How Schema Incongruity Influences Consumer Responses: Exploring the Degree of Incongruity For Different Sources of Discrepancy

Georgios Halkias, Athens University of Economics and Business, Greece
Flora Kokkinaki, Athens University of Economics and Business, Greece

The present research investigates how consumers respond to advertisements that vary in the degree of incongruity with established brand schemata. Two experimental studies were conducted in which the degree of incongruity was manipulated through the verbal (study 1) and the pictorial component (study 2) of a print ad. As expected, results in the second study supported an inverted U relationship between the degree of incongruity and consumer responses, with moderately incongruent advertisements producing more ad processing, better memory, and more favourable attitudes. However, the first study provided mixed results, indicating that verbal-based discrepancies might moderate the effects of schema incongruity.

[to cite]:

[url]:
http://www.acrwebsite.org/volumes/1006966/eacr/vol9/E-09

[copyright notice]:
This work is copyrighted by The Association for Consumer Research. For permission to copy or use this work in whole or in part, please contact the Copyright Clearance Center at http://www.copyright.com/.
How Schema Incongruity Influences Consumer Responses: Exploring the Degree of Incongruity for Different Sources of Discrepancy

Georgios Halkias, Athens University of Economics and Business, Greece
Flora Kokkinaki, Athens University of Economics and Business, Greece

ABSTRACT
The present research investigates how consumers respond to advertisements that vary in the degree of incongruity with established brand schemata. Two experimental studies were conducted in which the degree of incongruity was manipulated through the verbal (Study 1) and the pictorial component (Study 2) of a print ad. As expected, results in the second study supported an inverted-U relationship between the degree of incongruity and consumer responses, with moderately incongruent advertisements producing more favorable responses. However, when incongruity becomes severe people are most likely not willing to respond.

INTRODUCTION
Schema theory in cognitive psychology suggests that people tend to simplify reality by organizing and storing all available knowledge and experience about their social environment in memory-based cognitive structures, called schemata (Fiske and Taylor 1991). The cognitive schemata that we develop over time guide the perception of information, provide cognitive economy, and determine our expectations about the nature of the social phenomena encountered (Fiske and Taylor 1991; Sujan and Bettman 1989). Given that consumers’ knowledge about the market can also be perceived through relevant cognitive structures, such as the product, the brand, or the ad schemata, schema theory has been applied in the marketing research, revealing that schematic knowledge greatly affects how consumers process and respond to marketing communications (Sujan and Bettman 1989; Meyers-Levy and Tybout 1989; Goodstein 1993). In a highly competitive market environment, overpopulated by brand messages, consumers use their schemata to integrate incoming with existing data, retrieve information from memory, draw inferences, and facilitate purchase decisions (Sujan and Bettman 1989).

Advertising and consumer researchers have long been interested in creating a link between brands and consumers that would lead to effective communication. Most of the models of persuasive communications were developed upon the proposition that the transmitted message should correspond to consumers’ perceptions and experiences in order to be more relevant, more comprehensible, and more appealing (Rossiter, Percy, and Donovan 1991; Vaughn 1980; Ratchford 1987; Keller 1991; Petty and Wegener 1998). In other words, research on advertising and persuasive communication up to now has been based on the matching hypothesis between consumers' cognitive schemata and the content of communication. Establishing consistency and relevancy when communicating brand meaning to consumers is a widely help conception in the marketing literature (Rossiter, Percy and Donovan 1991; Keller 2003; Percy and Elliott 2005).

However, directly matching the brand message to consumers’ mind may not always be the most effective strategy. Findings from cognitive psychology challenge the matching hypothesis and point toward a different perspective, according to which schema incongruent stimuli may lead to more favorable results once the incongruities are resolved (Mandler 1982). Previous studies have examined several different aspects of information incongruity, such as incongruity with the product category schema (Meyers-Levy and Tybout 1989), ad (a)typicality (Goodstein 1993), or usage schema incongruity (Wansink and Ray 1996), and have provided several insightful findings. However, results are in many cases inconclusive (Goodstein 1993; Lee and Mason 1999). Besides, only a limited number of studies have examined schema incongruity at the brand level (e.g., Lange and Dahlén 2003; Dahlén et al. 2005) and an integrated framework on the role of schema incongruity in marketing is yet to be established. Drawing from Mandler’s (1982) theory, the present paper contributes to the relevant literature by exploring the effects of advertising information that varies in its degree of incongruity with consumer’s brand schemata.

THEORETICAL FRAMEWORK
Incongruity research deals with the effects of information that is incompatible with existing knowledge and do not conform to some presumably predefined pattern (Stayman, Alden and Smith 1992). Schema incongruity is defined as the extent to which semantic correspondence is achieved between the attributes of a stimulus object and the attributes specified by its relevant schema (Areni and Cox 1994). Heckler and Childers (1992) argue that schema incongruity can be approached as a two-dimensional concept, where the relevancy and the expectancy of information determine the overall degree of incongruity. Relevancy refers to the degree to which a piece of information is useful to produce meaning and contributes to the identification of the intended message. Expectancy, on the other hand, refers to the degree to which a piece of information conforms to expectations and falls into some predefined pattern evoked by the stimulus object (Heckler and Childers 1992; Lee and Mason 1999). In this line, schema congruity in this paper is represented by a match, in terms of relevancy and expectancy, between the content of a stimulus object (i.e., an advertisement) and the content of its associated schema (i.e., the schema for the advertised brand), whereas schema incongruity involves some degree of mismatch (Sujan 1985; Meyers-Levy and Tybout 1989).

The degree of incongruity is determined by how irrelevant and unexpected the informational content is and how easily the recipient can satisfactorily reconcile discrepancies within their existing cognitive structure (Mandler 1982; Meyers-Levy and Tybout 1989; Heckler and Childers 1992).

One of the most commonly applied paradigms to study information incongruity has been developed by George Mandler (1982), who focuses on the cognitive elaboration and the affective outcomes produced by different levels of schema incongruity. The basic premise of his theory is that increases in the level of incongruity between a stimulus and an existing schema lead to heightened cognitive arousal, which consequently increases the extremity of evaluations. Whether an evaluation becomes relatively more or less favorable depends on how easily incongruities can be successfully resolved. In more detail, according to Mandler, congruent information is easily processed and predictable. It does not generate additional arousal and results to mild responses, equal to a basic sense of liking. In contrast, schema incongruent stimuli attract attention and increase people’s cognitive arousal as they attempt to resolve inconsistencies (Heckler and Childers 1992). When incongruity is moderate, the psychological reward produced by successfully resolving inconsistencies results in more favorable responses. However, when incongruity becomes severe people are most likely not willing to
invest the significant amount of psychological resources necessary to accommodate the extremely inconsistent pieces of information. Reluctance or inability to spend time and effort on the processing of the incoming data and the revision of the existing knowledge obstruct people from interpreting information and finally reduces the favorability of evaluations.

Previous studies have demonstrated that schema incongruent information attracts consumer attention and leads to increased processing elaboration (Goodstein 1993; Ozzane, Brucks, and Grewal 1992). For instance, Goodstein (1993) has shown that atypical ads induce more consumer attention, in terms of longer viewing time than typical ads. At the product category level, Sujan (1985) found that consumers exposed to product propositions that do not match with a predefined category schema expend more time to form product judgments than consumers in a matching condition, while, following a threefold operationalization of incongruity, Meyers-Levy and Tybout (1989) found that products moderately incongruent with their associated category induce the highest level of processing elaboration. Along these lines, a non-monotonic relationship between the degree of incongruity and consumers’ ad processing is anticipated. Consumers are expected to invest more time trying to reconcile incongruent, compared to congruent, brand information. However, as incongruity increases, consumers might become unwilling to invest the additional cognitive resources necessary to accommodate extreme incongruities, thereby neglecting incompatible information and discounting the total amount of processing. It is predicted that:

H1: Advertisements that are moderately incongruent with the brand schema result in more ad processing, compared to advertisements that are either congruent or extremely incongruent with the brand schema.

Increased cognitive activity also implies enhanced memory performance (Hastie 1980; Friedman 1979). Items that conform to one’s expectations are only superficially encoded, since they can be immediately integrated into existing knowledge (Heckler and Childers 1992). However, the cognitive arousal generated by schema incongruity stimulates detailed encoding that may lead to the formation of a larger number of associative linkages between the stimulus and the knowledge stored in memory (Hastie 1980; Srull and Wyer 1989). The additional pathways generated will make stimulus information become more retrievable and easier to recall (Heckler and Childers 1992; Areni and Cox 1994; Lange and Dahlén 2003). An inverted-U pattern is again predicted. Under moderate incongruity, successfully linking the discrepant information to an activated schema in order to resolve incongruity increases the likelihood that the stimulus’ content will be recalled. Severe incongruity, on the other hand, is not expected to have the same effect. Extremely incongruent pieces of information discourage processing, since incoming data are especially difficult to be successfully linked to a coherent memory structure. As a consequence, the efficiency of retrieval processes is hindered and recall of the information presented is reduced. The following hypothesis is examined:

H2: Advertisements that are moderately incongruent with the brand schema result in better recall of the ad content, compared to advertisements that are either congruent or extremely incongruent with the brand schema.

Mandler’s theory suggests that the process of resolving incongruity is rewarding and may thus lead to more favorable responses. The positive effect of schema incongruity has been tested by a number of consumer studies that however provide inconclusive results (Goodstein 1993; Lee and Mason 1999). In particular, not distinguishing between moderate and extreme incongruity, Goodstein (1993) revealed that ads that do not match the typical ad schema result to a lower brand attitude than schema congruent ads, while Lange and Dahlén (2003) generally found no significant differences in attitude toward the brand between congruent and incongruent with the brand schema ads (cf., Dahlén et al. 2005). Using Mandler’s conceptualization of schema incongruity, Lee and Mason (1999) found no significant differences in brand evaluations between congruent and moderately incongruent product information. Nonetheless, a series of studies has provided considerable evidence for Mandler’s proposition, supporting a non-monotonic, inverted-U relationship between the degree of incongruity and consumer evaluations (Meyers-Levy and Tybout 1989; Meyers-Levy, Louie, and Curren 1994; Heckler and Childers 1992; Peracchio and Tybout 1996). We expect the same pattern to hold true for the brand attitude change process, with the most favorable effects resulting when ads contain moderately incongruent brand information. Extremely incongruent ads are not predicted to favorably affect attitudes as a result of consumers’ expectations disconfirmation and inability to accommodate inconsistencies (Meyers-Levy and Tybout 1989; Stayman, Alden, and Smith 1992). In summary, it is hypothesized that:

H3: Advertisements that are moderately incongruent with the brand schema result in more favorable attitude change, compared to advertisements that are either congruent or extremely incongruent with the brand schema.

STUDY 1: EFFECTS OF VERBAL-BASED SCHEMA INCONGRUITY

Method
A sample of 66 undergraduate business students participated in the first study in exchange for extra course credit. The hypothesized relationships were tested using one-way ANOVA and polynomial trend analysis in a single factor, between-subjects design. In particular, three levels of (in)congruity (i.e., congruity, moderate incongruity, extreme incongruity) with the schema for a real brand were examined. The degree of schema incongruity was manipulated through the verbal component of a print ad by means of information expectancy and relevance with the associated schema (Heckler and Childers 1992). The ad format and pictorial elements were held constant across conditions. Print advertisements are reader-paced, allowing for differences in processing and attention among participants and are therefore appropriate for the research purposes (Lange and Dahlén 2003).

Pretest
A focus group session (n=9) with consumer interviews was carried out to decide on the product category from which the final brand would be selected. The product category of “Jeans” appeared to be sufficiently familiar and relevant to the sample population and was thus chosen for the main study. Following, two pretests were conducted to identify consumers’ brand schemata within the selected product category. In the first pretest (n=34), participants were asked to indicate their level of knowledge (1=not knowledgeable at all, 7=very knowledgeable) for a series of jeans brands (Sujan and Bettman 1989) as well as to list all the associations with the brand. In the second pretest (n=43), participants were asked to list all the associations with “Levi’s Jeans.” Brand awareness was 100% and participants were knowledgeable enough (M=4.15, SD=1.62) to have
formed a discrete schema for the brand. A frequency analysis of participants’ associations was realized to reveal the most typical attributes of the brand. Individual brand associations representing the same concept (e.g., fashionable and stylish) were collapsed under a specific schema attribute, while idiosyncratic associations, i.e., associations listed by only one participant that could not be collapsed, were eliminated. Two independent coders categorized the same consumer associations to ensure reliability (intercoder reliability above 80%). The most frequently mentioned brand associations, listed by at least 34% of respondents, pertained to the attributes of classic, original, and simple.

The second pretest used a different sample (n=49) and was carried out to confirm the configuration of the Levi’s Jeans schema. The three most typical brand attributes identified in pretest 1 were quantified using nine-point, Likert-type scales. Subjects were asked to indicate how representative each attribute is with regard to their impression of the brand. The scale was anchored by 1 (not representative at all) and 9 (very representative). Attributes not mentioned to be part of the brand schema were used as control attributes. According to the results, schema attributes received consistently higher scores (ratings ranged from 6.43 to 7.35) than did control attributes (ratings ranged from 4.26 to 5.08). The least possible difference between schema and control attributes was highly significant (t(49)=3.80, p<.001), therefore the brand schema was confirmed.

**Stimulus Development**

The findings above were used to develop the stimulus material. In particular, nine ad versions were created that varied in terms of incongruity with the Levi’s brand schema. An advertising agency was utilized to ensure that the experimental ads approximate real commercial print advertisements. In a third pretest (n=17) respondents were asked to rate each ad in terms of relevancy and expectancy with regard to their impression of the brand (Heckler and Childers 1992) using a nine-point scale anchored by irrelevant/unexpected and relevant/expected. The order of the ads was counterbalanced to avoid possible carryover effects. Based on the mean ratings, the three ad versions that seemed to best represent each of the three levels of incongruence were selected. These were submitted to separate one-way repeated measures ANOVAs with relevancy and expectancy being operationalized as within-subjects variables, respectively. The results showed a significant effect of the ad version on the level of relevancy (F(2, 32)=110.97, p<.001) and expectancy (F(2, 32)=123, p<.001) therefore, each stimulus ad corresponded to a different degree of schema incongruence. Mean scores for the congruent version were $M_{\text{relevancy}}=7.05$ and $M_{\text{expectancy}}=6.88$, for the moderately incongruent version were $M_{\text{relevancy}}=6.17$ and $M_{\text{expectancy}}=6.00$, and for the extremely incongruent version were $M_{\text{relevancy}}=3.47$ and $M_{\text{expectancy}}=3.06$ (mean differences were all significant at the .01 level).

**Dependent Variables**

**Ad Processing.** The time spent watching the ad was used to indicate the amount of ad processing (Goodstein 1993). A timer running on a computer screen was set at the beginning of each exposure. Participants were instructed to watch the ad at their own pace and record the number appearing on the screen after they had formed their overall impression.

**Recall.** Recall was measured with an open-ended question asking participants to write down as many of the features they could remember from the ad within a two-minute time limit. Recall protocols were coded so that each correct mention of a distinct ad item represented a hit. The total number of hits was summed up to form the overall recall score for each respondent.

**Attitude Change.** The difference between brand evaluations after and prior to the exposure was used to indicate the amount and direction of brand attitude change. Brand attitudes were measured on five, nine-point semantic differential scales anchored by good and bad, likable and dislikeable, favorable and unfavorable, positive and negative, and desirable and undesirable. The five items were averaged to form the overall attitude score. The coefficient alpha was .97 for brand attitudes both prior and after the exposure.

**Experimental Procedure**

The study took place in a laboratory setting. Upon arrival, participants were randomly assigned to one of the three experimental conditions and were given a questionnaire that contained all the necessary manipulations and dependent measures. Initially, subjects provided their evaluations for several brands in the category to familiarize themselves with the answering process. Evaluations for the Levi’s jeans were also included to measure attitude toward the brand prior to exposure. Following, participants were told a brief cover story about the purposes of the study and were given additional guidelines on how to proceed. Immediately after, participants were exposed to the stimulus ad. When finished, they completed the brand evaluation scales and the manipulation checks. A 15-minute filler task followed to clear short-term memory and then participants completed the recall task. After completing a short section of demographic questions, participants were debriefed and thanked for their participation.

**RESULTS**

**Manipulation Check**

The effectiveness of the manipulation was checked using the same statements reported for the stimulus pretest. A single factor, between-subjects design was utilized. The average ratings for relevancy and expectancy were analyzed with a one-way ANOVA, which revealed a statistically significant main effect of the degree of incongruence on both relevancy ($F(2,63)=10.18$, $p<.001$) and expectancy ($F(2,63)=17.87$, $p<.001$). Mean ratings (see Table 1) differed significantly across the three experimental conditions, indicating that the manipulation of schema incongruence worked as intended.

**Hypotheses Testing**

A summary of results is provided in Table 1. Results reveal a significant main effect of schema incongruence on processing time ($F(2,63)=9.99$, $p<.001$). Participants in the congruity condition spent significantly less time processing the ad compared to both incongruity conditions (mean difference of -10.68 seconds and -13.58 seconds for moderate and extreme incongruity, respectively). However, the hypothesized non-monotonic relationship was not supported. In contrast to predictions, participants in the extreme incongruity condition spent relatively more time processing the ad than in the moderate incongruity condition (mean difference=2.90, NS). Consistent with predictions, a significant main effect ($F(2,63)=3.65$, $p<.05$) supported the anticipated effect on recall. Participants recalled significantly more ad features in the moderate incongruity condition than in the congruity and the extreme incongruity condition. Trend analysis showed that the mean values for recall do follow an inverted-U pattern (quadratic component; $F(1,63)=7.24$, $p<.01$). Finally, as expected, consumers’ attitudes were enhanced in the congruent ($M=31$, $SD=1.01$) and moderately incongruent condition ($M=34$, $SD=82$). Extreme schema incongruity had a negative impact on attitude change ($M=-20$, $SD=79$). Post hoc comparisons between the extreme and the moderate incongruity condition revealed that attitude change is significantly attenuated when inconsistencies are extremely dif-
ficult to accommodate (mean difference = -0.55, p < .05). However, the statistical significance of the main effect was marginally not supported (F(2, 63) = 2.63, p = .08), while the non-monotonic pattern failed to occur (quadratic component; F(1, 63) = 1.22, NS).

In summary, the results provide partial support to the proposed hypotheses. The directionality of the dependent measures is generally supported yet, specific significance tests show mixed results. Hypothesis 1 was partially supported. Schema incongruity had a significant effect on the amount of ad processing however, no significant differences between moderate and extreme schema incongruity occurred. The time consumers spent watching the ads was found to follow a linear trend across the degrees of incongruity (linear component; F(1, 63) = 17.85, p < .001).

Following, hypothesis 2 was fully supported, while the effects on consumers' brand attitude failed to occur. Further analysis of consumers' recall responses revealed that the manipulation of incongruity (i.e., manipulating incongruity through the ad copy) might be largely responsible for the weak results. More specifically, even though the textual elements were primed in the stimulus ads, they seem to be approached by respondents as supporting features even though the textual elements were primed in the stimulus ads, they seem to be approached by respondents as supporting features and thus, might have been less effective in producing the predicted effects. Given that, a replicate study was designed that devised a different manipulation and stimulus material.

STUDY 2: EFFECTS OF IMAGE-BASED SCHEMA INCONGRUITY

In the second study the degree of schema incongruity was determined by variations in the level of relevancy and expectancy of the pictorial elements used in the ads. Previous studies have demonstrated that the image is the component that is initially processed in print ads (Heckler and Childers 1992) and that it generates the initial impression and the expectations upon which the rest of the ad will be processed (Houston, Childers, and Heckler 1987). In general, the superiority of the pictorial over the verbal stimuli has been quite evident in the context of persuasive communication (Miniard et al. 1991; Areni and Cox 1994). Given that, for image-based schema incongruity we expect results to follow more closely the predicted relationships.

Method

Sixty-one students participated in the second study that was identical to the previous one the only difference being that schema incongruity was manipulated through the pictorial component of a print ad. The verbal elements and ad format remained the same. The same hypotheses between the degree of schema incongruity and the dependent variables were examined. The experimental design and the procedure adopted were similar to that of Study 1.

Stimulus Development and Dependent Measures

Based on the most typical attributes of Levi’s brand schema a new set of stimulus ads was developed. Each ad was intended to represent a different degree of schema incongruity by using images that were more or less relevant and expected with consumers’ schema for the stimulus brand. As in the previous study, a new pretest was conducted (n = 15). Out of the nine ad versions initially created we selected the final three based on respondents’ ratings in terms of relevancy and expectancy. Repeated measures analysis of variance revealed a significant effect of the three ad version on relevancy (F(2, 28) = 73.46, p < .001) and expectancy (F(2, 28) = 97.03, p < .001) therefore, the ads were found to correspond to a different degree of incongruity. Mean scores for the congruent version were $M_{relevancy} = 7.13$ and $M_{expectancy} = 7.27$, for the moderately incongruent version were $M_{relevancy} = 6.53$ and $M_{expectancy} = 6.47$, and for the extremely incongruent version were $M_{relevancy} = 3.87$ and $M_{expectancy} = 3.67$ (mean differences were all significant at the .01 level). The dependent variables and measurement method employed were similar to the first study. The Cronbach’s α coefficient for the averaged index of brand evaluations prior and after the exposure was .98 and .97, respectively.

RESULTS

Manipulation Check

The manipulation of schema incongruity was tested in the main study through between-subjects ANOVAs with the degree of incongruency being the independent factor and relevancy and expectancy the dependent measures, respectively. Results provided significant main effects on both relevancy (F(2, 58) = 13.99, p < .001) and expectancy (F(2, 58) = 16.67, p < .001). Mean ratings differed significantly across the experimental conditions (p < .01) therefore, the manipulation was successful.
How Schema Incongruity Influences Consumer Responses: Exploring the Degree of Incongruity for Different Sources of Discrepancy

TABLE 2
Summary of Results for Study 2

<table>
<thead>
<tr>
<th>Manipulation Check</th>
<th>Degree of Schema Incongruity</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Congruity</td>
<td>Moderate Incongruity</td>
<td>Extreme Incongruity</td>
<td>F</td>
<td></td>
</tr>
<tr>
<td>Relevancy</td>
<td>6.84 (1.80)</td>
<td>5.71 (1.48)</td>
<td>4.00 (1.84)</td>
<td>13.99***</td>
<td></td>
</tr>
<tr>
<td>Expectancy</td>
<td>7.05 (1.74)</td>
<td>5.57 (1.36)</td>
<td>4.00 (1.87)</td>
<td>16.67***</td>
<td></td>
</tr>
<tr>
<td>Ad Processing</td>
<td>16.15 (6.14)</td>
<td>22.73 (7.92)</td>
<td>16.99 (7.53)</td>
<td>4.97**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Quadratic Component</td>
<td>9.87***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recall</td>
<td>3.31 (1.15)</td>
<td>5.66 (1.15)</td>
<td>4.19 (1.08)</td>
<td>22.29***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Quadratic Component</td>
<td>39.48***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitude Change</td>
<td>-.08 (1.74)</td>
<td>.83 (1.36)</td>
<td>-.70 (1.23)</td>
<td>9.42***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Quadratic Component</td>
<td>15.57***</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**p<.01, ***p<.001
Note: Standard Deviations (in parentheses)

Hypotheses Testing

In contrast to the previous study the results provide full support to hypothesis 1. The degree of schema incongruity had a significant main effect on ad processing (F(2,58)=4.97, p<.01) and mean values were found to follow a non-monotonic pattern (quadratic component; F(1,58)=9.87, p<.01). Post hoc comparisons revealed that participants spent significantly more time watching the moderately incongruent ad than the congruent (mean difference=6.38, p<.01) or the extremely incongruent ad (mean difference=5.74, p<.05). The mean values for recall and attitude change were also proven to follow the inverted-U relationship and ANOVA main effects were in both cases significant (p<.001). In more detail, participants’ recall for the content of the moderately incongruent ad version was significantly better than for the congruent (mean difference=2.35, p<.001) or the extremely incongruent version (mean difference=1.47, p<.001). Moreover, moderate schema incongruity had the most favorable effect on brand attitude change (M=.83, SD=.36). Attitudes in the congruity condition remained the same before and after the exposure (mean difference=-.08, t(18)=.49, p>.05), while extreme schema incongruity negatively influenced attitude change (mean difference=-.70, t(18)=-2.61, p<.05). Brand attitude change scores between moderate incongruity and the two other experimental conditions were found to be statistically significant (p=.01 for congruity and p<.001 for extreme incongruity).

Overall, image-based schema incongruity produced a more concrete pattern of results with regard to the proposed hypotheses, providing support to all the predicted relationships. Table 2 provides an overview of the findings produced in the study.

GENERAL DISCUSSION

The present findings generally provide support to Mandler’s (1982) schema incongruity theory in the context of brand communication and contribute to the relevant literature by distinguishing between moderate and extreme levels of brand information incongruity (cf., Lange and Dahlén 2003; Dahlén et al. 2005). In contrast to the widely held conception of developing consistent and relevant communications and attitudes toward the brand (Park, Jaworski, and MacInnis 1986; Keller 2003; Percy and Elliott 2005), we found evidence for a favorable effect of moderately discrepant brand communication on consumer responses. Schema incongruent brand information was found to stimulate consumer attention and the extent of information processing. However, the inverted-U pattern was evident only when discrepancies derived from the pictorial elements of the ad. Contrary to our predictions, the first study revealed a linear trend for ad processing with verbal-based incongruities appearing to absorb increasingly more time across the degrees of incongruity.

Table 2 presents a comprehensive summary of the results from the second study. The data show that participants who were exposed to the moderately discrepant ad spent significantly more time watching the ad than those in the congruent condition, while the extremely discrepant condition showed the least attention. This suggests that consumers are able to process and absorb more information when the brand communication is moderately discrepant.

In contrast to the previous study, the results provide full support to Mandler’s (1982) proposition. The most favorable effect on consumers’ brand attitudes was found in response to moderate schema incongruity. Successfully resolving incongruity seems to provide consumers with a sense of satisfaction and fulfillment that is intuitively transferred to their evaluations. The findings imply that attitudes generated through more effortful and cognitively challenging processes appear to be stronger and more favorable. Even though not directly tested, research data also suggest that verbal-based discrepancies might moderate the effects of schema incongruity and might be less effective per se to provoke the predicted behavior. Future research would greatly benefit by examining more directly the relationship between verbal-based and image-based schema incongruity.
The present findings imply that establishing consistency in brand communications may not always be the most effective strategy. Advertising managers may use incongruity-based tactics to make their ads stand out from the clutter, engage consumers with the brand message, increase ad memorability, and refresh the brand’s position within consumers’ mind. Yet, great caution is required in manipulating information incongruity, since non-resolvable discrepancies may have adverse effects, such as to reduce the intended communication, lead consumers to confusion and frustration, and make them question their beliefs about the brand. Marketing managers should greatly consider the context in which brand communication appears, because depending on a different context consumers might be more or less willing to invest time on the processing of a single message. Ensuring that consumers will have the ability and opportunity to process a message of this kind is critical, since both situational and individual factors might interfere with the information processing process, influence the perception of incongruity and moderate its effects (MacInnis and Jaworski 1989; Lee and Mason 1999; Meyers-Levy 1988; SuJan 1985). For example, would the resolution of incongruity be equally beneficial under high, compared to low, involvement conditions, where people are already willing to invest time and effort on the processing of the relevant data, or when consumers have a high, compared to a low, degree of brand loyalty and probably be less susceptible to the effects of incongruity? Similarly, would schema incongruent advertising be equally effective when consumers have limited processing opportunities, such as when viewing television commercials, or when the advertised brand is associated with a different purchase motivation (informational vs. transformational)?

With reference to the present research, for instance, we would suggest that verbal-based schema incongruity (Study 1) might have been more effective for a distinctly informational product, since it would have been more likely that consumers will attend and rely on the textual information and the claims directly stated by the ad. Such questions are yet to be explored and future research would contribute considerably to the relevant literature by investigating the role of potential moderating factors.

REFERENCES


