Bipolar Scales Mask Loss Aversion

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Loss aversion in choices is commonly assumed to arise from the anticipation that losses will have a greater effect on feelings than equivalent gains. But evidence for loss aversion in feelings has been equivocal. We contend that loss aversion is masked in bipolar scales, because people rate opposite-valence outcomes separately on the positive and negative portions of the scale such that positive and negative outcomes are not compared directly. We show that when people comparatively judge their feelings about positive and negative outcomes using the same category units of intensity, loss aversion emerges and predicts risky choice.

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EXTENDED ABSTRACT

Loss aversion (Kahneman & Tversky 1979), which is well established in choice scenarios, is commonly assumed to be due to the anticipation that losses will have a greater effect on feelings than equivalent gains (Ariely, Huber, & Wertenbroch 2005; Kahneman & Tversky 1984; Kermer, Driven-Linn, Wilson, & Gilbert 2006; Zhang & Fishbach 2005). But loss aversion has proved difficult to detect in judgments of feelings (Mellers, Schwartz, Ho, & Ritov 1997; Rozin & Royzman 2001). We argue that loss aversion is disguised in judgments of feelings because bipolar scales, which are typically used to measure evaluative judgments (e.g., attitudes, emotions, and moods), inhibit its detection. When a scale is bipolar, people rate opposite-valence outcomes separately on the positive and negative portions of the scale, so that positive and negative outcomes are not compared directly (see Marsh & Parducci 1978).

We present response modes that encourage comparative processing across valence, as occurs in choices, and show that losses loom larger than gains in judged feelings. Loss aversion is better detected in judged feelings when the response mode implicitly encourages comparisons of negative outcomes to positive outcomes, and loss aversion is best detected when people explicitly compare the intensity of their feelings about an outcome to their feelings about opposite-valence outcomes in a manner similar to a choice process. Furthermore, when feelings are measured with a comparative response mode, the loss aversion detected in feelings accurately predicts loss aversion in choices.

In Study 1, we asked participants to imagine that they would play a gamble that had a 50% chance to win $200 and a 50% chance to lose $200. Participants judged how they would feel about winning the gamble and how they would feel about losing the gamble. Judgments were made on either a bipolar scale, a unipolar scale of intensity, which ignores valence and measures only the magnitude of feelings, or a relative intensity scale, which requires the explicit comparisons of feelings about opposite-valence events (e.g., Which outcome would have a greater effect on your feelings?). While loss aversion was not present in bipolar scale ratings, evidence for loss aversion was present in responses on the unipolar intensity scale, which implicitly encourages comparisons of the gamble outcome. The greatest evidence for loss aversion in judgments occurred for the relative intensity condition which involves a judgmental process that mirrors a choice process.

In Study 2, we replicated the differences in the detection of loss aversion for judgments on a bipolar scale versus relative-intensity scale for an equal probability gamble to win or lose $50. We also showed that (loss averse) judgments on the relative intensity scale predicted respondents’ unwillingness to play the gamble. Bipolar scale judgments did not predict risk averse preferences, which incidentally, were the same in both response mode conditions.

Studies 3 and 4 extend our findings to non-monetary outcomes and address criticisms that loss aversion in judged feelings is an affective forecasting error (Kermer et al. 2006). We show that bipolar scales mask loss aversion and comparative judgment tasks reveal loss aversion for judged feelings about pleasant and unpleasant images from Lang et al.’s (1999) International Affective Picture System. Participants were shown sixteen images and were asked to judge the intensity of the affective reactions to the pictures on a bipolar scale and a unipolar intensity scale with a short break in between each measure (Study 3). Even when the scales were used within-subjects, participants judged the unpleasant pictures to be more intense and the pleasant pictures to be less intense on the unipolar (comparative) scale than on the bipolar scale. When the procedure was replicated with the same pictures for a bipolar scale and relative intensity scale, the findings were consistent with the conclusion that loss aversion in actual feelings was present in the comparative judgment task (Study 4). When pleasant and unpleasant pictures were assigned the same level of intensity on the bipolar scale, those same pictures were judged to be unequal on the relative intensity scale, with unpleasant pictures overwhelmingly more likely to be judged as more intense.

In summary, we show that bipolar scales tend to mask evidence for loss aversion in feelings because the scale discourages comparative judgments of intensity across valence. Respondents seem to use different sized category values for positives and negatives. Judged feelings show evidence of loss aversion to the degree people judge the intensity of a negative outcome relative to that of a positive outcome. Opposite-valence judgments that are more comparative resemble choice processes, which improve the detection of loss aversion in judgment. Moreover, the loss aversive judgments in the comparative judgment task predict loss aversion in choices, whereas judgments on the bipolar scale do not. Finally, we show that loss aversion is evident in actual reactions to emotional stimuli, linking loss aversion to a more general phenomenon of negativity bias (see Cacioppo & Berntson 1994; Baumeister, Bratslavsky, Finkenauer, & Vohs 2001; Rozin & Royzman 2001).

References
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EXTENDED ABSTRACT

The Hungry Ghost Festival is celebrated in indigenous and diasporic Chinese communities around the world during the seventh month of the Lunar Calendar. The festival has several mythologies relating to its origins and religious significance. Traditional festivities have evolved over the years and have incorporated urban folklore and other cultural practices. In particular, for the Chinese community in Singapore, an integral event that has taken prominent place is the Hungry Ghost Dinner Auction (HGDA). The HGDAs are laden with socio-cultural meanings and exhibit immense economic potential and impact. With an estimated 200 events taking place over the entire month at about an average of S$30,000 spending per event, it is a multi-million dollar industry.

Given the recent interest in auction theory due to the proliferation of Internet auction sites, this paper seeks to enhance the understanding of the bidding behavior and the social interactions of bidders in a live auction setting, and the extent to which social and cultural goals influence the bidding behavior of auction participants. In particular, this paper asks the following research questions: (1) What motivates participants and bidders to attend and be involved in the HGDA? (2) What is the psychology of bidding when the final prices paid are exorbitantly higher than the economic value of the goods?

I first review the literature on motivations for attending auctions and the psychology on bidding. There are many reasons (economic, social, psychological, and otherwise) for participation in auctions. In the literature on auctions, the phenomenon of overbidding has been frequently observed. In common value auctions, people may bid past their limits because they are using personal and social information to evaluate an item. Overbidding has been frequently observed. In common value auctions, the phenomenon of overbidding can be attributed to various factors such as the buyer’s curse, escalation of commitment and auction fever (or competitive arousal). The time-compression of decision making and the adrenaline-charged atmosphere combine to make live public auctions a crucible for highly emotional and fiercely competitive manifestations of bidding behavior.

The principal researcher and the research team visited over forty locations where the Hungry Ghost events were held over the duration of the lunar seventh month. These auctions represented diversity in terms of the scale of operations with tables ranging from twenty to two hundred (an equivalent of two hundred to two thousand guests). Ethnographic techniques were used for data collection. Organizers and participants were interviewed before and during the dinner and auction. The research team also observed the proceedings and took detailed fieldnotes which were further supplemented with photographs and videos. The textual and visual data were reviewed, organized and analyzed within each auction and across auctions. The research context is described with an emphasis on the auction mechanism and auction items. The funds raised in the current HGDA are used to organize the following year’s HGDA, and successful bidders have up to a year to pay for the items.

Reasons like those suggested by Greenleaf (2004) such as getting a good bargain and paying prices lower than those at fixed price retailers do not exist in the HGDA as other social and emotional reasons for participating in the HGDA take precedence. The consensual and cooperative nature of the exchange is apparent in the case of the HGDA. Dinner guests and auction participants are first and foremost constrained by social obligations to attend the event. Showing up at the event means “showing face” to the important people in one’s business and social community and an opportunity to return the favors of business associates. The HGDA participants who bid for such items are often able to enhance their standing in the community through the social visibility and prestige that such participation brings.

HGDA bidders appear to be paying exorbitantly high prices for the various categories of auction items. Although most of the HGDA items have some value outside the auction, these values are dramatically enhanced within the context of the HGDA. For example, a DVD player which retails for S$300 can fetch a final bid of S$600. A stack of twenty oranges that costs no more than S$10 from a neighborhood grocer is considered an auspicious item worth hundreds of dollars in bids when it is decorated with elaborate trappings and prayed over by a priest.

The construction of value takes place in a web of complex social relations as bidders are extensively influenced by others in the cultural context of the HGDAs. The effect of social facilitation is strongest because of the live auction setting and the social prestige factor involved. Bidders are happy to put in high bid amounts because they feel they are giving back to the community and fostering good business relationships. In addition to social facilitation, the participants believed that their decisions and actions have important cosmic influence. They are pleasing the gods, and helping to take care of the “good brothers” (i.e., the hungry ghosts). For participants and bidders at the HGDA, the auctions are more than a process of assigning values to material goods. For them, the symbolic value they derived is the social recognition they are accorded as being part of the real-world community and the satisfaction of performing the duty of compassion for the other-world community of hungry ghosts.

References