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# Conditions and Causes of Split Ad Effectiveness

**Harper Andrew Roehm Jr.**

Department of Marketing, Entrepreneurship, Hospitality & Tourism Bryan School of Management and Economics, University of North Carolina Greensboro, Greensboro, USA

**Email address:**

[haroehm@uncg.edu](mailto:haroehm@uncg.edu)

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**Abstract:** Split advertising technique involves two distinct and separate components that must be jointly experienced to receive the entirety of a message. An example is a Nike ad that began on TV and then was completed at a web site. This mode of presentation is termed the “split advertising technique” or simply, the “split ad technique” as well as Hybrid style of advertising. The objective of this investigation is to explore the effectiveness of the split ad technique. Experiment 1 provides evidence that split ads can increase attitudes of light users. This increase seems due to the importance attached to the information contained in the second part of the split ad. In experimentation two, in addition to replicating results from Experiment 1, a more complex pattern of responses is discovered when timing of measurement is considered. For measurements taken immediately after exposure to the advertising materials, enhanced attitudes and attribute importance were again manifest for light users exposed to a split ad, and undermined attitudes were observed for heavy users. However, for measures taken after a week’s delay, the positive influence on light users did not persist. The negative impact on heavy users, however, was enduring. Results of two experiments indicate that a split ad can focus attention on information contained in its latter half, and in so doing, can produce more positive attitudes than traditional, uninterrupted ads. However, findings also suggest that the effects of split ads may be confined to particular conditions favoring limited processing and may be somewhat fleeting.

**Keywords:** Advertising, Split Ads, Hybrid Ads, Self-perception Theory, Attitude Strength

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## 1. Introduction

Consider a series of television ads for Nike, which featured vignettes that remained unfinished as the commercials concluded. At the end of each TV spot, viewers were encouraged to go to a Nike web site to find an ending for the unfinished story line. This example represents a style of advertising, in which two distinct and separate components must be jointly experienced to receive the entirety of a message. This mode of presentation is termed the “split advertising technique” or simply, the “split ad technique.” A striking aspect of this approach is that the marketer forgoes an opportunity to present an entire message all at once. Instead, consumers obtain the information in two parts, the second of which may be received only if an individual explicitly pursues it.

In employing this type of media stunt, an advertiser runs the risk of reducing the total audience reach for its complete message. It appears almost certain that some viewers will opt

not to pursue the second portion of the message. With this in mind, it seems worthwhile to consider what, if any, benefits might be gained from using the split ad technique to offset its potential drawbacks. Hence, in the current research, potential advantages of presenting messages via the split ad technique are explored. Particular focus is placed on split ads that, like the Nike example, offer a first portion in a conventional medium and a second portion at a web site. Several questions are addressed.

First, will processing of information delivered via the split ad technique differ from processing of the same information delivered via a single, continuous ad (which is referred to throughout as an “uninterrupted ad”)? If so, what is the nature of this difference? Moreover, when might this difference be more or less beneficial to a brand?

### 1.1. Split Ads vs. Uninterrupted Ads

How might information-processing for a given set of ad claims might differ when conveyed via a split ad versus when

conveyed in a traditional uninterrupted ad? How, for example, will reactions to the split Nike ad differ from reactions if the same information were offered in, say, a single television or print ad, or even a single web-based ad? Recent research provides the insight that self-perception may play an important role [1].

Bastardi and Shafir presented subjects with two-part decision problems that paralleled the structure of a split ad [1]. In the first portion, a basic problem description was provided. The description ended with a provocative final statement that lured subjects to seek a short addendum. This was provided in a follow-up message.

A noteworthy result of this research was that decision patterns differed for participants who received two-part information, as compared to control subjects, who received a single set of the same information. In particular, the choices of subjects receiving two-part information were quite sensitive to the content of the information delivered in the addendum. For example, when this second part included an especially positive (negative) attribute, participants were more likely to make a favorable (unfavorable) decision than were control subjects who received a single set of the same information, including this especially positive (negative) attribute.

The researchers invoked self-perception theory in explaining this effect [2, 3]. They speculated that in the two-part information condition, subjects took note of their choice to pursue the second segment of available information. This perception of their own behavior was then interpreted as a cue that the information must have been important because it was evidently worth waiting for. This inference enhanced the weight given to the information in the second portion as the final decision was being made. Because more weight was given to the very positive (negative) information in the two-part condition than the one-part condition, more favorable (unfavorable) decisions were made.

These observations provide a foundation for predicting different consequences for split ads and uninterrupted ads. By enticing consumers to pursue information in the second portion of a split ad, a marketer may engage self-perception of this behavior on the part of a message recipient. When a marketer has highly positive information to convey, this self-perception may be particularly useful. The split ad format may heighten the decision influence of the highly positive information in its second portion relative to the influence this same information would have when delivered via a traditional uninterrupted ad. This, in turn, may allow the split ad to produce more positive attitudes than an uninterrupted ad that contains the same set of information, but lacks the cue to focus on the very favorable information.

Returning to Nike as an example, suppose that the television portion of a split ad introduced a new shoe, and suppose the web addendum provided additional features of the new shoe that were especially favorable. According to the current theorizing, these attributes should receive more attention when presented in the latter portion of a split ad than they would receive when presented in an uninterrupted traditional ad. Assuming this information is viewed quite

favorably, judgments of the shoe should be more favorable following the split ad than following the uninterrupted ad.

The notion that a split ad can enhance the attention given to a very favorable attribute raises a corollary issue of whether this advantage is to be invariably expected to occur. Possibilities for limiting conditions are discussed in the sections below.

## ***1.2. Conditions Split Ad Are Most Effective***

What are the circumstances under which a split ad may benefit a brand? Extending the theorizing of Bastardi and Shafir, this specific question can be recast in the broader terms of when self-perception may be expected to play a greater or lesser role in influencing a consumer's thinking [1]. That is, if self-perception drives the weighting advantages associated with split information, then boundaries on self-perception effects should constitute boundaries on such influence from a split ad. Two factors will be considered that may moderate the influence of self-perception and thus may determine whether a split ad is more or less likely to play a role in a consumer's thinking.

## ***1.3. The Role of Category Usage***

Self-perception has been described as a relatively superficial manner of processing [6]. As such, it is a phenomenon that tends to influence judgments in circumstances where individuals are unwilling or unable to engage in more demanding judgment formation processes. For example, experiments indicate effects for self-perception on judgment when subjects have low motivation, have limited prior knowledge and/or lack access to relevant sensory data [23, 25, 26].

These findings imply that the ability of a split ad to heighten the weight given to information in its addendum may be confined to certain types of circumstances. These would include situations where the product category is not important to a consumer, where the consumer has little familiarity with the category, or where they have little sensory information to leverage. With this in mind, and noting research that indicates that such characteristics may be typical of light users of a product category, a proposition may be derived that split ads are more likely to positively influence the judgments of light users than heavy users [8, 9].

Returning to the Nike example, what is suggested is that the tendency to use self-perception to infer weights for Nike shoe information would differ between heavy and light users of the athletic shoe category. Relative to heavy users, light users may be individuals who are less likely to consider athletic shoes important, who have less extensive knowledge about attributes of athletic shoes and who have had fewer chances—because they wear the shoes less frequently—to gain sensory information about attributes (which features deliver exceptional comfort, etc.). As such, light users' sense of what attributes are important for athletic shoes may often be more malleable than that of heavy users.

Light users may thus typically be more open to cues about

importance that can be inferred from observing their own behavior. Therefore, if light users note that they have pursued information by visiting the Nike web site to see the ending of a split ad, special weight may be given to attributes learned therein. When these attributes are particularly highly valued, a more positive attitude should be created than would be the case in the absence of the highlighting cue from self-perception, as with an uninterrupted ad.

However, for heavy users, it seems unlikely that split ads would produce a similar effect. If heavy users are more involved with athletic shoe purchases, have more familiarity with shoe attributes and have a broader base of sensory input from wearing athletic shoes, then they seem more likely to have a priority structure developed for what they consider to be more or less relevant to athletic shoe judgments. With these resources, there would be less need for heavy users to infer importance for particular attributes from observations of their own behavior. Thus it can be predicted that for heavy users, there would be no difference in weighting for attributes received via a split ad or an uninterrupted ad.

Having reasoned that weighting benefits from a split ad will be limited to light users, attention is briefly turned to what effect split ads might then have on heavy users. A key issue in this regard is this: If the behavior cue does not provide information about attribute importance, what purpose might it serve for heavy users? One possibility is that the cue may simply make salient the effort undergone by the consumer. That is, instead of inferring "I pursued this information, therefore it must be important," the inference for heavy users might simply be "I pursued this information," which may connote exertion above that traditionally extracted from an advertising audience member.

Further, if such recognition of extra effort occurs, there is reason to believe that it could have negative consequences. Evidence suggests that effort expenditures can create negative affect [7]. It thus seems possible that a split ad could actually reduce the favorability of a heavy user's reaction to an advertised product, as compared to an uninterrupted ad.

For Nike, this would imply that although attribute importance would not differ as a function of whether claims about a new shoe were presented in a split ad or an uninterrupted ad, attitude toward the advertised shoe might be less favorable among heavy users exposed to a split ad than those exposed to an uninterrupted ad. This would presumably occur because heavy users would take note of their behavior in pursuing the second half of the split ad, negative affect due to a natural aversion to expending effort would be elicited, and this could reduce the resulting judgments' favor. Experiment 1 tests these propositions regarding category usage and the effects of a split ad.

#### **1.4. The Role of Timing**

The characterization of self-perception as a superficial process also raises an issue with respect to the permanency of any differentially positive judgments that result from a split ad. As described earlier, the importance weightings that light users may derive from exposure to a split are the

consequence of a relatively low effort process. All that is required of the consumer is to make a simple inference about the meaning of an information-seeking behavior. Given evidence that responses resulting from perfunctory processes can be relatively unenduring, it seems possible that the weighting produced by self-perception may be fairly ephemeral [10, 21].

Indeed, previous research has shown that influence from self-perception, which is evident in the immediate term, can fade after a substantial time interval [20]. The explanation advanced for such decreased impact centers on subsequent accessibility of the cue regarding one's behavior. It is theorized that although such cues may be salient initially, they are likely to become less accessible after delay. This might occur because of lack of rehearsal and because other cues that are attended in the interim have more recent activation and thus are more accessible. Because of this diminished accessibility, any effect the cue might initially have had dwindles as well [24].

One implication of the foregoing discussion is that measurement timing may moderate the observance of superiority for a split ad over an uninterrupted ad. Returning to the Nike example, a qualification seems to be necessary for the effects predicted for light users' attitudes. The premise was that Nike's split ad would produce a more positive attitude than an uninterrupted ad for light users of Nike shoes. The preceding analysis further suggests that this result will be contingent upon attitude measurement occurring immediately after the second portion of the split ad is experienced. If, on the other hand, a delayed report of attitudes is taken, and if the split ad's weighting of the very positive information is relatively weak and unenduring, then the advantage of a split ad over an uninterrupted ad may fade over time. Experiment 2 examines these possibilities.

## **2. Experiment 1**

Experiment 1 tested the basic predictions regarding the effects of split ads on heavy and light users of a product category. Participants were classified as either heavy or light users of athletic shoes. Information was provided about a hypothetical new shoe from Nike. This was delivered via either a split ad or an uninterrupted ad. Attitudes toward the new shoe were then assessed, along with the perceived importance of information provided in the latter half of the split ad.

Two predictions were made for light users. First, it was expected that the split ad would produce more positive attitudes toward the new shoe than the uninterrupted ad. Second, it was anticipated that light users would rate information as more important when it appeared in the latter portion of a split ad than when it appeared in an uninterrupted ad. In contrast, for heavy users, perceived information importance was not expected to differ as a function of advertising format. At the same time, it was also anticipated that the split ad would produce less positive attitudes toward the advertised shoe than the uninterrupted ad.

## 2.1. Method

The design for the experiment was a 2 (light users, heavy users) X 2 (split ad, uninterrupted ad) fully crossed factorial. Fifty-nine participants were recruited for the experiment, which was represented as a study of consumer reactions to new products.

To begin the experiment, subjects were asked to read a print ad for the Runnaire, a hypothetical new shoe from Nike. The ad began with information that a pretest (N=11) had indicated was viewed as moderately positive (rating 4.2 on 1-7 scale). Specifically, the ad stated that this shoe was designed for serious runners who were busy and thus offered glow-in-the-dark markings for safe after-dark jogging.

The ad then noted that the Runnaire also had a sole made of a novel type of rubber material. For subjects in the split ad condition, the ad then suggested that they visit a Runnaire web site, for which an address was given, and obtain more information on this new feature.

At the web site, participants learned information that the pretest had indicated was viewed quite favorably (rating 6.1 on 1-7 scale). This was, namely, that Runnaire's sole material was more durable than the kind that is typically used in athletic shoe designs, allowing it to last nearly one-third longer than other shoes before wearing out. It was pointed out that for avid runners, this could mean a significant cost savings over time.

Subjects in the uninterrupted ad condition received the same set of information as those in the split ad condition. However, the attributes were provided in their entirety as part of the original print ad.

After exposure to the entire ad, subjects provided a series of attitude ratings for the new Nike shoe. On 1-7 scales, subjects indicated judgments on dimensions labeled by bad/good, not excellent/excellent, negative/positive, unfavorable/favorable, dislike/like and inferior/superior. Next, they indicated the importance of the two features that had been mentioned in the ad, the rubber sole material and the glow-in-the-dark markings. Each of these features were rated on 1-7 scales for three dimensions related to importance, including irrelevant/relevant, not important/important and insignificant/significant.

Finally, respondents provided several pieces of information related to their level of category usage for athletic shoes. First, subjects estimated how often in a typical week they wore athletic shoes. Second, they reported the number of athletic shoe purchases they had made in the last year. Third, they responded to three items assessing the perceived level of importance of athletic shoes. On 1-7 scales, participants rated athletic shoes on dimensions of unimportant/important, irrelevant/relevant and insignificant/significant.

## 2.2. Preliminary Analyses

Analysis began by classifying subjects as relatively light or relatively heavy users of athletic shoes. To do this, a procedure was mimicked that was previously followed by Goldsmith and colleagues [8.9] Frequencies were examined in the reports of

how often athletic shoes were worn in a given week. Using these reports, users were split into two groups, designating those above the median (median usage = 3 times per week) as relatively heavy users of athletic shoes and those below as relatively light users.

Reports of purchase frequency for athletic shoes were then analyzed as a function of the light-heavy user distinctions. As expected, subjects classified as light users reported significantly fewer purchases ( $X = .94$ ) of athletic shoes in the past year than those classified as heavy users ( $X = 2.54$ ;  $F(1, 57) = 74.47$ ,  $p < .01$ ).

The importance of athletic shoes to individuals in each of these groups was also examined. The three importance ratings for athletic shoes were factor analyzed, revealing a single factor that was reliable ( $\alpha = .81$ ). Thus, ratings were averaged for each subject. An ANOVA on the combined scores indicated that light users ( $X = 2.67$ ) considered athletic shoes significantly less important than heavy users ( $X = 4.98$ ,  $F(1, 57) = 78.65$ ,  $p < .01$ ).

Taking these analyses together, it was concluded that the spirit of heavy and light usage groups had been captured with the classifications.

## 2.3. Analyses of Attitudes and Attribute Importance

Attitudes were examined as a function of usage group and ad condition. Attitude items were factor-analyzed and were shown to load on a single factor that was reliable ( $\alpha = .86$ ). Scores on the attitude items were thus averaged for each subject. An ANOVA on the combined attitude scores revealed an interaction between the independent variables ( $F(1, 55) = 19.60$ ,  $p < .01$ ). Contrasts indicated that different patterns of responses occurred among light users and heavy users. Means are reported in Table 1.

**Table 1.** Experiment 1 Means by Condition.

		Split Ad	Uninterrupted Ad
Light users	Attitude	4.47	2.97
	Sole Importance	4.67	2.98
	Number of Respondents	16	15
Heavy users	Attitude	2.87	3.62
	Sole Importance	4.07	3.92
	Number of Respondents	15	13

For light users, attitudes were more favorable in the split ad condition ( $X = 4.47$ ) than in the uninterrupted ad condition ( $X = 2.97$ ,  $F(1, 55) = 18.44$ ,  $p < .01$ ). However, for heavy users, attitudes were less favorable in the split ad condition ( $X = 2.87$ ) than the uninterrupted ad condition ( $X = 3.62$ ,  $F(1, 55) = 4.12$ ,  $p < .01$ ). These results conformed to expectations that attitudes would be enhanced by a split ad for light users, but undermined for heavy users.

Analyses were also conducted to examine the further expectations about weighting for the attribute provided in the latter portion of the split ad. Importance ratings for the attribute featured in the latter portion of the ad (the rubber sole material) were factor-analyzed and were shown to load a single dimension. The factor was reliable ( $\alpha = .80$ ), and ratings were therefore averaged.

An ANOVA was conducted on the sole importance ratings. An interaction was observed between the experimental factors ( $F(1, 55) = 4.41, p < .04$ ). Follow-up analyses revealed that, as expected, different patterns for the sole ratings occurred for light users versus heavy users. Among light users, the sole attribute was rated as significantly more important in the split ad condition ( $X = 4.67$ ) than in the uninterrupted ad condition ( $X = 2.98, F(1, 55) = 11.11, p < .01$ ). However, among heavy users, the sole attribute's importance did not differ between the split ad condition ( $X = 4.07$ ) and the uninterrupted ad condition ( $X = 3.92, F(1, 55) = .07, p > .80$ )[1].

#### 2.4. Discussion

Experiment 1 provides evidence in support of some key hypotheses. Split ads were shown to enhance the attitudes of light users, and this seems to occur because of an enhancement in the importance attached to the information contained in the latter portion of the split ad. Consistent with theorizing by Bastardi and Shafir, light users seem to have inferred that because they bothered to pursue it, the information on the web must have been important [1]. This apparently led to increased weighting for the highly positive sole material attribute.

However, also as anticipated, the attitudes of heavy users were negatively affected by being presented in a split ad format. Noting that their importance weights for the sole attribute did not vary, the conclusion is that heavy users were not susceptible to self-perception of their actions in assigning importance weights to the information received. Presumably, this is because their more extensive prior interest in the category and their greater understanding of it allowed them to already have a priority structure in mind for what matters with respect to athletic shoes. Instead, for heavy users, the observation of their pursuit action may have reinforced a perception of the effort they were required to undergo to experience the entirety of the ad. Negative affect from this, we would argue, is what caused their attitudes to be less favorable in the split ad condition than the uninterrupted ad condition.

Having obtained support for the basic predictions, a qualification suggested by the literature review was next examined. This was, namely, that timing of measurement would moderate the observance of effects for a split ad among light users. In Experiment 2, this possibility is explored.

### 3. Experiment 2

In Experiment 2, light users and heavy users of athletic shoes were exposed to the same split ad or uninterrupted ad as in Experiment 1. However, in Experiment 2, the timing was also varied at which attitudes and importance for attributes was assessed. These measures were collected immediately after exposure to the ad information and then again after a one-week delay.

Predictions were that for the immediate reports, results from Experiment 1 would be replicated. Thus, for light users, attitudes and importance ratings for the rubber sole attribute would be greater in the split ad condition than in the uninterrupted ad condition. For heavy users, although no

difference in importance ratings were expected, attitudes were expected to be less positive in the split ad condition than in the uninterrupted ad condition. This would also be consistent with the characterization of the self-perception as being a relatively low effort process and thus the positive effects of split ads as being relatively unenduring.

#### 3.1. Method

The design for Experiment 2 was a 2 (light users, heavy users)  $\times$  2 (split ad, uninterrupted ad)  $\times$  2 (immediate report, delayed report) factorial. Usage group and ad condition were between-subjects variables, and report timing was a within-subjects variable. Sixty-one MBA students participated in Experiment 2. The study was again described in a recruiting notice as an investigation of consumer reactions to new products.

Procedures were quite similar to Experiment 1. Subjects received information about the new Nike shoe via either a split ad or an uninterrupted ad. They then responded to the same six attitude measures as in Experiment 1, rated the importance of the rubber sole shoe attribute on the same three dimensions as in Experiment 1 and completed the same battery of measures related to product category usage.

Two supplements to these methods were made for Experiment 2. First, reaction measures were added, which were related to the ad itself. After responding to attitude and attribute importance items, participants responded to three seven-point bipolar scales about how much they liked the ad (dislike/like, unfavorable/favorable, unenjoyable/enjoyable). Subjects then indicated the amount of effort they perceived the ad to involve using three seven-point scales (low effort/high effort, not taxing/taxing, not strenuous/strenuous). These measures were included to allow closer analysis of the process thought to underlie heavy users' reactions. Specifically, heavy users were expected to like the split ad less and to perceive it as more effortful than an uninterrupted ad.

The other change in Experiment 2 was the addition of a second assessment of attitudes and attribute importance. One week after exposure to the ad information and after making initial reports, subjects responded to a duplicate set of attitude and importance items.

#### 3.2. Preliminary Analyses

As in Experiment 1, subjects were classified into groups of relatively light or relatively heavy users of athletic shoes. Using the frequencies reports of how often athletic shoes were worn in a given week, those above the median (median = 3.00) were classified as relatively heavy users of athletic shoes and those below as relatively light users.

Reports of purchase frequency in the category were then analyzed as a function of the light-heavy user distinctions. Light users reported fewer purchases ( $X = 1.00$ ) of athletic shoes in the past year than heavy users ( $X = 2.58; F(1, 59) = 76.48, p < .01$ ).

The importance of athletic shoes to individuals in each of these groups was also examined. The three importance ratings

for athletic shoes were factor analyzed and loaded on a single factor that was reliable ( $\alpha = .82$ ). Thus, ratings were averaged for each subject. An ANOVA on the combined scores indicated that light users ( $X = 2.73$ ) considered athletic shoes significantly less important than heavy users ( $X = 5.01$ ,  $F(1, 59) = 71.66$ ,  $p < .01$ ).

### 3.3. Analyses of Attitudes and Attribute Importance

Next, attitudes were analyzed as a function of usage group, ad condition and timing of report. The two sets of attitude items (immediate and delayed) were subjected to separate factor analyses. Each set loaded on a single factor that was reliable (immediate  $\alpha = .83$ , delayed  $\alpha = .81$ ). Scores on the immediate attitude items were thus averaged for each subject, as were scores for the delayed attitude items. A three-way mixed ANOVA was conducted on the combined attitude scores. Results indicated a three-way interaction between usage group, ad condition and report timing ( $F(1, 57) = 6.08$ ,  $p < .02$ ). Follow-up analyses revealed different patterns of means for immediate and delayed attitude reports (see Table 2 and Figure 1).

Table 2. Experiment 2 Means by Condition.

		Split Ad	Uninterrupted Ad
Light Users	Immediate Attitude	4.23	2.75
	Delayed Attitude	3.14	2.86
	Immediate Sole	4.47	3.25
	Delayed Sole Importance	3.31	4.00
	Number of Respondents	17	16
Heavy Users	Immediate Attitude	2.83	3.56
	Delayed Attitude	2.57	3.35
	Immediate Sole	3.58	4.00
	Delayed Sole Importance	3.51	3.82
	Number of Respondents	15	13

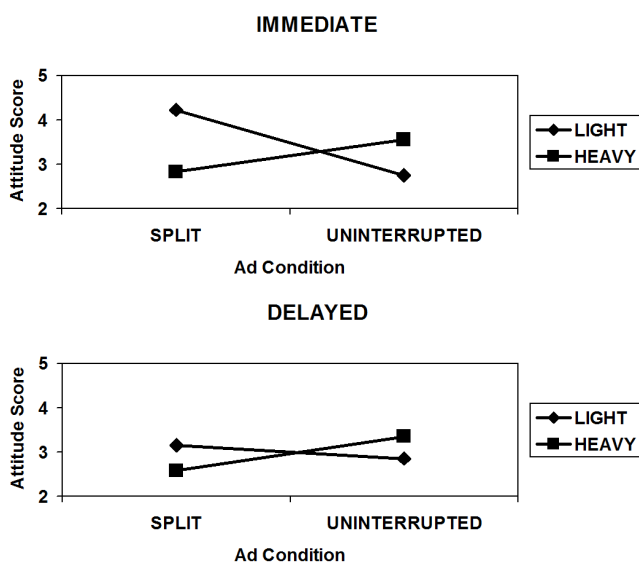


Figure 1. Attitudes.

For the immediate attitudes, a two-way interaction occurred between usage group and ad condition ( $F(1, 57) = 20.75$ ,  $p < .01$ ). Analyses of simple effects indicated that different patterns of responses occurred among light users and heavy

users. For light users, attitudes were more favorable in the split ad condition ( $X = 4.23$ ) than in the uninterrupted ad condition ( $X = 2.75$ ,  $F(1, 57) = 20.27$ ,  $p < .01$ ). However, for heavy users, attitudes were less favorable in the split ad condition ( $X = 2.83$ ) than the uninterrupted ad condition ( $X = 3.56$ ,  $F(1, 57) = 4.20$ ,  $p < .05$ ). These results thus replicated the finding from Experiment 1 that attitudes were enhanced by a split ad for light users but were diminished by a split ad for heavy users.

For the delayed attitude reports, a two-way interaction also occurred ( $F(1, 57) = 4.82$ ,  $p < .03$ ). However, a different pattern of means was observed than for the immediate attitudes. For light users, no differences were observed in delayed attitudes for the split ad ( $X = 3.14$ ) versus the uninterrupted ad conditions ( $X = 2.86$ ,  $F(1, 57) = .71$ ,  $p > .40$ ). Hence, as expected, the difference for light users that was observed upon immediate assessment seems to have failed to endure across the delay. Interestingly, though, the difference for heavy users prevailed over time. As in the initial attitude assessment, the split ad condition corresponded to less favorable attitudes ( $X = 2.57$ ) than the uninterrupted ad condition ( $X = 3.35$ ,  $F(1, 57) = 4.8$ ,  $p < .03$ ). This latter finding suggests that although benefits of a split ad may not be long lasting, disadvantages to this presentation method for particular types of consumers may unfortunately be more persistent.

Next, analyses were conducted to examine the corollary expectation that the attitude results would be associated with particular patterns of weighting for the sole material attribute provided in the latter portion of the split ad. Immediate and delayed importance ratings for the rubber sole material were separately factor-analyzed and were each shown to load on a single dimension. Each factor was reliable (immediate  $\alpha = .74$ , delayed  $\alpha = .77$ ). Ratings were thus averaged within each set.

A mixed ANOVA was then conducted on the sole importance ratings. An interaction was observed between the three factors, usage group, ad condition and report timing ( $F(1, 57) = 9.18$ ,  $p < .01$ ). For the immediate reports, the pattern from Experiment 1 was replicated. A two-way interaction was observed between user group and ad condition ( $F(1, 57) = 6.97$ ,  $p < .01$ ). Simple effects tests indicate that among light users, the sole attribute was rated as significantly more important in the split ad condition ( $X = 4.47$ ) than in the uninterrupted ad condition ( $X = 3.25$ ,  $F(1, 57) = 8.40$ ,  $p < .01$ ). However, among heavy users, the sole attribute's importance did not differ between the split ad condition ( $X = 3.58$ ) and the uninterrupted ad condition ( $X = 4.00$ ,  $F(1, 57) = .85$ ,  $p > .36$ ).

For the delayed importance scores, no differences were observed in these ratings across conditions ( $F_s < 2.42$ ,  $p_s > .12$ ). Hence, as anticipated, the differential importance of the sole attribute for light users in the split ad condition subsided after the delay.

### 3.4. Analyses of Ad Liking and Ad Effort

The final analyses concerned the measures of liking of the ad and effort elicited by the ad. The three items relating to each of these dimensions were separately factor-analyzed and

were shown to load on single factors that were reliable (alpha for liking = .85, alpha for effort = .87). An ANOVA on the liking measures revealed a two-way interaction between usage group and ad version ( $F(1, 57) = 12.05, p < .01$ ). Contrasts revealed that, as expected, heavy users liked the split ad ( $X = 2.56$ ) less than the uninterrupted ad ( $X = 3.49, F(1, 57) = 4.92, p < .03$ ). However, the opposite was true of light users. They liked the split ad ( $X = 4.54$ ) more than the uninterrupted ad ( $X = 3.50, F(1, 57) = 7.38, p < .01$ ).

For the effort measure, an ANOVA revealed a main effect for ad condition ( $F(1, 57) = 5.69, p < .02$ ). More effort was perceived in the split ad condition ( $X = 3.84$ ) than the uninterrupted ad condition ( $X = 3.09$ ).

Thus, it appears that although both heavy and light users perceived the split ad to require more effort, the light users enjoyed the experience, whereas the heavy users did not. These observations are consistent with the notion that heavy users and light users would interpret the self-perception cue differently, with light users finding the cue informative as to attribute weights and heavy users drawing negative affect from the reminder that greater effort was elicited.

### 3.5. Discussion

In addition to replicating results from Experiment 1, Experiment 2 uncovers a more complex pattern of responses when timing of measurement is taken into account. For measurements taken immediately after exposure to the advertising materials, enhanced attitudes and attribute importance were again manifest for light users exposed to a split ad, and undermined attitudes were observed for heavy users. However, for measures taken after a week's delay, the positive influence on light users did not persist. The negative impact on heavy users, however, was enduring.

## 4. General Discussion

Presumably, marketers such as Nike must expect that using a split ad will offer some benefit over and above that which could be achieved by conveying the same information in a traditional uninterrupted ad. The current findings lend support to this intuition, but also suggest certain caveats.

From the results of experiment 1 it can be concluded that split ads enhance the attitudes of light users, seemingly due to the enhancement in the importance attached to the information contained in the latter portion of the split ad. This result of light users seems to be due to the inference because they bothered to pursue it, the information on the web must have been important. This finding is consistent with Bastardi and Shafir, [1]. This apparently led to increased weighting for the highly positive sole material attribute.

However, also hypothesized in experiment 1, for heavy users attitudes were negatively affected by the split ad format. Heavy users' importance weights for the shoe sole attribute did not vary, because heavy users were not susceptible to self-perception of their actions in assigning importance weights to the information received. It is hypothesized, this is due to their more extensive prior interest in the category and

their greater understanding of it allowed them to already have a priority structure in mind for what matters with respect to athletic shoes. Instead, for heavy users, the observation of their pursuit action may have reinforced a perception of the effort they were required to undergo to experience the entirety of the ad. Negative affect from this, we would argue, is what caused their attitudes to be less favorable in the split ad condition than the uninterrupted ad condition.

Experiment 2 results supported experiment 1 findings that split ads seem to be superior to uninterrupted ads for light users of a product category, but not for heavy users. In fact, for heavy users, the effect of a split ad on attitudes can be deleterious. This finding suggests a logical link between a brand's targeting strategy and a tactical decision of whether to use a split ad or an uninterrupted ad. It seems that split ads may be most appropriate to consider when targeting strategy necessitates communicating with a substantial portion of light users. Certainly, this seems to arise in a growing number of situations, such as when a heavy user base is saturated within a product category or when heavy users have such established habits as to reject new information [12]. In the former case, a market leader with an already strong base of heavy users might find split ads useful when the desire is to gain share by shifting attention to attracting more business from lighter users of its category. In the latter case, a challenger brand might find split ads useful for communicating with light users when heavy users have seemingly insurmountable loyalties to a leader brand.

An additional finding of experiment 2 relates to the permanence of the superiority of a split ad over an uninterrupted ad, even for light users. Data from Experiment 2 suggest that the effect of a split ad will be somewhat fleeting. Strategically, this seems to indicate a relatively short window of opportunity for a marketer such as Nike to capitalize on the impact of this sort of advertising. This observation implies a connection between more general web site design strategy and a decision to use the split ad tactic.

The implication would be that in order to best exploit the effect of a split ad, consumers should be allowed to express preferences immediately after experiencing the advertising. This, in turn, suggests that when this advertising style is employed, and when the web is used to present the second portion of the split ad, maximum benefits might be reaped by those marketers who are able to take on-line orders directly at the web site, allowing minimum delay between exposure and expression of purchase interest. In Experiment 2, it was observed that delaying even a week seems to squander the positive impact created by a split ad. Thus, bundling split ads with on-line order taking functions seem ideally suited to maximizing rewards from the advertising efforts.

### 4.1. Theoretical Contributions

The internet introduces a host of new communications options to marketers. The split ad technique that has been investigated is one such option. Like many web-related tactics, the relatively recent emergence of the split ad format means



that little is currently understood about its effects. The present research begins to address this gap with respect to split ads. A theoretical account was presented of their influence on information-processing, and experimental evidence was presented in support of the theory.

In a broader theoretical sense, the present studies may be viewed as an extension of research by Bastardi and Shafir [1]. Their experiments on one-part and two-part decisions provided initial documentation that such presentation formats could result in different processing of information. However, the studies go beyond the earlier research by delving into underpinnings and consequences these effects.

It is in their discussion of these findings that the Bastardi and Shafir suggest that self-perception may provide a foundation for understanding why the differences have occurred. However, since this possibility arose relatively late in the paper, related predictions are not pursued in depth. One contribution of the current work has been to develop and test such predictions. As a result of these endeavors, confidence may be increased in the speculation by the original researchers that self-perception was indeed integral to their results.

A related contribution of this research is to help extend self-perception and self-attributions into new practical contexts. This classic theoretical perspective has historically been applied to analyses of issues such as brand switching [17] and reactions to retail membership fees [5]. The present studies join a trend of stretching it into new domains of consumer psychology, such as, for example, the examination of cross-cultural cognitions [13].

The current research also contributes to the relatively slim stream of literature on attribute weighting uncertainty. It has been noted that decisions are relatively understudied for which consumers are certain about attribute values, but uncertain about the appropriate weighting to give available attributes [11]. Seeking to address this gap in understanding, designed several studies to investigate the consequences of different levels of uncertainty [11]. They found that reactions to particular types of product attributes varied as a function of uncertainty about their importance. The present work adds the insight that reactions to particular advertising strategies can also be influenced by uncertainty about appropriate attribute weights. Additionally, it adds the existing research on split or hybrid advertising [19, 20].

#### 4.2. Future Directions

Several directions for future research seem promising. For example, it would be interesting to investigate additional forms of split ad delivery. This research has explored a print-web combination, but there are certainly many others that would be possible, including radio and web, billboard and web, and so on. Will the present results prevail when different media form the parts of the split? This question is particularly relevant, given recent findings regarding differences in exposure liking for different media [22]. Along similar lines with the increase in omnichannel marketing the use of split ad technique is increasing particularly with social media platforms. Can similar effects be produced when ads are split

but both parts are run within one single medium? Can going from, for example, one web location to social media platform or another website produce a similar self-perception inference that will affect attribute weighting?

Another future direction relates to individual differences. The present studies have documented differing responses from heavy and light users. Might personality factors similarly moderate the influence of a split ad? For example, could more general tendencies than we have investigated affect the likelihood of allowing attribute weighting to be affected by self-perception inferences prompted by a split ad? Perhaps it is the case, for instance, that individuals who are chronically low in Need for Cognition will be more susceptible than those who are chronically high in Need for Cognition [4]. For low Need for Cognition individuals, a split ad may offer a low-effort manner of responding to an ad that will be quite attractive. For high Need for Cognition consumers, this effect may be lost in the more extensive elaboration of information that may be undertaken. Additional research is needed to address these various issues and thereby add to the comprehension of the effects of this type of advertising.

Additionally, drawing from attitude strength research it can be predicted attitudes would be more enduring [16, 18]. Heavy users because of their experience, knowledge and interest would have stronger attitudes than light users. The stronger attitudes would endure over a time delay [14-16, 18].

## Footnotes

In the interest of completeness, the importance ratings for the glow-in-the-dark markings attribute were also analyzed. The ratings loaded on one reliable ( $\alpha = .84$ ) factor, and thus we averaged scores for each subject. However, an ANOVA revealed no differences across usage or ad conditions ( $p > .65$ ). The theory had suggested no specific predictions for this variable, since this is information that was always presented to subjects in print ad form and never after a split.

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