Shifting Reference Points & Fleeting Pleasures
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Barbara Mellers, University of California-Berkeley
Sergei Tishchenko, Bank of America Capital Management
Alan Schwartz, University of Illinois, Chicago Circle

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Consumer choice is often described as a multi-phase process that includes pre-purchase anticipation, decision making, and post-purchase evaluation. Customers with positive anticipated feelings about a particular product are more likely to purchase and satisfied customers are more likely to purchase it again (Dabholkar, 1994). The classic customer satisfaction approach of expectancy disconfirmation posits satisfaction as the difference between pre-purchase expectations and post-purchase experiences (Erevelles & Leavitt, 1992). These pre-purchase expectations depend on reference points, such as a product’s positive attributes (Boulding, Kalra, Staelin, & Zeithaml, 1993), product idealizations (Westbrook, 1987), price-based value expectations (Oliver & Swan, 1989), experienced-based norms (Cadotte, Woodruff, & Jenkins, 1987), or social considerations (Fournier & Mick, 1999). The challenge is knowing which reference points will be invoked (Iacobucci, Grayson, & Ostrom, 1994).

One way of analyzing how reference points interact is via Decision Affect Theory (Mellers, 2000). Decision affect theory is expressed as $P(w)=u(w)+d[u(w)−u(x)][1−s(w)]$, where $P(w)$ is the pleasure of outcome $w$, $u(w)$ is the utility of outcome $w$, $d[u(w)−u(x)]$ is a disappointment function comparing what actually occurred and what might have occurred, and $[1−s(w)]$ is the subjective probability that $w$ would not occur. This form of decision affect theory can be extended to include background reference points. Suppose a decision maker has cumulative earnings, $T$. He plays a gamble and outcome $w$ occurs. His total earnings are now $T+w$. We propose that the current earnings’ utility $u(T+w)$ and a contrast between present and previous earnings are both salient. According to decision affect theory, outcome pleasure depends on both immediate and background reference points. The following experiment explores how the relationship between immediate and background reference points.

METHOD

Participants
Seventy-five undergraduates at Ohio State University served as participants in the experiment.

Instructions and Procedure
Participants were told they would be paid whatever they earned in the experiment, the average earnings were approximately $8, and there was a small chance they could win or lose as much as $40. In the event that they lost money, they would be asked to work it off in the Decision Making laboratory at $10/hour. The experiment included a few practice trials followed by 100 experimental trials and then four additional trials that adjusted participants’ earnings to between $6 and $10.

Participants sat at a computer and chose between binary gambles with amounts on any trial ranging from $4 wins to $4 losses. After participants selected their gamble, the unchosen gamble disappeared, and remaining gamble played. Overall earnings, which were displayed on the computer screen, were updated accordingly. To control the cumulative earnings of the groups there was one common outcome in each gamble, which participants always received. Randomizing the results within and across gambles downplayed the presence of a common outcome. Overall earnings were always under the control of the experimenter. The “high” group’s earnings started at $0 and gradually increased to $24 before returning to $0. The “low” group’s earnings started at $0 and gradually decreased to -$24 before returning to $0. In both cases, there were four additional non-experimental trials that brought their final earnings to approximately $8. After each gamble the participants rated the pleasure or displeasure they felt with the outcome on a rating scale from 50 (“Extremely Elated”) to -50 (“Extremely Disappointed”).

RESULTS
We were especially interested in the emotional responses to the four outcomes of the left-hand gambles shown below, when presented in each path and only analyzed judgments of pleasure when those (dominate) gambles were selected.

<table>
<thead>
<tr>
<th>Path</th>
<th>Outcome</th>
<th>Judgments</th>
</tr>
</thead>
<tbody>
<tr>
<td>T1</td>
<td>($1, 0.5; -$4) vs ($1, 0.2; -$4)</td>
<td></td>
</tr>
<tr>
<td>T2</td>
<td>(-$1, 0.5; $4) vs (-$1, 0.8; $1)</td>
<td></td>
</tr>
<tr>
<td>T3</td>
<td>(-$1, 0.5; -$4) vs (-$1, 0.2; -$4)</td>
<td></td>
</tr>
<tr>
<td>T4</td>
<td>($1, 0.5; $4) vs ($1, 0.8; -$4)</td>
<td></td>
</tr>
</tbody>
</table>

The average pleasure of $1 wins and losses generally tracks cumulative earnings except when cumulative earnings returned to $0. At that point, participants in the negative path were much happier than those in the positive path. An analysis of variance revealed a significant main effect of path ($F(1,11)=5.88$) and an interaction between path and cumulative earnings ($F(6,66)=2.84$). Background reference information about position and trend of cumulative earnings influence the pleasure of immediate and counterfactual outcomes. Additionally, outcomes feel better when “what might have been” is worse, not better, than what actually occurred ($F(1,11)=22.85$).

To compare the relative impact of background and foreground reference points on judged pleasure, we analyzed the individual responses of participants in the positive and negative paths. The effect of counterfactual outcomes on pleasure was similar in magnitude (though opposite in sign) to the effect of obtained outcomes. The immediate context (i.e., what happened and what could have happened) appears to dominate the background context (i.e., cumulative earnings and trend). Interestingly, the effect of counterfactual outcomes that have nothing to do with take-home pay is similar in magnitude to that of the actual outcome.

DISCUSSION
Judgments and evaluations typically involve comparisons of outcomes and experiences to reference points. We often have an abundance of reference points from which to choose. In the present study, we examine how background reference points influence pleasure in the face of immediate reference points. Both background and foreground reference points determine the pleasure of outcomes. Background effects of cumulative earnings and trend had less impact, relative to foreground effects. There is also some evidence that background effects of cumulative earnings and trend interact. Being on a winning streak feels much better after losing $24 than after losing $0.
When Decision Affect Theory is extended to incorporate cumulative earnings and trend, it predicts both background effects, and foreground effects, in particular, the enormous effect of the counterfactual outcome. The utility of the outcome and the counterfactual comparison function were similar across paths, but the psychological impact of trend depended on position. Our results suggest that pleasure is myopic; immediate effects have greater impact than background effects on the pleasure of outcomes.

REFERENCES