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A means-end analysis of brand persuasion through advertising

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Abstract

This study examines the explanation of brand persuasion through communicating means-end levels of information (attributes, consequences and values) in commercials. It is argued that consumers perceive the personal relevance and desirability of product attributes in terms of their association with personal consequences of product usage. Similarly, the relevance and desirability of personal consequences are derived from their association with a consumer's personal values. It is predicted and supported that the strength of association between means-end information communicated by an ad will contribute to the explanation of brand persuasion. Support is also obtained for the prediction that the effect on brand persuasion of communicating means-end associations will be stronger for those who are not loyal users of the brand, since those persons have more to learn about the personal relevance and desirability of the means-end information provided by the associations between levels.

Keywords: Advertising; Persuasion; Copy-testing; Means-end; Associative memory

1. Introduction

Throughout the twentieth century, many have argued that the principal task of advertising is to persuade consumers (to buy) through communicating personally relevant messages (Starch, 1914; Brewster et al., 1947; Davis, 1955; Burton and Kreer, 1962; Mandell, 1974; Rothchild, 1987). Far less consistent are the discussions about how to make ad messages personally relevant and persuasive. This study argues for using means-end theory to describe how the content and structure

of certain types of information in an ad message provides personally relevant meaning to a recipient, which determines brand persuasion.

In the following sections, we discuss means-end theory and its relevance to ad communications. Next, we describe how the communication of means-end information in an ad influences brand persuasion. Then, we present the results of a study that test several hypotheses. Finally, we discuss the relevance of our findings for means-end theory and advertising practice.

1.1. Means-end theory

Means-end theory (Howard, 1977; Young and Feigin, 1975; Gutman, 1982) proposes that con-

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sumer product knowledge is hierarchically organized, spanning different levels of abstraction. Consumers may "know" products in terms of the attributes they possess, the personal consequences of using the products, and the personal values they satisfy. The more abstract levels of knowledge or meaning subsume (stand for) the more concrete levels of knowledge or meaning (Peter and Olson, 1987). The theory further argues that the higher the level of abstraction, the stronger and more direct is the relationship to the self (Olson and Reynolds, 1983). Thus, personal consequences are more germane to the self than product attributes and personal values are more germane to the self than personal consequences.

At the most concrete level are attributes. Consumers infer that products *have* attributes, some of which are more concrete (contains lanolin), and some of which are more abstract (good quality). At the next highest level of abstraction are personal consequences. Product usage *results* in consequences, which also may vary on the concreteness/abstractness continuum. Some consequences are "functional," and more concrete, in that they reflect whether a product performs as intended (manageable hair). Other, more abstract, "psychosocial" consequences reflect the personal and social outcomes of product usage (admiration from friends).

At the highest level of abstraction are the personal values satisfied by using a product. Rokeach (1973) defines "terminal values" as desired end states of existence, such as self-esteem. These are viewed as more abstract than "instrumental" values, or preferred modes of conduct, such as being self-reliant, which are important (instrumental) in attaining desired end states.¹

Means-end theory treats attributes, consequences and values as the basic *content* of consumer product knowledge stored in memory. Un-

derstanding this product-related knowledge across these levels of meaning has utility to the marketer, but the organization or structure of this content (what is related to what) is also important. As noted by Gutman (1982), the implicative *relationships* between the means-end levels of abstraction should be a central focus of concern. The personal consequences associated with an attribute provide the personal meaning of that attribute to a consumer. Consequences represent the reasons why an attribute is important to someone and why it is positively or negatively valenced ("low alcohol content in a wine cooler is important to me because I don't like getting intoxicated when I drink"). This interpretation process, however, involves still another step: consequences derive valence and importance because of their perceived ability to satisfy personal values. Consequences acquire meaning because they are seen as instrumental in achieving values central to the self ("not getting intoxicated when I drink is important to me because it helps me feel better about myself afterwards").

The implicative relationships between the means-end levels of abstraction represent the *structure* of consumer product knowledge. These propositional links provide "bridges" by which less self-relevant and valenced information gains greater self-relevant status and desirability. Conceptually, these linkages/associations between means-end elements can be viewed as mental connections or bonds between the different levels of product knowledge. These linkages between the levels of abstraction can be combined into "means-end chains," connecting attributes ("when I drink wine coolers with less alcohol") to consequences ("I don't feel intoxicated") to values ("and I feel better about myself afterwards"). In this sense, then, product attributes are the "means" by which a consumer is able to achieve the desired "end" state of existence associated with value satisfaction.

Essentially, means-end theory offers a way to understand how concrete product meanings gain self-relevance and desirability to consumers through their linkages, or associations, with more abstract product meanings. Self-relevant and desirable product meanings are presumed to be the

¹ The preceding conceptualization of six levels of abstraction across attributes, consequences and values is from Peter and Olson (1987). In this study, as later explained, four levels of abstraction will be utilized: attributes, functional consequences, psychosocial consequences and values.

basis for consumer preferences and choice (Gutman, 1982). Thus, means-end theory offers a way to understand brand persuasion, defined as favorable feelings and purchase intentions regarding a brand.

This study examines the extent to which communicating both the *content* (attributes, consequences and values) and the *structure* (linkages between attributes, consequences and values) of means-ends information in an ad influences brand persuasion. In the next section, we provide arguments in support of such influences.

1.2. Explaining brand persuasion

Brand persuasion is defined in this study as favorable feelings and intentions regarding a brand. Affective and behavioral responses have long been considered two (of the three) evaluative components (along with cognition) underlying attitudes (McGuire, 1969). Eagly and Chaiken (1993) note that the cognitive, affective and behavioral components of attitude are often highly correlated and "can be located on the common underlying dimension of evaluation" (p. 12). Consistent with this observation, Dillon and Kumar (1985) found a one-dimensional model to fit data on the three components. Cognitive indicators of attitude were not a focus of our study. Hence, we label our construct "brand persuasion" to reflect the common evaluative dimension underlying affective and behavioral responses to a brand.

Means-end elements (attributes, consequences and values associated with certain brands) and the chains formed by linkages between those elements are learned through direct consumption and indirect experiences (exposure to marketing communications). In this paper, we examine the use of advertising to teach means-end elements and chains to consumers. The principal objective of this research is to study how communicating means-end elements and the chained linkages between those elements determine brand persuasion. That is, we will measure: (1) How strongly recipients perceive that a means-end element has been communicated by an ad; and (2) How strongly viewers perceive that an ad associated an attribute with a consequence or a consequence

with a value. Those perceptions will then be examined to determine their influence on brand persuasion. There are clear theoretical rationales supporting such relationships.

Advertising is usually formulated as a persuasive message. Although the factors that influence message persuasion are a source of continuing expansion and debate, there is ample evidence that receipt of favorable message arguments advocating a particular position can have a persuasive effect (Hovland et al., 1953; McGuire, 1969; Petty and Cacioppo, 1986; Chaiken, 1980). Petty and Cacioppo (1986) define a message argument as "any information contained in a message that permits a person to evaluate the message target along whatever target dimensions are central for [important to] that person" (p. 18). Thus, receiving means-end elements about a particular brand should potentially increase brand persuasion when that information is favorably evaluated and sufficiently important to recipients.

Moreover, ads that effectively communicate linkages between such means-end chain elements should more strongly determine brand persuasion than ads which communicate only *unlinked* means-end chain elements. The influence on persuasion of heightened personal relevance and desirability of message information is well documented. Increasing message relevance has been shown to increase message processing (e.g., Rhine and Sevrance, 1970; Kiesler et al., 1969; Apsler and Sears, 1968). However, Petty and Cacioppo have provided extensive evidence that increased message processing produces increased persuasion only when the argument information is perceived to be strongly favorable (e.g., Petty and Cacioppo, 1979; Petty and Cacioppo, 1989; Petty et al., 1989). Thus, we should expect the heightened self-relevancy and perceived desirability of brand related information attained through the means-end chaining process (forming associative links between the levels of abstraction) to contribute to brand persuasion. This should be found since the self-relevancy and desirability of brand information is presumed to be the basis for consumer preferences and choice (Gutman, 1982), as summarized in the brand persuasion measure.

However, such heightening of the relevancy

and favorability of brand information should be more likely to occur among individuals who have not previously learned those linkages or associations between the means-end elements. A variable that should influence prior learning of the means-end associations for a certain brand is whether someone is a loyal user of that brand. We argue that, in general, loyal users of a brand have a more elaborate and strongly associated network of linkages among means-end elements pertaining to that brand, compared to the means-end network for persons who are loyal users of a competitive brand. Several theoretical positions support this reasoning. Greater product familiarity should produce a stronger and more extensive network of associations (Alba and Hutchinson, 1987), as should selective attention to attitudinally congruent information (Brehm, 1956), attempts at self-justification (Sherman and Gorkin, 1980) and the maintenance of cognitive consistency (Festinger, 1957). It follows, then, that learning the associations between the means-end elements should strengthen brand persuasion more for individuals who are loyal users of a competitive brand, compared to loyal users of the target brand. This should occur because loyal users of a competitive brand have less knowledge of the associations between the means-end elements and, therefore, have to be taught the self-relevance and favorability of brand information.

One final issue which should be discussed is an alternative explanation for brand persuasion that may result from exposure to advertising. Our arguments regarding brand persuasion have relied heavily on the message processing literature. However, evidence suggests that brand persuasion can be partly explained by recipient reactions to an ad per se, rather than reactions to the brand related arguments in that ad (Mitchell and Olson, 1981). For example, Lutz (1985) contends that the entertainment value of an ad can have an influence on attitude toward the ad. Later, MacKenzie et al. (1986) and MacKenzie and Lutz (1989) demonstrated that attitude toward an ad has a causal impact on brand attitudes. Other researchers have long suggested that the attention grabbing power of ads influence evaluations of the advertised product (see Moriarty, 1983 for

a review). Schlinger (1979) found ad attention and entertainment value to load on a common construct. Thus, we combine an ad's attention grabbing and entertainment value and call it "ad enjoyment." Control of this factor will reduce the possibility that effects are due to favorable affective reactions to the ads per se, as opposed to the means-end information in the ads.

2. Hypotheses

The preceding discussion suggests three hypotheses that we test in this study. All hypothesized effects involve the prediction of brand persuasion through communicating means-end elements and associations between those elements.

H1: The strength of association between elements of a means-end chain contributes significantly to brand persuasion.

H2: The strength of association between elements of a means-end chain contributes significantly to brand persuasion beyond that explained by the communication of means-end chain elements.

Hypotheses 1 and 2 are based on means-end literature suggesting that linkages between means-end chain elements are the basis for the perceived self-relevance and desirability of ad information. The message processing literature, in turn, suggests that ad message relevance and desirability should have a persuasive effect on the target (brand) of the message.

H3: The strength of association communicated by an ad between elements of a means-end chain is a stronger predictor of brand persuasion for loyal users of a competitive brand than for loyal users of the advertised brand.

Hypothesis 3 is based on expected differences in consumer knowledge structures. Compared to loyal users of an advertised brand, loyal users of a competitive brand should be less likely to have previously learned the associative linkages be-

tween means-end chain elements. Thus, being taught the associations between the means-end chain elements through commercial (advertised brand) exposure will predict brand persuasion most strongly for loyal users of the competitive brand since they should be less likely to self-generate those associative linkages on the basis of prior knowledge about the advertised brand.

3. Method

This study examined the effects of four nationally broadcast television soft drink commercials on brand persuasion. These commercials were developed to enhance favorable feelings about the brands by associating brands and brand features with desirable images, particularly those involving consequences of usage. Two ads were shown for each of two competing brands to reduce the possibility of ad specific variation accounting for the results. Together these brands account for over 58% of the total soft drink market with a market share difference of only four percentage points between the two.

3.1. Sample selection

Subjects were recruited for research to be conducted at a central research facility in Dallas, Texas, USA. Subjects were chosen that had a minimum level of two product purchases per week and fell within the target market demographics (13-to 19-year-olds and 28-to 49-year-olds, equal numbers of males and females). Subjects represented both urban and suburban areas of the Dallas metroplex and were paid for their participation. A further requirement was that subjects must be loyal users of one of the competitive brands. Brand loyalty was defined by subjects reporting that they use one of the two competitive brands "most often." Final sample size was $N = 192$ and included near equal numbers of loyal users of the two brands.

3.2. The means-end elements

The elements of the means-end levels for the soft drink category examined here had been developed previously from open-ended interviews with consumers using laddering techniques (see

Table 1
Means-end elements selected for modeling^a

	Loyal users of brand A		Loyal users of brand B	
	Means-end chain elements	Correlation ^b with brand persuasion	Means-end chain elements	Correlation ^b with brand persuasion
AD1 (for brand A)	Self esteem ¹	0.42	Self esteem	0.21 **
	Freedom of choice ²	0.49	Personal enjoyment	0.40
	Relaxing ³	0.44	Refreshment	0.33
	Cola taste ⁴	0.44	Unique taste	0.40
AD 2 (for brand A)	Accomplishment	0.50	Confidence	0.24 *
	Revives memories	0.53	Good times/fun	0.33
	Taste treat	0.54	Pick-me-up	0.44
	Cola taste	0.64	Unique taste	0.54
AD 3 (for brand B)	Confidence	0.22 **	Accomplishment	0.31
	Personal enjoyment	0.35	Freedom of choice	0.55
	Goes down easy	0.41	Pick-me-up	0.44
	Unique taste	0.44	Unique taste	0.48
AD 4 (for brand B)	Belonging	0.30	Self esteem	0.54
	Comfortable with others	0.40	Freedom of choice	0.80
	Pick-me-up	0.33	Relaxing	0.81
	Great taste	0.45	Sweeter	0.76

^a For each means-end chain, position 1 = personal value; 2 = psychosocial consequence; 3 = functional consequence; 4 = attribute.

^b Unless indicated, all correlations are significant at $p < 0.05$ or lower; * $p < 0.10$; ** not significant.

Reynolds and Gutman, 1988 for a detailed discussion of laddering methods). These interviews focused on the criteria used in product class evaluations. Subjects were probed for a relevant distinction between brands in the category, and then probed further to identify the reasons why that distinction was important. These interviews revealed that although attributes and values could be adequately represented at one level of abstraction, consequences required two levels: functional and psychosocial. In separate testing, a group of 46 subjects (similar to those used in the study) were presented with descriptions of the four levels of abstraction and asked to categorize the means-end elements into those four categories. Subject agreement on the categorization of the different elements ranged from 72-86% and disagreements were resolved through discussion. The elements listed in Table 1 were utilized for the means-end analyses in this study.

3.3. Data collection

The questionnaire was administered via personal computer using an interactive interviewing system. This system integrates a personal computer and a video cassette recorder so that ads being assessed and questions directed to the subjects can be shown alternately on the same color monitor. All interviews were conducted by professional researchers trained in the use of the software.

All subjects were individually tested (exposed to ads and provided data) with an average interview taking 62 minutes. During testing the software program first collected demographic information and confirmed that the subject was a member of the specified target market. Each subject was then shown two of the commercials being analyzed, one ad for each of the two brands. Ad presentation was alternated among eight possible sequences (2 ads \times 2 brands \times 2 orders) to control for biases due to presentation order.

After presentation of the ads, we obtained measures of the variables. Two items were used to measure brand persuasion: (1) "This ad makes me really want to get this product;" (2) "This ad makes me feel even better about using this prod-

uct." Two items were used to measure ad enjoyment: (1) "This ad wasn't just selling the product, it was entertaining me;" (2) "This ad really holds my attention." All measures are derived from Schlinger's analysis of consumer responses to advertising (Schlinger, 1979).

As each item was displayed respondents were asked if it was true for either or both of the ads for the different brands. For each ad that an item was endorsed as being true, subjects were further asked if the issue addressed by the item was conveyed "clearly" or "perfectly." Scores on the brand persuasion and ad enjoyment measures varied from 1 to 3 (1 = not endorsed as true; 2 = endorsed as true, clearly conveyed; 3 = endorsed as true, perfectly conveyed). The two brand persuasion and ad enjoyment measures were found to be moderately reliable ($\alpha = 0.68$ and 0.73 , respectively). Thus, the items in each measure were summed to represent the underlying constructs.

The next set of questions assessed the degree to which the different means-end elements were communicated by the commercials. Items for each means-end element (see Table 1) were displayed, one at a time (e.g., "the ad communicates that the soft drink has a real cola taste;" "the ad communicates how the product 'goes down easy'," etc.), and the degree to which the ads communicated that element was queried in the same manner noted above for the brand persuasion and ad enjoyment measures. Scores for each element varied from 1 to 3 (1 = not endorsed as communicated; 2 = endorsed as communicated, clearly conveyed; 3 = endorsed as communicated, perfectly conveyed).²

A final set of questions was designed to measure the degree to which any two "adjacent" means-end elements (attribute-functional consequence; functional consequence-psychosocial consequence; psychosocial consequence-values) were perceived to be associated or connected by the ad. The format of these questions was different from those previously discussed. For any two

² Exact wording for all of these items summarized in Table 1 can be obtained from the authors.

Table 2
Regression results for models of brand persuasion^a

	MODEL 1 Ad enjoyment only	MODEL 2 Ad enjoyment and means-end elements	Increase over MODEL 1	MODEL 3 Ad enjoy- ment and associations	Increase over MODEL 1	MODEL 4 Ad enjoyment, means-end elements and associations	Increase over MODEL 2
Across all Observations (<i>n</i> = 384)	$R^2 = 0.20$ $F_{1,382} = 96.6$	$R^2 = 0.59$ $F_{33,350} = 15.2$	delta = 0.39 $F_{32,350} = 10.4$	$R^2 = 0.59$ $F_{44,339} = 11.1$	delta = 0.39 $F_{43,339} = 7.5$	$R^2 = 0.66$ $F_{75,308} = 8.1$	delta = 0.07 $F_{42,308} = 1.47^*$
Most often Users of advertised brand (<i>n</i> = 192)	$R^2 = 0.26$ $F_{1,190} = 65.8$	$R^2 = 0.60$ $F_{17,174} = 15.2$	delta = 0.34 $F_{16,174} = 9.24$	$R^2 = 0.59$ $F_{23,168} = 10.4$	delta = 0.33 $F_{22,168} = 6.15$	$R^2 = 0.65$ $F_{39,152} = 7.18$	delta = 0.05 $F_{22,152} = 0.98^{**}$
Other brand most often users (<i>n</i> = 192)	$R^2 = 0.11$ $F_{1,190} = 23.3$	$R^2 = 0.40$ $F_{17,174} = 6.7$	delta = 0.29 $F_{16,174} = 5.25$	$R^2 = 0.43$ $F_{21,170} = 6.09$	delta = 0.32 $F_{20,170} = 4.54$	$R^2 = 0.55$ $F_{36,155} = 5.35$	delta = 0.15 $F_{19,155} = 2.72$

^a Unless indicated, all *F*-statistics are significant at $p < 0.001$ or lower; * $p < 0.05$; ** not significant.

adjacent elements endorsed as being communicated, subjects rated the extent to which the concepts were "associated or connected" in the ad. Subjects selected a response from three levels of strength of association: (1) "little or no" association; (2) "somewhat" associated; (3) "tightly" associated. Each level was illustrated through a diagram on the screen (showing different degrees of overlap between two circles) to help explain the concept of strength of association.

3.4. Model selection and analysis

We tested the hypotheses with a series of regression analyses. Strength of communication of the means-end elements and strength of the associations between those elements were the independent variables and brand persuasion was the dependent variable. The strength of associations was computed at three levels (pairs of elements, three-way associations and four-way associations).

The three two-way associations (attributes-functional consequences; functional consequences-psycho-social consequences; psycho-social consequences-values) were all measured directly as earlier described. The two three-way associations (attributes-functional consequences-psycho-

social consequences; functional consequences-psycho-social consequences-values) were computed as the product of the relevant two-way associations. The single four-way association (attributes-functional consequences-psycho-social consequences-values) was computed as the product of the two three-way associations.

Eight means-end chains were selected for modeling, two for each of four ads (one for loyal users of the advertised brand and one for loyal users of the competitive brand). At each level of abstraction (attributes, functional consequences, psycho-social consequences, values) the element (e.g., cola taste vs. unique taste vs. sweeter) that was most highly correlated with brand persuasion was selected for model building purposes.³ This model selection process resulted in the testing of the eight means-end chains presented in Table 1.

³ This method of model selection was preferred since it avoids bias in confirmation of the hypotheses. The model selection procedure maximizes the amount of variation in the dependent measures accounted for by the means-end elements, which avoids bias when assessing variation accounted for by associations between elements, or testing differences in explained variation between user groups.

4. Results

Regression results are provided in Table 2. For each hypothesis test described below, variation in the dependent variable (brand persuasion) accounted for by ad enjoyment was always extracted first. That explanation was significant and produced an R^2 of .20. A summary of the hypotheses tests, along with the relevant degrees of freedom, are provided in Table 2.⁴

The first hypothesis was that the strength of association between means-end chain elements contributes significantly to the prediction of brand persuasion. The two-way, three-way and four-way associations relevant to each means-end chain were used to test this hypothesis (and remaining hypotheses). The R^2 for this model (after controlling for ad enjoyment) was 0.59. The increase in R^2 for adding the associations to the model containing only ad enjoyment was 0.39, which is statistically significant ($F = 7.5$; $p < 0.001$).⁵ Thus H1 is supported.

The second hypothesis is that the strength of association between the elements of a means-end chain contributes significantly to brand persuasion beyond what is explained by the strength of communication of the means-end elements. The model containing strength of means-end element communication (after controlling for ad enjoyment) produced an R^2 of 0.59. The addition of strength of association measures to that model provided an R^2 of 0.66. This R^2 increase of 0.07 is statistically significant ($F = 1.51$; $p < 0.001$), supporting H2.

The third hypothesis is that strength of association between the means-end chain elements is a

stronger predictor of brand persuasion for loyal users of the competitive brand than for loyal users of the advertised brand. The baseline for this hypothesis is a model already containing the R^2 effects of ad enjoyment and strength of communication of the means-end elements. The third hypothesis is tested for the two user groups by comparing their R^2 increases due to adding strength of association between the means-end elements to the baseline model. For loyal users of the advertised brand, inclusion of the associations in the model produced an R^2 of 0.65, which was an R^2 increase of 0.05. For loyal users of the competitive brand, inclusion of the associations produced an R^2 of 0.55, which was an R^2 increase of 0.15. The R^2 increase for competitive brand users was significantly greater than for advertised brand users ($F = 4.32$, $p < 0.001$), thus supporting H3.

5. Discussion

The principal contribution of this research is the demonstration that associations between means-end levels of knowledge – attributes, consequences and values – contribute to the explanation of brand persuasion. According to means-end theory, lower-order elements of knowledge derive their personal relevance and desirability from their association with higher-order elements. Thus, an attribute's meaning to a consumer is given by its association with certain consequences. In turn, these consequences have meaning in terms of their association with personal value systems. Because these meanings are presumed to be the basis for consumer preferences and choice, the strength of associations between the means-end elements is expected to have a fairly strong influence on brand persuasion. This relationship was supported by our data. The associations between means-end elements not only explained a significant amount of variance in brand persuasion, they also explained a significant variance beyond that accounted for by the communication of the means-end elements. Further, these effects were found to be independent of the influence of ad enjoyment.

⁴ Details on the construction of the F -tests used in testing the hypotheses can be obtained from the authors.

⁵ The magnitude of this R^2 increase equals the R^2 increase due to adding the means-end elements to the model for the overall sample (compare models 2 and 3 in Table 2). That equality is notable given the fact that the model selection procedure maximizes the explanation in brand persuasion accounted for by communication of the means-end elements, but is unbiased with regards to the variation accounted for by the means-end associations.

These findings illustrate and support the use of means-end chains to understand how and why advertising works to persuade customers. Traditionally, advertisers have focused their efforts on how well ads communicate specific *content*, such as the attributes of a product or consequences of using a product. The results of this study illustrate the importance of the associations between elements of ad content (the *structure* of an ad) for determining ad effectiveness. Hence, we suggest that a primary objective of advertising should be to develop and strengthen *associations* between concepts, which link the product to attributes, attributes to consequences, and consequences to satisfaction of a personal value. Means-end theory provides a theoretical rationale for this objective and the results of this study provide support for its effectiveness in influencing brand persuasion.

This study also examined individual differences in the relationship between means-end associations and brand persuasion. It was found that the strength of means-end associations was more related to brand persuasion for those who most often used a competitive brand than for those who most often used the advertised brand. This finding makes sense in that the loyal users of a competitive brand (relative to loyal users of the advertised brand) have more to learn regarding the personal relevance and desirability of the means-end elements, which can occur through viewing commercials conveying means-end associations for the advertised brand.

Two particular limitations to this study need to be mentioned. First, this study utilized commercials to examine the impact of means-end information on brand persuasion since persuasion is a common goal of advertising. However, the results obtained do not necessarily suggest that means-end chain analysis is relevant to explaining other ad objectives, such as getting people to visit stores, encouraging word-of-mouth behavior or keeping a brand name in a "top-of-mind" position. Nevertheless, the brand persuasion evidence presented here should at least provide a starting point in understanding how means-end theory is relevant to assessing ad effectiveness. Second, the extent to which our results generalize across product

lines needs to be examined. The strength and organization of means-end associations may vary by product and product related experiences.

Future research might examine the effects of different lengths of means-end chains. There are theoretical grounds for suggesting that longer means-end chains should be more predictive of brand persuasion because longer chains provide a more complete representation of the self-relevant meanings of the brand. Exploratory analyses in this study revealed directional support for this proposition, although the differences in brand persuasion explained by two-way vs. three-way vs. four-way associations were not statistically significant. Future research might explore this issue further and attempt to identify variables that influence the relationship between lengths of means-end chains and brand persuasion. Meanwhile, this research has at least clarified an important assumption that follows from means-end theory: associations between means-ends elements increase the persuasion of commercial information.

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