

Effects of Product-Specific Word-of-Mouth Communication on Product Category Involvement

JOAN L. GIESE

Department of Marketing, Washington State University, Pullman, WA 99164-4730

ERIC R. SPANGENBERG

Department of Marketing, Washington State University, Pullman, WA 99164-4730

AYN E. CROWLEY

Department of Marketing, Drake University, Des Moines, IA 50311

Key words: word-of-mouth, involvement, product category

Abstract

Drawing primarily from categorization theory, this paper presents justification for the effects of word-of-mouth (WOM) communication on product category involvement. Results of an empirical test of this relationship are presented showing an enduring effect of positive WOM communication on product category involvement; this effect was not found for negative WOM. These results suggest that positive WOM about one firm's brand may help competitors by increasing involvement, thus generating more sales (not necessarily of one's own brand) in an entire product category. Our findings, coupled with categorization theory, provide support for a series of propositions presented concerning the effects of changes in product category involvement on nondiscussed brand attitudes and purchase intentions.

As perhaps the most influential source of consumer information, the study of word-of-mouth (hereinafter WOM) communication holds much potential for consumer researchers and practitioners. Although not extensively researched, studies examining the importance of WOM suggest it is a key factor in consumer decision making (e.g., Leonard-Barton, 1985; Price and Feick, 1984; Richins, 1983), and it has substantial influence on product evaluations and purchase decisions (Brown and Reingen, 1987; Price and Feick, 1984). WOM communication, for example, has been shown to have greater impact on product evaluations than printed information (Borgida and Nisbett, 1977; Herr, Kardes, and Kim, 1991). WOM may indeed play a key role in consumer decision making, but existing research leaves many unanswered questions regarding this role.

In marketing practice, proactive marketing strategies recognizing and taking into consideration the effects of WOM communication are commonly encouraged. WOM communications are perceived as so critical to success (or failure) that service firms are encouraged to proactively manage WOM communications (e.g., Zeithaml, Parasuraman, and Berry, 1985). Wilkie (1994) outlined four strategies for WOM: (1) discourage unfavorable WOM (e.g., dealing with rumors), (2) create favorable WOM (e.g., influentials' stimulation), (3) stimulate additional direct sales through WOM (referrals), and (4) simulate WOM in advertising (e.g., slice-of-life ad technique). While frequently accepted and employed

by many marketers, these strategies are not well justified in the literature. The effects of any of the above outlined strategies have not been fully identified, nor have they been empirically verified through research. Thus, the wisdom of incorporating WOM in marketing strategies, and how to develop this kind of strategy, is questionable until scholarly investigation provides clarification.

An important issue focuses on how WOM information ultimately affects product evaluations and purchase decisions. Exploratory findings suggest that WOM communication may indirectly affect sales by influencing consumers' level of involvement with the product category. Indeed, with source credibility as a covariate, involvement with resume writing software has been found to be significantly different as a result of the WOM condition to which subjects were exposed (Spangenberg, Giese, and Crowley, 1994). This significant interaction between valence of WOM information and involvement suggested that involvement may be something other than a covariate or moderating variable as it is commonly modeled. Specifically, Spangenberg, Giese, and Crowley (1994) found that positive (negative) WOM information about a specific product increased (decreased) consumers' involvement with an entire product category. If this is the case, negative information may not always result in only negative affective responses toward the mentioned brand (cf. Mizer-ski, 1982) but would result in weaker affective responses toward all brands in a product category. If this effect does generalize to a product category, the implications for managers could be significant in strategy development.

The above situation would most likely occur when consumers are not highly involved—conditions when WOM information would be most effective because consumers' product beliefs are not strongly held and consumers view brands as being less differentiated (Zaichkowsky, 1986). Conversely, this situation may not apply to low-involvement consumers "because they may not believe the communication would have personally relevant effects" (Zaichkowsky, 1986, p. 6). Thus, moderate involvement categories represent the most likely condition where product-specific WOM information would generalize across the product category. Moderate involvement categories, however, have been all but ignored in involvement research (see Andrews, Durvasula, and Akhter, 1990). This is ultimately important because of the potential impact on the many product categories for which consumers do not exhibit extreme (low or high) levels of involvement.

This paper presents an experimental test of theoretically driven hypotheses regarding the effects of positive and negative WOM information on a factor seldom considered as a dependent variable—product category involvement. Because involvement as a dependent variable is unaddressed in the literature, and word-of-mouth communication is relatively unexplored and difficult to manipulate, we designed a simple yet innovative study to test these relationships. Our somewhat surprising results raise questions concerning conventional beliefs regarding the effects of WOM communication; therefore, propositions for future research are developed.

1. Conceptual background

Zaichkowsky (1985, p. 342) defines *product involvement* as "a person's perceived relevance of the object based on inherent needs, values, and interests." Personal relevance is based

on the antecedents of involvement (Andrews, Durvasula, and Akhter, 1990) such as inherent needs, values, and interests (Zaichkowsky, 1985) evidenced by a person's knowledge, experience, and cognitive structure (Celsi and Olson, 1988) regarding the product category. Thus, by definition, high-involvement consumers have strongly held needs, values, and interests; conversely, low-involvement consumers have weakly held (or nonexistent) needs, values, and interests. As a consequence, involvement plays a role in determining consumers' attention and comprehension processes (Celsi and Olson, 1988). High-involvement consumers are more motivated to process messages, while low-involvement consumers lack the motivation to process messages and, instead, consider peripheral cues (such as source likeability) in forming attitudes. Furthermore, if consumers process messages more extensively, attitude change tends to be more enduring (Petty, Cacioppo, and Schumann, 1983).

When the personal relevance of a message is moderate or ambiguous, as we would expect under moderate levels of product category involvement, the source may influence the extent of message processing (Petty and Cacioppo, 1986). Subsequently, when consumers do not have well-defined brand beliefs, a personal information source is more persuasive in product evaluations than a nonpersonal source like advertising (Herr, Kardes, and Kim, 1991). Thus, when consumers are neither high nor low with regard to their level of involvement, the message source serves as a stimulus to encourage more extensive message processing (similar to high-involvement consumers) rather than, or in addition to, serving as a peripheral cue. Unlike consumers with high product category involvement, however, these moderately involved consumers are likely to be relatively less knowledgeable (Higie and Feick, 1989) and have more basic cognitive structures (Sujan and Dekleva, 1987).

Consideration of a person's cognitive structure regarding a product category (that is, how consumers categorize information), may shed insight on the nature of involvement. Bartlett (1932) contended that individuals organize their worlds according to "chunks" of knowledge. Rosch (1975) found that people group these chunks of knowledge into categories based on perceived similarities. Thus, an object is placed in a particular category if the object shares certain features with other objects in the category (that is, the object is typical of objects in the category). Furthermore, objects are categorized at the level that is most cognitively efficient and at which the information value of the categories is maximized (Rosch et al., 1976)—the most basic level. What constitutes the basic level varies by individual, depending (at least partially) on the level of expertise held by the individual. As individuals develop increased knowledge about a particular topic, categories implemented to process information become less basic and more specific (Mervis and Rosch, 1981).

Consistent with the literature on categorization, Sujan and Dekleva (1987) indicate that product type is most likely to be the basic level of categorization for most product offerings because of the perception of many shared attributes. This suggests that consumers view various brands of a particular product type as having similar attributes and thus categorize them together. This would be the case particularly for individuals who are relatively less knowledgeable about a particular domain (cf., Fiske, Kinder, and Larter, 1983). For example, consumers with limited knowledge about ice cream would most likely use "premium ice cream" as a level of categorization rather than "Haagen Dazs."

Because of the dynamic nature of memory, schemas or scripts (knowledge structures) are constantly modified to incorporate new knowledge, thus enhancing learning (Schank, 1982). This categorization system in memory facilitates generalization of knowledge learned

in one context to a separate, connected context as they are activated. For example, Schank (1982) described the memory structure of the more general "fast food" schema by indexing Burger King so that when entering McDonald's for the first time, the customer is reminded of Burger King. This occurs because the two fast food outlets share many attributes. Therefore, one would expect that if a consumer had limited knowledge about a product category, he or she would organize brands by product type, subsequently generalizing new information about a particular brand to other brands in the product category.

A lack of distinction within product categories is commonly associated with lower product involvement compared to high-involvement situations in which consumers clearly differentiate between alternative brands. Under the low-involvement scenario, brands in a product category would be perceived as nondifferentiated, acceptable substitutes (Zaichkowsky, 1986). Korgaonkar and Moschis (1982) use this notion of differentiation between alternative brands to distinguish between high-involvement and low-involvement product categories, finding that subjects were less susceptible to negative information if products were classified as high involvement. This rationale suggests that consumers under high involvement hold firm beliefs about product attributes and are influenced only by strong quality arguments, whereas under lower involvement, beliefs are not strongly held and hence are more easily influenced. This conclusion suggests that product-specific WOM information (or any product information for that matter) may affect perceptions of an entire product category where consumers have organized brands according to a product type schema. This is most likely to occur when perceived differences among brand alternatives are small or nonexistent, perhaps due to relatively low levels of knowledge or involvement concerning the product category.

As mentioned above, Higie and Feick (1989) indicate that consumers with high involvement are likely to be more knowledgeable about a respective product category. Much earlier, Howard and Sheth (1969) considered involvement with products to lead to greater perception of difference between attributes—that is, the more knowledgeable or involved consumers are, the more able or motivated they are to detect differences between attributes of brands within product categories. While knowledge is not interchangeable with involvement, it is reasonable to expect that the implications for categorization structures would be comparable for the two constructs. This could explain how brand-specific information would generalize to the entire product category under some conditions. Thus, as a consequence of more extensive message processing within a basic cognitive structure, an increase or decrease in interest of a mentioned brand could result in increased or decreased consumer interest in the entire product category. By definition, this increase (decrease) in interest would positively (negatively) influence consumer involvement with the product category. Furthermore, the change in involvement should be relatively enduring because of the central processing approach (Petty, Cacioppo, and Schumann, 1983).

2. Hypotheses

Given the empirical and conceptual support described above, we expect levels of involvement for a product category, not merely cognitive and affective perceptions of a specific brand within the category, to be affected by product-specific WOM communication. Thus, under initial conditions of moderate involvement, we hypothesize the following:

Hypothesis 1: *Brand-specific negative WOM information will significantly decrease product category involvement.*

Hypothesis 2: *Brand-specific positive WOM information will significantly increase product category involvement.*

Hypothesis 3: *These changes in product category will be enduring.*

3. Method

3.1. Design and subjects

A between-subjects design with a control group was used. The treatment factor consisted of negative WOM information, positive WOM information, and no information. Eighty-two subjects from an undergraduate course at a large northwest university participated in the experiment as part of their regular coursework and for extra credit. An initial screening survey and the subsequent experiment coincided with discussions of marketing research in the course; the experiment was therefore perceived as part of their course and not a research project.

3.2. Materials and measures

3.2.1. Videotape. Each of the three treatment groups watched a fifteen-minute videotaped focus group. The focus group was videotaped earlier using typical college students discussing their activities, interests, and opinions so that a hypothetical company could make a determination about how to segment their markets for premium ice cream products. No brand-specific information was discussed in the videotaped session.

3.2.2. Product category. A pretest using seventy undergraduate students was conducted to identify an appropriate product category. Of the several product categories tested, premium ice cream was considered most appropriate because pretest subjects indicated generally moderate to high levels of familiarity (86 percent indicated that they were either "somewhat familiar" or "quite familiar") and showed large relative variance in product category involvement. Familiarity was used to choose the product category as a sufficient level of the construct was necessary to insure that the manipulation would be processed (Andrews, Durvasula, and Akhter, 1990). We also sought a category with variance in involvement in our student population; if a majority of subjects were highly involved with the product category, our hypotheses could not have been tested.

3.2.3. Independent variable. Two levels of valence (positive or negative) of WOM information were manipulated in the experimental sessions. The confederate student made one of two statements in respective sessions. The control group received no WOM information. Treatment manipulation statements were as follows:

- *Cell 1 (positive)*: "The other day a friend and I tried both the regular and the low-fat versions of Ben and Jerry's ice cream. We couldn't believe how good they both tasted. They were so creamy. We were really impressed."
- *Cell 2 (negative)*: "The other day a friend and I tried both the regular and the low-fat versions of Ben and Jerry's ice cream. The regular Ben and Jerry's was so rich it made me sick, but the low fat version had no taste. We were both disappointed."
- *Cell 3 (control)*: No statement was made.

3.2.4. Dependent variable. Product category involvement was used as the main criterion variable in this study. Pre- and post-manipulation, and two-week delay product category involvement measures were taken using the ten-item revised version of Zaichkowsky's (1985) Personal Involvement Inventory (PII) (Zaichkowsky, 1994).

3.2.5. Potential covariates. WOM information transfer is an interpersonal form of communication. As such, a measure of susceptibility to interpersonal influence (Bearden, Netemeyer, and Teel, 1989) was included as a potential covariate; this construct did not account for a significant amount of variance in any of our tests, and therefore we do not discuss the construct hereafter. Pretest results suggested that level of familiarity varies with level of involvement; whether this is a result of, or results in, greater involvement is not known. This theorization led to inclusion of familiarity as a potential covariate which is discussed further below.

3.3. Procedure

During the first week of class sessions, subjects completed a survey to determine baseline involvement scores for several product categories including the focal product category of premium ice cream; five subjects were dropped at this point because they had no familiarity and extremely low pretest involvement with the target product category. Subjects were asked to volunteer for one of three sessions as role-playing participants in a focus group. In each condition, four round tables seating twelve to thirteen people were used. In order to involve subjects in the experiment and give the "feel" of a focus group as much as possible, each subject received a can of soda and a name card. Because subjects were assuming the role of focus group participants, they were asked not to talk with other classmates between sessions so that other participants could attend the session as free from bias as possible. To further minimize potential demand artifacts, all sessions were run in the same afternoon of one day; sessions were also spaced one hour apart to limit interaction between arriving and departing subjects.

Each of the three treatment groups watched the same fifteen-minute videotaped focus group, ostensibly providing students with insights concerning focus group participation and facilitation. No evaluative statements were made concerning product categories or brands within product categories on the videotape or in the treatment sessions other than the manipulation.

Immediately following each viewing of the videotape, the moderator/instructor asked for comments. In the two treatment groups, a paid student confederate made a single

comment (negative or positive, respectively) concerning a *specific brand* of premium ice cream. The conditions were assigned randomly to time slots prior to the experiment and were blind to the moderator until the comment was made. After the spoken manipulation, but before any other comments could be made, the moderator politely thanked the confederate (by the name "Jennifer"; her real name was not shared with anyone in the participating classes) for the comment, explaining, however, that the purpose of the special session was to understand the techniques of focus group interviewing not to make evaluative judgments. A ten-minute structured lecture concerning focus group interviewing and a short quiz followed. The quiz reinforced the connection of the special session with the regular course and also provided a manipulation check to determine the level of attentiveness to the session. Following the experiment, another experimenter entered the room (and the moderator left) to collect data for an "unrelated research study." The dependent measures were imbedded in this survey. The same procedure was used for the control group; the confederate was in attendance but did not speak. The confederate was seated in the same position in the room in all three conditions.

As a measure of the lasting effect of our manipulation, approximately two weeks later an experimenter posing as a representative from a local grocery store came into each classroom and asked for subjects' participation. He indicated that marketing researchers at the university had assisted in the design of this survey to help a local grocer better understand college students' buying behavior. This survey included involvement scales for several product categories including the target product category, ongoing search measures, attitudes, and purchase behavior measures. As a manipulation check, after completing this survey, students were asked by a separate researcher whether they remembered "Jennifer," 53 percent of exposed subjects recalled her presence in the sessions. An earlier manipulation check would have more appropriately demonstrated the effectiveness of the manipulation; however, we could not risk hypothesis guessing prior to collecting our two-week delay measure of involvement.

The experimental procedure described above was pretested prior to the actual experiment using a different but demographically similar group of college students. This pretest group was debriefed in an attempt to detect any demand effects that could result in bias; none of the pretest subjects detected the presence of the confederate or guessed our hypotheses.

In every case, the relevant measurements regarding the target product category were imbedded in several measures regarding distractor product categories (such as credit cards, discount stores, and laundry detergent). This was to disguise the product category of interest thus minimizing potential demand artifacts or hypothesis guessing.

4. Results

The main tests of significance were conducted as analyses of covariance in the three-condition (WOM: positive, negative, control) experiment using the immediate posttest and two-week delay measures of involvement as criterion variables and the pretest measure of involvement as covariate (cf., Cronbach and Furby, 1970; Peter, Churchill, and Brown, 1993). Familiarity was included as a significant covariate in the analysis. Because the data collection

sessions were separated by time, experimenter, and location, there is a difference in number of subjects at each stage (that is, some subjects did not show up for every session).

Figure 1 shows adjusted mean values for pretest, immediate posttest, and two-week delay product category involvement. There was no statistically significant difference between the negative WOM and control conditions for both the immediate and delayed measures (both F 's < 1). Thus, Hypothesis 1 was not supported: there was no effect of negative WOM communication as compared to the control condition. Hypothesis 2 was supported: there was a statistically significant immediate increase in product category involvement for subjects exposed to positive WOM communication compared to subjects in the control and negative WOM conditions ($F(1, 81) = 4.72, p = .033$). The immediate effects on involvement also held over time; for the two-week delayed product category involvement measure, the positive WOM condition was significantly greater than the negative WOM and control conditions ($F(1, 66) = 4.10, p = .047$) which did not differ statistically at the delay. Thus, Hypothesis 3 was supported for the positive WOM condition.

5. Discussion

This study demonstrates that product category involvement is increased by positive product-specific WOM information, but not decreased by negative product-specific WOM information. A major implication of this finding is that positive WOM about your brand may

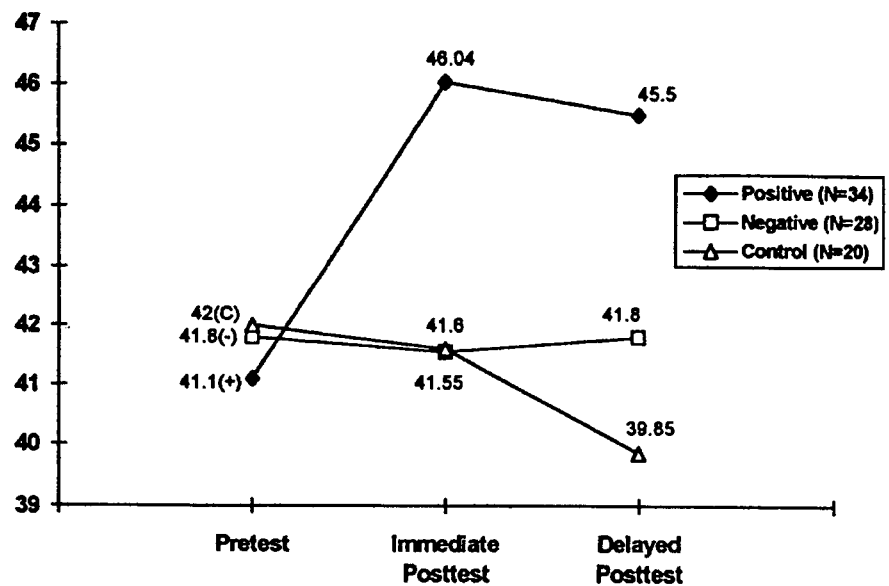


Figure 1. Product category involvement by WOM communication condition.

help your competition by increasing involvement level, thus generating more sales (not necessarily of your brand) in the entire product category. That is, if product category involvement is increased by positive, product-specific, WOM communication, the ultimate purchase made by consumers may not necessarily be the brand about which the positive WOM information was advanced. In other words, a nondiscussed brand may be purchased.

From a different perspective, if involvement increases within a product category to the extent that consumers differentiate more carefully between brands, the finding that product category involvement is affected by WOM information is of further import to practitioners, particularly in a market with many customers locked in a routine problem-solving (RPS) framework. A WOM campaign may generate greater consumer involvement within a product category, resulting in more information-seeking and thus better-informed consumers. If we have a better product than that of the competition, we may capture the more involved consumers from competitors' previously uninvolved loyal RPS purchasers; however, this also suggests the counterintuitive notion that positive WOM could be ultimately damaging to market share for some firms. Further research should be conducted to determine how WOM can influence variables like brand-specific purchase intention and purchase frequency.

Our unexpected result regarding negative WOM information may not be overly surprising. This result coincides with that of Ray and Wilkie (1970) regarding advertising fear appeals: if a given appeal or message is too strong or negative, people may avoid the message or mentally "write off" the recommendation being made in the message. Thus, the kind of information presented may partially account for our results. Furthermore, incongruity between the very positive overall context and the very negative information could have elicited these results. Mizerski (1982) suggests that an attribution threshold operates in situations where "the expectancy of favorable information is particularly strong, [thus,] unfavorable information would not be viewed as credible" (p. 308). It is interesting to note that, in a study replicating Petty, Cacioppo, and Schumann's (1983) test of their elaboration likelihood model, negative nonverbal behaviors disrupted argument processing (Huddleston, 1985). This implies that negative communication effects are possibly more complex than positive communication effects, and it is not uncommon to obtain unanticipated negative communication results. Future research is warranted to address negative communication processing.

Our results are consistent with the findings of Sujana and Dekleva (1987) indicating that product type is most likely to be the basic level of categorization for product offerings because of the perception of many shared attributes (product category is likely more cognitively efficient than brand-level categorization). Although our data do not directly address the issue, and what constitutes a basic level of categorization varies by individual, our findings are not counter to the idea that some product categories are more or less differentiated than others. In general, this study supports the expectation that consumers with limited knowledge about a product category organize brands by product type, subsequently generalizing new information about a specific brand to the product category.

As with any study, this one has limitations. Most important, the study focuses on only one brand and one product category. Thus, the generalizability of our conclusions across product categories and settings cannot yet be determined. Given this limitation, further empirical evidence is necessary before we can generally conclude that positive and negative WOM communication will have the effects we have found in other contexts.

6. Propositions for future research

Research on WOM communication, its definition, measurement, manipulation, and subsequent effects on various dependent variables has been sporadic and generally unfocused as a stream of research. This is due, in part, to special challenges regarding effective manipulation of WOM in the laboratory, while maintaining an acceptable level of external validity. Little generalizable research has emerged and methods of study are diverse and unstandardized. More specifically, further research should be conducted to determine how WOM can influence variables like brand-specific purchase intention and frequency. Based on our findings and relevant theoretical relationships, we have developed a set of propositions to guide future research.

6.1. Context propositions

Motivating consumers to process messages is an essential first step in persuasion (Petty and Cacioppo, 1986). Contextual factors may influence the extent to which consumers perform this first step. Two contextual issues are presented based on relevant research. First, although little research has directly addressed the issue, Petty and Cacioppo (1986) suggest that when consumers are moderately involved, the source may affect their motivation to process the message. Research has shown that WOM communication has a greater impact on product evaluations than printed information (Borgida and Nisbett, 1977; Herr, Kardes, and Kim, 1991). Thus, we propose that when a consumer is moderately involved with a product category, a personal source providing WOM information would be more influential on consumers' motivation to process messages than nonpersonal sources, such as advertising. In cases where consumers experience an "attribution threshold" (Mizerski, 1982), consumers would be less motivated to process the WOM message:

Proposition 1: *Under moderate involvement, consumers are more motivated to process messages when the source is personal rather than nonpersonal.*

Proposition 2: *Consumers are less motivated to process WOM messages when the valence of the context is incongruent with the valence of the message.*

6.2. Brand attitudes and purchase intention propositions

Categorization theory (discussed in Section 1) would suggest that under conditions where message recipients do not have a detailed cognitive structure, which would be the case under moderate levels of involvement (cf. Celsi and Olson, 1988), consumers would tend to generalize brand-specific information to the entire product category because that is most cognitively efficient and information value is maximized (Rosch et al., 1976).

Although not empirically tested, anecdotal evidence supports this contention. In 1991, bottled water sales were growing at less than 1 percent, well below the expected double-digit growth trend. Some industry analysts blamed the overall economic recession, while

"other bottled water analysts attribute the category's woes in part to industry leader Perrier's 1990 recall. Negative publicity and broken habits may have spurred some bottled water loyalists to fall away from the fold" (*Beverage World*, 1992-1993, p. 16). This is consistent with our contention that information about a single brand can affect an entire product category. Thus, we propose examining brand-specific WOM information's impact on all brands in a product category:

Proposition 3: *If consumers do not perceive attribute differences between brands, brand-specific word-of-mouth information affects consumer's attitudes toward all brands in the product category.*

Proposition 4: *If consumers do not perceive attribute differences between brands, brand-specific word-of-mouth information affects purchase intentions of all brands in the product category.*

Proposition 5: *If consumers perceive attribute differences between brands, brand-specific word-of-mouth information affects only consumers' attitude toward the discussed brand.*

Proposition 6: *If consumers perceive attribute differences between brands, brand-specific word-of-mouth information affects only consumers' purchase intention of the discussed brand.*

7. Conclusion

The main contribution of this article is a balanced theoretical justification for the effects of WOM communication on product category involvement and a set of testable propositions focusing on two heretofore relatively unexamined topics—WOM communication and moderate levels of product category involvement. WOM communication research is important and relevant to marketing researchers and managers. The results of our study show an effect of positive WOM communication on product category involvement. Furthermore, our results combined with categorization theory provide the support to make propositions concerning the effects of changes in product category involvement on nondiscussed brand attitudes and purchase intentions. Given the potential impact on product sales, this paper calls for future research to address these important issues. It is our hope that our work will motivate and facilitate more clearly directed, programmatic research addressing both theoretical and normative questions regarding WOM communication.

References

- Andrews, J. Craig, Srinivas Durvasula, and Syed H. Akhter. (1990). "A Framework for Conceptualizing and Measuring the Involvement Construct in Advertising Research." *Journal of Advertising* 19(4), 27-40.
- Bartlett, F.C. (1932). *Remembering: A Study in Experimental and Social Psychology*. Cambridge: Cambridge University Press.

- Bearden, William O., Richard G. Netemeyer, and Jesse E. Teel. (1989). "Measurement of Consumer Susceptibility to Interpersonal Influence." *Journal of Consumer Research* 15 (March), 473-481.
- Beverage World Databank*. (1992-1993). "The Beverage Market Index for 1992: Bottled Water." Great Neck, NY: Keller International Publishing Corporation.
- Borgida, Eugene and Richard E. Nisbett. (1977). "The Differential Impact of Abstract vs. Concrete Information on Decisions." *Journal of Applied Social Psychology* 7 (July-August), 258-271.
- Brown, Jacqueline Johnson and Peter H. Reingen. (1987). "Social Ties and Word-of-Mouth Referral Behavior." *Journal of Consumer Research* 14 (December), 350-362.
- Celsi, Richard L. and Jerry C. Olson. (1988). "The Role of Involvement in Attention and Comprehension Processes." *Journal of Consumer Research* 15 (September), 210-224.
- Cronbach, Lee J. and Lita Furby. (1970). "How We Should Measure 'Change'—or Should We?" *Psychological Bulletin* 74 (July), 68-80.
- Fiske, Susan T., Donald R. Kinder, and W.M. Larter. (1983). "The Novice and the Expert: Knowledge-Based Strategies in Political Cognition." *Journal of Experimental Social Psychology* 19, 381-400.
- Herr, Paul M., Frank R. Kardes, and John Kim. (1991). "Effects of Word-of-Mouth and Product-Attribute Information on Persuasion: An Accessibility-Diagnosticity Perspective." *Journal of Consumer Research* 17 (March), 454-462.
- Higie, Robin A. and Lawrence F. Feick. (1989). "Enduring Involvement: Conceptual and Measurement Issues." *Advances in Consumer Research* 16, 690-696.
- Howard, John A. and Jagdish N. Sheth. (1969). *The Theory of Buyer Behavior*. New York: John Wiley.
- Huddleston, B.M. (1985). "An Experimental Investigation of the Influence Deceptive Nonverbal Cues Exert on Persuasive Processes." Doctoral dissertation, University of Missouri.
- Korgaonkar, P.K. and George P. Moschis. (1982). "An Experimental Study of Cognitive Dissonance, Product Involvement, Expectations, Performance and Consumer Judgment of Product Performance." *Journal of Advertising* 11(3), 32-44.
- Leonard-Barton, Dorothy. (1985). "Experts as Negative Opinion Leaders in the Diffusion of a Technological Innovation." *Journal of Consumer Research* 11 (March), 914-926.
- Mervis, Carolyn B. and Eleanor Rosch. (1981). "Categorization of Natural Objects." *Annual Review of Psychology* 32, 89-115.
- Mizerski, Richard W. (1982). "An Attribution Explanation of the Disproportionate Influence of Unfavorable Information." *Journal of Consumer Research* 9 (December), 301-310.
- Peter, J. Paul, Gilbert A. Churchill, Jr., and Tom J. Brown. (1993). "Caution in the Use of Difference Scores in Consumer Research." *Journal of Consumer Research* 19 (March), 655-662.
- Petty, Richard E. and John T. Cacioppo. (1986). *Communication and Persuasion: Central and Peripheral Routes to Attitude Change*. New York: Springer-Verlag.
- Petty, Richard E., John T. Cacioppo, and David Schumann. (1983). "Central and Peripheral Routes to Advertising Effectiveness: The Moderating Role of Involvement." *Journal of Consumer Research* 10, 134-148.
- Price, Linda L. and Lawrence F. Feick. (1984). "The Role of Interpersonal Sources in External Search: An Informational Perspective." *Advances in Consumer Research* 11, 250-255.
- Ray, Michael L. and William L. Wilkie. (1970). "Fear: The Potential of an Appeal Neglected by Marketing." *Journal of Marketing* 34 (January), 54-62.
- Richins, Marshal L. (1983). "Negative Word-of-Mouth by Dissatisfied Consumers: A Pilot Study." *Journal of Marketing* 47 (Winter), 68-78.
- Rosch, Eleanor. (1975). "Cognitive Representations of Semantic Categories." *Journal of Experimental Psychology: General* 104, 192-223.
- Rosch, Eleanor, et al. (1976). "Basic Objects in Natural Categories." *Cognitive Psychology* 8, 382-439.
- Schank, Roger C. (1982). *Dynamic Memory: A Theory of Reminding and Learning in Computers and People*. New York: Cambridge University Press.
- Spangenberg, Eric R., Joan L. Giese, and Ayn E. Crowley. (1994). "Word-of-Mouth Communication: Some New Issues." Working paper, Washington State University.
- Sujan, Mita, and Christine Dekleva. (1987). "Product Categorization and Inference Making: Some Implications for Comparative Advertising." *Journal of Consumer Research* 14 (December), 372-378.
- Wilkie, William L. (1994). *Consumer Behavior*. New York: John Wiley.

- Zaichkowsky, Judith Lynne. (1985). "Measuring the Involvement Construct." *Journal of Consumer Research* 12 (December), 341-352.
- Zaichkowsky, Judith Lynne. (1986). "Conceptualizing Involvement." *Journal of Advertising* 15(2), 4-14.
- Zaichkowsky, Judith Lynne. (1994). "The Personal Involvement Inventory: Reduction, Revision and Application to Advertising." *Journal of Advertising* 23(4), (December), 58-70.
- Zeithaml, Valarie A., A. Parasuraman, and Leonard L. Berry. (1985). "Problems and Strategies in Services Marketing." *Journal of Marketing* 49 (Spring), 33-46.

Copyright of Marketing Letters is the property of Springer Science & Business Media B.V.. The copyright in an individual article may be maintained by the author in certain cases. Content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.