Special Session Summary  Effects of Preference Elicitation Task on Consumer Reactions to Product Customization

Ana Valenzuela, San Francisco State University
Ravi Dhar, Yale University

[to cite]:

[url]:
http://www.acrwebsite.org/volumes/8993/volumes/v31/NA-31

[copyright notice]:
This work is copyrighted by The Association for Consumer Research. For permission to copy or use this work in whole or in part, please contact the Copyright Clearance Center at http://www.copyright.com/.
SPECIAL SESSION SUMMARY

Effects of Preference Elicitation Task on Consumer Reactions to Product Customization
Ana Valenzuela, San Francisco State University
Ravi Dhar, Yale University

SESSION OVERVIEW

Customization of products and services is key to enhancing customer value and a source of competitive advantage. In a classical sense, this requires capturing consumer preferences and offering product assortments that include the consumers most preferred alternatives. From a constructionist perspective, consumer preferences are not well defined and, therefore, inferred from their constructed responses when consumers are required to make a choice or judgment (e.g. Bettman, Luce and Payne, 1998). These constructed preferences are volatile and preference reversals may occur since preference elicitation is sensitive to contextual factors (e.g. Park, Jun and Macinnis, 2000; Simonson and Tversky, 1992; Nowlis and Simonson, 1997; Hsee and Leclerc, 1998).

Different preference elicitation tasks might highlight different attributes and tradeoffs leading to inconsistent evaluations. In that case, different methods of preference evaluation may result in a different object being viewed as most preferred, or may lead to different levels of satisfaction with the chosen option. Additionally, different preference elicitation tasks may facilitate learning and influence expectations about the quality and control over the choice decision. For example, Huffman and Kahn (1998) showed that the presentation of product information attribute-by-attribute facilitated preference learning, reduced perceived process complexity and increased consumers’ readiness to make a choice. That relative ease of learning preferences also increased satisfaction with the sale interaction.

Although the recent literature has begun to explore how product customization may lead to different choice outcomes, it is still unclear how different customization processes may affect final product choice and the evaluation of both the customized product and the customization process. The three papers in this session are a step forward in that direction. All three papers not only explore how product customization may lead to inconsistent consumer evaluations and choices but also identify important moderating factors. They deal with research questions ranging from the effects of preference elicitation task transparency and amount of control afforded by customization, to distortions of customization outcomes depending on customization procedures. The three papers are complementary and share a common focus in examining the impact of product customization on consumer preference matching and on the overall purchase experience.

In the first paper, Kramer examines a condition that moderates consumers’ ability to deduce their preferences from their measurement responses and recognize that the customized offer fits their preferences more closely than alternative product options. He proposes that such moderator is the transparency of the preference elicitation task, defined as the ease with which consumers can “see through” the measurement to infer their preferences from their measured responses.

In the second paper, Godek, Brown and Yates show that there are other aspects of product customization that plausibly lead to advantages above and beyond more preference matching. For example, perceptions of control afforded by customization should lead to higher evaluations of both the process and the product selected. Customization also allows decomposition of the decision problem into a series of smaller sub-problems affecting consumers’ evaluations of a product selection process.

In the third paper, Dhar, Valenzuela and Zettelmeyer examine how different preference measurement tasks distort customization outcomes as well as the satisfaction with the customization process. They find that customization procedures based on attribute-by-attribute choice instead of choice between fully specified alternatives affects product choice, satisfaction with the choice, confusion with the process and readiness to buy.

As a whole, these three papers highlight the notion that product customization influences consumer choices and evaluations in systematic ways but not equally for everyone. With a well-developed framework and extensive data, all three papers account for how customization processes affect decision-making. Professor Pat West provided the impetus for the discussion by not only summarizing the work but also highlighting areas of future research. She noted that all three papers seemed to conclude that decomposing the choice process for the consumer augmented satisfaction with the outcome and probability of purchase. She called for more research on the impact of choice decomposition on consumer behavior.

INDIVIDUAL PAPER ABSTRACTS

“The Effect of Preference Measurement Transparency on Consumer Responses to Customized Offers”

Thomas Kramer, Baruch College/CUNY

In the age of customization, marketing activities frequently involve measuring the preferences of consumers and tailoring product offerings or recommendations to such individual specifications (Simonsohn 2003). Common underlying assumptions of these individual marketing approaches are that consumers can express their preferences in a preference elicitation task and recognize the superior value of an offer that is customized to their responses to the measurement task.

However, research on the constructive nature of preferences suggests that consumers may not always have stable, well-defined preferences that marketers can elicit (e.g., Bettman, Luce, and Payne 1998). One implication of such preference instability and uncertainty is that consumers may need to construct the values they express in the measurement task. A second implication is that consumers may need to infer their preferences from their constructed responses to the measurement task to evaluate whether the customized offer matches their tastes better than alternative product options. Thus, consumers who do not identify their measured responses correctly are less likely to recognize the superior value of a customized offer tailored to their individual specifications.

Therefore, it is important to examine the conditions that moderate consumers’ ability to deduce their preferences from their measurement responses and recognize that the customized offer fits their preferences more closely than alternative product options. In this research, I propose that one such moderator is the transparency of the preference elicitation task, defined as the ease with which consumers can “see through” the measurement to infer their preferences from their measurement responses.

Results of two experiments show that consumers’ responses to customized offers correspond more closely to their expressed preferences when they are obtained using a more transparent measurement technique, such as the self-explicated approach, as
opposed to full-profile conjoint analysis. Subjects who expressed their preferences for digital cameras (study 1) or personal digital assistants (study 2) using the self-explicated approach were more likely to accept a personalized product recommendation that matched their measured preferences most closely and was ranked highest on a list of recommended options. However, consumers’ understanding of their measured preferences may become less accessible over time (e.g., Fazio, Powell, and Williams 1989), and task transparency may therefore moderate responses only when the evaluation of the customized offer follows preference measurement without delay. In support of this hypothesis, both experiments find that the difference in response due to task transparency is no longer obtained when offer evaluation follows preference measurement after a longer delay of one week.

A third study suggests that, with less transparent preference measurements (e.g., full-profile conjoint analysis), reminding people of their expressed preferences can lead to less favorable responses to a customized offer derived from these preferences. Following less transparent measurement, subjects who were provided with a personalized product recommendation after a delay responded to it less favorably when reminded of their measured responses to the earlier elicitation task. Such a reminder had no effect on subjects in the transparent measurement task condition.

**“Customization Decisions: The Effects of Perceived Control and Decomposition on Evaluations”**

*John Godek, University of Oregon*

*Christina L. Brown, University of Michigan*

*J. Frank Yates, University of Michigan*

Technological advances have led to increased collaboration between consumers and firms in the product selection process to the point where consumers are often able to specify some or all of the attributes to be included in the products being purchased. Such customization is seen as a desirable, and perhaps even a necessary, strategy by firms in order to be competitive in the marketplace. This belief is based primarily on the notion that allowing consumers to specify product features should lead to closer matches between consumers’ preferences and selected products. However, in addition to this benefit, there are other aspects of customization that may plausibly lead to advantages above and beyond preference matching. Two features in particular, attribute specification and product selection task decomposition, provide additional mechanisms through which customization can influence consumers’ decision process. The present research identifies several conditions under which customization yields benefits above and beyond preference matching, and tests when and for whom these conditions apply.

The first aspect of customization examined in this research concerns the consumer’s ability to specify some or all of the attributes to be included in the product purchased. This attribute specification increases the consumer’s perceptions of control over the process and the product selected by affording the consumer greater input into what is eventually chosen (Averill 1973). Prior research concerning control (Langer 1975; Thompson 1981; White 1959) suggests that people value control, and that increases in perceived control positively influence both how they feel about the current situation as well as their thoughts about the outcome. There are conditions, however, where consumers may wish to relinquish control to someone else in order to facilitate a better decision (Holland and Rassuli 1999). This past research suggests that the perceptions of control afforded by customization should lead to higher evaluations of both the process and the product selected. These effects should interact with the degree to which consumers desire to retain or relinquish control in order to facilitate a better decision outcome. In order to test these predictions, an experimental study was conducted where perceived control and desired control were manipulated. The results of this study indicated that, in a purchase situation where there is a match between perceived and desired levels of control, such that they are both high or low, process and product evaluations are higher. Mediation analyses per Baron and Kenny (1986) showed that process evaluations fully mediated the effect of this interaction on product evaluations. These results provide strong evidence concerning how changes in perceived control afforded by customization can increase or even decrease consumers’ evaluations of the process and product selected.

The second aspect of customization examined in this research concerns how customization breaks down or decomposes the decision problem into a series of smaller sub-problems. Such decomposition has been shown to improve decision making relative to holistic evaluations of entire alternatives by allowing decision makers to more easily consider a larger number of alternatives and factors (Fischer 1977; Morera and Budescu 1998), while simultaneously reducing judgment errors by relaxing the information processing demands on the decision maker (Kleinmuntz 1990). Easing the cognitive burden on decision makers should reduce feelings of frustration while also positively influence expectations about the quality of the resulting decision. Decomposing the decision task too much, though, can make it too simple and lead to distraction or counter-arguing against the wisdom of the consumer’s choice, and thus lower evaluations (Anand and Sternthal 1989; Wright 1973). Accordingly, this suggests an inverted U-shaped relationship between decomposition and evaluation. Since more difficult problems require additional cognitive resources to complete, this curve should shift in the direction of more decomposition as problem difficulty increases. The results of a second study support the prediction of an inverted U-shaped relationship between level of decomposition and process evaluation, and that this curve will shift in the direction of higher decomposition when problem difficulty increases. The relationship between level of decomposition and product evaluation shows a similar pattern, but is less definitive. These results suggest that too little or too much customization can lower consumers’ evaluations of a product selection process, and that such effect depends upon the level of difficulty associated with the decision problem.

In a third study, we examine the moderating effects of outcome ambiguity in order to determine when and for whom customization will influence both process and product evaluations. We hypothesized that since people tend to be ambiguity averse (Ellsberg 1961), they will tend to search the decision context more for information when outcome ambiguity is high. Under such circumstances, information about the process should be accessible and seem diagnostic (Feldman and Lynch 1988), making it more likely to be used for generating product evaluations. Such a mechanism received support from the third study where high-experience SUV-users and low-experience SUV-users were queried about a new automobile hybrid designed to address many of common complaints by SUV-users. As expected, there was a large main effect such that all participants evaluated the choice process higher when there was customization instead of choosing from an assortment. Of note though was that for low-experience SUV-users, product selection mode (assortment or customization) had the same effect on product and process evaluations, while for high-experience SUV-users there was no such difference on product evaluations between the product selection conditions. Together, these results suggest that higher ambiguity concerning the outcome does indeed make it more likely for process evaluations to influence product evaluations.
The rapid proliferation of options in many product-markets and the potential for information overload has created an important role for customization. A basic precursor to any customization requires preference elicitation. A major finding in the behavioral decision theory literature is that consumer preferences are not well-defined and different preference elicitation tasks might highlight different attributes and tradeoffs leading to differing product evaluations and choices. We propose that different preference elicitation methods (i.e., customization interfaces) affect not only a consumer’s final product choice, but also his/her reaction to that choice. We propose that different tasks for arriving at customer preferences will systematically distort final outcomes as well as the satisfaction with the customization process. Specifically, different methods of preference elicitation may result in (i) a different final product being perceived as most preferred, (ii) different degree of choice difficulty and satisfaction and (iii) different percentage of no choice.

We examine these propositions in a series of studies using two common means of measuring consumer preferences in the conjoint literature (e.g., Srinivasan and Park 1997) that are widely used in the business world. Specifically, preference measurement is based on information presented about fully specified products (“full-profile” approach) or by rating in isolation the desirability of the different levels for each attribute for all attributes (similar to “self-explained” approach). In contrast to the focus on modeling partworths, our emphasis is the effect of these approaches on impacting the most preferred alternative. We propose that the customization procedure based on eliciting customer desirability level for each attribute should increase the preference for intermediate options as opposed to more extreme options. Specifically, when each attribute is presented in isolation, the consumer uncertainty that absolute attribute levels should increase choice of compromise options to reduce the probability of making a sub-optimal choice by selecting intermediate levels for most attributes (Simonson 1989). In contrast, when respondents are confronted with multiple alternatives in a fully specified customization format, they are likely to experience greater conflict (Dhar 1997; Iyengar and Lepper 2000). Respondents that want to avoid making choice conflict often resort to lexicographic decision rules (Dhar 1996, 1997) where alternatives are preferred that have the highest value on the most important attributes.

Different customization procedures should also affect experienced states during and after customization. As noted by Huffman and Kahn, learning within-attribute preferences from alternatives is difficult. The reason is that such learning requires consumers to decompose the alternative into its attributes and infer how each contributes to the overall evaluative reaction. On the other hand, presentation of information by attribute is easier to process because information is presented in smaller pieces (e.g., Chase and Simon 1973). Since consumer learning is easier when product information is presented by attribute, we expect consumers to feel less confusion in this type of customization process. The relative ease of learning preferences may also increase satisfaction with the sale outcome.

Finally, we propose that customization procedure will have an effect on the consumer readiness to make a choice. A psychological variable that has received much attention is the degree of difficulty in deciding among the options provided (Dhar 1997; Tversky and Shafir 1992; Luce 1998). These studies show that when consumers confront several attractive options such that none easily stands out as the best, they often tend to put off choice. If product alternatives are presented simultaneously, the decision process typically involves making tradeoffs between relatively equally attractive alternatives. This process is likely to increase the difficulty of choosing any one alternative. As a consequence, we expect to find larger choice deferral when consumers customize products choosing from fully-specified alternatives.

Studies 1 and 2 show that consumers tend to choose an intermediate (compromise option) significantly more often when they customize a product attribute-by-attribute. The increase in compromised choices in attribute-by-attribute customization tasks seems to be robust across product categories and is not affected by the consumer’s familiarity level with the product category. On the other hand, familiarity level with the product category does moderate choice tradeoffs when consumers customize choosing between fully specified alternatives. Subjects choose lower price-lower quality options on average when their familiarity with the category is low, but choose higher price-higher quality choices when their familiarity is high. Additionally, Study 2’s findings suggest that consumers experience less confusion with the choice process in an attribute-by-attribute customization task. Lower confusion with the choice process (in other words less uncertainty about having made the right choice) results in more satisfaction with the final choice. At the same time, when consumers confront several attractive product alternatives, such that none easily stands out as the best, they often tend to put off choice. Consistent with this argument, by-fully-specified-alternative customization results in a larger percentage of product no-choice.

Finally, Studies 3 finds a boundary condition to Study 1 and 2’s findings. We argue in study 1 and 2 that, when product alternatives are presented simultaneously, the decision process typically involves explicit inter-attribute comparisons. The process of making tradeoffs between relatively equally attractive alternatives is likely to increase the difficulty of choosing any one alternative (e.g., Luce, Bettman and Payne 2001). Making tradeoffs makes counterfactuals become more salient. Counterfactual thinking drives consumers to the realization that they are giving up on certain attribute levels when they are making a choice. As a consequence, consumers confronted with explicit trade-offs in a customization task are likely to experience greater choice conflict (Dhar 1997; Iyengar and Lepper 2000). Study 3 reverses Study 1 and 2’s results by constructing an attribute-by-attribute condition in which trade-offs in the choice between attributes are explicit (choosing between features within a fixed-priced product). In that condition, attribute-by-attribute customization leads to lower satisfaction and a lower probability to purchase.

REFERENCES


