Joint Versus Separate Evaluations of Mental Accounts

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In three experiments, we show that how consumers mentally organize, and act upon, the costs and benefits of transactions depend upon whether their preferences for the transactions are elicited in isolation (separate evaluation) or together (joint evaluation). We test two popular decision problems from mental accounting research, the “theater ticket” problem, and the “game and snowstorm” problem. We find that a lost $10 theater ticket deters consumers from going to the theater more than a lost $10 bill in separate evaluations, but not in joint evaluations. Conversely, a $40 paid game ticket makes consumers risk driving through a snowstorm more than a $40 free ticket in joint evaluations, but not in separate evaluations. Implications of the results on the normative status of mental accounting research are discussed.

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EXTENDED ABSTRACT

We can measure preferences one alternative at a time (separate evaluations, e.g., Choose Brand A or not choose Brand A; Choose Brand B or not choose Brand B), or many alternatives at a time (joint evaluations, e.g., Choose Brand A, or choose Brand B, or choose neither). Research typically shows that if one alternative is more attractive in a particular evaluation (say, Brand A is more popular than Brand B in separate evaluations), it is less so in the other evaluation (Brand A is less popular than Brand B in joint evaluations; see, for example, Hsee and Leclerc, 1998). Such preference reversals often occur because consumers shift from a within category processing in separate evaluations (consider Brand A only, or consider Brand B only) to reconciling across category differences in joint evaluation (how Brand A compares to Brand B; Bazerman, Moore, Tenbrunsel, Wade-Benzoni, and Blount, 1999).

In this paper, we extend the study of joint versus separate evaluation effects to mental accounting, a form of cognitive bookkeeping that consumers often use to evaluate transactions (Thaler, 1980, 1985). In mental accounting, consumers organize the costs and benefits of a transaction within that transaction's mental account. If separate evaluations encourage consumers to look only within one mental account, but joint evaluation encourages broad across account comparisons (e.g., how the costs in one account compare to the costs in another account), it is conceivable that the mental accounting process itself may be susceptible to separate and joint evaluation effects.

In the first experiment, we consider the theater ticket problem from Kahneman and Tversky (1984). Upon entering the theater, Consumer A discovers that she has lost the $10 ticket, and Consumer B discovers that she has lost a $10 bill. Mental accounting predicts that B is more likely to buy the theater ticket than A because B will organize the lost $10 bill in a wealth account (and keep it separate from her theater decision), but A will organize the lost $10 ticket directly into her theater cost. We, however, expect that the mental accounting prediction will hold in separate evaluations but not in joint evaluation. In separate evaluations, we can make out that there is a qualitative difference between A's theater decision ($10 cost) and B's theater decision ($0 cost). In joint evaluation, however, as our focus shifts to comparing the costs across the two consumers, we can see that both consumers are equally worse off (A is $10 poorer in her theater account, and B is $10 poorer in her wealth account). To test our predictions, we have three separate groups of participants read about (1) Consumer A, or (2) Consumer B, or (3) both Consumer A and Consumer B. As predicted, we find that the mental accounting prediction is supported in separate evaluations but not in joint evaluation.

In the second experiment, we consider the basketball game problem from Thaler (1980). Here, Consumer A has to decide whether or not to brave a snowstorm and drive to a basketball game for which she has already paid $40, whereas Consumer B faces the same decision, except that she got the ticket for free. Mental accounting predicts that A is more likely to drive to the game because closing the game account, with a $40 cost already in it, is too painful, B, on the other hand, is not wasting money by not going to the game, so she has, in that sense, nothing to lose (other than the enjoyment of the game). In this case, we expect that the mental accounting prediction will hold in joint evaluation, but not in separate evaluations. Unlike the $10 bill in the previous example, which could have been used for any purpose, it is difficult to separate the cost of driving to the game from the game itself. In separate evaluations therefore, we cannot easily distinguish between A's tradeoff (risking a dangerous drive to get the satisfaction of not wasting $40) and B's tradeoff (risking a dangerous drive to enjoy the game). When the scenarios are presented jointly, however, all other costs and benefits remaining the same, the paid ticket becomes salient when it is compared to a free ticket. To test our predictions, we have three separate groups of participants read about (1) Consumer A, or (2) Consumer B, or (3) both Consumer A and Consumer B. As predicted, we find that the mental accounting prediction is supported in joint evaluation but not in separate evaluations.

In Experiment 3, we make one change to the basketball game problem. Instead of reading about a snowstorm, participants are told that the consumer will have to spend $40 in transportation should she want to go the game. Thus, Consumer A must spend $40 for transportation in addition to the $40 for the ticket, while Consumer B, with a free ticket, must spend $40 on transportation. Mental accounting predicts that, in this case, A is less likely to go the game. Making the expenses easy to track, the extra $40 transportation costs de-escalates the sunk cost faced by A (Heath, 1995). However, as before, we expect that the mental accounting prediction will be supported in joint evaluation but not in separate evaluations. In joint evaluation, when the two amounts are presented together, we can see that the cost of attending the game is double for A relative to B. In separate evaluations, however, since the two costs cannot be compared, it is hard to judge who is spending more money (i.e., $80 is a lot of money, but so is $40). To test our predictions, we have three separate groups of participants read about (1) Consumer A, or (2) Consumer B, or (3) both Consumer A and Consumer B. We find that the mental accounting prediction is supported in joint evaluations, but not in separate evaluations.

Our results cast the normative status of mental accounting in doubt. It appears that consumers are unable to decide whether mental accounting is good for them or bad for them, as is evident by their shifting preferences across joint and separate evaluations. This, however, offers an opportunity to educate consumers. If some outcomes of mental accounting are not desired, encouraging consumers to think in both separate and joint evaluation modes may show that what they think is attractive in one condition is not so in the other.

REFERENCE


