The Effects of Emotion on Economic Decisions:

The Misery-Is-Not Miserly Effect

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The economists talk about "mispriced risk" and "illiquidity" in the system. But many economists are trained to downplay emotion, social psychology and moral norms, and so produce bloodless and incomplete descriptions of what's going on.

- David Brooks, *The New York Times* (10/6/08)

Introduction

Two decades of research document the tendency for unrelated emotion to color subsequent, unrelated judgments and decisions. Positive emotions trigger more optimistic assessments, and negative emotions more pessimistic ones, even if the source of the emotion is unrelated to the judgments being made (Johnson & Tversky, 1983). Recently, research has demonstrated the importance of examining specific emotions (e.g., happiness, sadness) rather than global (positive or negative) feelings (Bodenhausen, Sheppard, & Kramer, 1994; DeSteno, Petty, Wegener, & Rucker, 2000). For example, two negative emotions – such as fear and anger – can have *opposite* effects on risk perception (Lerner & Keltner; 2000).

Do emotions have an impact when real money is at stake? Questions such as this have been overlooked in the new field of behavioral economics. The projects presented here seek to bridge this gap.

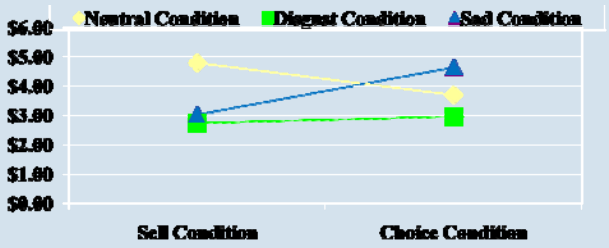
Project 1: Discovering the Misery-Is-Not Miserly Effect

Goals: Test whether sadness will reverse the "endowment effect," or the tendency for sellers to overvalue their possessions, and whether disgust, another negative emotion, has similar effects or different effects (as our theory predicts).

Hypotheses: Emotions triggered in the first stage of the experiment will influence valuations in the second, and participants will be unaware of this influence. Sadness, arises from appraisal themes of loss and helplessness and evokes the implicit goal of changing one's circumstances. We therefore predicted that, relative to the neutral condition, sadness would reduce selling prices but increase buying princes, potentially to the extent of reversing the typical endowment effect. In this case, selling what one has presents an opportunity for changing one's circumstances; whereas buying new goods presents an opportunity for change.

As a comparison case, we predicted that experimentally induced disgust would reduce both selling prices among participants who owned the experimental object (an "expel goal") and buying prices among participants who did not (an "avoid taking anything goal").

Method: Participants were randomly assigned to watch either a tear-jerker scene from the film "The Champ," a disgusting scene from the movie "Trainspotting," or a neutral scene from a documentary. The participants were either given highlighter pens and asked to sell them back to the experimenter or given the opportunity to buy the highlighter pens, depending on experimental condition.



Summary: We examined the impact of specific emotions on the endowment effect, the tendency for selling prices to exceed buying or "choice" prices for the same object. As predicted, disgust induced by a prior, irrelevant situation carried over to normatively unrelated economic decisions, reducing selling and choice prices and eliminating the endowment effect. Sadness also carried over, reducing selling prices but increasing choice prices – producing a "reverse endowment effect" in which choice prices exceeded selling prices. The results demonstrate that incidental emotions can influence decisions even when real money is at stake, and that emotions of the same valence can have opposing effects on such decisions.

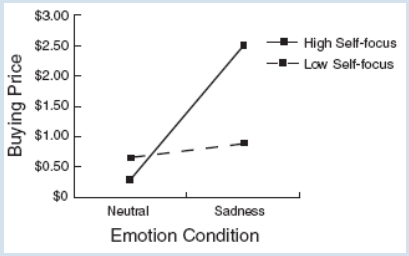
Project 2: Examining Underlying Causes of the Effect

Goals: Discover the mental processes that explain sadness effects on buying price.

Hypotheses: Test whether self-focus helps to explain the spending differences between the two groups. Among participants "primed" to feel sad, those who are highly self-focused should pay more than those with low self-focus.

Method: Participants viewed either a sad video clip or one devoid of human emotion. Afterward, participants could purchase an ordinary commodity, such as a water bottle, at various prices.

Results: Participants randomly assigned to the sad condition offered almost 300% more money to buy the product than did "neutral" participants. Notably, participants in the sadness condition typically insisted, incorrectly, that the emotional content of the film clip did not carry over to affect their spending.

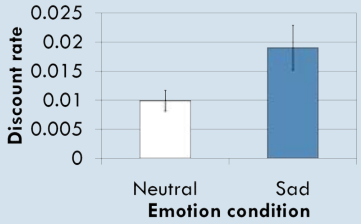


Project 3: Examining the Effect Across Time

Goals: Splurge or save? Defer or act now? Intertemporal choices are a special category of decisions that involve trade-offs among outcomes that will have their effects at different times. Few studies have examined the potential effects of specific emotions on intertemporal choice. We reason that sadness should have pronounced effects, even when the sadness arises from past situations that should have nothing to do with the choice at hand (i.e., incidental emotion).

Hypotheses: Drawing on evidence that incidental (unrelated) sadness increases the amount decision makers pay to obtain a commodity – termed the "misery is not miserly" effect – we hypothesize the following:
1. Sadness will increase discount rates for monetary outcomes.
2. The effect will be specific to sadness rather than a generalized effect of negative emotion. As a test case, disgust (another negative emotion) should not influence discount rates.

Method: Participants were randomly assigned to an incidental emotion condition (neutral, sadness or disgust) with a two-part emotion induction:
Subjects watched previously validated video clips designed to elicit the target emotions. After viewing the video stimulus, subjects were asked to recall and write an essay describing a time in the past when they had strongly experienced the target emotion.
On completing the emotion induction, participants engaged in an intertemporal choice survey, based on Kirby, Petry and Bickel (1999). Subjects were asked to make choices between cash amounts today (between $11-$80) and larger cash amounts (between $25-85) at varying points in the future (ranging from 1 week to 6 months).
Estimates for participants' discount rate were calculated from their pattern of choices via a choice-titration procedure.



Results: Incidental sadness results in greater orientation toward the present in real-money intertemporal choices -- the "myopia of misery" effect.

The difference between discount rates for sad and neutral subjects is substantial. For rewards between $11 and $85 and time periods between 1 week and 6 months, sad subjects have discount rates that are 92% higher than those of neutral subjects. Thus, an individual with the mean sadness discount rate would pick $10 now over $75 in a year's time.

Practical Implications

Beyond advancing theories of emotion and decision making, these results have practical implications. For example, our findings could have implications for the aggregate economic consequences of emotional events such as the terrorist attacks of September 11; they suggest that, contrary to widespread intuition, such events could actually encourage rather than discourage consumer spending, depending on the specific emotions they evoke in individuals.

In sum, the findings highlight both the powerful effects that emotion can play in everyday economic choices and the need for research on the mechanisms driving such effects.