

EFFECTS OF DECEPTIVE PACKAGING AND PRODUCT INVOLVEMENT ON PURCHASE INTENTION: AN ELABORATION LIKELIHOOD MODEL PERSPECTIVE¹

H. BRUCE LAMMERS

*Department of Marketing
California State University, Northridge*

Summary.—From an Elaboration Likelihood Model perspective, it was hypothesized that postexposure awareness of deceptive packaging claims would have a greater negative effect on scores for purchase intention by consumers lowly involved rather than highly involved with a product ($n=40$). Undergraduates who were classified as either highly or lowly ($n_s=20$ and 20) involved with M&Ms examined either a deceptive or nondeceptive package design for M&Ms candy and were subsequently informed of the deception employed in the packaging before finally rating their intention to purchase. As anticipated, highly deceived subjects who were low in involvement rated intention to purchase lower than their highly involved peers. Overall, the results attest to the robustness of the model and suggest that the model has implications beyond advertising effects and into packaging effects.

The Elaboration Likelihood Model of persuasion contends that there are two paths to persuasion: a *central route* in which consumers who are highly motivated and able to process a communication engage in elaborative processing of the central information provided and a *peripheral route* in which consumers who are less motivated or able to process the communication tend to focus on the peripheral, ancillary cues associated with the communication, e.g., the sexy models in the advertisement, the cute puppies, the celebrity endorsers, and so forth (Petty, Cacioppo, & Schumann, 1983). Persuasion and learning effects which result from central information processing are said to be stronger and more lasting than effects resulting from peripheral cue processing (cf. Homer & Kahle, 1990). A major purpose of the present study was to test experimentally the Elaboration Likelihood Model within the consumers' responses to deceptive packaging claims.

In the present study, subjects examined an M&Ms package design and afterwards were informed of the relative deceptiveness of the design. From an Elaboration Likelihood Model perspective, it was hypothesized that subjects who were lowly involved with the product would react more negatively to a deceptively packaged product than would subjects who were highly in-

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volved with the product. This hypothesis presumes that persons who are highly involved with a product are more likely to discount the deceptiveness of the packaging claims because such cues may be relatively peripheral to the central, inherent virtues, e.g., the taste, of the product. Conversely, lowly involved subjects, being theoretically more sensitive and susceptible to peripheral cues than to central product information, should be less likely to discount the deceptiveness of the packaging claims.

METHOD

The experimental design was a 2×2 with Deceptiveness of Packaging (Low deceptiveness vs High deceptiveness) and Involvement (Low vs High) as the between-subjects factors. Undergraduates (18 women and 22 men) recruited from introductory business courses required of all business majors volunteered to participate in a study on "candy preferences" and were randomly assigned to the Deceptiveness of Packaging conditions. Deceptiveness of Packaging was manipulated by using two authentic package designs for M&Ms. In the early 1980s, M&M/Mars changed their package design to one which included the true claim, "NEW, LARGER PACKAGE"; however, the new package actually contained *fewer* M&Ms and the content weight was actually *less* than the original, smaller package. M&M/Mars quickly dropped the new package design after receiving numerous criticisms from the advertising and marketing industry. In the present experiment, subjects were shown either the original, nondeceptive M&Ms package (Low Deceptiveness of Packaging) or the "NEW, LARGER PACKAGE" design (High Deceptiveness of Packaging).

After examining the package design, subjects were asked to complete a questionnaire containing the manipulation check on the deceptiveness of the packaging and a measure of attitude toward the product followed by the Personal Involvement Inventory (Zaichowsky, 1985). This inventory purports to measure the extent of involvement with products. Its development was based on consumer research which questioned the portrayal of the consumer as an active information processor (Kassarjian, 1981). The inventory contains 20 Semantic Differential-like items such as important-not important, matters to me-does not matter to me, and valuable-worthless. A median split of Personal Involvement Inventory scores ($Mdn = 74$) was used to classify the subjects as having relatively low or high involvement with M&Ms ($n_s = 20$ and 20).

Finally, subjects were shown both the deceptive and nondeceptive versions of the package design and were asked to indicate on a scale of 0 to 100% the likelihood they would purchase some M&Ms within the next 30 days.

RESULTS

Psychometric Check on the Personal Involvement Inventory

A principal components analysis with varimax rotation on the intercorrelation matrix for the 20-item Personal Involvement Inventory showed that the scale was unidimensional (eigenvalue=12.41, 62% of explained variance). A scree test eliminated two other factors with low eigenvalues (eigenvalues=1.55 and 1.40). In addition to being unidimensional, the Personal Involvement Inventory also had high internal consistency (coefficient alpha=.97). Overall, the results of the principal components analysis and the reliability test were highly consistent with the findings of Zaichowsky (1985).

Effectiveness of Deceptive Packaging Manipulation

To judge whether the package designs differed in deceptiveness, subjects were asked to estimate how many M&Ms were in the package. Subjects in the High Deceptiveness of Packaging group estimated that there were more M&Ms in the package than did subjects in the Low Deceptiveness of Packaging group ($M_H=38.0$ vs $M_L=27.7$; $F_{1,36}=6.35$, $p=.02$). No other effects were statistically significant.

In addition, a main effect of involvement on attitude toward the product (prior to being informed of the consumers' deception) fell short of significance. The means suggested highly involved subjects ($M=2.0$ on a -3 to $+3$ scale) evaluated the product somewhat more favorably than did low involved subjects ($M=1.2$; $F_{1,36}=3.35$, $p=.08$). No effects were significant.

Intention to Purchase

The very last item on the questionnaire was one which first showed subjects *both* package designs in juxtaposition and explained that both package designs had actually been used for M&Ms. The subjects were then asked to indicate the likelihood of purchasing a package of M&Ms within the next 30 days on a scale from 0 to 100%.

A significant interaction for deceptiveness of packaging \times involvement on intention to purchase ($F_{1,36}=5.87$, $p=.02$) showed that the highly involved subjects who had initially been exposed to the deceptive package design gave higher scores on intention to purchase ($M=55.0$) than did the lowly involved subjects ($M=14.7$). Duncan's multiple-range tests showed that the means of Deceptiveness of Packaging group (55.0 and 14.7) were statistically different from one another ($p<.05$). No other internal comparisons were statistically significant. The subjects in the low deceptiveness of packaging condition did not differ as a function of involvement (M s of 41.5 and 41.9 for lowly and highly involved subjects, respectively; see Fig. 1).

In addition to the significant interaction, a main effect of involvement showed that highly involved subjects gave higher scores on intention to pur-

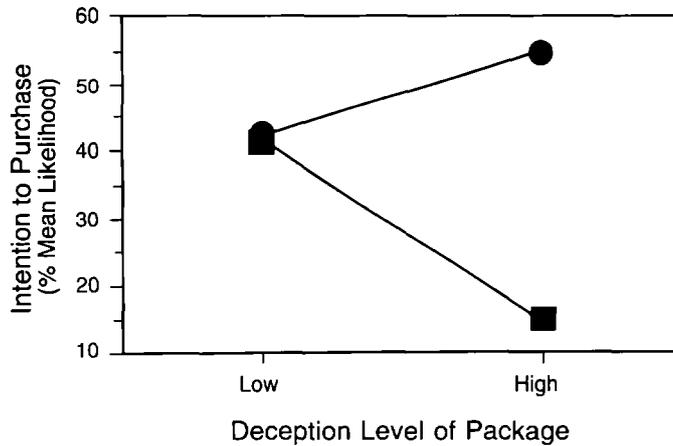


FIG. 1. Interaction of deception and involvement on intention to purchase. (●) High Involvement, (■) Low Involvement

chase than did lowly involved subjects ($M_{\text{High}}=46.9$ vs $M_{\text{Low}}=25.3$; $F_{1,36}=5.66$, $p=.02$). This main effect should, however, be interpreted in terms of the significant interaction just described.

DISCUSSION

Overall, the results supported the Elaboration Likelihood Model hypothesis that persons highly involved with a product are more likely to discount negative peripheral cues about that product (here, deceptive packaging) than are less involved persons. Specifically, when subjects were first exposed to a deceptive package design and were later informed of its deceptiveness (which is a situation somewhat analogous to a public disclosure of a deceptive marketing claim), scores on intention to purchase were higher for those subjects who were relatively more involved with the product than for subjects who were less involved.

Interestingly, when subjects were first exposed to a nondeceptive package design and were later informed of the existence of a separate deceptive package design for the product, scores on intention to purchase did not significantly differ between high and low involvement subjects. Perhaps these persons did not take the deception as "personally" as did the group who had received prior exposure to the deceptive package, leading to an attenuation of the difference between the two groups.

The present results attest to the robustness of the Elaboration Likelihood Model and suggest that the Elaboration Likelihood Model has implications which stretch beyond advertising effects and on into packaging effects; however, there are many aspects of the present study which limit the exter-

nal validity of the findings. Most of these limitations are those associated with laboratory-like experimentation, namely, testing undergraduates as subjects, the use of a single product's package designs, the artificial nature of examining a package design in a controlled environment, and so forth.

These findings imply that marketers who engage in deceptive practices concerning the peripheral aspects of a product may be rebuked by consumers who, ironically, are the less involved consumers of the product. To the extent that most consumers' purchases appear to be made under low involvement rather than under high involvement (Kassarjian, 1981; Hawkins & Hoch, 1992), the potential extent of subsequent consumer fallout from some deceptive practices could be significant and suggests marketers may need to take precautions to protect their consumers from such deception.

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