

Message Framing Effects on Product Judgments

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ABSTRACT

The purpose of this paper is to provide a summary of a special topic session organized to address recent developments in framing research in consumer behavior. The papers presented in this session examined both how and when consumers' judgments vary as a function of the way message information is framed. In addition, they explored the theoretical and empirical implications of such framing effects.

OVERVIEW

Recent research has shown that people's choices and judgments can be influenced not only by the content of communicated information but also by the way the information is described or framed (Kahneman and Tversky 1979; Meyerowitz and Chaiken 1987; Puto 1987; Tversky and Kahneman 1982). Two paradigms have prevailed in framing effect investigations. In consumer research that assumes a decision theory approach, people typically are presented with two discrete options to a problem, one representing a risky outcome and the other a certain outcome. People's choice of option is compared when these same two options are expressed as either as gains or losses (Kahneman and Tversky 1979, 1982; Puto 1987; Thaler 1985).

A second paradigm prevails in research that examines consumers' response to persuasive communications. Here consumers' overall product judgments are examined after being presented with one of several sets of message claims that are alternatively framed by presenting positive versus negative attribute labels (e.g., "ground beef described as "75% lean" or "25% fat", Levin and Gaeth 1988", positive versus negative consequences (e.g., "... women who [do/do not do] breast self examination have an [increased/decreased] chance of finding a tumor in the early, more treatable state of the disease, Meyerowitz and Chaiken 1987", or nonverbal versus verbal descriptions, "35 grams of protein" versus "excellent protein content" Scammon 1977). This session focused on research that pursued this latter approach to investigating framing effects.

Each of the four papers presented in the session report the findings of empirical research which explores the extent to which the effectiveness of alternative message framing manipulations is contingent on situational and/or individual difference variables. Thus these papers add significantly to our theoretical understanding of framing effects by attempting to go beyond just simple demonstrations of framing effects and clarifying when a particular framing effect is likely to be observed, reversed, or eliminated.

The first paper by Gary J. Gaeth, Irvin P. Levin, Deborah A. Cours and Susan Combs explores the interactive effects of personal experience and

framing where framing is manipulated in terms of positively versus negatively phrased product attribute labels. The subsequent framing effect study by Joan Meyers-Levy and Durairaj Maheswaran explores whether some of the conflicting outcomes observed in framing effect studies in the literature can be accounted for by differences in people's use of detailed versus more cursory processing. The study reported investigates how the effectiveness of a message that focuses on either benefits received ("positive framing") or benefits foregone ("negative framing") varies as a function of product risk and personal relevance. A third paper by Nancy Artz examines framing effects of a different sort. The effect of numeric versus verbal message framing is explored as a function of source expertise and individual's predisposition to favor quantitative versus qualitative information. Finally, the last paper by Carolyn Yoon, Joan Meyers-Levy and Alice Tybout investigates yet another type of framing effect. This paper explores the extent to which simply framing a hypothetical event as having occurred in the past or as to take place in the future leads people to engage in alternative search processes in memory and thus results in the generation of event descriptions that vary in the degree of detail they contain and their predictability. More detailed abstracts of the papers provided by the authors are presented next.

ABSTRACTS

Framing of Attribute Information in Product Description

Gary J. Gaeth, Irvin P. Levin, Deborah A. Cours and Susan Combs
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Consumers' evaluation of products are influenced by the manner in which information about key attributes is labeled or "framed". In prior research we found that ground beef was judged to be of higher quality when it was labeled "75% lean" rather than "25% fat". However, the difference in response to "75% lean" and "25% fat" meat was attenuated when consumers actually tasted the meat (Levin and Gaeth 1988). Furthermore, both theory and research suggest that the temporal sequencing of information provided by outside sources (e.g., ads) and information gained from personal experience is a crucial factor affecting consumer impressions.

A recent study in our laboratory extends earlier work by examining the interactive effects of information frame and personal experience within a dynamic and realistic temporal sequence of information acquisition. College students were asked to evaluate the usefulness of a word processing system at different points in the following sequence of information and experience: basic introductory

literature about the system and description of available features; observations of the system in use; hands on experience with the word processor. These three phases were spaced one week apart. Subjects also received a "frame" which was a written summary of the effects of using the word processor on a previous class of students. This information was framed positively (% of students who improved their grade) for some subjects and negatively (% of students who did not improve their grade) for others.

Consistent with prior work, evaluation tended to be more favorable in the positive condition than in the negative condition, but the magnitude of this effect differed depending on when in the sequence the framed information was introduced and how often subjects were required to update their evaluations. When subjects were asked to re-evaluate their opinions following each new phase of information, a transient recency effect was obtained. That is, framed information presented at an early phase affected judgments at that point in time but not judgments made at a later date. By contrast, when subjects were asked to respond only at the end of the sequence of information (in some cases three weeks later), even early information had a long-term effect. This set of findings fits current theorizing on the role of response mode on belief updating (Hogarth and Einhorn 1989).

This study illustrates the value of using a well-established cognitive phenomenon, in this case the information framing effect, for discovering the influence of information introduced at varying times during the formation of product impressions. Our long-term goal is to use studies of this type to develop a comprehensive model of product impression formation based on varying amounts, source and sequences of product-relevant information.

Investigating Message Framing Effects on Consumer Judgments: The Influence of Personal Relevance and Product Risk

Joan Meyers-Levy, Northwestern University
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Research by Meyerowitz and Chaiken (1987) found that positively framed messages, which noted the positive consequences of using a product, were more effective than were negatively framed messages, which highlighted negative consequences. However, Levin and Gaeth (1988) observed reverse framing outcomes when they described a product using positively or negatively phrased attribute labels. The current research attempted to reconcile these disparate findings by positing that the direction of framing effects may depend on whether message information is processed in a detailed or cursory, heuristic manner.

In an experiment, subjects received manipulations intended to vary the degree to which they would use detailed or heuristic processing in comprehending message information that was positively or negatively framed to highlight either benefits gained or benefits foregone by

buying/failing to buy a product. More specifically, subjects were presented with materials that discussed the role of cholesterol in the development of heart disease. The degree to which subjects engaged in relatively detailed or heuristic processing was manipulated in two ways. First, the extent to which concern over cholesterol was portrayed as personally relevant to subjects was varied. Second, the tradeoff of product benefits and risk was varied by informing subjects that the advocated product involved a fairly high risk (i.e., a nine month test of the product by the American Heart Association showed that product use resulted in a significant reduction of cholesterol for 80% of test participants but 20% of participants evidenced enhanced cholesterol levels) or a relatively low risk (i.e., the corresponding percentages were 98% and 2%).

It was expected that detailed processing would be greatest in the high personal relevance/high product risk condition. As a result, negatively framed information, which was highly diagnostic and consequential to subjects, would receive disproportionate weight and impact relative to positively framed information and produce greater compliance. However, heuristic processing would be greatest in the low personal relevance/low product risk condition. Here it was anticipated that subjects might use the valence of the message frame as a heuristic cue for determining their disposition and the result would be greater compliance when the message was positively rather than negatively framed.

Results were consistent with the expectations. Indeed it appeared that negatively framed messages were more effective when people processed the message in a predominantly detailed manner, whereas positively framed messages were superior when the message was heuristically processed.

Individual Differences in Preference for Numeric/Verbal Framing

Nancy Artz, Northwestern University

A variety of researchers (e.g., Holbrook 1978; Scammon 1977; Yalch and Elmore-Yalch 1984) have examined the effects of numeric and verbal advertising claims (e.g., "3 grams of fiber" versus "high in fiber"). The mixed results these researchers observed are difficult to interpret because the numeric and verbal claims were not clearly designed to convey equivalent information. A study was undertaken with numeric and verbal claims that conveyed equivalent information to examine numeric/verbal execution as a framing device.

Subjects were presented either numeric or verbal claims about a cereal from either an expert or novice source. For example, the verbal claim included the phrase "contains average amount of protein" while the corresponding numeric claim was "contains 3 grams of protein average cereal has 3 grams."

Thus the numeric and verbal claims conveyed equivalent information but were framed with either

numeric or verbal execution. Subjects indicated their beliefs about the product's nutritiousness, and these responses served as a dependent measure in an ANOVA.

There was a significant three-way interaction between numeric/verbal frame, source expertise, and an individual difference variable of whether a person's undergraduate training was quantitative or qualitative ($p < .01$). Specifically, source expertise influenced product beliefs only when the numeric claim was presented to quantitatively oriented individuals.

Overall, the pattern of results suggests that there are individual differences in preference for numeric frames and this preference may play a motivational role in message processing. Individuals favorably predisposed to a particular frame appear to process claims using that frame versus the alternative one differently.

Exploring Temporal Perspective Framing Effects

Carolyn Yoon, Duke University

Joan Meyers-Levy, Northwestern University

Alice Tybout, Northwestern University

A somewhat tenuous observation that has emerged in the social cognition literature is that people's descriptions and judgments of hypothetical events differ depending on whether the events are retrospectively framed as having already occurred or prospectively framed as to occur in the future (Bavelas 1973; Webb and Watzke reported in Weick 1979). It appears that when individuals are asked to look backward and describe a hypothetical event, they write longer, more detailed, concrete, and conventional descriptions of it; when they look forward and describe this same event, their descriptions tend to be briefer, more abstract and they mention more unusual, unconventional features.

We hypothesized that such temporal framing effects might occur because of differences in the memory search processes and cognitive elaboration these temporal frames stimulate. Events that are situated in the future are by definition considerably undetermined or uncertain, and such uncertainty may prompt a broad search of memory. This broad search may absorb considerable processing time, thereby leaving less time for writing a description of the event. This broad search also is more likely to uncover unusual, less predictable outcomes that might be associated with the event. By contrast, hypothetical events that are situated in the past may be regarded as more certain, even if they are unknown to the individual. Accordingly, people may engage in a more constrained memory search, focusing on a most likely or representative (Kahneman and Tversky 1982) outcome given the situation. Thus people may report a familiar, prototypical event and this is likely to be elaborated on in considerable detail.

A study was conducted to explore the existence of such temporal perspective framing effects as they might relate to a consumer relevant situation and to investigate the plausibility of the

proposed explanation. Subjects were given a priming task intended to encourage either a narrow or broad search of memory. Then they were asked either to look forward or to look backward in time and describe the purchase behavior and situation that a hypothetical individual will confront/confronted when buying a gift for a parent.

Some evidence supported the prediction that relative to prospective framing, retrospective framing resulted in descriptions that were more detail specific (e.g., greater specification of the gift, more adjectives that described the gift, greater number of brands mentioned, etc.). Some evidence also suggested that such framing effects may stem from the breadth of memory search and elaboration stimulated by the temporal perspective frame.

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