ABSTRACT

We can understand consumers’ decision strategies as a product of trade-offs between consumers’ meta-goals proposed by Bettman and colleagues (1998). In the current studies, consumers’ post-purchase regret was examined with respect to cognitive effort and ease of justification of the invested effort. Results showed that consumers experienced less regret when more cognitive effort was used and when they initially purchased a product at a local store than online. Consumers also experienced less regret when their cognitive effort was easy to justify. These results suggest that consumers’ meta-goals are interrelated rather than independent, as previously theorized.

BACKGROUND

Regret is sometimes unavoidable due to uncertainties at the time of the decision (Simonson, 1992) and counterfactual thinking (Roese, 1994). Consumers often experience regret even after spending quite some time and effort in their decisions.

The relationship between regret, cognitive effort, and decision justification is not well understood. Elevated anticipation of regret tends to produce more elaborate and conservative consumer decisions (Janis & Mann, 1977), but some research finds that additional time speculating on decision alternatives (cognitive effort) can decrease perceived quality of the final option (Wilson & Schooler, 1991). In addition, a justifiable basis of the decision (Inman & Zeelenberg, 2002) is found to influence the experience of regret.

According to Bettman’s model of consumers’ meta-goals (Bettman et al., 1998), increase in cognitive effort and justification of a decision may elicit decision conflict between the meta-goals (maximizing accuracy, maximizing justification, minimizing cognitive effort, and minimizing negative emotions). Though this model provides a big picture of consumers’ constructive decision processes, there is a need to empirically examine the interrelationship of these two goals.

The current studies examine the effects of cognitive effort and ease of justification on experienced regret.

METHOD: Studies 1-2

Study 1

- 147 students (Males: 45, Females: 102, Mean age = 18.17) at a Midwestern university.
- A 2 (Cognitive effort: High vs. Low) x 2 (Place of purchase: In-store vs. Online) x 2 (Types of product: Laptop vs. Jeans) mixed-subjects design.

Upon consent, participants were randomly assigned to one of the two conditions (High vs. Low). They were asked to read four regret-inducing vignettes presented on the computer monitor by using Medialab (v2008) (see Box 1). After reading each vignette, participants rated the degree of experienced regret on a single 7-point regret item: “Considering the situation, I regret my decision…”

1: Disagree Very Strongly, 7: Agree Very Strongly

Study 2

Study 2 replicated and expanded Study 1. Less regret was found when:
- More cognitive effort was invested in making a decision (F(1,110) = 33.58, p<.05, η² = .23)
- The cognitive effort was easy to justify (F(1,110) = 4.35, p<.05, η² = .04)

RESULTS: Studies 1-2

Study 1

Less regret was found when:
- More cognitive effort was invested (F(1,145) = 10.84, p<.05, η² = .07)
- A product was purchased in local stores than on-line (F(1,145) = 15.03, p<.05, η² = .09)
- A pair of jeans was purchased than a laptop (F(1,145) = 18.32, p<.05, η² = .11)

Table 1. The mean (std.dev.) of experienced regret depending on the place of purchase, type of products and the level of cognitive effort

<table>
<thead>
<tr>
<th>Cognitive Effort</th>
<th>Laptop In Store</th>
<th>Laptop Online</th>
<th>Jeans In Store</th>
<th>Jeans Online</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>3.71 (1.32)</td>
<td>2.43 (1.17)</td>
<td>3.41 (1.23)</td>
<td>3.94 (1.19)</td>
</tr>
<tr>
<td>Low</td>
<td>4.67 (1.21)</td>
<td>4.71 (1.40)</td>
<td>3.90 (1.24)</td>
<td>4.31 (1.16)</td>
</tr>
</tbody>
</table>

Figure 1. The degree of regret depending on the place of purchase and the level of cognitive effort

Study 2

Study 2 replicated and expanded Study 1. Less regret was found when:
- More cognitive effort was invested (F(1,110) = 33.58, p<.05, η² = .23)
- The cognitive effort was easy to justify (F(1,110) = 4.35, p<.05, η² = .04)

Table 2. The degree of experienced regret based on cognitive effort and justification

<table>
<thead>
<tr>
<th>Cognitive Effort</th>
<th>Difficult to justify</th>
<th>High cognitive effort, Easy to justify</th>
<th>Low cognitive effort, Difficult to justify</th>
<th>Low cognitive effort, Easy to justify</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>3.31(1.52)</td>
<td>3.42(1.50)</td>
<td>4.50(1.69)</td>
<td>3.80(1.56)</td>
</tr>
<tr>
<td>Low</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 2. The degree of regret depending on the level of cognitive effort and ease of justification

RESULTS (Cont’d)

Differences between ease and difficulty of justification were found only when cognitive effort was low (Simple effect). See Figure 2.

DISCUSSION

What is the function of cognitive effort in relation to the experience of regret?

Previous research has reported conflicting results regarding the amount of cognitive effort invested in the decision and the decision regret (e.g., van Dijk, van der Pligt, Zeelenberg, 1999 vs. Srull & Wyer, 1989).

Our current findings showed that:
- Greater investment of cognitive effort led to attenuated experience of regret, which is congruent with van Dijk et al. ’s (1999) finding. Furthermore, greater cognitive effort appears to be helpful to reduce the degree of regret regardless of the justifiability of the effort.
- Is justification of cognitive effort always useful to reduce the experience of regret?
  - Justification of a decision has been found to be effective in reducing the degree of regret. The present results found that:
    - Higher degree of regret was experienced when cognitive effort was difficult to justify.
    - However, we no longer see this effect when greater cognitive effort was invested in the decision.

Our findings also suggest:
- Consumers’ goals of minimizing cognitive effort and diminishing negative emotion are interrelated and not independent.

Current study showed that experience of post-purchase regret depended on the degree of exertion of cognitive effort. In addition, exertion of the effort interacted with the ease of justification. These results indicate that Bettman et al.’s (1998) model of consumers’ meta-goals needs to be further developed and refined.

Box 1. A sample vignette for High cognitive effort, In-store, laptop purchasing situation

Recently your computer broke down and you decided to buy a new laptop…..One model had a 4GB DDR3 memory system, hard drive size of 500GB, and the latest operating system. It also came with …… and it cost $899.99. The other model had a 3GB DDR3 memory system, ……..and cost $649.99. In the store, you spent a few hours researching and gathering information about your options, talking to a product manager who seemed very knowledgeable…..Even though you did not have a chance to compare the price in on-line stores, you bought the laptop and were satisfied with it.

Two weeks later, you visited the website of the store and found out that the same kind of laptop you purchased was on sale with an extra 10% discount.

Box 2. A sample vignette for High cognitive effort, difficult to justify the effort situation

Since this is not the first time purchasing a laptop by yourself, you have a pretty good idea of which laptop will be the best option for you……. However, in the store, you spent quite some time researching and gathering information about your options. Finally, you decided on which laptop to purchase. Even though you put quite some time and effort in this decision, your final choice was what you had in mind when you walked into the store.

Acknowledgements

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