

Can Money Buy Happiness?

Evidence from the Discounting of Uncertain Happiness

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Introduction

In our daily lives it is common to make choices between outcomes that involve varying amounts of certainty. For example, should you invest money in the stock market or should you place money in a savings account? In this example, the stock market payoff is uncertain, but could be relatively large; whereas the savings account payoff is certain, but relatively small. A fuller understanding of choice behavior would actually include outcomes that are both positive (a gain) and negative (a loss). Since choice behavior is so common, it would be beneficial to have a fuller understanding of the factors that contribute to the choices made by individuals (e.g., sensitivity to risk, sensitivity to a loss).

Discounting has been used to describe choice behavior under conditions of uncertainty. Generally speaking, it has been found that as an outcome becomes more uncertain, the value the individual places on the outcome decreases (a subjective value that is lower than the actual value). That is, as an outcome becomes less certain, individuals place less value on (discount) that outcome.

Choice behavior has generally been investigated through choices between two of the same outcome (usually a monetary outcome). The present study was the first to study choice behavior between two different outcomes: money and happiness. By examining these choices, we aimed to place a price (value) on happiness.

Method

There were sixty-one participants (46 female; age 18-35, $M = 20.885$, $SD = 3.104$) who completed an online decision-making task concerning preferences for hypothetical outcomes of money and probabilities of happiness one could have for the rest of their life (ideal lifetime happiness) and the Satisfaction with Life Scale (SWLS; Diener, et al., 1985). Scores from the SWLS were used to categorize participants as either happy or unhappy.

For the decision making task, each participant completed two conditions: a "gains" condition where they chose between a dollar amount that could be received for sure and a probability of ideal lifetime happiness; and a "losses" condition where they chose between a dollar amount they could pay to receive ideal lifetime happiness for sure and a probability of ideal lifetime happiness. Each condition included six probabilities (85%, 70%, 50%, 20%, 10%, and 5%). Dollar amounts used ranged from \$500 to \$1,000,000,000.

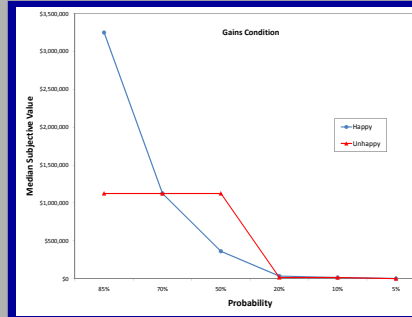
Sample Gains task:

Which would you prefer?
 \$100,000 OR
 70% chance of ideal happiness for the rest of your life

Sample Losses task:

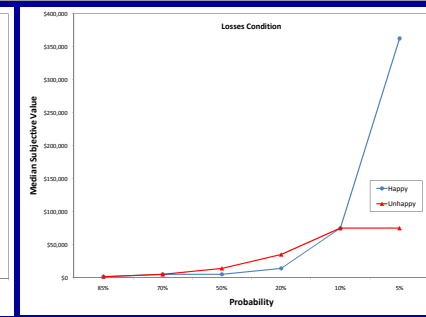
Which would you prefer?
 Pay \$2,000 & receive ideal happiness for the rest of your life OR
 50% chance of ideal happiness for the rest of your life

Results



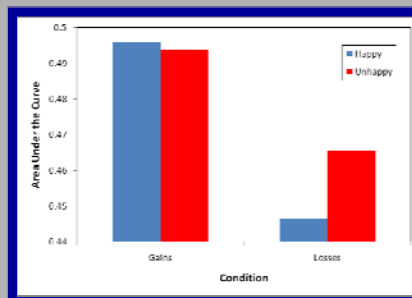
Plotted above is the median monetary value (willingness to accept) placed on each of 6 increasingly uncertain lifetime happiness outcomes for both Happy and Unhappy participants.

As the chance of lifetime happiness becomes more uncertain the monetary value decreases.



Plotted above is the median monetary value (willingness to pay for ideal lifetime happiness) placed on each of 6 increasingly uncertain lifetime happiness outcomes for both Happy and Unhappy participants.

As the chance of lifetime happiness becomes more uncertain the amount the participants were willing to pay increases.



Plotted to the left is the mean area under the curve for both gains and losses conditions for Happy and Unhappy participants. Area under the curve provides an index of the degree of discounting that can be used for inferential purposes.

For Gains: There was no significant difference in the degree of discounting between Happy and Unhappy individuals ($t(59) = .042$, $p = .967$).

For Losses: There was no significant difference in the degree of discounting between Happy and Unhappy individuals ($t(59) = -.468$, $p = .641$).

Discussion

The present study aimed to examine the choice behavior and discounting of two different outcomes, and by doing so, place a value on happiness. Hypothetical outcomes of money and probabilities of ideal lifetime happiness were used in a condition where both outcomes could be gained and a condition where one outcome would include a payment of money.

Discounting was observed for both Happy and Unhappy participants in the gains condition. More specifically, it was found that for Happy participants, the subjective value of ideal lifetime happiness decreased systematically as the probability of its receipt decreased. For Unhappy participants, however, it was found that there was less of a systematic decrease and more of an "all or none" pattern of responding.

In the losses condition, for all participants, the subjective value of ideal lifetime happiness increased as the probability of its receipt decreased. The only apparent difference between the Happy and Unhappy participants was in the 5% probability condition where the Unhappy participants were not as willing to pay as were the Happy participants.

Results from this study suggest that a value can be placed on happiness, but this value differs depending on whether happiness is being simply accepted or being paid for (whether it concerns a gain or a loss).