Research Article

MONEY, KISSES, AND ELECTRIC SHOCKS: On the Affective Psychology of Risk

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Abstract—*Prospect theory's S-shaped weighting function is often said to reflect the psychophysics of chance. We propose an affective rather than psychophysical deconstruction of the weighting function resting on two assumptions. First, preferences depend on the affective reactions associated with potential outcomes of a risky choice. Second, even with monetary values controlled, some outcomes are relatively affect-rich and others relatively affect-poor. Although the psychophysical and affective approaches are complementary, the affective approach has one novel implication: Weighting functions will be more S-shaped for lotteries involving affect-rich than affect-poor outcomes. That is, people will be more sensitive to departures from impossibility and certainty but less sensitive to intermediate probability variations for affect-rich outcomes. We corroborated this prediction by observing probability-outcome interactions: An affect-poor prize was preferred over an affect-rich prize under certainty, but the direction of preference reversed under low probability. We suggest that the assumption of probability-outcome independence, adopted by both expected-utility and prospect theory, may hold across outcomes of different monetary values, but not different affective values.*

Risky choices, such as whether to leave home without an umbrella and whether to sign a peace agreement, are made without advance knowledge of their consequences. Most theoretical analyses of such choices thus depict each option as a gamble that can yield various outcomes with different probabilities. In these analyses, a value function, *v*, indexes the attractiveness of the outcomes; a weighting function, *w*, quantifies the impact of probabilities; and value and weight are somehow combined to establish a utility for each course of action. The decision maker is presumed to choose the action of highest utility. Expected-utility theory and prospect theory are both special cases of this formulation in which the utility of an option having *i* different potential outcomes, each with probability p_i, is a weight-based linear combination of the values of those outcomes: $\Sigma w(p_i)v(i)$.

Different theories make different assumptions concerning the impact of probabilities. In expected-utility theory, the weighting function is the identity, $w(p) = p$. Simply put, the theory presumes that the decision maker incorporates in his or her decision the probabilities themselves. In prospect theory, in contrast, the decision maker incorporates in his or her decision a transformation of probability said to be induced by the psychophysics of chance (Kahneman & Tversky, 1984). The psychophysical notion of diminishing sensitivity implies that the impact of a given change in probability diminishes with its distance from impossibility and certainty. Indeed, in a well-known study, Tversky and Kahneman (1992) found that the median participant was indifferent between receiving a lottery ticket offering a 1% chance at $200 and receiving $10 for sure and was also indifferent between receiving a lottery ticket offering a 99% chance at $200 and receiving $188 for sure. In line with diminishing sensitivity, the first hundredth of probability was worth $10, and the last hundredth was worth $12, but the 98 intermediate hundredths were worth only $178, or about $1.80 per hundredth. Prospect theory captures such a pattern with an S-shaped weighting function, examples of which are depicted in Figure 1. The large jumps at the endpoints imply $w(p) > p$ for small *p* and $w(p) < p$ for large *p*, as revealed in the data[1] (for analysis of the S-shaped weighting function, see Abdellaoui, 2000; Bleichrodt & Pinto, 2000; Camerer & Ho, 1994; Gonzalez & Wu, 1999; Kilka & Weber, 1998; Prelec, 1998; Tversky & Fox, 1995; Wu & Gonzalez, 1996).

In this article, we propose an affective rather than psychophysical deconstruction of the weighting function. Suppose you hold a lottery ticket offering as a prize the opportunity to meet and kiss your favorite movie star. The availability of the movie-star prize will induce some hope or similar positive affect associated with the possibility of winning and some fear or similar negative affect associated with the possibility of not winning. We suggest that the large jump on the left-hand side of the weighting function differentiates situations in which some hope exists (whenever the probability of winning is greater than zero) from situations in which there is no hope (whenever the probability of winning is equal to zero). Likewise, the large jump on the right-hand side of the weighting function differentiates situations in which some fear exists (whenever the probability of winning is less than 1) from situations in which there is no fear (whenever the probability of winning is equal to 1). The presence of these two jumps implies that altering the degree of possibility from one intermediate probability to another will have relatively little affective impact, so that the weighting function will be S-shaped. In sum, the affective approach holds that the jumps in the weighting function can be attributed, at least in part, to the affective reactions—which we label hope and fear—associated with a lottery.

Although the psychophysical and affective approaches may be complementary and make largely the same predictions, there is a crucial difference between them. Among the most fundamental implications of the representation $\Sigma w(p_i)v(i)$ is *probability-outcome independence.* By positing separate functions for the evaluation of outcomes and probabilities, both expected-utility theory and prospect theory assume that the impact of a given probability is a function of that probability but not of the outcome to which it is attached. The psychophysical approach maintains this assumption. The affective approach, in contrast, draws a distinction between monetary and affective determinants of value. Although probability-outcome independence may hold across outcomes having different monetary values, the affective approach implies that it is unlikely to hold across outcomes having different affective values.

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1. The weighting function in prospect theory is typically termed "inverse S-shaped." For the sake of brevity, we follow Prelec (1998) in using the term "S-shaped."

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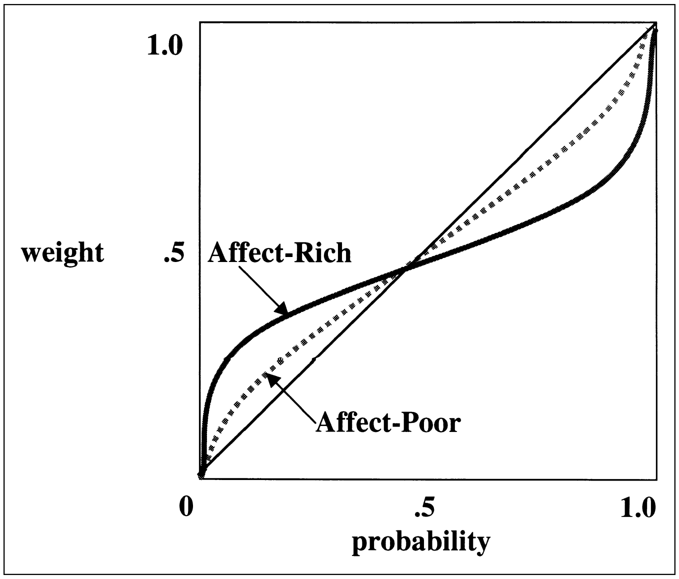


Fig. 1. Hypothetical affect-poor and affect-rich weighting functions (and an identity line).

Neither expected-utility nor prospect theory distinguishes any one source of value from any other. However, we propose that, even with monetary values controlled, some outcomes are relatively affect-rich and others are relatively affect-poor. Consider a $100 coupon redeemable for payment toward one's phone bill and a $100 coupon redeemable for payment toward dinner for two at a fancy French restaurant. Although the two coupons have the same monetary value (i.e., $100), the phone-bill coupon is likely to evoke relatively weak emotional reactions and little affect-laden imagery, whereas the restaurant coupon is likely to evoke relatively strong emotional reactions and a great deal of affect-laden imagery. To take another example, suppose a person is indifferent between receiving $50 in cash and receiving the movie star's kiss. In this case, the kiss may be said to have a cash equivalent of $50, but it is presumably affect-rich compared with the cash.

If the shape of the weighting function is influenced by affective reactions, then the weighting function will be more S-shaped for lotteries involving affect-rich outcomes than for lotteries involving affect-poor outcomes (holding the monetary values of the outcomes constant). That is, affect-rich prizes will elicit greater degrees of hope and fear and, therefore, larger jumps at the endpoints. Compared with affect-poor prizes, affect-rich prizes will yield more pronounced overweighting of small probabilities, more pronounced underweighting of large probabilities, and less sensitivity to intermediate probability variations. We depict two hypothetical weighting functions, one for affect-rich and one for affect-poor prizes, in Figure 1.[2]

An affective deconstruction of the weighting function is consistent with Elster and Loewenstein's (1992) observation that mental imagery often underlies emotions. The fear engendered by the possibility of a terrible car crash, for example, is due, at least in part, to the vividness of the image associated with this possibility. If the weighting function depends on affective reactions that in turn depend on mental images, the nature of mental imagery may be an important determinant of the shape of the weighting function. Elster and Loewenstein suggested that probabilities other than 0 or 1 are difficult to incorporate into a mental image. The image of a car crash seems essentially the same—equally vivid and scary—whether the probability of a crash is 1% or 10%. Thus, compared with imagery-poor prizes, imagery-rich prizes should reveal weighting functions with marked jumps at the ends of the probability scale and low marginal sensitivity over a wide range of probabilities in the middle. Pronounced reactions to departures from impossibility and certainty and insensitivity to intermediate probability variations are also predicted by the "risk as feelings" model of Loewenstein, Weber, Hsee, and Welch (1999).

I would think that affect poor simply don't do the mental imagery for us.. thus there will be a delay.

In the remaining portions of this article, we corroborate the predictions of the affective approach. Experiment 1 provides evidence for the left-hand side of Figure 1. That is, it provides evidence of a *probability-outcome interaction* in the form of a larger weight on small probabilities for affect-rich than for affect-poor prizes: An affect-poor prize is preferred to an affect-rich prize under certainty, but the direction of preference reverses under low probability. Experiment 2 completes the picture, providing evidence for both the left-hand and the right-hand sides of Figure 1. That is, it provides evidence of very large weights on small probabilities and very small weights on large probabilities for affect-rich prizes. Both Experiments 1 and 2 investigated outcomes that were gains over the status quo. Experiment 3 studied negative outcomes and also found evidence of a weighting function that is more S-shaped for affect-rich than affect-poor prizes. Our results thus apply in both the domain of gains and the domain of losses. We conclude by discussing how our results may call into question the traditional formulation for the analysis of choice under risk.

why is the affect poor prize preferred here?

gains vs. losses.

EXPERIMENT 1: KISSES AND MONEY

Method

Forty Rice University undergraduates completed a short questionnaire included in a packet of unrelated questionnaires. The study consisted of two between-subjects probability conditions: certainty and low probability. Participants in the certainty condition (n = 20) were asked to imagine that they could receive either "the opportunity to meet and kiss your favorite movie star" or $50 in cash.[3] These participants indicated which of the two prizes they preferred. Participants in the low-probability condition (n = 20) were asked to imagine that they could take part in either a lottery offering a 1% chance of winning "the opportunity to meet and kiss your favorite movie star" or a lottery offering a 1% chance of winning $50 in cash. These participants indicated which lottery they preferred to play.

would be nice to do within if it makes sense.

Results and Discussion

The study revealed a dramatic probability-outcome interaction (see Fig. 2). In the certainty condition, 70% of participants preferred the

2. Comparing the graph of the affect-rich weighting function and the graph of the affect-poor weighting function in Figure 1 informally conveys what we mean by "more S-shaped." A precise inventory of the differences between the two graphs would include many different properties. Our experiments directly examined only one of these properties, whether w_{rich} is more regressive than w_{poor}.

3. The movie star's kiss was first used as a stimulus in Loewenstein's (1987) experimental studies of temporal discounting.

cash over the kiss, but in the low-probability condition, 65% of participants preferred the kiss lottery over the cash lottery, $\chi^2(1, N = 40) = 4.91, p < .05$. That is, despite the fact that under certainty the cash was preferred to the kiss, under low probability the kiss was preferred to the cash. We interpret this result as indicating that the weight of a 1% probability is greater for the affect-rich kiss than for the affect-poor cash, as predicted by the affective approach and depicted in Figure 1.

In Experiment 2, we extended Experiment 1 in four ways. First, instead of studying relatively incomparable prizes, such as a movie star's kiss and $50 in cash, Experiment 2 studied two similar and financially equivalent prizes—a $500 coupon redeemable toward payments associated with a European vacation (affect-rich) and a $500 coupon redeemable toward payment of tuition (affect-poor). Second, Experiment 2 included a manipulation check verifying that the European coupon was indeed affect-rich compared with the tuition coupon. Third, whereas Experiment 1 employed a choice task, Experiment 2 employed a pricing task. Finally, in Experiment 2, we attempted to replicate the finding that weights of small probabilities are higher for affect-rich than affect-poor outcomes, but also attempted to establish that the weights of large probabilities are lower for affect-rich than for affect-poor outcomes. That is, whereas Experiment 1 established the left-hand side of Figure 1, in Experiment 2, we attempted to establish both the left- and the right-hand sides of the figure.

EXPERIMENT 2: COUPONS

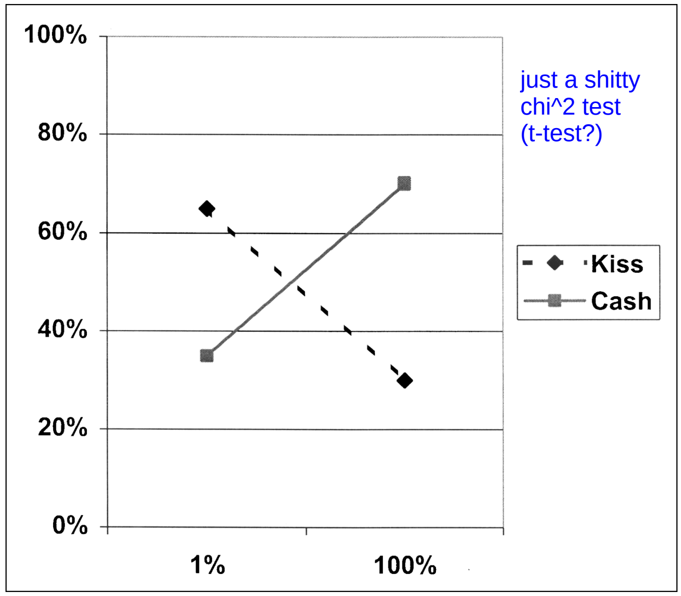
Method

Participants were 138 University of Chicago undergraduates. They completed a short questionnaire, included in a packet of unrelated questionnaires, and were paid $2. The study employed a 2 (prize) × 2 (probability) factorial design.

The prize factor included two between-subjects conditions. One group of participants was presented with a $500 coupon that could be redeemed toward expenses associated with a summertime European vacation. Another group of participants was presented with a $500 coupon that could be used toward tuition payments at their university. We intended the European coupon to be relatively affect-rich, and the tuition coupon to be relatively affect-poor. Indeed, the instructions in the European-coupon condition read in part: "Imagine the following scenario: you have dreamed of going to Europe for a long time, and you plan to take your first trip there this summer. You will visit Paris, Venice, and Rome." The instructions in the tuition-coupon condition did not make salient any exciting episodes like a first-time trip to Paris, Venice, or Rome. To ensure that our manipulation was effective, we later asked 33 University of Chicago undergraduates to imagine that they might receive either the $500 European or the $500 tuition coupon and to indicate to which prize they would react more emotionally and about which prize they would be more excited. Overwhelming majorities indicated that they would react more emotionally to (88%) and would be more excited about (84%) the European coupon.

2x2 design.

The other independent variable in the study—probability—included two between-subjects conditions. For each prize, some participants were told they had a 1% chance of winning, and other participants were told they had a 99% chance of winning. Participants indicated how much money they would have to be offered for them to be indifferent between receiving that dollar amount for sure and having the specified chance of winning the prize.



just a shitty chi^2 test (t-test?)

Fig. 2. Percentage of participants choosing the kiss and cash prizes under the two different probability levels in Experiment 1.

Results and Discussion

The results, presented in Figure 3, are consistent with the affective approach. Although the two coupons had equivalent redemption values, the median price of the 1% chance of winning the European coupon was $20, whereas the median price of the 1% chance of winning the tuition coupon was only $5 ($p < .05$ by Mann-Whitney test, ns = 54 and 27, respectively). We interpret this result, which is essentially a replication of the probability-outcome interaction observed in Experiment 1, as indicating that the weight of 1% is greater for the affect-rich European coupon than for the affect-poor tuition coupon.[4]

The default hypothesis would be that at 99% probability, the European coupon would still be priced higher than the tuition coupon. The affective approach, of course, suggests exactly the opposite. Recall that according to the affective approach, affect-rich outcomes yield more pronounced overweighting of small probabilities, but more pronounced underweighting of large probabilities. Indeed, the median price of the 99% chance of winning the European coupon, $450, was less than the median price of the 99% chance of winning the tuition coupon, $478 ($p < .05$ by Mann-Whitney test, ns = 39 and 18, respectively). This result extends the findings of Experiment 1 by incorporating the right-hand side of Figure 2. For the affect-poor tuition coupon, the size of the right-hand jump in the weighting function can be indexed as equal to $22 ($500 − $478); for the affect-rich European coupon, the size of this jump is much larger, equal to $50 ($500 − $450). In sum, the weight of 99% is smaller for the affect-rich prize than for the affect-poor prize.

4. Much of our analysis relies on the assumption that under certainty participants value both the European and the tuition coupons at $500. To check this assumption, we asked University of Chicago undergraduates to imagine that they had received one of the coupons and to indicate the least amount of cash for which they would be willing to sell it. The median response was $500 for the tuition coupon (n = 33) and $499 for the European coupon (n = 33).

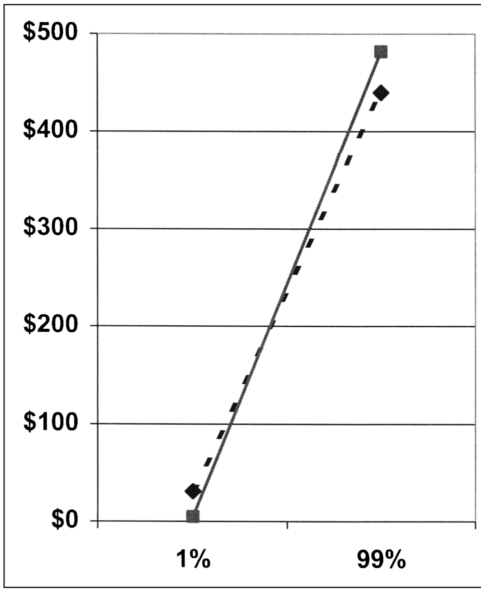


Fig. 3. Median prices paid for the $500 European and $500 tuition coupons at different levels of probability in Experiment 2.

The outcomes studied in Experiments 1 and 2 were positive. When a positive outcome is available, any departure from impossibility may engender hope or some similar affect, and any deviation from certainty may produce fear or some similar affect. The opposite pattern should arise when the available outcome is negative. In this case, departures from impossibility should engender fear, and deviations from certainty should produce hope. Thus, an important question is whether when outcomes are negative, affect-rich outcomes also yield more S-shaped weighting functions than affect-poor outcomes. We addressed this issue in Experiment 3.

EXPERIMENT 3: ELECTRIC SHOCKS AND MONETARY PENALTIES

Method

Participants were 156 University of Chicago undergraduates. They completed a short questionnaire for $1. The study employed a 2 (outcome) × 3 (probability level) factorial design. Outcome included two between-subjects conditions. Participants were asked to imagine that they were required to participate in a psychological experiment. Some participants were told that the hypothetical experiment entailed some chance of a "short, painful, but not dangerous electric shock."[5] Other participants were told that the hypothetical experiment entailed some chance of a $20 cash penalty. Presumably, the shock is relatively affect-rich and the cash penalty is relatively affect-poor.

Probability included three between-subjects conditions; participants were told to imagine that there was either a 1%, 99%, or certain chance of experiencing the aversive outcome. In each condition, participants were told to imagine that they could pay to avoid participating in the hypothetical experiment. They were asked to indicate how much money they would have to pay for them to be indifferent between paying that amount for sure and participating in the hypothetical experiment. We omitted the certainty condition for the cash outcome, because by definition participants in that condition should be willing to pay up to $20 to avoid participating in the experiment.

Results and Discussion

In the certainty condition, the median price paid to avoid an electric shock was $19.86. Twenty-four of the 30 participants were willing to pay only $20 or less, and just 3 participants were willing to pay more than $50. Thus, most participants preferred receiving the shock over paying more than $20.

anchoring to the 20$???

Nevertheless, in the low-probability conditions, the median price paid to avoid a 1% chance of a shock was $7, substantially greater than the median price paid to avoid a 1% chance of a $20 penalty, $1 ($p < .05$ by Mann-Whitney test, *n*s = 34 and 27, respectively; see Fig. 4). Although under certainty the shock is slightly less aversive than the cash payment, a small probability of shock is more aversive than a small probability of the cash payment. As before, we interpret this probability-outcome interaction as indicating that the weight of a 1% probability is greater for the affect-rich outcome (shock) than for the affect-poor outcome (cash payment).

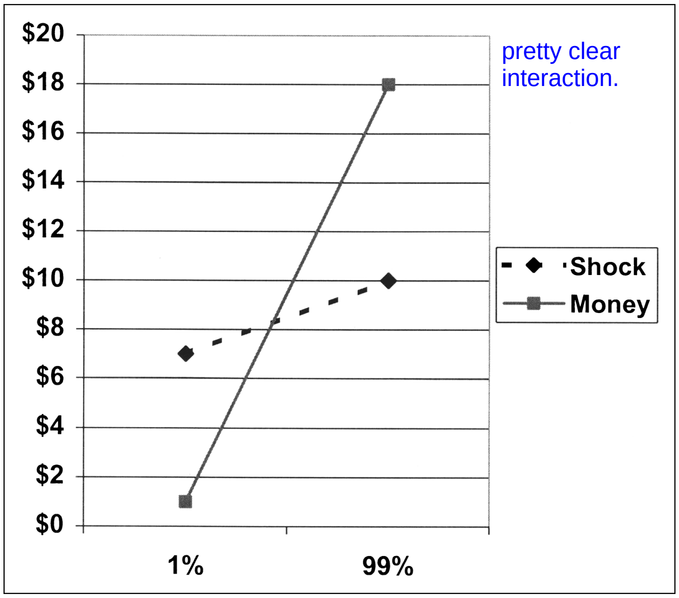
Recall again that according to the affective approach, affect-rich outcomes yield pronounced overweighting of small probabilities, but pronounced underweighting of large probabilities. In line with this prediction, and as depicted in Figure 4, the median price paid to avoid a 99% chance of a shock, $10 ($n = 39$), was substantially lower than the median price paid to avoid a 99% chance of a $20 penalty, $18 ($n = 26$). Put differently, for the affect-rich electric shock, the size of the right-hand jump in the weighting function is about $10 ($19.86 − $10), but for the affect-poor cash penalty, the size of this jump is much smaller, only $2 ($20 − $18). Evidently, the weight of 99% is smaller for the affect-rich shock than for the affect-poor cash. In sum, affect-rich outcomes appear to produce more S-shaped weighting functions than affect-poor outcomes in the domain of losses, as in the domain of gains.

GENERAL DISCUSSION

We have proposed an affective deconstruction of the weighting function, according to which the large jumps at the ends of the function reflect emotional reactions. This affective approach implies that people should be more sensitive to departures from impossibility and certainty and less sensitive to intermediate probability variations for affect-rich than for affect-poor prizes. The probability-outcome interactions observed in Experiments 1, 2, and 3 support this prediction.

The affective approach is consistent with recent findings emphasizing the role of affect-laden imagery in judgment. Slovic, Monahan, and MacGregor (1999) showed clinicians case summaries of patients hospitalized with mental disorders. The clinicians judged whether the patients posed a high, medium, or low risk of harming someone after discharge. At any given level of likelihood, a patient was judged as posing greater risk if that likelihood was presented as a frequency (e.g., 10 out of 100) than if it was presented as a probability (e.g., 10%). To explain these results, Slovic et al. suggested that a probabil-

5. The design of Experiment 3 used a modification of a study from Loewenstein (1987). Loewenstein measured the amount of money people were willing to pay to avoid electric shocks that would be administered at various future times.



pretty clear interaction.

Fig. 4. Median prices paid to avoid the electric-shock and $20 monetary penalties under two different probability levels in Experiment 3.

ity format naturally creates an image of a single individual. Because this individual may or may not be violent, the image of him or her might appear relatively benign. The assessed risk in this case might therefore be relatively low. In contrast, a frequency format suggests an image that necessarily includes a number of violent patients and is thus frightening and affectively loaded. As a result, the assessed risk in this case might be relatively high.

Finucane, Alhakami, Slovic, and Johnson (2000) suggested that affective reactions are used as cues for judgment, in much the same way as assessments of availability or representativeness. For example, it is well known that perceived risk and perceived benefit are often negatively correlated (see Ganzach, 2000). Activities viewed relatively unfavorably (e.g., nuclear power generation) tend to be judged as high risk and low benefit, whereas activities viewed relatively favorably (e.g., use of cellular phones) tend to be judged as low risk and high benefit. Put differently, unfavorable affective reactions may form the basis for judgments of high risk and low benefit, and favorable affective reactions may form the basis for judgments of low risk and high benefit. That risk and benefit are, in reality, typically positively correlated may be obscured by reliance on affective reactions as a judgmental heuristic.

The affective approach complements research documenting the relation between affective experience and choice. Mellers, Schwartz, Ho, and Ritov (1997) studied people's affective reactions at the time the outcome of a risky choice became known. Mellers et al. observed that, assuming people are aware of what their affective reactions to different potential outcomes would be, the preferred option in a risky choice tends to be the option for which people would expect to feel better on average. Lopes (1987) presented a model in which, as in the present affective approach, weights depend both on probabilities and on the outcomes to which probabilities are attached. In Lopes's model, people high in "security motivation" tend to weigh the worst outcomes heavily, and people high in "potential motivation" tend to weigh the best outcomes heavily. In riskless choice, Dhar and Wertenbroch (2000) found that hedonic goods are associated with greater loss aversion than utilitarian goods. This observation provides a parallel to the present analysis: Hedonic goods may be thought of as affect-rich and utilitarian goods as affect-poor, and affect may partially determine not only the shape of the weighting function but the shape of the value function as well.

Camerer (1992) reported probability-outcome interactions consistent with the affective approach. In Camerer's experiment, participants chose their preferred lottery from each of many different pairs of lotteries. All lotteries offered cash prizes. When large prizes were available ($10,000 or $25,000), participants' choices were consistent with a weighting function having a pronounced S-shape. However, when small prizes were available ($5 or $10), participants' choices were consistent with a weighting function having only a slight S-shapes. Large cash prizes should engender more significant emotional reactions than small cash prizes. Thus, the affective approach implies that compared with small cash prizes, large cash prizes will yield a more pronounced S-shape, as Camerer observed.

also interesting .

We close with two observations concerning the traditional formulation for the analysis of risky choice. Recall that the traditional formulation maintains separate functions for the evaluation of outcomes (the value function v) and the evaluation of probabilities (the weighting function w); expected-utility and prospect theory are both special cases having the representation $\Sigma w(p_i)v(i)$.

Our first observation is that the present data are essentially at odds with the traditional formulation. If the weight attached to the probability of an outcome depends on the nature of that outcome—as suggested by our data—then one cannot have separate functions for the evaluation of outcomes and the evaluation of probabilities. Whether the traditional formulation should be altered so that both value and weight depend on outcomes (e.g., $\Sigma w(i, p_i)v(i)$) depends on pragmatic considerations pitting the cost of more complex models against the empirical prevalence and severity of probability-outcome interactions.

Distinguishing between different alterations of the traditional formulation is beyond the scope of the present article, but may lead to important avenues for future work. Consider the family of weighting functions $w = p^{1-a}/[p^{1-a} + (1 - p)^{1-a}]$, where a is an affect index, bounded by 0 and 1, with larger values indicating greater affect-richness. When $a = 0$, w reduces to the identity; as a grows larger, w becomes more S-shaped. Thus, consistent with an account emphasizing hope and fear, this formulation indicates that greater affect yields larger jumps on both the left- and the right-hand sides of the probability scale. Alternatively, consider the family of functions $w = (1 + a)p/[(1 + a)p + (1 - p)]$. When $a = 0$, w again reduces to the identity; but as a grows larger, w does not become more S-shaped, it becomes more elevated. Under this formulation, greater affect yields a larger jump only on the left-hand side. A greater jump on the left- but not the right-hand side would be consistent with an account emphasizing anticipatory emotions. Compared with affect-poor prizes, affect-rich prizes might give rise to more savoring (positive prizes) or dread (negative prizes). Such greater anticipatory emotion would elevate the (absolute) value of affect-rich lotteries at every probability (for discussions of savoring and dread, see Elster & Loewenstein, 1992; Loewenstein, 1987).

est. the mathemat. function.

The evidence we have presented is consistent with the hope-and-fear account, but our experiments, which focused primarily on the left-hand side of the probability scale, cannot authoritatively rule out a savoring-and-dread account.[6] We hope future research provides more fined-tuned tests that distinguish between different affective hypotheses. The main objective of the current research was to distinguish the affective approach from the traditional psychophysical deconstruction of the weighting function (for a third affective hypothesis about the weighting function, see Wu, 1999).

Although expected-utility theory and prospect theory are both special cases of the traditional formulation, it is well-known that preferences formed in line with prospect theory's S-shaped weighting function are often incoherent (in the sense that they violate the independence axiom or some similar requirement), whereas preferences formed in line with expected utility's identity weighting function, $w(p) = p$, are not (see, e.g., Kahneman & Tversky, 1984). Indeed, a large literature characterizes an identity weighting function as a normative model and an S-shaped weighting function as a nonnormative model.

Our second observation is that the affective approach supports an elaboration of the normative-versus-nonnormative distinction. In any risky choice, feelings of hope and fear may be crucial consequences in and of themselves (cf. Tversky & Fox, 1995). These feelings are modeled by the S-shaped weighting function. Thus, although an S-shaped weighting function surely leads to preferences that are incoherent, it may fully capture the decision maker's actual experience. In contrast, although expected utility's identity weighting function leads to coherent preferences, it may neglect crucial (affective) aspects of a decision maker's experience (cf. Bell, Raiffa, & Tversky, 1988).

Suppose you are asked to make a number of pair-wise choices between various lotteries. After doing so, you realize that your choices are incoherent. Would you rather alter some choices to make the entire set coherent or eschew any change and "live with" incoherence? The answer should depend on the price of coherence: whether changing your preferences yields a more or less satisfactory set of choices than those you initially settled upon. The affective approach, by highlighting affective experience as a source of incoherence, suggests that achieving coherence will often require settling upon less than fully satisfactory preferences. In many cases, there may be an unavoidable tension between forming preferences that are faithful to one's feelings and forming preferences that are coherent.

6. Of course, the hope-and-fear and the savoring-and-dread accounts are not mutually exclusive.

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