

SPECIAL SESSION SUMMARY

Decision Biases in Evaluating Ambiguous Information

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I. Introduction

What motivates consumers to hold consistent preferences? One might argue that holding consistent, well-defined preferences serves an important function for consumers, allowing them to understand the preferences underlying their choices and making it easier to choose more accurately among products (West, Brown, and Hoch 1996). On the other hand, products sometimes offer "equivocal" or ambiguous qualities, with the potential for multiple interpretations (Hoch and Ha 1986). In such cases, consumers' attempts to understand their own preferences (thus allowing them to behave in a way consistent with these preferences) can bias their interpretation of subsequent product stimuli. As Hoch and Deighton (1989) suggest:

"Ambiguity emerges as a critical environmental factor enabling the management of experiential learning. When experience is neither vague or open to multiple interpretations, consumers learn fast and the manager has little scope for influencing the result. An ambiguous environment, in contrast, poses both threats and opportunities (p. 10)."

In short, consumers may "theorize in advance of the data," changing their interpretation of ambiguous stimuli in an effort to form consistent preferences, potentially threatening their objectivity. The question of consumer consistency in the face of ambiguity is therefore an important one, since it has powerful implications for marketers' ability to learn the objective relationship between a product's features and consumer preferences.

The objective of this special session was therefore to address the biasing effects of consumers' need for consistency on interpreting ambiguous product information. Specifically, our intention was to contribute to a better understanding of how consumers evaluate ambiguous information, as well as the role of their prior and developing preferences in this process. The session examined these issues from a variety of theoretical, methodological, and analytical perspectives. Russo, Meloy, and Medvec used dissonance research to provide a new perspective on understanding the role of pre-existing and developing preferences in evaluating ambiguous information. Brown and Raghunathan relied on theory and experimental paradigms from the impression-formation literature to address how and why consumers perceive more consistency in ambiguous service encounters than may actually be present. The paper by Chernev investigated consistency biases in consumer choice; specifically, how consumers' motivated reasoning mediates their evaluations of ambiguous product features.

II. "The Distortion of Information During Decisions"

The first paper presented was "*The Distortion of Information During Decisions*," by J. Edward Russo, Margaret G. Meloy, and Victoria Husted Medvec. Jay Russo was the presenter. This work reported on the presence of predecisional distortion of information. In two studies, participants were asked to choose between two brands (Russo, Medvec & Meloy 1996; Russo, Meloy & Medvec 1996). They received information one attribute at a time (but on both alternatives simultaneously) and stopped whenever they felt confident enough to make a commitment to one alternative. In

addition, after announcing their decision, participants were shown the remaining, unrequested attributes of information. This enabled an assessment of the postdecisional distortion driven by dissonance reduction which, in turn, provided a benchmark against which the magnitude of the predecisional distortion could be compared. Each attribute was read and integrated with past information to update the choice process. Then participants were asked choice if all information were available and used. This measure of confidence directly traced the strength of the tentative preference. Finally, participants were asked to rate an attribute's diagnosticity (though not using this term) on a nine-point scale where each end point reflected strong support for one alternative and the midpoint represented neutrality. The difference between a participant's evaluation on this scale and the mean rating on the same scale of a no-choice control group served to measure the distortion of the information.

The main result was the existence of predecisional distortion and its systematic relation to strength of preference. In the absence of any prior information (the two alternatives were identified only by the letters G and Z), distortion occurred from the second attribute on. That is, distortion appeared as soon as there emerged any preference for one brand over the other. Further, the magnitude of the distortion was directly related to the strength of the developing preference. The distortion of an attribute was a linear function of the confidence in the tentative preference after the prior attribute. Thus, the stronger was the developing preference for one brand, the more the next piece of information was distorted to favor that leading alternative.

The magnitude of the observed distortion was substantial. In both studies the predecisional distortion was roughly twice the size of the postdecisional distortion that was due to traditional cognitive dissonance. The phenomenon of predecisional distortion of information has important implications for the nature of decision processes, for theory construction, for decision making in natural environments where such distortion may be costly, and for the validity and value of decision aids.

III. "The Effects of Persuasion Knowledge on Attitude Formation"

Second, "*The Effects of Persuasion Knowledge on Attitude Formation*," by Christina L. Brown and Raj Raghunathan, was presented by both authors. This work concerned how the resolution of ambiguity surrounding encounters between consumer and marketer depends on the source of the information received.

One way consumers may react to the knowledge that a marketer is trying to persuade them is to activate "persuasion knowledge"—their developed expertise or schema about marketers and the nature of their persuasive efforts (Friestad and Wright 1994). This activation may simply result in a more negative attitude toward the marketer. Alternatively, a consumer may be motivated to develop a more consistent and cohesive attitude or mental model of that marketer, as a way of coping or defending against the persuasive effort. This tendency results in the "disambiguation" of consumers of two sorts: first, as a consumer's attitude towards a particular marketer becomes more internally consistent, marketers will appear more distinct from each other. Secondly, consumer will appear more distinct from each other. Thus, when consumers are

consciously aware of a marketer's effort to persuade, they will become more segmented.

The authors tested these assertions in an experiment. The stimuli were sixteen descriptions of consumer experiences in retail clothing stores (descriptions of the store's atmosphere, the personnel, the product assortment, and the service for each of four stores). Subjects rated each description on a series of brand personality scales. The identity of each store was labeled for half the subjects but left unidentified for the other half. Furthermore, the source of information was manipulated: subjects were either told that the descriptions came from friends (the "word-of-mouth" condition), or from an infomercial.

Variance decomposition was used to determine to what extent the variance in store ratings was driven by the store itself, the subject, the particular description, or the interaction between these factors (Park, DeKay, and Kraus 1994). Variance due to "store" represented the extent to which stores were seen as distinct from each other. Variance due to "subject" represented idiosyncratic use of the response scales by different subjects. Of greatest interest, variance due to a "subject-x-store" interaction represented the extent to which each subject viewed a store consistently, yet differently from other subject's reaction to the same store (i.e., the extent to which they were disambiguated).

The authors hypothesized that when the stores were identified, subjects would resolve ambiguity (measured as the variance in behavior across situations) by seeing a store's behavior as more consistent than in the unidentified case. Secondly, they hypothesized that subjects would resolve this ambiguity in idiosyncratic ways (a subject-x-store interaction). Finally, they expected to show that the source of information exacerbated subjects' tendency to perceive ambiguous descriptions as more consistent than they actually are. The data supported these expectations.

IV. "The Impact of Unfamiliar Product Features on Brand Choice"

Third, Alex Chernev presented his research on "*The Impact of Unfamiliar Product Features on Brand Choice*." This research considered the familiar case in which consumers make choices among brands that share unfamiliar, yet functionally similar features. For example, consider a choice among TV's that have analogous features like PanaBlack screen (Panasonic) and Smart picture (Magnavox) or a choice among two brands of toothpaste that have analogous ingredients such as Fluoristat (Crest) and Triclene (Aquaafresh). Unfamiliar with these features, consumers face ambiguity as to how different these features actually are and which of these features is more attractive.

Chernev investigated how consumers evaluate brands that share such analogous unfamiliar features. In particular, his research documents the existence of systematic biases in consumers' evaluations of unfamiliar attributes. Building on the reason-based view of choice (Shafir, Simonson, and Tversky 1988), Chernev's research shows that when consumers have a reason to select a particular brand, they are likely to interpret unfamiliar product features in a way that will result in a consistent and readily justifiable decisions. Thus, when individuals were provided with a reason to choose a particular alternative (e.g., because it is dominant on the most important attribute), adding analogous unfamiliar features to all brands in consumers' consideration set resulted in an increase in the overall evaluations of the brand favored by that reason. In contrast, in the absence of a specific reason to focus on a particular brand (e.g., when brand attributes have similar importance), adding unfamiliar features was found to increase consumers' indifference between choice alternatives.

These data lend support for the preference confirmation view of choice, whereby the evaluation of the available information is often biased by consumers' already established preferences (Hoch and Ha 1986, Hoch and Deighton 1989). More generally, these findings are in agreement with the notion that consumers' reasoning is mediated by their motivation to attain consistent and readily justifiable decisions (Kunda 1990).

V. Discussion

Finally, Steve Hoch made good use of the limited time available as synthesizer. His primary point was that although the three studies purported to be concerned with the reduction of ambiguity, none of them had actually manipulated ambiguity directly. If ambiguity is the driving construct behind the research, it is important to show that reducing ambiguity in the stimuli reduces the reported effects.

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