



Good or Better; The Effect of Comparative Mindset with Recommended Products on Product Evaluation and Purchase Decision

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Introduction Recommender system elicits the interest of users and makes recommendations to assist product search and evaluation (Xiao & Benbasat, 2007). It supports decision making process of customers facing preferential choice problems (Todd & Benbasat, 1994) by reducing information overload and search complexity. Recommender system generates 35 percent of revenue on Amazon and 75 percent of selection on Netflix (Mackenzie, Meyer, & Noble, 2013). As recommender systems can be a very effective tool, it is important to understand the mechanism that recommender systems affect consumer decision making. However, previous studies are limited to the development of algorithm for creating best recommendations or consumer perception of recommender system. Thus, this study aims to investigate the underlying process using the mindset literature.

Literature Review Purchase decision involves two modes of thinking: a decision-only mindset (i.e., considering whether to buy) and a comparative mindset (i.e., comparing and deciding among available options) (Lee & Ariely, 2006; Xu & Wyer, 2007) Depending on the consumer's mindset, he/she is likely to engage in different kinds of activity during shopping. Comparative mindset can lead consumers to view and compare multiple options, a joint evaluation. On the other hand, decision-only mindset can lead consumers to consider a single option at a time and focus on deciding whether the option is attractive or not, a separate evaluation. The relative attractiveness of alternatives can impact the target evaluation in a joint evaluation but not in a separate evaluation (Tversky & Shafir, 1992).

Comparative mindset can impact the value perception of a product because the attractiveness of the product can change depending on other options (Hsee, 1996). Value refers to the overall assessment of the utility of a product based on what is received and what is paid for (Zeithaml, 1988). The perception of value depends on the reference of consumers (Zeithaml, 1988), situation and context (Holbrook & Corfman, 1985). Consumers in joint evaluation are likely to consider the recommended options as an external reference and thus likely to be influenced by the recommendations. Especially if the recommended products are less attractive than the product of interest, the target product will seem more attractive. Thus, Consumers with comparative mindset (vs. those with decision-only mindset) are likely to show higher (H1a) perceived value, (H1b) favorableness, (H1c) attitude, (H1d) willingness to purchase for the target product. Also, the perceived value will be positively related to (H2a) favorableness, (H2b) attitude, (H2c) willingness to purchase.

Because consumers find it easier to justify purchase of utilitarian products than hedonic products (Prelec & Loewenstein, 1998) being able to justify can facilitate purchase of hedonic products more than utilitarian products (Okada, 2005). Because consumers with comparative mindset can justify the chosen product in comparison to other alternatives, the positive effects of comparison mindset will be stronger for hedonic than utilitarian products (H3).

Methods A 2 (Comparative vs. Decision only mindset) X 2 (Hedonic vs. Utilitarian product) between-subjects experiment was conducted. An external hard drive and a casual backpack were selected as the utilitarian and hedonic product through a pretest. Participants were randomly assigned to one of the four conditions. The comparative mindset was induced following the procedure used in the previous studies (Xu & Wyer, 2007). Participants viewed a webpage with the product image and 4 recommendations. The price of recommended products was higher than the main product to make the option more attractive than recommended products. Then, participants completed a questionnaire containing items for perceived value, favorableness, attitude, willingness to purchase, and subjective knowledge. All items were adopted from previous studies.

Result US adults ($n=146$) were recruited from Amazon MTurk. Two-way ANCOVA with subjective knowledge as a covariate confirmed that comparative mindset results in higher willingness to purchase ($M_{Com}=5.77$, $M_{Dec}=5.35$, $F(1, 144)=5.29$, $p=0.02$) and perceived value ($M_{Com}=5.74$, $M_{Dec}=5.40$, $F(1, 144)=4.90$, $p=0.03$) than decision only mindset. In addition, the mindset causes a marginally significant effect on attitude ($M_{Com}=5.79$, $M_{Dec}=5.51$, $F(1, 144)=23.49$, $p=0.06$) and favorableness ($M_{Com}=5.76$, $M_{Dec}=5.43$, $F(1, 144)=3.51$, $p=0.06$). Therefore, H1 was supported. A linear regression analysis indicates that perceived value is positively related to favorableness, attitude, and willingness to purchase ($\beta=.66$, $p<.000$; $\beta=.62$, $p<.000$; $\beta=.51$, $p<.000$), supporting H2. The two-way interaction effect of mindsets and product type on the willingness to purchase was significant ($F(1, 141)=4.79$, $p=.03$). When the participants shopped for the casual backpack (i.e., the hedonic product), the comparative mindset resulted in a significantly higher willingness to purchase ($M_{Com}=5.89$) than decision only mindset ($M_{Dec}=5.08$). However, there was no significant difference for the external hard drive, the utilitarian product ($M_{Com}=5.64$, $M_{Dec}=5.61$). No significant interaction effects were found for perceived value, favorableness, and attitude ($p>.05$). Therefore, H3 was partially supported.

Discussion & Implication Consumers in comparative mindset can use the alternatives as reference information. Comparing with less attractive alternatives influence the value perception and decision even though the actual value of the product remains the same. Value perception mediated effects of mindset on dependent variables, providing evidence that value perception change is the underlying mechanism of mindset effects on preference and purchase. The finding is consistent with Xu and Wyer (2007). The decision can be leveraged as comparative mindset increases value perception by referring to external information (Zeithaml, 1988). The findings imply that comparison should be facilitated with website features and the arrangement of recommendations to enhance value perception. Retailers can boost sales by making comparison easier between products and convincing customers of selecting a better option. In addition, recommendations can highlight advantages or overcome hesitations with different attributes. Technological advancements can be emphasized for functional product and guilt can be attenuated with price for hedonic product.

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