certain amount of indoor heating during winter), which in turn gives this consumer a certain level of consumption experience (e.g., sensory experience with the bread, comfort from heating). Suppose also that more money allows the consumer to enjoy better consumption levels (e.g., more bread, more comfortable room temperature).

How happy will the consumer be when he or she receives the money? How happy will the consumer be when he or she consumes the good? Intuitively, monetary experience (happiness with money) should be aligned with expected consumption experience (happiness during consumption). Money is merely a token, a medium to trade for something else. The feeling of happiness (or unhappiness) with the medium should be determined by the expected enjoyment (or lack thereof) from consuming the goods it can buy. Money also entails other utilities (e.g., the option to trade for different goods, the ability to be saved for future use), but for the purpose of this research, these features are nonessential, and we do not consider them.

We propose that in reality, monetary experience is often disassociated from expected consumption experience; each has a life of its own. We submit two specific propositions. First, when encountering a medium (money), people tend to myopically focus on its face value and overlook the ultimate consumption experience, even if they have the knowledge to predict it. This tendency has been documented in various studies (e.g., Amir, Ariely, and Carmon 2008; Hsee et al. 2009; Hsee et al. 2003; Vohs, Mead, and Goode 2006). In one study (Hsee et al. 2003), for example, research participants were asked to choose between two tasks, one of which would award them with 60 points and the other with 100 points. The participants were told that these points had no value or use, except that 60 points would entitle them to a bucket of vanilla ice cream and 100 points would entitle them to an equal-sized bucket of pistachio ice cream. Most participants chose the 100-point option, even though when asked afterward to predict their ice-cream preferences, they overwhelmingly selected vanilla. Apparently, participants focused on the immediate reward—in this case, points—and chose the option that would pay more points rather than the option that would result in better consumption experience. Thus, monetary experience depends primarily on the value of the medium itself and is not always aligned with expected consumption experience.

Second, monetary experience and consumption experience fit different hedonic patterns. Monetary value is inherently inevaluable; people do not have an innate “scale” to

sense what amount is desirable and what is undesirable. When external reference information (e.g., how much other people receive) exists, they rely on such external reference information to assess what is good versus bad. Thus, monetary experience follows the relative pattern we depict in Figure 1; the absolute value of money is not important.

In contrast, during consumption, people directly experience or sense the good being consumed. Such direct sensory input is often inherently evaluable; people have an innate and relatively stable sensory “scale” to gauge whether a given sensory experience is desirable (see Morewedge et al. 2008; Simonson 2008). For example, we suspect that most people do not need external reference information to help them decide what level of room temperature feels pleasant and how much food is satisfying, and even if such external reference information exists, people will still more or less use their internal standard to form their experience. Thus, consumption experience follows the absolute pattern we depict in Figure 1. Note that to say consumption experience is absolute does not imply that it is totally impervious to the influence of external reference information. Instead, it means that the absolute level of consumption is an important determinant of consumption experience.

#### *Acquisition Versus Consumption*

The preceding analysis can be extended to situations in which no money is involved. We draw a distinction between acquisition experience and consumption experience. Acquisition experience refers to how a consumer feels when acquiring an item, and consumption experience refers to how the consumer feels when consuming the item. Intuition might suggest that acquisition experience should match consumption experience because the purpose of acquisition is usually for consumption. In reality, however, acquisition experience is readily dissociable from consumption experience.

We propose that just as when receiving money people focus on its face value, when acquiring a good people focus on its “face information”—that is, its number, its quantity, its size, its price, its specifications, and so on—and overlook the eventual consumption experience even if they could predict it. Moreover, like monetary value and unlike consumption experience, the face information people encounter at the acquisition stage is usually cognitive and inherently inevaluable. People look to external reference information, such as what others acquire, to judge the merit of their own acquisitions. Thus, acquisition experience, like monetary experience, is largely relative. Monetary experience can be regarded as a special case of acquisition experience—the acquisition of the medium of money itself.

#### *Summary*

When receiving money that can be traded for a good or when directly receiving a good, people look to external information to determine their happiness. When consuming the corresponding good, people resort to their internal “sense bud” to inform them about their happiness. This analysis leads to the following hypotheses:

- $H_{\text{Money}}$ : Monetary experience (happiness with money) largely depends on the relative amount of money.

$H_{\text{Acquisition}}$ : Acquisition experience (happiness with the acquisition of a good) largely depends on the relative desirability of the good.

$H_{\text{Consumption}}$ : Consumption experience (happiness during the consumption of a good) largely depends on the absolute desirability of the good.

### STUDY 1

#### Method

We conducted Study 1 to test  $H_{\text{Money}}$  and  $H_{\text{Consumption}}$ . Its design mimicked the two-society scenario we described previously. Participants were assigned to two isolated groups. Within each group, some participants received a higher-value coupon and could drink a more concentrated milk (made of milk powder) than other participants. The following chart summarizes the design.

Group Member	Poor		Rich	
	Poor	Rich	Poor	Rich
Coupon value	One point	Two points	Five points	Ten points
Milk concentration	One teaspoon	Two teaspoons	Five teaspoons	Ten teaspoons

Here, we designed groups to simulate the societies in the two-society example, group membership to simulate society membership, coupons to simulate money, and milk concentration to simulate consumption levels. We used coupons to simulate money for two reasons. First, as mentioned, we intended the study to imitate two isolated societies. Because participants came from one society (same country and city) and shared common knowledge about what constitutes a large and small amount of money, using real money would have defeated the purpose of the study. Second, we intended to focus only on the effect of the medium (trading), whereas real money entails other values (e.g., it is fungible, it can be saved) that are not germane to the research.

The specific method of the study is as follows: Participants were 89 students recruited from a large university on the east coast of China. The study was run with one “rich” group and one “poor” group. The two groups did not know about each other and could not compare with each other. In the poor group, participants were told that (1) they would first receive a coupon with a value of either one or two points, (2) the coupon had no other value except that it could be traded for a single cup of milk (100 milliliters) made of Nestlé milk powder, and (3) the milk would contain one teaspoon of milk powder if their coupon was one point or two teaspoons of milk powder if their coupon was two points. The experimenter then randomly distributed coupons to the participants, with some participants—the poor members—receiving one-point coupons and others—the rich members—receiving two-point coupons. The value was printed on each coupon so that participants could easily see who received what. They were then asked to rate their feelings on an 18-point scale ranging from “very unhappy” to “very happy.” This measured what we defined as “monetary experience” (i.e., happiness with coupons).

Participants then traded their coupons for a serving of milk of the promised concentration and drank it. The concentration level (one or two teaspoons) was conspicuously

marked on each cup so that participants could easily see who drank what. While drinking their milk, participants were asked to rate their feelings on the same 18-point scale again. This measured what we defined as “consumption experience” (i.e., happiness with milk). The procedure for participants in the rich group was identical to that for the poor group except that the value on the coupons was either five or ten points and the drink contained either five or ten teaspoons of milk powder.

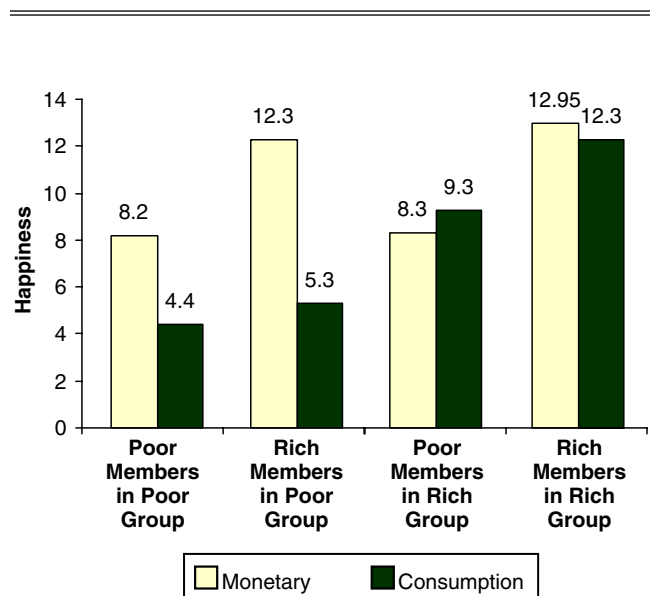
#### Results

Figure 2 summarizes the results of the study. As we expected, monetary experience and consumption experience indeed revealed differences. To test  $H_{\text{Money}}$ , we performed a 2 (group: rich versus poor)  $\times$  2 (member: rich versus poor) analysis of variance (ANOVA) on the monetary experience data. The analysis revealed no significant group effect ( $F(1, 85) = .29$ , n.s.) but a significant member effect ( $F(1, 85) = 36.97$ ,  $p < .001$ ). In support of  $H_{\text{Money}}$ , these results demonstrate the relative nature of monetary experience. To test  $H_{\text{Consumption}}$ , we conducted a similar 2  $\times$  2 ANOVA on consumption experience data. This time, we found a significant group effect ( $F(1, 85) = 50.86$ ,  $p < .001$ ) and a significant member effect ( $F(1, 85) = 5.50$ ,  $p = .02$ ). These results support  $H_{\text{Consumption}}$  that consumption experience is absolute. (Neither ANOVA revealed an interaction effect.)

In summary, after receiving coupons, rich members in each group were happier than poor members, but on average members in the rich group were not any happier than members in the poor group. When consuming their milk, however, not only were rich members in each group happier

Figure 2

STUDY 1 RESULTS: MONETARY EXPERIENCE FITS THE RELATIVE PATTERN, AND CONSUMPTION EXPERIENCE FITS THE ABSOLUTE PATTERN



than poor members, but members in the rich group were also happier than members in the poor group.

We also compared just the rich members in the poor group and the poor members in the rich group. Recall that in relative (social comparison) terms, the rich members in the poor group should be better off, but in absolute (objective) terms, the poor members in the rich group should be better off. We found that when receiving coupons, the rich members in the poor group were happier ( $t(46) = 3.96, p < .001$ ), but when drinking the milk, the poor members in the rich group were happier ( $t(46) = 3.73, p < .001$ ). This “reversal of happiness” reinforces our proposition that monetary experience is relative and consumption experience is absolute.

To test this theory further, we performed a three-way ANOVA that included type of happiness (monetary versus consumption) as a third independent variable. We found a significant type-of-happiness  $\times$  group interaction effect ( $F(1, 85) = 35.64, p < .001$ ) and a significant type-of-happiness  $\times$  member interaction effect ( $F(1, 85) = 6.57, p = .012$ ). In other words, absolute consumption level (milk concentration) had a greater effect on consumption experience than absolute monetary value (coupon points) had on monetary experience, but relative consumption level had less of an impact on consumption experience than relative monetary value had on monetary experience. (There was no three-way interaction effect.)

### Discussion

It is natural to assume that the utility of money lies in the utility of the consumption experience. For example, possessing \$100 enables the holder to consume what the \$100 can buy. However, we posit that utility of money has two rather independent components: its value per se (monetary experience) and its consumption consequence (consumption experience). These two types of happiness obey different hedonic principles: Monetary experience depends on relative monetary value, whereas consumption experience depends on absolute consumption level.

These propositions are corroborated in Study 1 with coupons (mimicking money) and milk (a consumption good). The results suggest that when receiving coupons, participants evaluated the desirability of their own face information relative to that of others, but when drinking milk, they relied on their internal sensory experience.

Several potential alternative explanations warrant consideration. One is that when receiving coupons, participants had no idea how different concentrations of milk would taste and thus could not reliably predict consumption experience. To rule out this explanation, we asked another group of students ( $n = 50$ ) to predict the consumption experience with the four milk concentrations. We found their predictions to be accurate—that is, they had the same monotonically increasing pattern as the consumption results in the main study: The predictions for the one-, two-, five-, and ten-teaspoon servings were 8.14, 9.50, 13.33, and 15.50, respectively.<sup>2</sup> Thus, the disassociation between monetary

and consumption experiences was not due to respondents' inability to predict consumption experience at the monetary phase.

Another potential alternative explanation involves the possibility that social comparison when receiving coupons may have biased participants' predictions (e.g., Gilbert, Gill, and Wilson 2002). Evidence for this explanation comes from a series of seminal studies by Morewedge and colleagues (2008), who find that affective forecasters (predictors) pay more attention to context information (which is analogous to social comparison) than experiencers. This might explain why the current study revealed a somewhat greater member effect in monetary experience than in consumption experience. However, it cannot explain the virtual lack of any group effect in monetary experience, despite a significant group effect in consumption experience.

Another question is whether during the consumption phase participants actually based their responses on their consumption experience (taste of the milk) as we claimed or simply on the face information they received about the concentration of the milk. To address the issue, we asked another group of participants ( $n = 78$ ) to drink milk of one of the four concentrations and rate their happiness. This time, we did not give them any information about its concentration, so their ratings could be based only on the taste of the milk. Their mean ratings for the one-, two-, five-, and ten-teaspoon milk were 4.69, 6.00, 9.05, and 11.43, respectively. These results parallel the consumption results of the main study, suggesting that information about milk concentration was not necessary. (We replicated these findings again in Study 3, in which participants could experience only the target goods and were not given any descriptive information.<sup>3</sup>)

## STUDY 2

### Method

The purpose of Study 2 was to test  $H_{\text{Acquisition}}$  and  $H_{\text{Consumption}}$ . Its design and procedure were identical to those in Study 1 with one exception: We skipped the coupon phase in Study 1. Participants directly received milk of different concentrations and consumed it afterward. We elicited their happiness ratings when they received the milk (acquisition experience) and when they drank the milk (consumption experience). Participants were 77 students from a large university on the east coast of China.

### Results

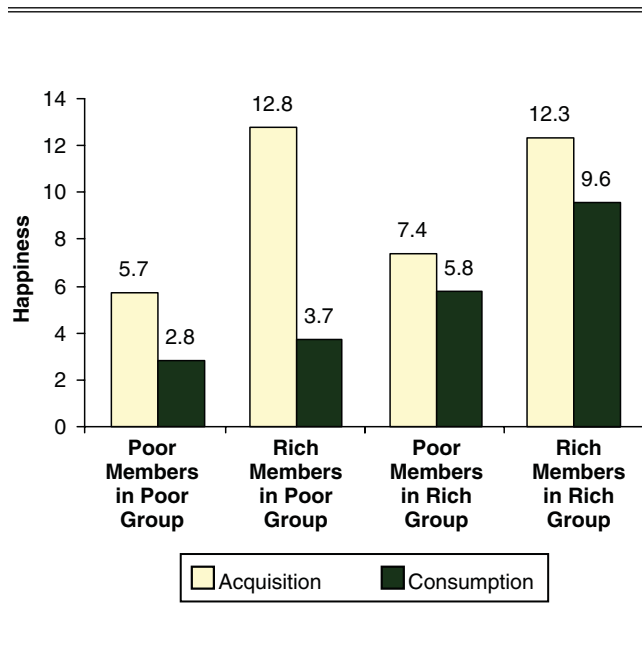
Figure 3 summarizes the results of Study 2. As we expected, acquisition experience and consumption experience indeed differed. To test  $H_{\text{Acquisition}}$ , we conducted a 2 (group: rich versus poor)  $\times$  2 (member: rich versus poor)

<sup>2</sup>Overall, the prediction ratings were higher than the consumption ratings, indicating that, in general, people overpredicted the taste of reconstituted milk. It is the monotonic nature of the prediction, not the absolute value of the main effect, that is relevant to our interests.

<sup>3</sup>The response scale we used in this study was a rating scale bounded by labels, as is commonly used in behavioral research. This type of scale has been found to be susceptible to a measurement artifact called “scale renorming,” a tendency for raters to calibrate the scale to bounds according to their subjective comparison set (e.g., Bartoshuk et al. 2002; Hsee and Tang 2007). Did scale renorming occur in our research? It may have, but it does not constitute a sufficient explanation for our findings. Although scale renorming is consistent with the relative nature of the monetary experience finding, it cannot explain the absolute nature of the consumption experience finding either in this study or in the other studies.

Figure 3

STUDY 2 RESULTS: ACQUISITION EXPERIENCE FITS THE RELATIVE PATTERN, AND CONSUMPTION EXPERIENCE FITS THE ABSOLUTE PATTERN



ANOVA on the acquisition data. We found no significant group effect ( $F(1, 73) = 1.29, n.s.$ ), but there was a significant member effect ( $F(1, 73) = 49.43, p < .001$ ). These results confirm  $H_{\text{Acquisition}}$  that acquisition experience is relative. To test  $H_{\text{Consumption}}$ , we performed a similar  $2 \times 2$  ANOVA on the consumption data. This time, there was a significant group effect ( $F(1, 73) = 37.73, p < .001$ ) and a significant member effect ( $F(1, 73) = 7.92, p = .01$ ). These findings replicate the consumption results of Study 1 and support  $H_{\text{Consumption}}$  that consumption experience is absolute. (Neither ANOVA revealed an interaction effect.)

In summary, during the acquisition phase, although rich members in each group were happier than poor members, members in the rich group were not happier than members in the poor group. However, during consumption, not only were rich members within each group happier than poor members, but members in the rich group were also happier than members in the poor group.

We also compared only the rich members in the poor group and the poor members in the rich group and found a reversal of happiness between the acquisition stage and the consumption stage. At the acquisition stage, rich members in the poor group were happier ( $t(38) = 4.61, p < .001$ ), which reflected a relative pattern. At the consumption stage, poor members in the rich group were happier ( $t(38) = 1.95, p = .058$ ), which reflected an absolute pattern.

As in Study 1, we also performed a three-way ANOVA in which we included type of happiness (acquisition versus consumption) as a third independent variable. A significant type-of-happiness  $\times$  group interaction effect ( $F(1, 73) = 11.27, p < .01$ ) and a significant type-of-happiness  $\times$  member interaction effect ( $F(1, 73) = 10.11, p < .01$ ) emerged.

In other words, absolute consumption level (milk concentration) had a greater effect on consumption experience than on acquisition experience, but relative consumption level had less of an impact on consumption experience than on acquisition experience. The analysis also found a significant three-way interaction effect ( $F(1, 73) = 5.21, p < .05$ ), a result that has no theoretical significance in this research.

### Discussion

It seems intuitive that the utility of an item lies primarily in its consumption utility. For example, the utility of a massage chair is the feeling of comfort and therapeutic effect it provides. Contrary to this intuition, Study 2 indicates that an item can generate two rather independent utilities, one experienced when the consumer acquires the item (acquisition experience) and one experienced when the consumer consumes it (consumption experience). For example, when buying or otherwise acquiring a massage chair, the consumer tends to focus on its specifications (e.g., power, number of airbags). When using the massage chair, the consumer experiences its sensory effect. These two types of experiences follow disparate hedonic patterns. Acquisition experience follows a relative pattern, and consumption experience follows an absolute pattern. (If the consumer tries the massage chair during purchase, the acquisition experience essentially becomes a consumption experience. Generally speaking, the more sensory input a consumer receives during acquisition, the more the acquisition experience resembles the consumption experience.)

The disassociation between acquisition and consumption we observed in Study 2 parallels the disassociation between money and consumption we observed in Study 1. As we explained in Study 1, the disassociation occurred not because participants were unable to predict their consumption experience at the time of acquisition but rather because they simply did not make or follow this prediction.

### INHERENTLY EVALUABLE VERSUS INHERENTLY INEVALUABLE CONSUMPTION

So far, we have maintained that consumption experience follows the absolute pattern ( $H_{\text{Consumption}}$ ). Here, we offer a major qualification to this proposition: Consumption experience does not invariably follow the absolute pattern. We distinguish between two types of consumption variables, inherently evaluable and inherently inevaluable. For ease of expressions, we refer to inherently evaluable variables as Type A variables and inherently inevaluable variables as Type B variables. Type A variables are those whose desirability human beings have an innate and largely common and stable scale to assess. This is the type of consumption variables we have assumed so far. Examples include ambient temperature, amount of sleep, concentration of a porridge, presence or absence of orgasm, degree of social isolation (loneliness), fatigue level, boredom, and so on. Conversely, Type B variables are those whose desirability human beings have no innate scale to gauge and must rely on external reference information (e.g., how much others have) to judge. Examples include the weight of a diamond, the interest rate of a certificate of deposit, the brand of a purse, the horsepower of a car, and so on. We suspect that without training, even primates will feel differently toward different levels of a Type A variable but not toward different

levels of a Type B variable. For example, we suspect that monkeys feel happier in a 20°C room than in a 10°C room, when in the company of other monkeys than when socially isolated, or when toys are available than when absent. Monkeys probably will feel no happier when in possession of a two-karat diamond than when in possession of a one-karat diamond.

We propose that consumption experience with Type B (inherently inevaluable) variables, just as monetary experience and acquisition experience, follows a different hedonic pattern from that of consumption experience with Type A (inherently evaluable) variables. Specifically, we submit the following hypotheses:

$H_{\text{Type A Consumption}}$ : An inherently evaluable (Type A) consumption experience depends on the absolute desirability of the good.

$H_{\text{Type B Consumption}}$ : An inherently inevaluable (Type B) consumption experience depends on the relative desirability of the good.

We offer a few clarifications here. First, Type A and Type B variables are not two discrete states; they are two ends of a continuum, with most consumption variables falling in between. For example, the size of a television screen is Type A only to the extent that it affects the eye strain of the viewer. Second, that Type A variables involve an inherent evaluable scale does not mean that there are no individual differences. How much sleep is satisfying may vary from person to person.

Third, as are Type B experiences, Type A experiences are also susceptible to the influence of social comparison and other external context. The chief difference between Type A and Type B experiences is not whether the experience can be affected by external context. Both can. Rather, the chief difference is that Type A experiences have an absolute inherent evaluation standard and therefore also depend on the absolute level of the corresponding variable. Type A experiences may be thought to resemble a foam ball, which has an inherent shape, whereas Type B experiences resemble a Play-Doh ball, which lacks an inherent shape. The shapes of both can be altered by an external force, but the foam ball will return to its inherent form, whereas the Play-Doh ball has no inherent shape to return to.

Finally, the distinction between Type A and Type B variables, as with distinctions between hedonic goods and utilitarian goods in consumer research and between System 1 and System 2 in cognitive psychology, is multiply determined. For example, Type A variables are commonly associated with basic psychobiological and biophysical needs. As Veenhoven (1991) argues in his article that criticizes the relative view of happiness, happiness depends at least in part on the gratification of psychobiological needs that are innate, universal, and not arbitrarily adjustable. To the extent that Type A variables reflect these basic needs, our view echoes Veenhoven's. In contrast to Type A goods, the value of Type B goods is probably derived from their signal of status (Frank 2000; Solnick and Hemenway 2005). Although we consider the notion of inherent evaluability important, we realize that it is still evolving and will be refined in further research. In the "General Discussion" section, we revisit this topic and discuss how to identify inherently evaluable versus inevaluable variables, how inherent

evaluable variables differ from other evaluable variables (e.g., Hsee 1996; Hsee et al. 1999), and how inherent evaluability interacts with hedonic adaptation (e.g., Frederick and Loewenstein 1999). For now, we report two studies that test  $H_{\text{Type A Consumption}}$  and  $H_{\text{Type B Consumption}}$ . Study 3 is a controlled experiment, and Study 4 is a field study.

### STUDY 3

#### Method

We designed Study 3 to test  $H_{\text{Type A Consumption}}$  and  $H_{\text{Type B Consumption}}$ . The structure of the study parallels that of Study 1 and Study 2 and mimics the two-society scenario. The stimuli were bathwater temperature and diamond size. As we confirmed in a pretest (described next), the former was Type A, and the latter was Type B. The following is a summary of the design:

Group Member	Poor		Rich	
	Poor	Rich	Poor	Rich
Diamond size	3.0 mm	4.4 mm	5.8 mm	7.2 mm
Water temperature	12°C	22°C	32°C	42°C

Notes: mm = millimeters.

Participants were 136 female students recruited from a large university on the east coast of China. The study consisted of two within-subject phases, one about water and one about diamonds. The order of the phases was counter-balanced and had no significant effect.

In each phase, we ran the study in two separate groups, one corresponding to the rich society and the other to the poor society. The two groups were not aware of each other. For the diamond phase with the poor group, participants were seated in pairs and shown two diamonds, one with a diameter of 3.0 millimeters and one with a diameter of 4.4 millimeters. The diamonds were then given to the first pair, with one person getting the smaller diamond and the other getting the larger diamond. We encouraged each participant to compare her diamond with the other participant's. Participants were not given the diameter information; they could only see the diamonds. While holding their diamond, the participants were asked to indicate how they would feel when wearing a ring with a diamond of that size and rated their feelings on an 18-point scale ranging from 1 ("very unhappy") to 18 ("very happy"). They then passed the diamonds to the next pair of participants. The procedure for the rich group was identical to that for the poor group except that the diamonds were 5.8 millimeters and 7.2 millimeters in diameter, respectively.

The procedure in the water phase was identical to that in the diamond phase except that instead of diamonds, each group was given two bottles of water. In the poor group, the water temperatures were approximately 12°C and 22°C, respectively; in the rich group, the temperatures were 32°C and 42°C, respectively. Each participant was encouraged to compare the temperature of her water with that of the other participant in the pair. Again, participants were not given the temperature degree information; they could only sense

the temperatures. While holding their bottle, the participants were asked to indicate how they would feel when taking a bath using water of that temperature during the winter.

Although this study did not involve actual consumption (wearing a diamond ring or taking a bath), it involved real experience (seeing the diamonds and feeling the water temperatures). For the purpose of this research, we believed that having this real experience was sufficient. Study 4 (a field study) involved real consumption.

To ascertain that water temperature was Type A and diamond size was Type B, we recruited another group of students ( $n = 18$ ). We told them that there were two types of variables and that for one type, which we called Type A, people have an innate sensory scale to judge and that for the other type, which we called Type B, people do not have an innate sensory scale and need to rely on external information to judge. Then, we asked the respondents to rate diamond size and bathwater temperature on a four-point scale ranging from 1 (“definitely belongs to Type A”) to 4 (“definitely belongs to Type B”). Ratings were significantly smaller for water than for diamond ( $M_s = 1.50$  and  $3.22$ ;  $t = 3.35$ ,  $p = .004$ ), confirming that people intuitively classified water temperature as more of Type A than diamond size.

### Results

We summarize the results of Study 3 in Figure 4. As  $H_{\text{Type A Consumption}}$  and  $H_{\text{Type B Consumption}}$  predicted, happiness with water and happiness with the diamond indeed revealed divergent patterns. To test  $H_{\text{Type A Consumption}}$ , we subjected the water data to a 2 (group: rich versus poor)  $\times$  2 (member: rich versus poor) ANOVA. Confirming  $H_{\text{Type A}}$

Consumption, the analysis yielded a significant group effect ( $F(1, 123) = 80.65$ ,  $p < .001$ ) and a significant member effect ( $F(1, 123) = 25.38$ ,  $p < .001$ ). To test  $H_{\text{Type B Consumption}}$ , we subjected the diamond data to a similar ANOVA. Confirming  $H_{\text{Type B Consumption}}$ , the analysis revealed no significant group effect ( $F(1, 128) = .16$ , n.s.), but there was a significant member effect ( $F(1, 128) = 26.03$ ,  $p < .001$ ). (Neither ANOVA revealed a significant interaction effect.) In short, the temperature of water affected happiness with or without social comparison, and the size of the diamond influenced happiness only with social comparison.

As in the previous studies, we also compared only the rich members of the poor group and the poor members of the rich group and found a reversal effect: The poor members in the rich group were happier with their water temperature ( $t(62) = 2.66$ ,  $p = .01$ ), and the rich members in the poor society were happier with their diamond size ( $t(64) = 3.92$ ,  $p = .002$ ).

To test this theory further, we performed a three-way ANOVA including type of consumption (water versus diamond) as a third independent variable, and we found a highly significant type-of-happiness  $\times$  group interaction ( $F(1, 126) = 49.97$ ,  $p < .001$ ) and no significant type-of-happiness  $\times$  member interaction ( $F < 1$ , n.s.). As additional support for our theory, these findings meant that absolute water temperature had a greater impact on happiness with water than absolute diamond size had on happiness with diamonds, but relative water temperature did not have a greater impact on happiness with water than relative diamond size had on happiness with diamonds. (There was no three-way interaction.)

### Discussion

The first part of this article contrasted happiness during consumption with happiness with money and acquisition, emphasizing that happiness during consumption is absolute. Study 3 demonstrates that while happiness during Type A consumption is absolute, happiness during Type B consumption is relative. Indeed, both monetary experience and acquisition experience can be regarded as variants of Type B consumption. In all cases, the target variable—whether it is the face value of a medium, the face information of a product, or the size of a diamond—lacks an inherent stable evaluation scale.

### STUDY 4 (FIELD STUDY)

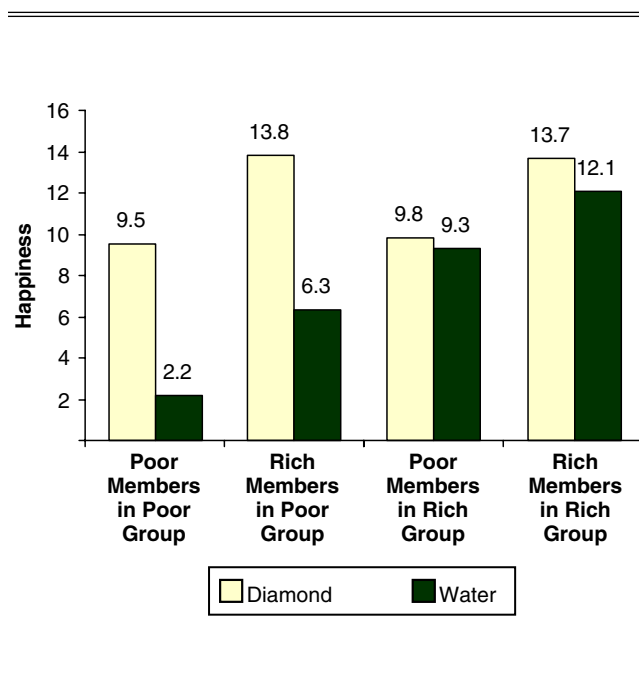
#### Method

Study 4 replicates Study 3 using field data. We assessed city dwellers' happiness with their room temperature (Type A) and their jewelry value (Type B) both within and between cities. Presumably, it is easier for city dwellers to compare with each other within a city than between cities; thus, cities are analogous to societies in the two-society example and to groups in Study 3.

Using a computer-assisted telephone-interviewing system, we conducted a survey in the 31 officially designated major cities in Mainland China, which comprised the capitals of its 22 provinces, the capitals of its 5 autonomy regions, and its 4 directly controlled municipalities. A total of 6951 people responded to the survey, with approximately the same number of respondents in each city.

Figure 4

STUDY 3 RESULTS: EXPERIENCE WITH THE DIAMOND FITS THE RELATIVE PATTERN, AND EXPERIENCE WITH WATER FITS THE ABSOLUTE PATTERN





Among other questions (for other purposes), respondents were asked four questions in the following order: (1) how happy they felt when they thought about their present room temperature; (2) how happy they felt when they thought about their jewelry, including watches; (3) what their present room temperature was; and (4) how much their jewelry, including watches, was worth. Responses to the two happiness questions were ratings based on a seven-point scale ranging from 1 (“very unhappy”) to 7 (“very happy”). We put the two objective-number questions (3 and 4) after the two happiness questions (1 and 2) because we believed that answers to the objective-number questions were less likely to be influenced by answers to the happiness questions than the other way around.

We chose room temperature and jewelry value as consumption variables for two reasons. First, they resembled water temperature and diamond size, respectively, in Study 3. Second, each of these variables entailed not only within-city variations but also between-city variances. With regard to temperature, for example, we conducted the study in the winter. Within each city, some residents could afford more heating and thus had warmer room temperatures than others. Across cities, on average, residents in some cities had warmer homes than residents in others. The presence of both within- and between-city variances enabled us to perform both within-city and between-city analyses, as we describe subsequently.

### Results

To verify the existence of between-city variations in temperature and jewelry values, we calculated the mean temperature and mean jewelry value for each city. Mean temperature ranged from 14.0°C to 20.3°C, and mean jewelry value ranged from ¥2,986 to ¥9,683.

Recall that in Study 3, we expected water temperature to exert both a group effect (i.e., a between-group effect) and a member effect (i.e., a within-group effect) and diamond size to exert only a member effect (i.e., only a within-group effect). Likewise, in Study 4, we expected room temperature to exert both a between-city effect and a within-city effect and jewelry value to exert only a within-city effect but no between-city effect.

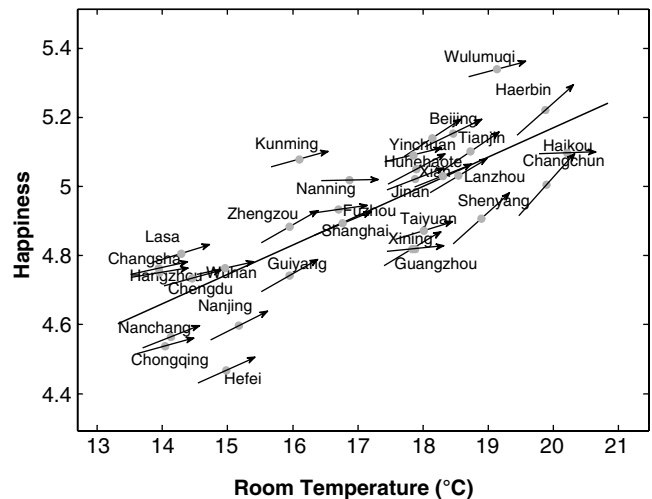
Figure 5 visually summarizes the findings. Panel A is a scatter plot of the 31 cities based on the temperature data. The slope of the long line indicates the effect of temperature between cities, and the slope of each arrow indicates the effect of temperature within a given city. Panel B is a corresponding scatter plot for the jewelry data.

A comparison of the two panels reveals compelling evidence for our predictions. In Panel A, both the between-city effect of temperature (slope of the long line) and the average within-city effect of temperature (average slope of the arrows) are positive, and on average the between-city slope is as steep as the within-city slopes. In Panel B, the between-city slope of jewelry value is essentially flat, whereas the average within-city slope is still positive.

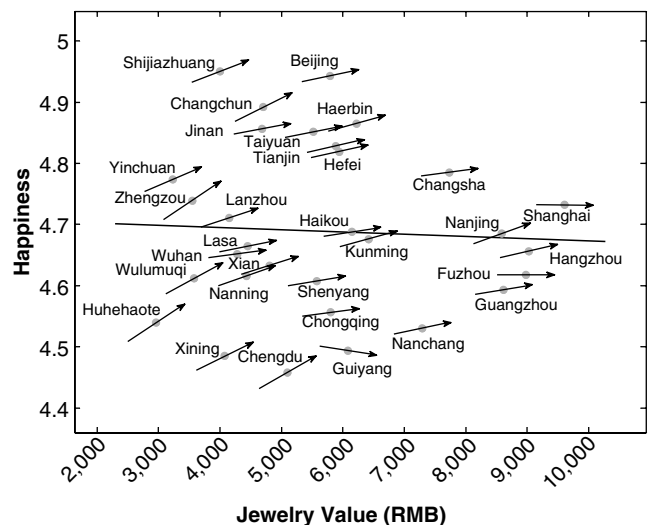
To test our hypotheses further and control for potential confounding factors (e.g., city effects, gender), we performed four regression analyses: one for temperature’s within-city effect, one for temperature’s between-city effect, one for jewelry’s within-city effect, and one for jewelry’s between-city effect. (Because this study was not a lab

Figure 5  
STUDY 4 RESULTS: HAPPINESS WITH TEMPERATURE IS ABSOLUTE, AND HAPPINESS WITH JEWELRY IS RELATIVE

A: Scatter Plot of the 31 Cities Based on the Temperature Data



B: Scatter Plot of the 31 Cities Based on the Jewelry Data



experiment, we could not analyze the data using an ANOVA.) To test for temperature’s within-city effect, we regressed each respondent’s happiness-with-temperature rating on his or her room temperature, and we controlled for possible city effects by treating cities as dummy variables. To test for temperature’s between-city effect, we regressed each city’s mean happiness-with-temperature rating on each city’s mean room temperature. We did the same two regression analyses for the jewelry data. (We included only respondents whose jewelry value was not zero in the regressions because the data coding left it unclear whether zero meant no jewelry, including no watches, or a refusal to

answer the question.) In all regressions, we controlled for gender, age, and duration of residence in the given city.

The results confirmed our predictions: Room temperature had a significant effect in both the within-city regression ( $B = .077$ ,  $t = 19.37$ ,  $p < .0001$ ) and the between-city regression ( $B = .094$ ,  $t = 6.88$ ,  $p < .0001$ ), and the magnitudes of the two effects were remarkably similar ( $t = -1.33$ , *n.s.*). Conversely, jewelry value had a significant effect only in the within-city regression ( $B = .017$ ,  $t = 6.67$ ,  $p < .0001$ ) and no significant effect in the between-city regression ( $B = -.0077$ ,  $t < 1$ , *n.s.*), and the within-city effect was significantly greater than the between-city effect ( $t = 2.42$ ,  $p < .02$ ). Because the distribution of jewelry values was negatively skewed, we also performed analyses using logarithm of jewelry values, and we observed the same pattern of results: a significant effect in the within-city analysis ( $B = .16$ ,  $t = 8.84$ ,  $p < .0001$ ), virtually no effect in the between-city analysis ( $B = .02$ ,  $t < 1$ , *n.s.*), and a significant difference between the two effects ( $t = 2.17$ ,  $p < .05$ ).

Evidently, owners of warmer homes were happier than owners of cooler homes, regardless of whether they resided in the same city. In contrast, owners of expensive jewelry were happier than owners of less expensive jewelry only if they lived in the same city.

### *Discussion*

Most existing research on hedonic happiness and happiness in general uses either controlled lab experiments or uncontrolled surveys. The current research includes both. As a field study, Study 4 differs considerably from Study 3 and involves “real people” experiencing real consumption experience. Yet it produces remarkably similar results. Together, Study 3 and Study 4 convey a straightforward and largely overlooked message: For some consumption variables, people do not have inherent evaluation scales, and for others, they do. The absolute level of Type A variables matters in happiness, while the absolute level of Type B variables does not.

### *GENERAL DISCUSSION*

We explore whether happiness is absolute or relative. To address this question, we go beyond the omnibus concept of overall life satisfaction and examine happiness (hedonic experiences) with specific consumer-related events. We theorize and demonstrate through both experimental and field data that happiness with money and with the acquisition of a good is relative and that happiness with consumption can be absolute. Within consumption, we propose and show that happiness with inherently evaluable (Type A) consumption is absolute and that happiness with inherently inevaluable (Type B) consumption is relative. In the remainder of the article, we draw implications from this research and suggest directions for further research.

### *Implications for Utility Theories*

Classic economic theories of utility—in particular, expected utility theory—assume that the carriers of utility are final states and absolute outcomes. In contrast, a key proposition of behavioral theories of utility, especially prospect theory (Kahneman and Tversky 1979), is that the carriers of utility are relative outcome values—namely, gains and losses relative to reference points.

Since their introduction, prospect theory and related behavioral models have been treated as alternatives to classic economic models, and scholars have debated over which theory best captures the reality. On the basis of the current research, we propose that this debate may be misinformed. We speculate that classic and behavioral theories are not competing accounts of the same event but rather are complementary accounts of different events. Behavioral models, such as prospect theory, characterize the utility (experience) derived from the acquisition of money or goods, whereas classic utility models describe utility derived from consumption, especially consumption of inherently evaluable goods.

Recent studies by Morewedge and colleagues (2008) and Kermer and colleagues (2006) suggest a related point, that reference dependence and loss aversion, two key principles of prospect theory, apply more to predicted experience than to actual experience. Although these studies differ from ours in that they compare predicted versus real experiences rather than acquisition versus consumption experiences, an underlying relationship among these variables appears to exist.

This analysis also sheds light on the debate regarding the innate versus the constructed nature of preference. Some behavioral decision theorists assert that preferences are largely constructed and determined by context (e.g., Bettman, Luce, and Payne 1998; Lichtenstein and Slovic 2006). Others maintain that many preferences are inherent and stable and that some exist even for things that people have never encountered before (e.g., Simonson 2008). Our research adds specificity to the debate by suggesting that preferences for money, for acquisition (choice), and for inherently inevaluable experiences are largely constructed, whereas preferences for inherently evaluable experiences have a stable core.

### *Social Implications*

We now revisit the two-society example introduced at the beginning of the article and summarize the key insights from this research. Within each society, rich members are always happier than poor members. Between the societies, when considering money, acquiring goods, or consuming Type B goods, members in the rich society are not happier than members in the poor society. When consuming Type A goods, however, members in the rich society are happier.

The main social implication of our research pertains to how to increase happiness across generations. A generation is a social milieu, like a society. A new generation, like the rich society in the previous example, typically enjoys more wealth and better consumption than the previous generation. Based on our analysis of the two-society example, a central message from this research is that across generations in a country, raising the wealth of all may increase the happiness of all if people focus their attention on consumption experience rather than on monetary or acquisition experiences and if they invest their wealth on improving Type A consumption rather than Type B consumption. Our grandchildren will not feel happier than us when they count their wealth or their possessions. Nor will they feel happier than us if they have more diamonds to wear during dinner parties. Yet they may well feel happier than us if they have

a more comfortable room temperature during their dinner parties.

At first glance, this research appears at odds with the Easterlin paradox, the finding that reported life satisfaction has stayed the same in developed countries across generations despite substantial increases in wealth (e.g., Blanchflower and Oswald 2004; Easterlin 1974, 1995). If Type A variables improve as wealth increases, according to our theory happiness should also increase. Why, then, does reported life satisfaction refuse to follow suit? When we say that happiness should increase, we mean that Type A consumption experience should increase. Type A consumption experience is only a component of general life satisfaction. When reporting life satisfaction, respondents may attend to money and acquisition, which, according to our theory, does not increase happiness across generations. Furthermore, even if respondents attend to consumption experiences, most of the improvements in developed countries in recent decades have been in Type B consumption variables, which, based on our findings, do not increase happiness across generations either. This speculation is corroborated by studies showing that life satisfaction indeed increases as wealth increases in less developed countries (e.g., Clark, Frijters, and Shields 2008), and life satisfaction in less developed countries is on average lower than life satisfaction in developed countries (e.g., Diener et al. 1993; Kahneman 2008; Stevenson and Wolfers 2008). Finally, when reporting life satisfaction, respondents undoubtedly also attend to aspects of life other than money, acquisition, and consumption, and these other aspects may have stayed the same or even worsened over time.

Readers might ask whether this research is relevant to the twenty-first century when most people seem no longer to be worried about Type A events, such as food and room temperature. We believe so. Most people in the world still live in developing countries, and many still suffer from malnutrition, devastating diseases, and unsanitary living conditions. Even in developed countries, there are still deficiencies that we believe are Type A domains. For example, many Americans still lack adequate heating in the winter and still suffer from migraine headaches, social isolation, insomnia, sexual dysfunctions, and depression. Thus, the current research has practical applications in both developing and developed societies.

#### *More on Inherent Evaluability*

*Inherent evaluability versus learned evaluability.* Inherently evaluable variables are different from variables that become evaluable as a result of social learning. For example, the size of a diamond can be evaluated rather easily by people who have recently purchased a diamond and are aware which size is considered large or small on the market. This form of evaluability is learned, not inherent, and, in our terminology, still belongs to Type B. Relevant research on evaluability (e.g., Hsee 1996; Hsee et al. 1999; Morewedge et al. 2009; Yeung and Soman 2005) has not distinguished between these forms of evaluability.

This distinction is vital to appreciate the broader social implications. Across generations, improving Type A goods will increase happiness, but improving learned evaluable goods will not. The reason is that people's "evaluation scale" for Type A variables (e.g., what temperature feels

comfortable) is relatively stable and does not change much from one generation to another, but the evaluation scale for learned evaluable variables is a generation-specific consensus measurement and is likely to change along with societal norms. For example, suppose that mining advances allow the newer generation to produce and possess larger diamonds than prior generations. Within each generation, diamond size is highly evaluable to its members because of social learning, but the shift in the evaluation scale from one generation to the next means that the new generation will be no happier about diamond size than the older generation. It is a zero-sum game. In contrast, if the current generation can only afford an indoor temperature of 15°C in winter and the next generation can enjoy a temperature of 25°C, the new generation will be absolutely happier.

*How to identify inherently evaluable versus inevaluable variables.* Theoretically, the inherent evaluability of a variable is defined by the extent to which a person has an inherent evaluation scale for that variable. Operationally, it is possible to identify Type A (inherently evaluable) versus Type B (inherently inevaluable) variables by giving laypeople our theoretical definitions and assessing their intuition, as we did in our manipulation checks. Although lay intuition may not always be correct, it should not be systematically wrong either.

However, if the objective of the researcher is to inform policy makers about what kinds of improvements can increase happiness across generations and what kinds of improvements cannot, he or she does not need to define a variable as Type A or Type B on the basis of our theoretical definition. Instead, the researcher can adopt the following method to empirically classify a variable as Type A or Type B: Suppose that  $X$  is a concerned variable and  $x_1$  and  $x_2$  are two levels of  $X$ . The researcher should recruit three groups of respondents who are naive about  $X$ —that is, respondents who have not learned about the evaluability of  $X$  through social learning. The researcher lets everyone in Group 1 experience  $x_1$ , everyone in Group 2 experience  $x_2$ , and some members in Group 3 experience  $x_1$  and some members in Group 3 experience  $x_2$ . The three groups are isolated, but members in each group know what level of  $X$  other members get. The researcher then elicits everyone's hedonic experience. Define  $D_{\text{Between}} = e_{\text{Group1}}(x_1) - e_{\text{Group2}}(x_2)$  and  $D_{\text{Within}} = e_{\text{Group3}}(x_1) - e_{\text{Group3}}(x_2)$ , where  $e_{\text{Group1}}(x_1)$  is the mean happiness level of Group 1,  $e_{\text{Group2}}(x_2)$  is the mean happiness level of Group 2, and  $e_{\text{Group3}}(x_1)$  and  $e_{\text{Group3}}(x_2)$  are the mean happiness levels of those in Group 3 who receive  $x_1$  and those in Group 3 who receive  $x_2$ , respectively. Assume that  $D_{\text{Within}} > 0$ . Then, the researcher can identify whether  $X$  (at least in its range around  $x_1$  and  $x_2$ ) is Type A or Type B (or where it falls on the Type A–Type B continuum) as follows: The more  $D_{\text{Between}}$  is close in magnitude to  $D_{\text{Within}}$ , the more  $X$  is in the Type A end of the Type A–Type B continuum; the more  $D_{\text{Between}}$  is small relative to  $D_{\text{Within}}$ , the more  $X$  is in the Type B end of the Type A–Type B continuum. In other words, it is possible to use  $D_{\text{Between}}/D_{\text{Within}}$  to identify the nature of  $X$ , such that greater (smaller)  $D_{\text{Between}}/D_{\text{Within}}$  indicates greater proximity to Type A (Type B).

Logically, this method is analogous but opposite to the method we adopted in Study 3 and Study 4. The purpose of those studies was to test our theory. To do so, we defined

Type A and Type B variables a priori and showed that relative to their within-group (within-city) effect, the between-group (between-city) effect of the Type A variable (temperature) was large and that of the Type B variable (jewelry) was small. In contrast, the purpose of the method we introduced in this section is not to test our theory but rather to apply our theory to inform policy makers. To do so, we do not define a variable as Type A or Type B a priori; instead, we empirically identify it as Type A or Type B by assessing its relative within-group and between-group effects.

This method could be applied on a wide range of variables, and then the variables could be placed one by one on the Type A–Type B continuum, thus forming a “Type A/B menu.” We believe that such a menu would be highly valuable to policy makers. If they intend to make future generations happier, policy makers should pick a variable on the Type A side of the menu and invest resources to improve it.

*Inherent evaluability versus hedonic adaptation.* An obstacle to enduring happiness is hedonic adaptation—that is, the tendency to feel affectively insensitive to a positive (negative) event after experiencing it for a given period (e.g., Diener, Lucas, and Scollon 2006; Frederick and Loewenstein 1999). However, some events are more adaptation resistant than other events. For example, uncertain and variable events are more adaptation resistant than certain and fixed events (e.g., Kurtz, Wilson, and Gilbert 2007; Scitovsky 1976). Thus, to ensure long-lasting happiness, people should pursue adaptation-resistant rather than adaptation-prone positive events.

Two questions regarding inherent evaluability and hedonic adaptation warrant explanation. First, is the recommendation to improve inherently evaluable (Type A) consumption redundant with the recommendation to pursue adaptation-resistant positive events? Second, will the happiness brought about by an improvement in Type A consumption be erased by hedonic adaptation? Regarding the first question, improving adaptation-resistant consumption is theoretically different from improving Type A consumption (Hsee, Xu, and Tang 2008). The former can produce long-lasting happiness within a generation. The latter can increase happiness across generations. The reason is as follows: Any improvement in a consumption variable can lead to an improvement in happiness within a given generation. How long the increased happiness lasts within the generation depends on whether the event is adaptation resistant or adaptation prone. The increased happiness will last longer if the event is adaptation resistant (e.g., a variable event) than if it is adaptation prone (e.g., a fixed event). However, an improvement in an adaptation-resistant event does not necessarily lead to an improvement in happiness across generations. Whether the new generation is happier than the old generation depends on whether it is happier from the beginning, regardless of whether there is subsequent adaptation, and whether the new generation is happier than the old from the beginning depends on whether the improved event is Type A or Type B. The new generation will be happier if the event is Type A (e.g., temperature) than if it is Type B (e.g., diamond size).

The second question is whether hedonic adaptation will erase the across-generation improvement in happiness brought about by the improvement in Type A consumption. For example, suppose that an old and less wealthy genera-

tion can afford only 20°C water when taking a bath during winter whereas a new and richer generation can afford 40°C water. Will the new generation eventually feel the same as the old as a result of hedonic adaptation? We doubt so. Although hedonic adaptation may occur to both Type A and Type B variables, the rate of adaptation will be slower for Type A variables. Taking a bath in 20°C water for the 20th time will be less dreadful than the first time, but it will still be far less pleasant than taking a bath in 40°C water for the 20th time. Study 4 corroborates this claim: Respondents in that field study had presumably experienced and adapted to their room temperature. Room temperature still exerted a significant between-city effect, which suggests that variations in temperature will endanger lasting variations in happiness, despite the possibility of adaptation.<sup>4</sup> Thus, although theoretically hedonic adaptation and inherent evaluability are distinctive, they may be correlated.

### Conclusion

In general, laypeople assume that happiness depends on absolute wealth and absolute consumption levels. Behavioral researchers have drawn a more realistic picture by arguing that happiness depends primarily on relative wealth and relative consumption levels. In this article, we draw an even more realistic picture by demonstrating that each view is correct under predictable circumstances. We believe that if attention is focused on consumption rather than on money or goods and if wealth is invested in improving inherently evaluable consumption rather than inherently inevaluable consumption, raising wealth from one generation to the next will make the new generation absolutely happier.

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<sup>4</sup>Schkade and Kahneman (1998) find that Midwesterners and Southern Californians in the United States are equally happy, despite the weather difference in the two regions. Unlike our Study 4, which focuses on happiness with temperature, their study focuses on overall life satisfaction.

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