Peripheral Cues or Persuasive Arguments?
An examination of print advertisements from an ELM perspective

THESIS

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Abstract

Keller and Lehmann (2006), preeminent scholars in the area of marketing and branding, pointed out that little academic research has been conducted regarding the impact of visual elements, such as a company’s logo, slogan, or tagline, on consumer attitudes toward marketing efforts. Therefore, in an effort to enrich this area of literature, this paper proposes an incorporation of the use of a particular visual element in a print advertisement into the larger framework of the elaboration likelihood model. Specifically, a 2 (issue involvement level: high or low) x 2 (argument quality: strong or weak) x 2 (visual element presence: present or absent) experiment will ideally explore under which conditions audience members tend to engage this aspect of an advertisement as a central argument or peripheral cue. In addition to providing a centralizing literature review of marketing and communication literature regarding branding, brand equity, brand positioning, and the elaboration likelihood model, this paper will offer practical advice to marketers of given brands by describing how different consumers potentially react to the use of a visual element in advertising.
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Overview/Introduction/Rationale

Keller and Lehmann (2006), preeminent scholars in the area of marketing and branding, pointed out that little academic research has been conducted regarding the impact of visual elements, such as a company’s logo, slogan, or tagline, on consumer attitudes toward marketing efforts. Therefore, in an effort to enrich this area of literature, this paper proposes an incorporation of the use of a particular visual element in a print advertisement into the larger framework of the elaboration likelihood model. Specifically, a 2 (issue involvement level: high or low) x 2 (argument quality: strong or weak) x 2 (visual element presence: present or absent) experiment will ideally explore under which conditions audience members tend to engage this aspect of an advertisement as a central argument or peripheral cue. In addition to providing a centralizing literature review of marketing and communication literature regarding branding, brand equity, brand positioning, and the elaboration likelihood model, this paper will offer practical advice to marketers of given brands by describing how different consumers potentially react to the use of a visual element in advertising.
Literature Review

Brands and Branding

They have left an indelible mark on western culture. They often provide their users and customers with a sense of self-worth, belonging, and imagined feeling of connection and community with other consumers. Many times, they are so easily recognizable that only a symbol or phrase is needed to bring them to mind. They are brands, some of the most powerful influences and organizations in America’s capitalist society. They are the Nike swoosh, the McDonald’s arches, and the Apple logo, entire mindsets and collections of people that are represented by simple symbols and logos.

Brands are unmistakably influential, however, these brands are made, not born, and are formulated and developed through a series of persuasive steps and processes. Firms must first take the necessary actions that lead to customer responses and reactions to the brand, which ideally result in the purchase of the product or service and, eventually, a fostering of loyalty. The typical formula for an aspiring corporation or firm is to integrate branding and marketing activities in an effort to achieve brand positioning and brand equity. Brand equity is parsimoniously defined as the value of a brand or brand name. Clearly, as firms attempt brand positioning by creating certain impressions and images in the minds of potential consumers, communications plays an imperative role. While direct experience with a product or service is one obvious method for learning about a product, consumers learn much of what they originally associate with a product
through marketing and advertising, which is often performed through the mass media. Since brands and the process of branding are so significant in American culture, a wide variety of academic scholars from a number of different fields have explored the concepts behind brands. Communications, economics, and marketing researchers all describe brand equity, brand positioning, and different strategies available for firms, while applying their own unique concepts and theories. Before expanding on this literature, it is imperative to review the key ideas behind much of this work.

When thinking about brands, it is easy to picture the concrete products or logos that are associated with or produced by the actual company. Nike has shoes and the famous Air Jordan symbol, Coca-Cola has soft drinks and polar bears, and Geico has a talking lizard. Clearly, brands are built on the product or service itself, and elements such as logos, symbols, packaging, and phrases help companies differentiate offerings to customers (Keller & Lehmann 2006). Nevertheless, brands reflect the complete experience customers have with the product, and it is important for the accompanying marketing activity and brand positioning efforts to keep this in mind. Among the criteria useful for choosing and designing brand elements to build brand equity (which will be formally discussed and defined later) are memorability, meaningfulness, aesthetic appeal, transferability (across products, markets, geography, and cultures), adaptability, and flexibility (Keller 2003).

Furthermore, Aaker (1997, 1999) discovered that customers often attribute personality types to brands in the United States, and actual customers often purchased the brand that most closely resembled their own associated personality type. The brand
personality types in these studies fell into five primary clusters: sincerity, excitement, competence, sophistication, and ruggedness (Aaker 1997). Additionally, research has also explored personal relationships that people have with brands and the nature of desired relationships that consumers seek out in products. Fournier (1998) found that among these relationship dimensions were loyalty, commitment, nostalgia, intimacy, and quality. It is even possible for brand communities, which are classified by a shared consciousness, rituals and traditions, and a sense of moral responsibility, to develop among brand users (Muniz & O’Guinn 2000; Carlson, Suter, & Brown 2008). Taking all of this into account, a brand can be seen as a lens through which the words and actions of a company, its competitors, and the environment in general are converted into thoughts, feelings, attitudes, images, and perceptions about products and services, which will eventually result in a degree of brand equity (Keller & Lehmann 2006).

In an effort to further extend and build upon a brand and brand equity, several studies have demonstrated that leading brands can command large price differences when compared to non-leading brands (Park & Srinivasan 1994; Agrawal 1996) and are typically more immune to price increases (Sivakumar & Raj 1997). Since generating profitable growth is typically the primary objective for companies, brand extensions have been investigated, with results suggesting that the success of an extension, whether it is with new products or into new markets, tends to depend primarily on the perceptions of fit that consumers hold between the parent brand and the new direction (Klink & Smith 2001; Keller & Lehmann 2006). Keller and Lehmann (2006) recognized four distinct components that combine with the price of a product or service to make up what they
called the value of a branded product. These components were biased perceptions, image
associations (non-product related attribute beliefs, such as stylish or friendly),
incremental value (an additive constant that is associated with a given brand name that is
not related to a particular attribute or belief), and an inertia value (perceived value from
consumers of simply choosing the same option rather than spending effort to consider
other choices).

**Communicating the Brand and Corporate Identity**

To facilitate the development of a successful brand and eventual brand equity, a
firm must formulate some type of corporate identity. In fact, in much of the literature, the
concept of a corporate identity is synonymous with the idea of a brand. Elements such as
the logo and tagline play an imperative role in creating a firm’s corporate identity, and
the resultant exposure of this corporate identity to potential customers through
communications and marketing is believed to enhance the public’s familiarity with the
company. Scholars stress the importance of maintaining a clear and consistent corporate
identity through communicative elements, such as an appropriate name and logo
(Ackerman 1988; Carls 1989; Gorman 1994). Furthermore, Lambert (1989) depicts
corporate identity as consisting of two levels: that which can be seen above the surface
(visual elements like name, logo, colors) and natural forces of the firm that exist below
the surface (communications, corporate structure, behavior). Alessandri (2001) defines a
firm’s corporate identity as all of the observable and measurable elements of a firm’s
identity manifest in its comprehensive visual presentation of itself, including – but not
limited to – its name, logo, tagline, color palette, and architecture. Moreover, corporate
identity includes the firm’s public behavior, including – but not limited to – its reception of employees, customers, shareholders and suppliers (Alessandri 2001).

Clearly, as is stressed in much of the branding literature, there is more to a brand and corporate identity than merely the product or service. In order to foster an ideal corporate identity and brand, a firm must strategically plan and purposefully present itself in order to gain a positive corporate image in the minds of the public. Then, for a company’s corporate identity and idealized sense of the brand to move from the firm’s control to the minds of potential consumers, exposure must occur through various channels. While this is possible through interpersonal contact, it is more often done through mass communication, brand positioning, and advertising.

**Brand Equity**

Ultimately, the final goal for a company in any branding activity, as is the case for most business decisions, is to garner a profit. The value of a brand and its established brand name can be thought of as the brand’s equity. Brands are being recognized as valuable assets and, therefore, there has been increased scholarly attention granted to understanding how to build, manage, and measure brand equity (Keller 1993, 2003; Kapferer 2005). High levels of brand equity reduce price sensitivity and often make advertising more effective, all while ensuring distribution in channels with limited selections, such as convenience stores or small distributors. Thus, there may be a virtuous circle as brands develop positive brand equity, making it easier for established brands to develop further while making it harder for competitors to compete (Keller & Lehmann 2006). Included among the increasing research concerning brand equity are three distinct
perspectives to studying the concept – the customer approach, the company approach, and the financial market approach.

The customer level is developed from the customer point of view, and brand equity is ultimately part of the attraction or repulsion a customer feels toward a particular product from a particular company. Thus, if frequently generated from nonobjective parts of product offerings instead of the actual product attributes, and through effective marketing, customer use and interpersonal influences can develop series of attachments and associations that exist beyond the product itself (Keller & Lehmann 2006). The company based approach to studying brand equity arises from a company perspective and is seen as the additional value that is accumulated for a firm because of the presence of the brand name that would not accrue to an equivalent, but unbranded, product (Keller & Lehmann 2006). Additionally, the financial based approach to studying brand equity is seen from a financial market point of view, in which brands are viewed as assets that can be bought and sold frequently. The eventual financial worth is the price the brand brings, or could bring, in the financial market. The details to measuring brand equity differ depending on the approach one undertakes, however, they have a common core. Each implicitly or explicitly focuses on brand-knowledge structures that are cultivated in the minds of consumers (individuals or organizations) as the primary source of brand equity (Keller & Lehmann 2006).

Ultimately, the value of the brand (its equity) is derived from the words and actions of consumers because they are the ones who decide, through purchases based on factors they see as important, which brands have the most financial success and resultant
equity (Villas-Boas 2004). Many scholars prefer conceptualizing brand equity from a customer based perspective, since it enables managers to consider how marketing programs improve the value of brands. Keller (1993) defines customer based brand equity as the differential effect of brand knowledge on consumer response to the marketing of the brand. A brand has positive (negative) brand equity if customers react more (less) favorably to an element of the marketing mix for a brand than they would have for the same marketing mix element attributed to a fictitiously named version of the product or service. Building customer based brand equity requires the creation of a familiar brand with favorable, strong and unique brand associations. This can be done through an initial choice of brand identities such as a brand name, logo, or symbol, and through the integration of brand identities into supporting marketing programs (Keller 1993). If one is to assume the common approach of conceptualizing brand equity from a customer based point of view, there are two basic approaches to measuring this consumer based brand equity. The indirect approach attempts to assess potential sources of customer based brand equity by measuring brand knowledge (brand awareness and brand image), while the direct approach strives to measure customer based brand equity by assessing the impact of brand knowledge on consumer responses to different elements of the firm’s marketing program (Keller 1993). The indirect approach is useful in identifying what aspects of brand knowledge cause differential responses that create customer based brand equity, and the direct approach is useful for determining the nature of these differential responses. The most obvious example of a differential customer response is the purchase of one brand over another or more favorable attitudes toward a
given brand. Thus, the two approaches are complementary and are best used together (Keller 1993).

Despite these various scholarly approaches, no single number or measure can capture the entirety of brand equity. Rather, the concept should be thought of as a multidimensional notion that depends on what knowledge structures are present in the minds of consumers and what persuasive actions a firm can undertake to capitalize on the potential offered by these knowledge structures (Keller 1993). Keller (1993) presents a handful of general guidelines in an effort to assist marketers in their attempts to manage customer based brand equity. He proposes that marketers should adopt a broad view of marketing decisions, they should define knowledge structures that they would ideally prefer to create in the minds of consumers, and they should evaluate the increasingly large number of communicative options available to create these desired knowledge structures. Ultimately, the way in which a brand association is created is not nearly as important as the favorability, strength, and uniqueness of these associations. While strong, favorable, and unique can be viewed as separate concepts, when consumers possess associations that can be classified as strong, favorable, and unique, the differential responses of more favorable or accessible attitudes, as well as actual purchase decisions, will be more likely.

**Brand Positioning and Knowledge Structures/Associations**

It is unmistakably a crucial communication task for all brands, and especially for unknown and aspiring brands, to build and establish knowledge in the minds of potential consumers. Only through this knowledge and resultant associations will firms realize a
high degree of brand equity. Therefore, it is necessary to establish these knowledge structures for a brand before increasing sales, so potential consumers can respond positively to marketing, since high levels of brand awareness and a positive brand image can increase the effectiveness of marketing communication (Keller 1993). Ultimately, these brand knowledge structures occur when potential consumers think of a given brand when presented with a product category. Through brand positioning, a firm can develop these knowledge structures and associations by integrating and coordinating various marketing activities (Naik & Raman 2003). The long term success of marketing for a brand is greatly influenced by the knowledge of the brand in memory that is established by short term marketing. Thus, it is crucial for managers to understand how marketing programs affect consumer learning and subsequent recall for brand information in an effort to enhance brand awareness (Keller 1993).

The overall purpose of brand positioning is to allow the brand to develop a sustainable competitive advantage, which will ideally give customers a compelling reason for purchasing brand relevant products. If the communicative task of brand positioning can create fundamentally high levels of brand awareness and a positive brand image, it should increase the chance of brand choice and produce more consumer loyalty, which will ultimately decrease a brand’s vulnerability to competitors (Keller 1993). However, the brand associations should be strong, favorable, and unique in order to generate a differential response, otherwise, the brand runs the risk of being viewed as a prototypical version of a product or service category. For example, a brand such as Nike strives to establish these strong and unique associations in the minds of potential
consumers so these same consumers see Nike products as more favorable than an average pair of gym shoes.

In an effort to establish key brand associations in the minds of customers to differentiate the brand for the purpose of competitive superiority, brand positioning sets the direction of a firm’s marketing activities and programs. A critical area that is relevant to brand positioning is the role that brand intangibles play in marketing. Brand intangibles are aspects of the brand image that do not involve physical, tangible, or concrete attributes or benefits (Levy 1999) and are common means that marketers use to differentiate brands among consumers (Park et al 1986). Moreover, brand intangibles cover a wide range of different types of brand associations, such as actual user imagery, desired user imagery, history, heritage, and experiences (Keller 2001). Physical, tangible, and concrete attributes, on the other hand, include such traits such as product features, price, warranty agreements, and product packaging.

Keller (1993), in a discussion concerning the various brand associations resulting from brand positioning, compared the process to an associative network memory model. He conceptualized brand knowledge as consisting of a brand node in memory to which a variety of associations are linked, meaning that the dimensions distinguishing brand knowledge and affecting consumer responses are awareness of a brand and the favorability, strength, and uniqueness of the accompanying brand associations. Brand awareness plays an influential role in consumer decision making because it is important that consumers think of a brand when they think of a product category, and awareness of a particular brand can influence decisions in the consideration set (for example a
customer may only buy established, well known brands). The elaboration likelihood model, which will be discussed in detail later, suggests that consumers may base choices on brand awareness considerations when they possess a low involvement level (Petty & Cacioppo 1984), which results from either a lack of consumer motivation or lack of consumer ability (perhaps consumers do not know anything else about brands). Related research has demonstrated that attitudes can be formed through less thoughtful decision making (Petty & Cacioppo 1986) by the use of heuristics or peripheral cues. For instance, if a consumer lacks motivation or ability to evaluate a product or service, he or she may use signals or extrinsic cues to infer product or service quality based on what is known about the brand. Clearly, the success of marketing programs and brand positioning is reflected in the creation and maintenance of favorable brand associations.

Roskos-Ewoldsen and Fazio (1992) found support for the hypothesis that the more accessible a source’s likability is from memory, the greater chance there is that a message recipient will agree with a message attributed to that source. Thus, if a brand is capable of increasing their likability in the eyes of potential consumers, there is a greater chance that people will tend to agree with their persuasive messages and advertisements. Roskos-Ewoldsen, Bichsel, and Hoffman (2001) proposed three explanatory mechanisms for this observed phenomenon. First, an increase in the accessibility of a source’s likability may increase the possibility that the message is centrally processed, since the activation of the attitude toward the source can serve as a cue that this is a likable source, which ultimately should enhance the motivation to process the message (Roskos Ewoldsen 1997). If the arguments are strong and a message recipient is processing them
centrally, more persuasion should occur (Petty & Cacioppo 1984, 1986). A potential second mechanism that may account for the persuasive effects of a more accessible sense of source likability is that an increase in the accessibility of the source’s likability may raise the probability that the likability heuristic will be activated from memory when the source is mentioned. This would imply that people are more likely to agree with the message merely because they like the source, regardless of the actual merits of the arguments. In other words, when peripheral processing is the default route of processing because of low motivation or ability levels which, in turn, may be due to distraction or low topic-relevant knowledge (Petty & Cacioppo 1984, 1986), the accessibility of the source’s likability as a peripheral cue or heuristic can still increase the chance of persuasion. Another potential mechanism described proposes that the accessibility of the source’s likability may lead to biased processing of the message content. Intuition suggests that if someone is processing a message in a biased fashion because he or she has an affinity for the source, more persuasion will occur. Therefore, there are a number of potential advantages available for a brand or firm if it can effectively create brand knowledge and likable associations with its brand positioning efforts.

**Comparative/Competitive Advertising**

While many scholars have researched a variety of different topics concerning branding, brand equity, and brand positioning, an interesting development has occurred in the actual world of marketing and strategic communications. The practice of competitive (or comparative) advertising, in which an advertisement contrasts two or more specifically named or recognizable brands of the same type of product or service and
makes a comparison between one or more attributes, has steadily increased since the 1970s (Yi, Phelps, & Roskos-Ewoldsen 1998). This can be done through a direct comparative advertisement, which specifically provides a name of a competitive brand, or through an indirect comparative advertisement, which only infers a competitive brand in its message without explicitly mentioning it by name. Thus, both established and aspiring brands must undertake their persuasive brand positioning efforts in a competitive environment, raising the importance of establishing unique and favorable brand associations in the minds of potential consumers.

Keller (1987) and Burke and Srull (1988) demonstrated that competitive advertising within a product category can affect consumer ability to recall communication effects for a brand by creating interference in memory. This meant that relatively weak associations may be developed between brands and their advertisement memory traces and associations, so that some communication messages within a given product category may not be recalled. Additionally, Keller (1991) discovered that a high level of competitive advertisements varying in valence produced interference effects for brand recall and evaluations. These interference effects were the result of confusion between competing advertisements and a failure or inability to retrieve brand claims. Despite these findings, Keller (1991) established that the utilization of advertisement retrieval cues can at least partially offset these detrimental interference effects and subsequently enhance recall and evaluations of brand claims as well as cognitive assessments in competitive advertisement situations. Advertisement retrieval cues are defined as additional visual or verbal information, besides the advertisement’s main
message, contained in the advertisement, such as a picture, background video, or attention catching slogan. Interestingly, the presence of advertisement retrieval cues resulted in higher brand evaluations when the target advertisement was considered effective and lower brand evaluations when the target brand advertisement was considered poor (Keller 1991). This suggests that different advertisement techniques in a competitive environment may influence audience elaboration and memory concerning brand messages and associations. If it can be discovered that particular visual elements in print advertisements can serve as persuasive advertisement retrieval cues, marketers can use these visual elements to overcome competitive interference.

**Elaboration in Brand Positioning**

Clearly, in an environment where comparative and competitive advertising is on the rise, it is important for brands to use different brand positioning techniques to ensure that potential consumers, at least briefly, think about and form associations concerning their products and services. One way that companies and brands can elicit these positive associations with their brands is by encouraging potential consumers to elaborate on their products and services. By further elaborating on different elements of brands, or their brand positioning strategies, consumers are more likely to develop favorable cognitive opinions regarding a given brand.

While Roskos-Ewoldsen and his colleagues (2001) discussed the elaborative consequences and mechanisms resulting from source likability, a number of different studies have explored the potential connections between brand concepts and elaboration. Parsimoniously defined, elaboration occurs when consumers provide additional cognitive
effort and scrutiny to a message feature. Campbell and Keller (2003) discovered that an advertisement for an unfamiliar brand may encourage an increased level of elaboration, since consumers are attempting to learn about its features. However, the same study found that consumers experienced repetition wear out at an earlier stage if the brand was unfamiliar. Furthermore, if the unfamiliar brand’s advertisements are repetitive, more negative thoughts about tactic inappropriateness arise, potentially suggesting that it would benefit an aspiring, new brand to vary the delivery and style of its advertisements.

Overall, research indicates that comparative advertising actually leads to more elaboration than non-comparative advertising (Priester, Godek, & Nayakankuppum 2004). Additionally, comparative advertising can lead to more elaboration if the target brand is compared to brands that are market leaders and possess a high degree of market share, especially if the target brand is relatively unfamiliar or unknown (Priester et. al 2004). Iyer (1988) actually discovered that there was less elaboration when a comparative ad compared two familiar brands than when one familiar brand was contrasted with an unfamiliar brand. This seems to suggest that brands high in market share do not always lead to more elaboration, since the two brands that were high in market share actually stimulated less elaborative processing. Priester and his colleagues (2004) explained this finding through the use of congruency research, which proposes that products that are moderately incongruent from the preexisting product category schema can actually receive more attention than those either congruent or very incongruent with the product category schema. Thus, since the two familiar brands that are high in market share are congruent, while the one unfamiliar brand compared to the familiar brand is moderately congruent,
incongruent, there is less elaboration for the two brands that are high in market share. Ultimately, the researchers concluded that when a target brand advertisement is low in market share compared to one that is high in market share, the market share explanation for elaboration is sufficient. However, if both brands are high in market share, then the congruency explanation is more efficient.

Other research concerning elaboration and brands suggests that information presented by untrustworthy endorsers is more likely to be thoughtfully elaborated on, while information presented by trustworthy endorsers is likely to be accepted as valid, without much extensive and additional thought (Priester & Petty 1995). The idea behind this research is that, if we can be confident in an expert to provide accurate information because they are trustworthy, we may forgo effortful scrutinizing of the message and accept it as valid. However, if we are unsure if the information is accurate because the endorser is untrustworthy, this signals that we need to further elaborate on the message. Priester and Petty (2003) attempted to replicate these findings and apply the conclusions to advertising effectiveness for brands. They found that attitudes for those who read the strong argument advertisement endorsed by a trustworthy source were as persuaded as those who read the strong argument (those that utilize statistics, data, and hard evidence – Petty et al 1981) advertisement endorsed by an untrustworthy source. However, the bases that these attitudes were formulated upon differed. People were favorable toward the ad with a trustworthy source regardless of argument strength, implying that these attitudes were not based as much on argument strength, and instead were developed more from a low cognitive effort process using the heuristic cue of trustworthiness of source. On the
other hand, strong attitudes for the advertisement utilizing an untrustworthy source occurred only if the advertisement had strong arguments, meaning these respondents based their attitudes more on argument strength and merit. Therefore, for strong argument conditions, trustworthy and untrustworthy endorsers yielded equally positive attitudes, but the authors propose that the psychological processes (bases) in forming these attitudes differ (Priester & Petty 2003). Those in the low trustworthiness condition elaborated more on argument strength, while those in the high trustworthiness condition relied more on the trust in the endorser.

Priester and Petty (2003) also found, using latency tests as a measure for attitude strength (accessibility), that attitudes formed from the untrustworthy endorser condition came to mind faster than the attitudes formed from the trustworthy endorser condition, supporting the hypothesis that more elaboration leads to more accessible attitudes. Ultimately, the authors provide two distinct processes by which source trustworthiness in a brand’s advertisement and brand positioning efforts can influence attitudes. It can influence the extent of elaboration because, when an endorser’s trustworthiness is low, there is more product-relevant elaboration, meaning argument quality has more of an impact, while source trustworthiness can serve as simple cue when the source is trustworthy. While the authors do not necessarily suggest that a brand utilize an untrustworthy source in its advertisements, it is an interesting study regarding the role that elaboration can play in brand positioning efforts.

Extending the research regarding elaboration and brand advertising, Livingston and Helsper (2006) found that the dual process elaboration likelihood model potentially
explains the differing effects of advertising on children. These researchers discovered that younger children tend to be more influenced by peripheral and source cues, while older children, who typically become more skeptical of advertising as they age, are more inclined to elaborate on product relevant messages. Therefore, older children can also be influenced by advertisements, and are often more persuaded with longer lasting attitudes, since they are centrally processing the messages. This helps explain why the empirical evidence suggests that children can be equally or more strongly influenced and persuaded by advertisements as they age, even when it is commonly assumed that younger children are more susceptible to advertising (Livingston & Helsper 2006).

**Elaboration Likelihood Model and Dual Processing**

Clearly, a handful of academic scholars have combined branding concepts with ideas concerning elaboration. The elaboration likelihood model (ELM), one of the most commonly used theoretical frameworks in studies of persuasive communication, theorizes why and how message recipients elaborate on the persuasive messages and advertisements that they encounter. Elaboration is defined as the extent to which people think about issue relevant arguments contained in a message (Petty & Cacioppo 1986). The ELM model is typically applied to situations of persuasion that demonstrate how attitudes are formed and changed and, in doing so, distinguishes between two routes of persuasion - the central route and the peripheral route (Petty, Cacioppo, & Goldman 1981; Petty, Cacioppo, & Schuman 1983; Petty & Cacioppo 1984, 1986). A message recipient undertakes the central route to persuasion when he or she grants a great deal of cognitive thought and effort to product relevant messages. Hence, there is more
elaboration, and because there is careful scrutiny through this central route, the recipient will consider the merits of the argument when formulating the ultimate evaluation of the product or service (Petty & Cacioppo 1984, 1986). It is important to note that for the message to be centrally processed, the message recipient must have both the ability and the motivation to carefully process the message arguments.

Contrary to the central route, the peripheral route of elaboration occurs when the message recipient is lacking either the ability or motivation, or both, to centrally process a message and, thus, does not extensively and cognitively consider the merits of the argument (Petty & Cacioppo 1984, 1986). Since message recipients are often seen as cognitive misers, who minimize the cognitive effort granted to various tasks, especially the processing of advertising, peripheral route processors will rely on other characteristics of the message. These other traits can include the perceived credibility of the source, the quality in which the message was presented, or perhaps an aesthetic quality of the source or message such as an attractive source, a catchy slogan, a celebrity source, or an effective illustration.

Both motivational and ability factors determine the extent of elaboration and the route to persuasion undertaken when receiving a message. Motivational factors can include the personal relevance of the message topic, a person’s need for cognition, and accountability or a feeling of personal responsibility. Ability factors can include wear out from repetition, the presence of distractions, or the availability of cognitive resources, which is based on how many cognitive resources one has available through message relevant knowledge possessed or his or her general education level (Petty & Cacioppo
Petty, along with his colleagues (1981, 1983, 1984, 1986), suggests that attitudes formed when message recipients are motivated and possess the necessary ability under high elaboration conditions through the central route are stronger than those formed under low elaboration. Therefore, attitudes created or changed through the central route will be stronger and more persistent over time, will remain more resistant to counter persuasion, and will exert a greater impact on cognition and behavior than will attitudes changed or created through the peripheral route. Attitudes influenced through the peripheral route under conditions of low elaboration are more likely to produce short term attitude change than long term. A significant consideration, however, is that under central route processing, the arguments must be strong and effective to result in persuasion. If the arguments are weak, the more thought and cognitive effort granted to their processing will ultimately undermine any desired persuasion.

According to the ELM, a given variable can serve multiple roles in different persuasive settings, dependent upon the level of elaboration granted to that variable. For instance, under high elaboration, a variable such as source expertise can be an argument or a biasing factor, while under low elaboration it can serve as a peripheral cue to simply accept the message because it is being presented by an expert (Petty & Cacioppo 1986). Moreover, something such as source attractiveness frequently serves as a peripheral cue to the message, however, if the message is an argument for makeup, which ideally will make the user more attractive, it can serve as a central argument.

In a classic study of ELM arguments, Petty, Cacioppo, and Goldman (1981) presented three conditions to respondents – a level of personal involvement with the
message (high/low), argument quality (strong/weak), and source expertise (high/low). The researchers demonstrated that the impact of arguments and expertise depended, in large part, on the level of involvement with the message. Under high involvement, argument quality exerted a significant impact on attitudes toward the message, while under low involvement, a highly expert source induced more attitude change than a source low in expertise, regardless of the argument strength. The ELM provides a parsimonious explanation for these results. Under levels of high involvement, respondent motivation was increased and, therefore, they engaged in central route processing of the merit of the arguments. However, under low involvement conditions, there was little motivation to engage in central route processing of the argument quality, so respondents engaged in peripheral route processing, using the simple cue of source expertise (Petty et al. 1981).

In a 1984 study, Petty and Cacioppo used the same methods and concepts as this previous study, but instead of using source expertise as a potential peripheral cue, they used the number of arguments. The researchers presented nine weak arguments to one group of respondents and one quality argument to another and found that those respondents who had a low involvement level with the message developed greater attitude change from an exposure to the nine weak arguments. However, those in the high involvement condition were more influenced by the one quality argument. Thus, the sheer number of arguments can serve as a peripheral cue as well, when message recipients are engaging in the peripheral route of message processing.
Petty, Cacioppo, and Schuman (1983) discovered that a manipulation of argument quality had more impact under high than low involvement levels, but a manipulation of a given product endorser had more impact under low than high involvement levels. Those who were highly involved with the message centrally processed its arguments, while those who were in the low involvement peripherally processed the product endorser. An important concept of the ELM is that different methods of inducing persuasion may work best depending on a given situation and whether the elaboration likelihood of the communication is high or low. If the likelihood of elaborating on a message is high, then appealing to audience members through the central route with strong product relevant arguments should be effective. However, if the likelihood of message elaboration is low, then engaging those message recipients through the peripheral route with peripheral cues will be more effective. Since different appeals may be potentially more effective for different audiences, marketers should not automatically dismiss the notion of utilizing peripheral cues instead of strong, product relevant arguments.

Another dual processing model that is noticeably similar to the elaboration likelihood model is the heuristic and systematic information processing model (HSM) of persuasion (Chaiken 1987; Chaiken, Liberman, & Eagly 1989). The HSM is similar to ELM since it proposes that individuals can process messages in one of two ways - heuristically or systematically. Heuristic processing uses previous judgmental rules, known as knowledge structures, which are learned and stored in memory. This requires minimal cognitive effort and does not undertake detailed information processing (Chaiken 1987), instead focusing on the use of simple cues, rules, and cognitive
heuristics as shortcuts for cognitive processing (similar to peripheral processing described in the ELM). Heuristic processing utilizes schemas or decision rules that people rely on from past experiences or decisions (for example, in the past, one may have leaned on the idea that experts are always right, so if the message source is an expert, then a heuristic processor will tend to believe it is valid).

Contrary to heuristic processing, systematic cognitive processing varies in its extensiveness but requires more than marginal levels of cognitive effort. Those who engage in systematic processing will scrutinize the content and validity of the messages in a detailed way (Chaiken et. al 1989). Similarly to central processing in the ELM, systematic processing can lead to more effective long term persuasion if the message content is considered valid, since attitudes and evaluations formulated through systematic processing are more resistant to counter arguments and more predictive of future behavior (Chaiken 1987; Chaiken et. al 1989). While the two models are nearly identical, the most notable difference between the HSM and the ELM is that the ELM specifies two separate routes to persuasion, while the HSM can occasionally be seen as describing parallel modes of information processing. Thus, the ELM suggests that a message recipient either engages in central or peripheral route processing when elaborating upon a message, but the HSM proposes that a message recipient can engage in both heuristic and systematic processing when elaborating upon the same message.
Experimental Design, Hypotheses, and Methods

This paper proposes to conduct an experiment that is a modification of Petty, Cacioppo, and Goldman’s (1981) well known test of the elaboration likelihood model and source expertise. Petty and his colleagues explored a message condition under which each route to persuasion described by the elaboration likelihood model is taken. It is fairly well established that under conditions of high personal relevance, attitude change is primarily the result of the central route of persuasion, under which audience members carefully scrutinize product or topic relevant messages. Furthermore, under low personal involvement conditions, peripheral features of persuasive messages are more important in regards to attitude change. Petty and colleagues (1981) based their test upon these well-established involvement concepts (Petty et al 1981; Petty & Cacioppo 1984; Petty & Cacioppo 1986) with a 2 (level of issue involvement: high or low) x 2 (argument quality: strong or weak) x 2 (source expertise: high or low) experimental design. Ultimately, Petty and colleagues found under the low issue involvement condition, source expertise had a larger effect on audience attitudes than it did under the high involvement condition. Additionally, argument quality manipulation had a stronger impact on audience attitudes under high involvement conditions than under low involvement conditions. This suggests that source expertise primarily served as a persuasive peripheral cue in the Petty et al (1981) experiment, since it influenced the attitudes of those that were peripherally
processing the provided message under low involvement conditions more so than it influenced those centrally processing the strength of the arguments.

**Hypotheses**

It is possible that the presence of a visual element in an advertisement could also serve as a peripheral cue for audience members under certain conditions, much in the same way source expertise can serve as a peripheral cue. Therefore, this paper hypothesizes that under a high personal relevance condition, audience attitudes will be impacted more by the quality of arguments instead of the presence of a visual element, while under a low personal involvement condition, persuasion will be more tied to the presence or absence of a visual element in the advertisement. Formally, the hypotheses are as follows:

**H1:** Under a high personal involvement condition, the manipulation of argument strength will have a greater effect on audience attitudes toward the advertised brand than the manipulation of visual element presence.

**H2:** Under a high personal involvement condition, the manipulation of argument strength will have a greater effect on audience attitudes toward the advertised brand than it will under conditions of low personal involvement.

**H3:** Under a low personal involvement condition, the manipulation of visual element presence will have a greater effect on audience attitudes toward the advertised brand than the manipulation of argument strength.
H4: Under a low personal involvement condition, the manipulation of visual element presence will have a greater effect on audience attitudes toward the advertised brand than it will under conditions of high personal involvement.

**Design and Sample**

Thus, the experiment’s design alters the Petty et al (1981) source expertise condition, replacing it with a visual element presence condition, ultimately resulting in a 2 (issue involvement: high or low) x 2 (argument quality: strong or weak) x 2 (visual element presence: present or absent) experimental design, resulting in eight total conditions.

Undergraduate students from a large, Midwestern university were recruited from communication classes and offered extra credit for participation. During various sessions, it was possible to test all eight conditions. The 2 x 2 x 2 design was evaluated with an analysis of variance (ANOVA). While the undergraduate students were conveniently sampled in a self-selected manner from a large, Midwestern university, according to Riffe et al (1998), there are three conditions in which the use of convenience sampling is justified. These three instances are if the material being studied is difficult to obtain, if resources limit the researchers’ abilities to generate a random sample of the population, or if the researcher is exploring an under-researched but important area of study. Basically, if little is known about a subject, convenience sampling can be a beneficial method of data collection. As has been described, there is very little included in the communication literature regarding the effects of visual elements on audience attitudes about advertising. Additionally, this study is limited in resources available for sampling
the population. Since the persuasive effects of visual cues, and the underlying thoughts and processes behind it, is a worthwhile area of study, this research situation paralleled Riffe et al.’s (1998) three instances when convenience sampling is warranted. Thus, the experiment is justified in its utilization of convenience sampling.

The total number of respondents was 209 (n = 209), with 71.8 percent female and 28.2 percent male. The sample was entirely made up of undergraduate students with a mean age of 20.58. Since the given print advertisement was for a brand of coffee, it was of interest that 42.6 percent of the sample typically bought coffee at least two to three times a week. Furthermore, 74.6 percent of the sample either enjoys drinking coffee or sometimes enjoys drinking coffee.

**Manipulation Procedures**

In a fashion similar to Petty et al (1981), the effectiveness of the message quality manipulation was analyzed by asking subjects: "How would you rate the quality of the arguments used by the advertisements to support the product advocated?" on a scale where 1 indicates "not very good arguments" and 11 indicates "very good arguments.” It is important in manipulating the quality of arguments that the number of arguments are kept the same, since Petty and Cacioppo (1984) established that the number of arguments can serve as a peripheral cue for audience members. Petty et al (1981), when discussing the manipulation of argument quality, suggested that strong arguments utilize statistics, data, and hard evidence, while weak arguments incorporate personal opinions or anecdotes. Therefore, this paper proposes following these suggestions as a way of gauging the effectiveness of the manipulation of the strength of the arguments. Thus, in a
parallel manner to the suggestions of Petty and his colleagues (1981), the strong argument print advertisements that respondents were exposed to incorporated statistics, data, and hard evidence, while the weak argument print advertisements utilized personal opinions and anecdotes. Furthermore, as a way of ensuring that this manipulation of argument strength was effective, respondents were asked to indicate perceived argument quality on the eleven point scale based on the question above.

To manipulate the level of involvement, this experiment portrayed to the undergraduate sample of respondents that their large, Midwestern university’s library café is planning to expand its menu and is asking for respondent feedback regarding a specific coffee brand. Moreover, the low involvement condition portrayed to the respondents that another university is expanding its cafe menu and is looking for general feedback from undergraduate students of different schools. The presence of the visual element was manipulated through the use of print advertisements. Respondents were exposed to a number of print ads, some of which used the visual cues within the advertising and some of which did not.

**Stimuli**

The visual element that was integrated into those print advertisements that contained the visual cue was a Consumers' Choice Award™ logo on the bottom right of the advertisement. As described by the organization’s web site (www.consumerschoiceaward.com), the Consumers' Choice Award™ was established in 1986 and is an initiative of Consumers' Choice Institute, which uses a leading and independent research firm to conduct surveys in major Canadian and U.S. cities. The
winners of these awards are determined by consumers through surveys, and not by a panel of judges. It covers a broad range of categories of interest to both the public and business communities. Its purpose is to publicly identify those establishments that have been voted by consumers as being their choice for excellence. Ultimately, the Consumers' Choice Award™ is a prestigious tribute to businesses that effectively serve their clients and customers. Respondents are asked to consider criteria such as value, professionalism, and service when making their choice. Award recipients reflect a broad spectrum of enterprises and represent product and service providers to both the general public and the business community (www.consumerschoiceaward.com).

Source expertise and credibility have been widely established as peripheral cues in research investigating the elaboration likelihood model (Petty et al 1981; Petty & Cacioppo 1984). Thus, the inclusion of the Consumers' Choice Award™ logo in the print advertisements ideally indicated to respondents that the companies or brands offering these food and beverage choices to the library cafes are credible and reliable food providers. Therefore, it is hypothesized that the Consumers' Choice Award™ logo, which indicated credibility and reliability to respondents, served as a peripheral cue to those who process the messages peripherally. However, the central arguments for the products themselves were more persuasive for those who process the print advertisements centrally.

The experiment utilized print advertisements for a fictitious coffee provider for a specific reason. This prevents the results from being conflated with various factors such as brand loyalty or associations with specific types of coffee brands from respondents.
Thus, instead of potentially processing actual brand names of coffee providers, the respondents centrally or peripherally processed the arguments or Consumers' Choice Award™ logo.
Results

The experiment was conducted in a 2 (central vs. peripheral processing) x 2 (presence of a visual element vs. absence of a visual element) x 2 (strong arguments vs. weak arguments) fashion. This resulted in eight total conditions. Condition one consisted of respondents who centrally processed an advertisement with strong arguments and the presence of the Consumer Choice logo. Condition two consisted of respondents who centrally processed an advertisement with strong arguments and the absence of the Consumer Choice logo. Condition three consisted of respondents who centrally processed an advertisement with weak arguments and the presence of the Consumer Choice logo. Condition four consisted of respondents who centrally processed an advertisement with weak arguments and the absence of the Consumer Choice logo. Condition five consisted of respondents who peripherally processed an advertisement with weak arguments and the absence of the Consumer Choice logo. Condition six consisted of respondents who peripherally processed an advertisement with weak arguments and the presence of the Consumer Choice logo. Condition seven consisted of respondents who peripherally processed an advertisement with strong arguments and the absence of the Consumer Choice logo. Condition eight consisted of respondents who peripherally processed an advertisement with strong arguments and the presence of the Consumer Choice logo.
Manipulation Checks

Following the guidelines established by Petty et al (1981), this experiment manipulated argument quality/strength in a manner that saw strong arguments utilizing statistics, data, and hard evidence. Contrarily, the weak arguments incorporated personal opinions or anecdotes. Furthermore, as a way of ensuring that this manipulation of argument strength was effective, respondents were asked as part of the survey to indicate perceived argument quality on an eleven point scale (where 1 indicates "not very good arguments" and 11 indicates "very good arguments) based on the question - "How would you rate the quality of the arguments used by the advertisements to support the product advocated?" This manipulation check question was also based on a similar question in the Petty et al (1981) study.

This manipulation check found that strong arguments were significantly seen as higher quality arguments by respondents across all eight conditions (mean = 7.15) than weak arguments (mean = 4.53). This was answered using an independent sample t-test: t(207) = 7.974, p<.01. Thus, the manipulation of argument strength appears to have been effective.

To manipulate the level of involvement, this experiment portrayed to the undergraduate sample of participants that their large, Midwestern university’s library café is planning to expand its menu and is asking for respondent feedback regarding the specific coffee brand in the advertisement. Moreover, the low involvement condition portrayed to the respondents that a different university is expanding its cafe menu and is looking for general feedback from undergraduate students of different schools.
To further test if this manipulation was successful, respondents were asked to rate on a one to five scale how relevant the given advertisement was to them at their given institution. Using an independent sample t-test, it was found that those in the high involvement condition (mean = 2.68) found the advertisement to be more personally relevant than those in the low involvement condition (mean = 2.29) at a statistically significant level: t(207) = 2.313, p<.05. Thus, the manipulation of personal involvement appears to have been successful.

Hypotheses Related Results

**H1: Under a high personal involvement condition, the manipulation of argument strength will have a greater effect on audience attitudes toward the advertised brand than the manipulation of visual element presence.**

To examine this hypothesis, an analysis of variance (ANOVA) was conducted using only those conditions consisting of respondents who centrally processed the advertisement (high personal involvement). The suggestion in H1 that under a high personal involvement condition, the manipulation of argument strength will have a greater effect on audience attitudes toward the advertised brand than the manipulation of visual cue presence was significantly supported on each indicator observed.

The ANOVA indicated that these central processors were significantly impacted by argument strength when assessing a number of attitude indicators, including the overall persuasiveness of the ad, F(1, 102) = 29.29, p<.01, their likelihood of trying this advertised brand of coffee, F(1, 102) = 22.73, p<.01, their likelihood of switching from their coffee brand of choice to the advertised brand, F(1, 102) = 26.624, p<.01, and their
likelihood of purchasing this brand of coffee from the given university café, $F(1, 102) = 12.508, p = .01$.

However, these respondents under high personal involvement conditions were not significantly affected by the manipulation of a visual element presence for any of the indicators observed ($p>.45$ for all four indicators). Furthermore, when asked how much impact the text based arguments included in the advertisement had on attitudes toward the coffee brand, argument strength was a significant indicator, $F(1, 102) = 37.976, p<.01$.

Thus, these results lend significant support for H1. For those respondents observed under high personal involvement conditions, the manipulation of argument strength had a greater effect on audience attitudes toward the advertised brand than the manipulation of the visual element.

- **H2: Under a high personal involvement condition, the manipulation of argument strength will have a greater effect on audience attitudes toward the advertised brand than it will under conditions of low personal involvement.**

In order to test this hypothesis, an ANOVA was conducted. When using the dependent variable of overall persuasiveness, the second hypothesis is supported because central processers rated the advertisement as more persuasive (mean = 5.686) than peripheral processers (mean = 5.411) when exposed to strong arguments, $F(1, 209) = 54.558, p<.01$. However, when exposed to weak arguments, the peripheral processers (mean = 3.471) rated the advertisement as more persuasive than central processers (mean = 3.353), $F(1, 209) = 54.558, p<.01$. Thus, it appears that argument strength has more of
an impact for those in the high involvement condition, since they see the ad as more persuasive than those in the low involvement condition when exposed to strong arguments and less persuasive than those in the low involvement condition when exposed to weak arguments.

When observing other indicators, a similar pattern emerges. Central processors are more likely to try the new brand of coffee (mean = 6.961) than peripheral processors with strong arguments (mean = 6.089), but are less likely (mean = 4.02) than those in the low involvement condition (mean = 4.078) when exposed to weak arguments, F(1, 209) = 38.224, p<.01. The same holds true when the respondents are asked how likely they are to purchase the brand of coffee after seeing the advertisement. Central processors (mean = 6.353) are more likely to purchase it than peripheral processors (mean = 5.857) when exposed to strong arguments, but are less likely (mean = 4.098) than those in the low involvement condition (mean = 4.137) when exposed to weak arguments, F(1, 209) = 21.407, p<.01.

Therefore, the results indicate significant support for hypothesis two.

- **H3: Under a low personal involvement condition, the manipulation of visual element presence will have a greater effect on audience attitudes toward the advertised brand than the manipulation of argument strength.**

To examine this hypothesis, an ANOVA was conducted using only those conditions consisting of respondents who peripherally processed the advertisement (low personal involvement). The suggestion in H3 that under a low personal involvement condition, the manipulation of visual element presence will have a greater effect on
audience attitudes toward the advertised brand than the manipulation of argument strength was provisionally rejected.

The ANOVA indicated that the presence of a visual element had a nearly statistically significant impact on how those in the low personal involvement condition rated the overall persuasiveness of the ad, $F(1, 107) = 2.85, p<.1$, and how likely they were to try the new brand of coffee, $F (1, 107) = 3.324, p<.08$. However, the presence of the Consumer Choice logo did not significantly affect the probability of these respondents switching their brand of coffee choice ($p>.25$) or how likely they were to purchase the coffee at the given library café ($p>.5$).

However, argument strength did have a significant impact on the probability of these low involvement respondents switching their brand of coffee choice ($p<.01$) and purchasing the coffee at the given library café ($p<.01$).

Despite the fact that the presence or absence of the potential peripheral cue did not significantly influence peripheral respondents’ attitudes on the given attitude indicators, there is evidence that this element did indeed serve as a peripheral cue. When observing H1 and central processers in the high personal involvement condition, the presence or absence of a visual element was not close to significantly impacting any of the indicators. This is to be expected, since central processers theoretically are more invested in the overall argument strength than any potential peripheral cues. However, the Consumer Choice logo did have a nearly significant effect on some of the indicators for the peripheral processers, meaning that the cue did have more influence for peripheral
processers in the low involvement condition than it did in the high involvement condition with central processers.

Therefore, the hypothesis that under a low personal involvement condition, the manipulation of visual element presence will have a greater effect on audience attitudes toward the advertised brand than the manipulation of argument strength is provisionally rejected. It is only provisionally rejected because there is little academic research regarding the impact of visual elements on print advertisements. Therefore, with the understanding that this experiment should not preclude future research and in an effort to avoid a Type II error, this hypothesis is provisionally rejected. Moreover, it would follow logically that visual elements would have some type of impact on print advertisements, which further strengthens the case to offer a provisional rejection instead of a complete rejection.

- **H4: Under a low personal involvement condition, the manipulation of visual element presence will have a greater effect on audience attitudes toward the advertised brand than it will under conditions of high personal involvement.**

To test this hypothesis, an ANOVA was conducted. When observing the effects of the manipulation of the visual element that was intended to serve as a peripheral cue, the data is in the predicted directions and appears to support the hypothesis. Peripheral processers (those in the low personal involvement condition) showed stronger reactions to the advertisement when the peripheral cue was present than central processers (those in the high personal involvement condition) for each of the indicators of audience attitudes toward the advertisement and the brand. Those in the low personal involvement condition
found the advertisement to have a higher level of overall persuasiveness (low involvement mean = 4.811, high involvement mean = 4.388), were more likely to switch brands of coffee to the one in the advertisement (low involvement mean = 4.453, high involvement mean = 4.327), were more likely to try the coffee (low involvement mean = 5.623, high involvement mean = 5.531), and were more likely to purchase the coffee at the given university café (low involvement mean = 5.208, high involvement mean = 5.041) than those in the high personal involvement condition when the peripheral cue was present.

However, when the visual element was absent, the opposite was found – those in the high personal involvement condition scored higher on each of these attitude indicators (for example, for overall persuasiveness the high involvement mean = 4.642, while the low involvement mean = 4.167). Hence, it appears that those in the low personal involvement condition were using the presence or absence of this potential peripheral cue to guide their attitudes about the product.

Despite the fact that the data is in the predicted direction, none of these observed findings were statistically significant (overall persuasiveness F(1,209) = .364, p>.5; switch brand F(1,209) = .550, p>.4; likely to try F(1, 209) = 1.467, p>.2). The p-value was >.2 for each of the attitude indicators. Thus, hypothesis four was not supported in a statistically significant fashion.

**Exploratory Exercise**

Respondents were also asked at the end of the survey to list as many arguments as they could recall. In an exploratory analysis of the responses, it was found that those who
were central processors in the high personal involvement condition (mean = 2.24) recalled more arguments than those who were in the low personal involvement condition (mean = 2.21). However, this was not a statistically significant finding, with p>.5.

It was also discovered that those who were exposed to strong arguments (mean = 2.61) recalled more arguments than those who were exposed to weak arguments (mean = 1.81). This finding was statistically significant, t (207) = 5.209, p<.01. This realization raises the possibility that in this particular experiment, the difference between the strong and weak arguments was so profound that it may have overshadowed other factors, including effects resulting from the absence or presence of the possible peripheral cue.
Discussion

Out of concerns for organization and consolidation, the discussion section will revolve around theoretical implications, threats/concerns regarding internal validity/issues and external validity/issues, and branding implications. Included in the concerns for internal validity and internal issues is a discussion about power, the manipulation checks, the hypotheses results, and a post hoc analysis. Included in the concerns for external validity and external issues is a discussion about a sample based limitation and practical applications (plus future research).

Theoretical Implications

The theoretical framework used for this experiment was the Elaboration Likelihood Model. One of the crucial stipulations of the ELM is that the strength and merit of the actual product relevant arguments is much more important for those who are centrally processing a message than it is for those who are peripherally processing a message. Furthermore, central processors will generally disregard any type of peripheral cue due to their focus on the actual arguments when formulating overall opinions about a message. The fact that central processors were clearly and significantly more influenced by argument strength than the presence or absence of the Consumer Choice Award logo in this experiment supports these ELM propositions. Furthermore, those in the high personal involvement condition, which were classified as central processors, were the
ones who were most influenced by argument strength. This supports the ELM idea that motivation (relevance) will lead message recipients to centrally process arguments.

However, the Consumer Choice Award logo, which served as the visual element in given advertisements, did not play the expected role of a peripheral cue. Although there was cursory evidence that it was seen as a peripheral cue (it influenced peripheral processors more so than the central processors), it did not do so in a statistically significant fashion. There are a number of possible explanations as to why the Consumer Choice Award logo failed to act as a peripheral cue, including the deficiency of an established visual theory to explain the impact of visual elements in advertisements.

Clearly, the Consumer Choice Award chosen to serve as the peripheral cue in this test of the ELM did not serve the expected purpose. Perhaps, instead of a peripheral cue that cognitive misers use to peripherally guide their level of elaboration applied to the advertisement, the Consumer Choice Award actually served as a central argument for the given coffee product. Despite the fact that it was included in the bottom right corner of the advertisement, the fictitious coffee company did win an award distinguishing its brand from competitors. Thus, the Consumer Choice Award may have indicated to certain respondents that this brand of coffee is a better product than its competitors for a reason, leading to more elaboration and central processing.

On the other hand, there may have been a lack of the desired credibility and expertise associated with the Consumer Choice Award as a peripheral cue. In order to indicate source expertise to peripheral processors (and serve as the expected cue), the logo needed to be something that the respondents were familiar with. For instance, if a
movie were to win an Academy Award, audience members would be familiar with what that meant and could use that knowledge as a peripheral cue to guide movie selection. However, if there is any lack of awareness regarding the Consumer Choice Award and what it stands for among respondents, it likely will not serve as a peripheral cue guiding responses to the advertisements.

Therefore, there exist a number of possibilities as to why the manipulation of a visual element failed to serve as a peripheral cue within the ELM framework. A more precise explanation for this failure would likely be in place if there was more information regarding the ability to accurately predict how visual communication operates in advertisements. As Keller and Lehmann (2006) noted, there is a true hole in the academic literature concerning the impact of visual elements in audience reactions to advertising. The fact that the effects of the given visual element could not be explained by the well-established ELM framework highlights the necessity of developing some type of visual theory to accurately predict and explain how audience members react to and process visual elements in advertisements. Future research needs to be equipped with more information and guidelines.

**Internal Validity and Internal Issues**

**Power:** The statistical power for all ANOVAs conducted when looking at H1 was greater than .95. Since the power was so high, the chance of making a Type II error (failing to reject a null hypothesis) was minimal. Consequently, the support found for H1 appears to be statistically legitimate with such a high power level. The same can be said about the ANOVAs conducted when testing H2. The power was greater than .95,
minimizing the potential for a Type II error. Due to the power for H1 and H2, it is reasonable to suggest that these observed relationships are statistically meaningful and the sample size was adequate to trust the effects detected.

However, when performing the ANOVAs for H3 and H4 – those that did not receive statistical support when analyzing the data – the power was less than .6. The result of this low power is an increased chance at a Type II error, which reinforces the caution implied with the provisional rejection. However, due to the dearth of academic research regarding visual elements in advertising, future research should continue to investigate these potential relationships.

**Manipulation Checks:** Although not every hypothesis was supported, the manipulations appeared to be successful. The fact that the strong arguments were overwhelmingly seen as higher quality than the weak arguments provides further evidence for Petty et al’s (1981) delineation of what constitutes a strong and weak argument. Petty and his colleagues (1981) proposed that strong arguments utilize statistics, data, and hard evidence, while weak arguments involve personal opinions and anecdotes. This is the delineation that this experiment used, and the manipulation check supported the proposition.

In addition to the manipulation of argument strength, the manipulation of personal involvement was successful. This implies that the Elaboration Likelihood Model is an appropriate theoretical framework to use with this experiment. Motivation and ability are the two primary components that are typically associated with the ELM, and a higher level of personal involvement logically implies more motivation to process the given
message. Consequently, since the manipulation of personal involvement was successful, this experiment parallels one of the central tenets of the ELM – that motivation plays a role in how people respond to and process messages.

**Hypotheses:**

*H1: Under a high personal involvement condition, the manipulation of argument strength will have a greater effect on audience attitudes toward the advertised brand than the manipulation of visual element presence.*

The fact that argument strength had a greater effect on audience attitudes toward the brand than the presence or absence of a visual element (possible peripheral cue) for those in the high personal involvement conditions supports the propositions of the ELM. Under high personal involvement conditions, those who are exposed to messages theoretically centrally process a message. When centrally processing messages, advertisements, and/or arguments, the actual strength of the arguments has a greater impact on resultant attitudes and responses than any peripheral cue. In this particular condition, the argument strength mattered more than the presence or absence of a peripheral cue to central processors, which further substantiates many of the claims in the ELM framework.

*H2: Under a high personal involvement condition, the manipulation of argument strength will have a greater effect on audience attitudes toward the advertised brand than it will under conditions of low personal involvement.*

Finding support for hypothesis two was critical if the data was to support the theoretical framework of the ELM. One of the primary suggestions of the ELM is that actual argument strength and quality has a larger impact on how central processors
evaluate a message, while peripheral cues largely determine how peripheral processors respond to a message. In fact, this hypothesis concentrates on what is arguably the largest and primary difference between central processors and peripheral processors in the ELM. Strong, high-quality arguments are theoretically what central processors base almost the entirety of their reactions to a given message on, so it would be difficult to accept the ELM as the theoretical framework for this experiment if the manipulation of argument strength had a greater effect on audience attitudes for those in the low personal involvement conditions. Just as the support for hypothesis one did, the statistical significance of hypothesis two provides additional support for the well-established claims of the ELM.

H3: Under a low personal involvement condition, the manipulation of visual element presence will have a greater effect on audience attitudes toward the advertised brand than the manipulation of argument strength.

H4: Under a low personal involvement condition, the manipulation of visual element presence will have a greater effect on audience attitudes toward the advertised brand than it will under conditions of high personal involvement.

Due to the fact that there is a lack of extensive academic research regarding the effects of visual elements in advertisements and branding efforts, these hypotheses regarding the manipulation of visual element presence are of particular interest. Hypothesis three was provisionally rejected solely because of this relative dearth in the data concerning visual elements in advertising. Since multiple components of the conducted ANOVAs were nearly statistically significant, there was a degree of caution
applied to a full-fledged rejection. However, hypothesis four was rejected in its entirety, due to a lack of statistical significance. While the given visual element utilized in this experiment showed evidence of acting as a peripheral cue, the data did allow for any statistically significant claims.

Since the manipulation check for personal involvement levels was successful, the fact that hypotheses three and four were rejected implies that something unidentified may be in play. Anytime effects of argument strength were analyzed in the various ANOVAs, there was a statistically significant effect size. This potentially suggests that the difference in argument quality between the strong and weak arguments was so great with the given print advertisement that it perhaps overshadowed any other potential effects, including the manipulation and impact of the visual cue, even for peripheral processors. Thus, a more straightforward test of visual cues and elements in advertising, which does not have argument strength effects overshadowing the actual test of the peripheral cue, may be needed in future research. This is especially the case since there is a relative lack of data in the advertising and brand positioning literature regarding visual elements.

**Post Hoc Analysis:** Although it was not directly related to the hypotheses proposed by this experiment, a post hoc analysis was performed regarding the respondents’ preferences for coffee. One of the survey questions asked participants ‘Is coffee a product that you enjoy drinking?’ Among those who answered, 49 percent of the respondents replied yes, 26 percent replied sometimes, and 25 percent replied no. Out of a logical concern that preference for coffee would influence how respondents react to and process print advertisements for coffee, the same ANOVA analyses were performed after
controlling for coffee preference (based on responses to this question). Despite this concern, the results of this post hoc analysis did not differ from the previously established results. There still remained strong support for hypotheses one and two, and there was no statistically significant support for hypotheses three and four. The p-values were slightly altered in some instances when factoring in coffee preference, but not nearly enough to have any statistically significant impact.

**External Validity and External Issues**

**Potential Sample Based Limitation:** In addition to the need for a more straightforward test of visual cues in advertising to avoid the possibility of argument strength effects outweighing everything else, there are a handful of other areas that can potentially be seen as limitations for this experiment. A much larger proportion than was to be expected from random selection of the given sample was female. In fact, over 70 percent of the respondents to the survey across all eight conditions were female. While it is certainly unclear what, if any, influence sex differences have on responses to print advertisements for coffee, some may see this as a shortcoming for an experiment that was not conducted with a randomly selected sample.

In fact, some brain imaging and psycho-physiological research has suggested potential sex based differences in how we process visual elements. Sabatinelli and colleagues discovered a bias for men to react more strongly to pleasant pictures and for women to react more strongly to unpleasant pictures. Additionally, men showed greater activity than women specifically during the viewing of erotic picture perception, possibly reflecting a gender-specific visual mechanism for sexual selection (Sabatinelli et al
2004). Therefore, future research should perhaps consider sex based differences in how potential consumers view visual elements in print advertisements.

**Practical Applications and Future Research:** Due to the provisional rejection of hypothesis three and full rejection of hypothesis four, there is a limit to any practical applications that can be drawn from this experiment. The use of the Consumer Choice Award visual element as a peripheral cue did not have the expected results that the ELM would suggest. Looking at the rejection of hypotheses three and four in a vacuum would imply that the Consumer Choice Award does not really act as a peripheral cue for those without much personal involvement in the message. However, since all of the findings regarding argument strength for the text based arguments were strongly significant, it is certainly feasible that the strong arguments were so strong and the weak arguments so weak that any other effects were overshadowed. With this understanding, and the fact that there is a strong necessity for the development of visual theory to grant explanatory power to the effects observed from visual elements in advertising, future research and marketers hoping to glean practical advice should not abandon this line of research.

Therefore, due to the possibility that visual elements are important when arguments are relatively weak, future research should ideally design a more straightforward test of the impact of visual elements on advertising effects without argument strength as such a dominant influence. Moreover, future research can delve into the exploratory exercise from this experiment with a more developed thought listing task. If a stronger analysis is applied to how respondents recall and remember visual elements
(and other arguments) in print advertisements, perhaps more can be contributed to the relative lack of research regarding visual elements in the advertising literature.

**Implications for Branding**

Ultimately, the primary objective of the vast majority of companies producing products and offering services is to garner some type of profit or brand equity. The communicative task of brand positioning (the overall direction of marketing and persuasive activities) will ideally create fundamentally high levels of brand awareness and a positive brand image, increase the chance of brand choice in a given product category and produce more consumer loyalty, and ultimately decrease a brand’s vulnerability to competitors and increase its equity (Keller 1993). This paper, which used the ELM as its main theoretical framework, included branding concepts because it hoped to assist marketers in understanding if visual elements can contribute to this brand awareness and ultimate brand equity.

However, since the Consumer Choice Award logo did not serve as the expected peripheral cue, the direct practical applications for branding efforts are again somewhat limited. Nevertheless, visual elements clearly play an important role in the development of brands. One merely has to look at the leading brands to see instances of this every day – the famous swoosh of Nike, the Apple logo on every iPod, and the golden arches of McDonalds. Even with these readily available examples, there is still a deficiency in understanding of the role that visual elements play in the brand positioning process that leads to brand equity. Therefore, this paper will ideally serve as an early step in the
eventual development of some type of visual theory to explain the role that visual elements serve in the branding process.
Concluding Thoughts

If a company wants to elicit stronger and longer lasting attitudes that are more indicative of behavior, then it is ideal for potential customers to process persuasive messages centrally. Thus, although this experiment did not statistically confirm that the presence of a Consumer Choice visual cue can serve as a peripheral cue within the ELM framework, it can be suggested that marketers need to realize the importance of argument strength when messages are more personally relevant to the audience. This is due to the fact that more relevant messages are likely to be centrally processed, so it would be beneficial to focus the brand positioning efforts on creating strong, product relevant arguments. Additionally, argument strength was the primary determinant of the resultant attitudes of those respondents who were in a high personal involvement condition. The most important take away from this experiment is a confirmation of one of the primary tenets of the ELM – strong arguments are critical if one hopes to garner a positive response to the advertisement or message if the respondents are centrally processing.

At the same time, if marketers understand that under certain conditions, such as when the messages may not be personally relevant to potential consumers, the Consumer Choice element can serve as a persuasive, peripheral cue, the argument can be made that it would be beneficial to include the cue in the advertisement. However, this experiment did not establish this to be the case, but the effect of visual elements in advertising on consumer attitudes is an area of the literature that is relatively unexplored. Thus, by
analyzing the various persuasive effects of the Consumer Choice cue (or lack thereof), this experiment’s findings can serve as an early step in the study of the effects of visual elements in advertisements and perhaps the eventual development of a visual theory to explain these effects.
References


Appendix A: Argument strength high, visual element present stimulus

- Morning Fresh Coffee combines a rich aroma and taste with a variety of different flavors, including caramel, light roast, medium roast, vanilla, hazelnut, cinnamon, decaf, and more.
- Morning Fresh Coffee is roasted from 100% natural coffee beans, resulting in the taste and freshness all coffee drinkers long for.
- Morning Fresh Coffee guarantees to have the lowest prices: one dollar a cup, no matter the size.
Appendix B: Argument strength high, visual element absent stimulus

- Morning Fresh Coffee combines a rich aroma and taste with a variety of different flavors, including caramel, light roast, medium roast, vanilla, hazelnut, cinnamon, decaf, and more.
- Morning Fresh Coffee is roasted from 100% natural coffee beans, resulting in the taste and freshness all coffee drinkers long for.
- Morning Fresh Coffee guarantees to have the lowest prices: one dollar a cup, no matter the size.
Appendix C: Argument strength low, visual element present stimulus

- Morning Fresh Coffee is the best coffee in the Midwest.
- Morning Fresh Coffee will wake you up every morning
- Morning Fresh Coffee tastes great, you will love it.
Appendix D: Argument strength low, visual element absent stimulus

- Morning Fresh Coffee is the best coffee in the Midwest.
- Morning Fresh Coffee will wake you up every morning
- Morning Fresh Coffee tastes great, you will love it.
Appendix E: Questionnaire

1. Is coffee a product that you enjoy drinking? Yes or No.

2. Is coffee something that you purchase often? Yes or No.

3. What is your sex? Male or Female?

4. What is your age?

5. On a scale ranging from 1 to 11, where 1 indicates “not very good arguments” and 11 indicates “very good arguments,” how would you rate the quality of the arguments used by the advertisement to support the product advocated?

6. On a scale ranging from 1 to 11, where one indicates not very likely at all and 11 indicates very likely, how likely are you to try this new brand of coffee if available?

7. On a scale ranging from 1 to 11, where one indicates no chance at all and 11 indicates a very high chance, what is the probability of you switching your coffee purchase from your brand of choice to the brand in the advertisement?

8. On a scale ranging from 1 to 11, where 1 indicates “not very likely” and 11 indicates “very likely,” how likely is it that the sale of this product at the library café of the given university will impact your likelihood of purchasing the product?

9. On a scale ranging from 1 to 11, where one indicates no impact and 11 indicates a strong impact, how much impact did the text based arguments included in the advertisement impact your attitude about the given brand of coffee?

10. On a scale ranging from 1 to 11, where one indicates no impact and 11 indicates a strong impact, how much impact did the text based arguments included in the advertisement impact the likelihood of you purchasing the given brand of coffee?

11. On a scale ranging from 1 to 11, where one indicates no impact and 11 indicates a strong impact, how much impact did the visual element included at the bottom corner of the advertisement impact the likelihood of you purchasing the given brand of coffee?

12. On a scale ranging from 1 to 11, where one indicates no impact and 11 indicates a strong impact, how much impact did the visual element included at the bottom corner of the advertisement impact your attitude about the given brand of coffee?

13. Please list as many of the arguments from the advertisement as you can remember.

14. On a semantic differential scale ranging from good to bad, indicate your overall opinion of the advertisement’s persuasive levels.

15. On a scale ranging from one to five, with one indicating not at all, how relevant is this advertisement to you and your daily life?