Easy Does It:
How the Organization of Print Advertisements Influences Product Evaluations

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How the Organization of Print Advertisements Influences Product Evaluations

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ABSTRACT

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How can advertisers improve consumer attitudes toward a given brand? Improving the ease with which consumers can process and make sense of an advertisement that features the product appears to be one possible strategy. Eight studies explored whether the location of a familiar or novel product in the context of a print advertisement influences consumer appraisals of the brand. Across five experiments in which participants viewed print advertisements, participants presented with ads that featured familiar brands tended to respond more favorably to those in which the brand appeared in the center, rather than along the margins, of the image. Conversely, participants presented with advertisements of novel brands reported more favorable appraisals when the ad featured the brand along the margins of the image than at the center. This response pattern appears to emerge via a processing fluency mechanism: When the consumer’s metacognitive understanding of fluency as a positive evaluative cue changed, the response pattern reversed. These findings indicate that simple aesthetic decisions about the construction of print advertisements could elicit more favorable consumer responses to the featured brand.
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CHAPTER 1: INTRODUCTION

The typical American sees approximately 1500 advertisements over the course of a single day (Lane, 2007). These advertisements interrupt TV and web-cast programming, add volume to magazines and newspapers, await daily commuters on the subway and line highways, pop up during internet browsing, and even seek out consumers individually through the U.S. Postal Service and electronic mail. Of these ads, consumers view most incidentally and process them with little conscious cognitive effort (see Fang, Singh, & Ahluwalia, 2007; Janiszewski, 1988, 1990, 1993). Considering that American companies spent over $149 billion on advertising in 2007 alone (TNS Media Intelligence, 2008), understanding precisely how these passively observed advertisements might impact consumer attitudes toward featured brands could provide valuable knowledge to advertisers and the companies they represent.

Advertisers acknowledged that the modern consumer rarely processes advertisements deliberatively and with the intent to evaluate the brand. As a result, advertisers adopted visual strategies to appeal to this low-involvement or passive style of processing (Phillips & McQuarrie, 2002). In consideration of consumers’ attentional limitations, modern advertisers now rely on increasingly visual marketing techniques (e.g., McQuarrie, 2008). That is, in contrast to traditional advertisement strategies that incorporated paragraphs of persuasive text to convince the analytical reader to purchase the featured product, modern advertising layouts evolved over the past 100 years to largely eliminate text in favor of full-page, evocative pictures and only brief taglines (McQuarrie, 2008; McQuarrie & Phillips, 2008). If “a picture is worth a thousand
words,” modern picture-dominant advertising represents a much more efficient method of influence than traditional strategies that relied on verbal content.

Whereas visual marketing more efficiently conveys the advertisement message, the content of the advertisement influences how easily consumers process that message. Specifically, consumers understand and remember advertisements that contain interrelationships between the visual objects in the ad image and the type of product, brand name, and copy text (i.e., tagline) more easily than ads that do not relate these components to one another (Schmitt, Tavassoli, & Millard, 1993; Edell & Staelin, 1983; Labroo & Kim, 2009; Labroo & Lee, 2004). That is, infusing an advertisement with multiple related visual and semantic elements facilitates consumer recall of the featured product, and this, in turn, increases the likelihood that the consumer will consider the brand for purchase (e.g., Coates, Butler, & Berry, 2006).

In the present research, I examined whether the consumer response to print advertisements depends on how easily the consumer is able to categorize and identify the brand featured within the ad. For example, how rapidly consumers conclude that the featured brand in a given advertisement is Frosted Flakes, which they know to be a brand of children’s sugary breakfast cereal that may be consumed to satiate hunger, may influence how positively they then rate the brand, or how likely they see themselves actually purchasing the brand. I seek to demonstrate that consumers’ evaluations of products become more favorable after viewing visual ads that are relatively easy, rather than difficult, to process.
To examine this question, I explored whether two particular aspects of advertisement content inform consumer appraisals through a processing fluency mechanism. Specifically, I examined whether the advertiser’s decision about where to physically place the featured product in an advertisement image influences how easily consumers process that ad, and if that influence depends on whether the featured product is a familiar or novel brand. If consumers spend a mere two seconds attending to the average advertisement (du Plessis, 2005), and if they, at most, process what the advertisement is for (Sutherland & Sylvester, 2000), what consumers first see in an advertisement could help determine how quickly and easily they come to understand that ad. Given evidence that perceivers tend to direct their visual attention towards the center of static images when freely viewing them, exhibiting a *center bias* (Mannan, Ruddock, & Wooding, 1996, 1997; Tatler, 2007; Foulsham & Underwood, 2008), I argue that placing a familiar or novel brand of product in the center of the advertisement image or along the visual periphery of that image could influence how quickly and easily consumers come to understand the purpose of the advertisement as a whole. How easily consumers process this information, in turn, should inform subsequent consumer judgments.

**Processing Fluency, Attitudes, and Behavior**

Absent any specific processing goals, advertisements that consumers experience as easy to process or understand should contribute to more favorable evaluations of the featured product. In general, the easier it is for people to make sense of a given stimulus, the more they report liking that stimulus. Much recent research demonstrates how the
ease with which a target object can be detected, identified, or otherwise perceptually or cognitively processed, referred to as processing fluency, increases hedonic evaluations of that target (see Winkielman, Schwarz, Fazendeiro, & Reber, 2003, for a review). For example, when informational text appears in ornate or blurry font styles, consumers experience greater difficulty reading the text and, as a result, evaluate the product as less desirable or tempting than those who read the same description in a clearer font style (Labroo & Kim, 2009). People also rate food additives with more complex and difficult-to-pronounce names more negatively than those with less complex names (Song & Schwarz, 2009). Consumers prompted by imagery appeals in advertisements evaluate featured travel destinations more favorably only when the imagery is easy to generate, such as when ads provide more vivid descriptions of the featured destination (Petrova & Cialdini, 2005). These and a growing repertoire of other experiments indicate that consumers tend to use their metacognitive experience of processing fluency as an informative cue regarding their own attitudes when making judgments, evaluating targets like featured products more favorably when the information conveyed is easier to process.

How easily consumers process and make sense of an advertisement is a function of several factors, both internal and external to the perceiver. Any feature of advertisement images, brand logos, and product packaging that makes it subjectively easier to detect, identify, and understand the product should facilitate more favorable evaluations of that brand of product. Similarly, certain higher-order thought processes can also facilitate a perceiver’s understanding of a given target. For example, product
location and brand familiarity could influence which knowledge structures first become activated in memory and, as a result, determine how quickly consumers come to understand or make sense of the ad.

*Perceptual Processing*

When consumers encounter an advertisement image, they first must process the physical characteristics of the ad. This sensory input includes the luminance, shape, size, texture, and proximity of the target, as well as cues regarding the orientation at or physical perspective from which the perceiver views the stimulus (Willingham, 2001). Viewers receive this perceptual information and use it to help them categorize, identify, or label the visual target.

Several aspects of the advertisement itself can make the ad easier to process and therefore elicit more positive evaluations of the featured target, including visual clarity, figure-ground contrast, and simplicity. For example, the clarity of a visual target can determine how rapidly observers detect a given stimulus (Whittlesea, Jacoby, & Girard, 1990). Similarly, the relative simplicity of symmetrical stimuli, compared to asymmetrical stimuli, appears to make such targets easier for viewers to make sense of and therefore generally more likeable (see Reber, Schwarz, & Winkielman, 2004). That is, the resulting increase in ease of processing then facilitates positive attitudes. For instance, people judge visual targets with high figure-ground contrast as “prettier” than those with low figure-ground contrast, liking pictures of mundane objects like circles more the easier it is to detect them (Reber, Winkielman, & Schwarz, 1998). Applied to advertising, print ads should elicit the most positive consumer response if information
most diagnostic of the brand (i.e., information that is most helpful in understanding the purpose of the brand and ad) is also the easiest to process or detect.

The downstream consequences of these differences in how easily the perceiver can process an advertisement may impact consumer purchase decisions and other behaviors as well. For example, consumers experiencing processing difficulty, or disfluency, when reading about several competing purchase alternatives may instead elect to defer their choice or select a less-than-ideal compromise option (Novemsky, Dhar, Schwarz, & Simonson, 2007). Similarly, after reading instructions written in atypical, ornate fonts that require more cognitive effort to process, people reported less willingness to personally execute the described activities compared to those who read the same instructions written in a clearer font style (Song & Schwarz, 2008). The metacognitive experience of ease appears to influence donation behaviors as well. Participants reading about a charity described in easy-to-read font subsequently donated more money to the charity than participants presented with the same information written in a difficult-to-read font (Labroo & Kim, 2009). The more easily consumers process and understand the advertisement, the more favorably they respond to the target, and the more likely the consumer then becomes to follow through with donating to the cause, trying the activity, or purchasing the featured brand.

Cognitive Processing

Certainly, the physical, perceptual features of an advertisement do not solely determine the consumer’s processing experience, or how easily consumers come to understand the ad. Higher-order thought processes come into play as well, often guiding
the detection of and attention to visual features in a manner that can inform and even expedite perceptual processing.

One important internal factor that can influence the processing experience of advertisements is the context in which the target brand appears (e.g., Labroo & Lee, 2006; Labroo & Kim, 2009; Schlosser, 2003; Labroo et al., 2008). In general, people can more rapidly identify and name objects when they appear in the context of a coherent, diagnostic, conceptually related background than when they appear in an incoherent, conceptually unrelated background (Boyce, Pollatsek, & Rayner, 1989; Boyce & Pollatsek, 1992). This is because the act of viewing contextual information automatically activates associated representations in memory (Higgins, Rholes, & Jones, 1977), which can then spread to related constructs to make them more accessible (e.g., Collins & Loftus, 1975; Neely, 1977; Biederman, Mezzanotte, & Rabinowitz, 1982). Thus, information gathered from the background context of an advertisement can cue a schema in memory for that type of scene. This activated schema is associated in memory with information about the types of objects typically appearing in such a scene, facilitating their recognition. That is, with relevant knowledge structures already activated in memory, identifying featured products in an advertisement becomes easier.

When the increased accessibility of associated information facilitates the identification of related objects in the environment, this ease of processing can also then automatically elicit positive affect (see Reber et al., 2004). Products will receive more favorable evaluations if viewed following visual depictions of highly related constructs or predictive contexts compared to less related constructs or contexts (Lee & Labroo, 2004).
That is, one can identify a brand of bottled beer more quickly, and will evaluate it more favorably, than a brand of multivitamins when viewed in the context of a bar scene, because beer is consistent with the perceiver’s expectations, as generated by the activated bar scene schema.

By presenting background scenes related to the product and activating conceptually related information in the mind of the consumer, advertisers may not only facilitate the identification of and positive attitudes toward the product that appears in a given ad, but may also increase the likelihood that consumers will consider purchasing the product. By providing viewers with a familiar link with which to associate the featured product in memory, advertisers can improve consumer recall for the brand. And by increasing brand memorability, an advertisement increases the likelihood that consumers will consider the product as an option when making actual purchases – a primary goal for advertisers (e.g., Shapiro, MacInnis, & Heckler, 1997; Coates, Butler, & Berry, 2006). For example, consumers better remember print advertisements that contain conceptual or lexical relationships amongst the brand name, copy text, and image used in the ad than those without such relationships (Schmitt, Tavassoli, & Millard, 1993).

Similarly, when unknown brands of products appear in a conceptually related context (for example, an unfamiliar brand of briefcase carried by a businessman on his way to work), consumers evaluate those products more favorably and report a greater likelihood of actually purchasing the featured product than if it had appeared by itself on a plain white background (Shapiro, 1999).
Thus, when consumers encounter advertisements that contain perceptual or conceptual links to a given product, this product becomes more accessible, evaluated more positively across a range of evaluative dimensions, and is more likely to be chosen at the point of purchase as a result, regardless of any conscious awareness of this process (Berger & Fitzsimons, 2008). The color of pens consumers use (orange, green) unknowingly influences their later consumer choice preferences between Sunkist orange soda or lemon-lime Gatorade. Simply viewing pictures of dogs improves subsequent consumer evaluations of Puma sneakers, but not other brands of sneakers. Even reading the word “frog” before viewing a brand of wine with a frog on the label can increase preference for this wine over other brands (Labroo, Dhar, & Schwarz, 2008). Consumers more easily and more rapidly make sense of a target brand if knowledge structures relevant to identifying the brand or features of the brand have been activated than if they have not. What the consumer first sees in a given advertisement, then, may not only determine how rapidly he or she identifies the featured brand, but should also inform subsequent brand attitudes, purchase intentions, and behaviors.

Product Location in the Advertisement

How easily consumers come to understand an advertisement, and their subsequent attitudes about the featured brand, may depend in part on how the advertisement is organized. Some research already indicates that the spatial organization of an advertisement can inform how viewers evaluate the featured brand. Specifically, incidentally viewed advertisements that place the ad image to the left, with the brand name, persuasive text, or product description written on the right, elicit more positive
evaluations of the product and brand name than those that utilize the opposite spatial relationship (Janiszewski, 1990, 1993). But within the advertisement image, what might influence how consumers process brand information?

The spatial organization of a given advertisement image likely influences consumer evaluations of the featured brand because what consumers initially attend to in an ad can inform how and how quickly they identify its contents. What is first attended to in a simple visual scene, for example, can guide how one thinks about the objects contained within it. People tend to describe scenes using sentence structures that mimic the order of their eye movements (Nappa, January, Gleitman, & Trueswell, 2004; Gleitman, January, Nappa, & Trueswell, 2007). Additionally, where perceivers focus their visual attention when viewing ambiguous targets like reversible figures, for example, may bias interpretations of those images (Toppino, 2003). Focusing eye gaze to critical features of these reversible figures (Georgiades & Harris, 1997) and manipulating the gaze sequence when looking at the image (Pomplun, Ritter, & Velichkovsky, 1996) can induce the perception of one interpretation over another. Finally, people become much more likely to successfully complete problem-solving tasks if their visual attention is directed towards the piece of the puzzle instrumental to its solution (Grant & Spivey, 2003). That is, by simply manipulating visual attention toward the key part, these incidental ocular movements influenced the perceiver’s subsequent cognitive processing of the puzzle to produce the insight necessary for its solution. Thus, not only do thought processes influence how one directs visual attention, as may be expected (see Richardson & Spivey, 2004), but the reciprocal relationship can and does emerge: Visual attention
and the perceptual sequence can inform cognitive processing, influencing consumer ease in the identification of, for example, the contents of print advertisements.

Since the information that consumers perceive in a given advertisement can influence the speed with which they may identify the featured product, it is important to know where people look when viewing print advertisements. Generally, humans exhibit a center bias when viewing images of scenes; that is, people more often tend to focus their visual attention on the center of static images (Mannan et al., 1996, 1997; Tatler, 2007; Foulsham & Underwood, 2008), including television and computer screens (Tosi, Meccaci, & Pasquali, 1997; Brasel & Gips, 2008b), than other, more visually peripheral locations. As a result, the proximity of brand logos in relation to the center of the image appears to matter, for example, to television viewers scanning through commercial breaks (Brasel & Gips, 2008a, 2008b). This location within the image – in the center rather than along the margins of a commercial advertisement – elicited more positive evaluations of the featured brand (Brasel & Gips, 2008a). That is, viewers tended to focus more on the center of the image, and therefore demonstrated improved memory for and more favorable attitudes toward brand logos appearing in that region compared to those that appeared along the borders or margins of the screen.

Given that consumers exhibit a centrality bias with scenes and images, what appears at the center of a print advertisement could be of particular importance in determining the consumer’s processing experience. Whereas commercial advertising studies often portray an informative context conceptually or perceptually linked to the brand in the center of the screen before, after, and/or during the presentation of the brand
logo (Brasel & Gips, 2008a, 2008b), static print advertisements contain more limited information, presenting only one still image to the consumer. In these cases, scene or background context information present in the initial eye fixations on an image facilitates the speed with which the perceiver can categorize and identify the target objects observed within those scenes (Boyce & Pollatsek, 1992), although this depends on how relevant or related the background context is to the target object (Davenport, 2007). Moreover, even though consumers may grasp the gist of an advertisement scene within the first 40 milliseconds of exposure to inform object categorization and identification (Joubert, Rousselet, Fize, & Fabre-Thorpe, 2007), this rapid global processing occurs based on perceptual information gleaned primarily from the center of the fixated area as opposed to information in the visual periphery, where visual acuity is poor (Rayner, 2009). The center of a given visual fixation corresponds to the fovea of the eye, where visual acuity is greatest; the perceiver then moves his or her eyes to fixate this foveal area on perceptual regions of interest (e.g., toward the featured product, located elsewhere in the advertisement image) for further processing (Mannan et al., 1996). However, if the featured product is present in the first visual fixation, perceivers may process this visually salient object at the expense of background context or scene information, which becomes more difficult and requires additional processing time particularly if the contextual information is conceptually inconsistent with the featured product (see Joubert et al., 2007). Therefore, absent any expectations that lead the consumer’s initial visual attention elsewhere (Tosi et al., 1997), what the advertiser chooses to display at the center of a
print advertisement may help determine the consumer’s processing experience with the ad.

**Brand Familiarity**

In addition to the organization of the ad, familiarity with a brand should also facilitate the processing and identification of sensory input during subsequent exposures. A perceiver becomes familiar with a given product through prior exposures, which create a memory trace for the configuration of physical features associated with the brand. This memory trace facilitates the visual processing, and liking, of the product in subsequent encounters (Fang et al, 2007; Shapiro, 1999). Viewers most efficiently process a given stimulus when the physical features of that stimulus in both encounters match (Roediger & Blaxton, 1987). However, even prior exposure to similar, but not identical, visual information can improve processing speed for subsequently viewed images. For example, visual primes can help viewers discern subsequently viewed images, increasing the speed with which they identify the target. In one study, participants viewed an image of lines that matched or did not match the visual contours of a subsequently viewed, slightly degraded stimulus picture. Participants identified the contents of these matched pictures more quickly, and liked their contents better, than pictures viewed following mismatched pictures (Reber et al, 1998). Thus, how frequently consumers encounter a given brand may increase the speed with which consumers identify a given configuration of physical features as belonging to the brand.

Prior experience links perceptual and conceptual information in memory to a given brand, and so upon viewing the product or brand logo, these concepts and
knowledge structures become activated in memory. Viewing a well-known, familiar brand activates this rich network of associations formed across a history of experiences and repeated encounters with that brand. However, this knowledge and experience is absent when viewing a novel brand. Instead, for unfamiliar, novel products, additional contextual information would make it easier for consumers to categorize and make sense of the product. Viewing a conceptually relevant background scene in an advertisement activates a representation of that context, or schema, in memory. This schema creates expectations that then facilitate the recognition of related objects, like the featured product.

Viewing perceptually or conceptually related background contexts first, then, will result in faster categorization and identification of novel brands. For example, an advertisement image that focuses on a smiling model pouring the clear contents of a bottle into her mouth allows consumers to quickly categorize the otherwise novel product in her hand as bottled water. However, if consumers first view the novel product and then refer to the visual periphery for contextual information before arriving at a conclusion about the nature of the product, processing time should take longer and evaluations should be less positive than those following the reverse fixation sequence.

The best cue for activating representations of a familiar brand in memory, however, should be the brand itself. For popular, well-known products, focusing visual attention on the product itself should result in rapid identification. As a result, ads for well-known brands that focus on the actual product should prompt the most efficient understanding of the ad, because consumers can easily identify the features of the
familiar product (e.g., the red and blue logo indicates Pepsi), which readily cue associations of product meaning (e.g., Pepsi is a caffeinated soda that one often drinks during daily lunch breaks). Other contextual information (e.g., a teenage girl drinking a bottled beverage) should not activate this identification or facilitate this understanding more quickly and easily than the product itself.

Certainly, how favorably consumers respond to an advertisement depends in part on how subjectively familiar or novel the featured brand is. Frequent exposures to a brand, of course, make that brand feel familiar (Shapiro, 1999; Fang et al., 2007). Frequent exposures to, and therefore familiarity with, a non-negative target then automatically results in greater liking, a phenomenon called the mere exposure effect (Zajonc, 1968). In this classic study, repeated exposure to novel and otherwise entirely meaningless Chinese ideographs led to more favorable evaluations of those stimuli. People also demonstrated a significant preference for one’s own mirror image over the true orientation of one’s likeness, but preferred the true orientation of others’ likenesses (Mita, Dermer, & Knight, 1977). That is, people preferred viewing depictions of the self and others that matched the orientation they were most accustomed to viewing. Frequent exposure to one’s inverted likeness cultivates a preference for viewing these familiar images. Although beyond the scope of the present investigation, it is worth noting that consumers appear to respond more favorably to products (i.e., earrings) presented on this preferred image of the self, compared to the true orientation of the self, as a result of the association (Cho & Schwarz, 2006). Familiarity based on repetitive exposures improves evaluations of a variety of inanimate objects, and a meta-analysis of 208 experiments
conducted over a span of 20 years found mere exposure to be a robust and reliable effect (Bornstein, 1989). This effect emerges even without conscious awareness of exposure to the stimulus (Kunst-Wilson & Zajonc, 1980; Monahan, Murphy, & Zajonc, 2000), without recognition of the stimulus as familiar (Moreland & Zajonc, 1977), and even when exposure is incidental – that is, in absence of any intentional effort to process stimulus information (Janiszewski, 1988, 1990, 1993).

Importantly, the consumer’s processing experience – how subjectively easy or difficult it is to process and understand an advertisement – appears to directly underlie the effects of familiarity on liking. When greater familiarity with an object increases the speed with which the object is identified, and this ease is experienced as positive affect (Fang et al., 2007; Winkielman et al., 2003). Then, when people come to associate processing fluency with familiarity, the reciprocal relationship may also be observed. That is, viewers may attribute an experience of processing fluency or positive affect to familiarity with that target. Viewers who experience ease in processing an apparently complex stimulus may perceive this fluency as resulting from prior exposure to or familiarity with the target, even if the target is in fact novel (Shapiro, 1999; Klinger & Greenwald, 1994).

Well-known, familiar products, then, should generally elicit more positive evaluations than novel, unfamiliar products. In general, familiar brands do elicit greater liking than unknown, novel brands. For example, after initial exposures, participants exhibit a preference for familiar brands over novel ones (Janiszewski & Meyvis, 2001). Consumers also demonstrate prolonged interest during repeated exposures to the same
advertisement over time if that advertisement features a brand already familiar to the viewer, rather than one that is completely novel. That is, although satiation and boredom can eventually set in following a high frequency of exposures to the same advertisement (Janiszewski & Meyvis, 2001; Groves & Thompson, 1970; Bornstein, 1989), such wearout effects of inattention and disinterest are delayed when the featured brand is already well known to the perceiver (Campbell & Keller, 2003).

Few studies directly examine how advertisements may be differentially effective for familiar, versus novel, brands. Of these studies, most focus primarily on how incidental emotions or the environmental context in which the ad appears affect consumer memory and evaluations of featured products (e.g., Holden & Vanhuele, 1999; Coates, Butler, & Berry, 2006; Yi, 1990, 1993; Janssens & De Pelsmacker, 2005). None, however, appear to investigate how brand familiarity may interact with the organization of the ad (i.e., product location) to impact consumer evaluations. While brand familiarity appears to influence consumer evaluations, how evaluations may change as a function of product location remains unknown.

I posit that brand familiarity interacts with the relative placement of the product in the ad to determine how rapidly consumers make sense of the ad and, ultimately, how consumers then respond to the featured brand. That is, in viewing print advertisements, how easily consumers process and make sense of an ad depends on both the consumer’s familiarity with the featured brand and the location of the product in the advertisement image. The first feature of an ad that a consumer initially sees can activate associated constructs in memory. Whether understanding is facilitated or hindered is a function of
consumer familiarity with the featured product. For ads that feature a familiar brand, consumers will more easily make sense of ads that display the product as the most central visual object (also henceforth referred to as *center-placed product advertisements*), compared to ads that relegate the brand to the outskirts or margins of the image (also henceforth referred to as *margin-placed product advertisements*). For ads that contain a novel brand, however, consumers will more efficiently understand ads that feature a relevant context (margin-placed product ads) than ads that focus visual attention on the unfamiliar product itself (center-placed product ads). Efficiency in understanding and making sense of an ad should subsequently influence how favorably consumers evaluate the featured brand, with more efficient ads eliciting more favorable appraisals in low-involvement, passive processing contexts.

**Current Research**

In the current research, I aimed to establish whether or not product location interacts with brand familiarity to inform consumer evaluations of the featured brand through a processing fluency mechanism. Given that advertising requires repeated exposures in order to be effective (du Plessis, 2005), and that increased exposures consistently improve attitudes only toward initially neutral or positive stimuli (e.g., Bornstein, 1989), consumers’ passive or low-involvement processing of advertisements is likely only effective when advertisers feature affectively neutral or positive stimuli. The current research, therefore, considers ads for unfamiliar, completely novel brands and popular, well-known brands towards which consumers have affectively neutral or positive attitudes.
I first explored whether students with relevant academic and work experience in the field of advertising and marketing possess any beliefs regarding an interaction effect between product location and brand familiarity on consumer responses to advertisements, compared to the beliefs of the lay consumer. Then, in the seven studies that follow, lay consumers viewing real or mock-up center-placed and margin-placed product advertisements featuring a familiar or novel brand assessed the ad and brand using a provided questionnaire form. If brand familiarity and product location interact to determine the consumer’s processing experience and, subsequently, inform their responses to the advertisement, consumers should offer more favorable appraisals of familiar brands following center-placed product ads, but more favorable appraisals of novel brands following margin-placed product ads. If these two factors indeed influence consumers’ processing experience and responses following advertisement exposure, the present research may be useful to advertising professionals in devising effective visual marketing strategies to promote their products.

Secondly, I tested whether these effects emerged as a result of a processing fluency mechanism. Product location and brand familiarity may interactively inform the consumer’s subsequent appraisals of the brand because these factors contribute to the ease with which the consumer is able to process the advertisement. In Studies 4 and 6, consumers answered questions designed to assess the subjective ease or difficulty of their processing experience with each advertisement. If easily understood advertisements elicit more positive consumer appraisals, Studies 4 and 6 should demonstrate a similar pattern of results for both processing fluency and attitudinal measures.
In addition to the two studies that incorporated self-report measures of processing fluency, I also explored whether processing fluency underlies the proposed interaction effects using a second approach. Given that certain circumstances can cause perceivers to view processing difficulty, rather than fluency, as a positive cue when evaluating a product (Brinol, Petty, & Tormala, 2006; Alter & Oppenheimer, 2009), Study 5 examined whether such a variable known to moderate these effects of processing fluency also moderates consumer responses to the different ad types for familiar and novel brands. This moderator is the consumer’s active goal state when viewing the advertisement. When perceivers adopt and pursue a goal, they tend to evaluate objects relevant to that goal more favorably if their subjective processing experience requires greater mental effort (a phenomenon called the instrumentality heuristic); in the absence of a goal, feelings of ease facilitate positive evaluations (Labroo & Kim, 2009). For example, the more difficulty the consumer experiences in processing an advertisement for chocolates, the more instrumental the consumer then presumably perceives those chocolates to be in attaining his or her goal if they are pursuing a goal to experience pleasure. Thus, these perceivers view processing disfluency as a positive cue about the value of the target, therefore responding more favorably to the chocolate after viewing the more difficult-to-process advertisement. However, another consumer, for whom this goal is not accessible, will evaluate those same chocolates less favorably as a result of the experienced processing difficulty. If processing fluency indeed underlies the effects of product location and brand familiarity on brand appraisals, the same goal manipulations that moderate the effects of processing fluency on consumer appraisals in other contexts
should similarly influence appraisals of familiar and novel brands that appear in center-placed and margin-placed product advertisements. Study 5 explores this possibility. Thus, when consumers perceive processing disfluency as a positive evaluative cue, novel brands should receive more favorable appraisals following center-placed, and not margin-placed, product advertisements. Correspondingly, center-placed product ads should no longer elicit more favorable evaluations of familiar brands. If active goal states moderate the interaction effect of product location and brand familiarity on consumer appraisals, and the perceptual sequence interacts with prior knowledge sets to inform how easily observers come to make sense of even a single visual scene, the effects of processing fluency in everyday life may be even more ubiquitous than previously suspected.

Finally, I attempted to examine whether processing fluency informs the brand evaluations of different types of individuals in different ways (Studies 4 and 6). How individual differences affect the consumer response has long been a topic of interest in the field of advertising (see Haugtvedt, Petty, & Cacioppo, 1992). One well-established individual difference variable seems of particular relevance to the processing fluency phenomenon: an individual’s need for cognition, or the extent to which they engage in and enjoy cognitively effortful tasks (Cacioppo & Petty, 1982). If cognitive effort appeals to the consumer, he or she may not perceive processing disfluency to be as negative of an evaluative cue – nor may he or she experience processing fluency as positively as a consumer with a low need for cognition. Moreover, consumers low in need for cognition tend to rely more on cognitive shortcuts or heuristics and tend to be more persuaded by peripheral (message-unrelated) cues inherent to the ad or message, such as spokesperson
attractiveness (Cacioppo, Petty, Feinstein, & Jarvis, 1996; Smith & Petty, 1996; Haugtvedt, Petty, Cacioppo, & Steidley, 1988). Those low in need for cognition may be similarly influenced by the subjective ease with which an advertisement is processed. As a result, consumers low in need for cognition should be more likely to exhibit the predicted product location and brand familiarity interaction in their appraisals of brands featured in print advertisements than those high in need for cognition.
CHAPTER 2: EXPERIMENTS 1 – 6

Overview of Study 1: Intuitions About Product Location

Study 1 examines specific intuitions about what constitutes a successful print advertisement. Regardless of which advertising strategies actually influence consumer evaluations of brands, does the layperson, with no marketing or advertising expertise, believe that the spatial location of the product within a given print advertisement influences subsequent consumer appraisals of that featured brand? Alternatively, do those with relevant marketing experience believe that manipulations of the location of the product within a given ad can increase the ad’s effectiveness?

Study 1 asked every-day consumers and marketing students to indicate how much they believed that center-placed product advertisements and margin-placed product advertisements might be successful in persuading consumer attitudes in favor of the featured product brand. If lay consumers or marketing students differentiate between center- and margin-placed product advertisement layouts and identify one type of product location as generally more effective than the other, participants in Study 1 should demonstrate such a preference across advertisement strategies. If lay consumers or marketing students endorse the specific belief that center-placed product advertisements are more effective than margin-placed product advertisements for familiar products, but the reverse for novel products, these beliefs would be consistent with the current hypothesis. That is, these results would match predictions that product location interacts with brand familiarity to affect the ease with which consumers understand the
advertisement image, subsequently influencing judgments and appraisals that pertain to
the featured product and advertisement as a whole.

Study 1: Method

Participants

In exchange for partial course credit, 126 public university undergraduate students
with no specific marketing expertise or enrolled in an upper-level marketing course
completed a brief consumer survey.

Design and Procedure

Participants imagined either a well-known brand (Corona) or an unknown,
fictitious brand (Barton’s) of bottled beer. They then read four short descriptions of
possible print advertisement layouts (see Appendix A). Two of these advertisement
strategies employed center-placed product descriptions and two advertisement strategies
employed margin-placed product descriptions. For example, one center-placed product
description stated, “The ad should focus on the (product) itself, with nothing else
competing for your attention.” Alternatively, one margin-placed product description
stated, “The ad should focus on a popular celebrity or successful athlete, with the
(product) off to the side in the spokesperson’s hand.”

Each participant rated these two versions of center-placed and two versions of
margin-placed product advertisement descriptions on how effective they believed each
would be in promoting the specified product. The survey defined an effective ad as one
that piqued interest and enticed the general public to purchase the product. Participants
used a 1 (not at all effective) to 7 (extremely effective) Likert-type scale to evaluate each
description. This produced a 2 (respondent: marketing student vs. lay consumer) x 2 (brand: familiar vs. novel) x 2 (product location: center vs. margin) mixed experimental design, with respondent and brand type as the between-subjects variables and product location as the within-subjects variable.

As measures of relevant expertise, participants also indicated how many marketing courses they had completed and how many years of relevant work experience they possessed.

**Study 1: Results**

**Manipulation Check**

One-sample t-tests examined whether or not the sample of marketing students possessed a statistically greater amount of relevant educational and work experience than students considered to be lay consumers. The reported number of courses taken and years of work experience were both significantly greater for marketing student respondents ($M_{\text{course}} = 2.4$, $SD_{\text{course}} = 1.5$; $M_{\text{exp}} = 1.0$, $SD_{\text{exp}} = 1.6$) than for lay consumer respondents ($M_{\text{course}} = 0.3$, $SD_{\text{course}} = 0.6$; $M_{\text{exp}} = 0.2$, $SD_{\text{exp}} = 0.6$), with $t(62) = 10.02$, $p < .001$, and $t(62) = 3.90$, $p < .001$, respectively.

**Transformations**

Participant evaluations of both center-placed and both margin-placed advertisement descriptions were averaged to create one center-placed advertisement effectiveness score and one margin-placed advertisement effectiveness score for analysis.
Effectiveness Ratings

I conducted a 2 (respondent) x 2 (brand) x 2 (product location) repeated measures ANOVA on advertisement effectiveness scores. This analysis revealed a significant three-way interaction, $F(1, 122) = 5.92, p = .016$. Simple effects tests revealed that lay consumers perceived no difference in the effectiveness of center-placed or margin-placed advertisements for the familiar or novel brand of product, $F(1, 122) = 0.96$ and $F(1, 122) = 1.17$, respectively. Marketing students, on the other hand, evaluated margin-placed advertisements ($M_m = 4.6, SD_m = 0.8$) as a more effective strategy than center-placed advertisements ($M_c = 3.7, SD_c = 1.3$) for the novel brand, $F(1, 122) = 12.88, p < .001$. However, no statistically significant difference emerged in marketing students’ evaluations of these two advertisement layout strategies for the familiar brand, $F(1, 122) = 2.20$.

Study 1: Discussion

Study 1 revealed that lay consumers, with no specific marketing expertise or insight, believe that advertising efforts are equally effective regardless of the visual strategy used. Lay consumers also do not appear to discriminate based on the familiarity of the brand. That is, lay consumers do not appear to believe that brand familiarity and product location interact to inform consumer attitudes.

In contrast to lay consumers, marketing students appear to be somewhat sensitive to the interaction between product location and brand familiarity. That is, students with relevant marketing education and work experience rated the margin-placed product layout as a more effective advertising strategy than the center-placed product layout for
the unfamiliar brand, but not for the familiar brand. This pattern of beliefs about the effectiveness of center- and margin-placed product advertisements, emerging only from participants with relevant marketing experience, lends credence to the possibility that product location and brand familiarity may indeed interact to produce more favorable downstream consumer evaluations in the real world.

Overview of Studies 2A and 2B: Evaluations of Brands After Viewing Print Advertisements

Study 1 suggests that greater marketing experience may lead individuals to recognize that brand familiarity and product location interact to influence subsequent evaluations of a given brand. Studies 2A and 2B explore whether product location actually influences consumers’ evaluations of familiar and novel brands featured in print advertisements, respectively. If these studies produce the predicted effect of ad type on consumer appraisals, they would support the general hypothesis that these different ad types, as defined by brand familiarity and product location, determine the consumer’s processing experience, which can inform the consumer’s response to the advertisement.

Study 2A

To examine whether the location of familiar products in real-world print advertisements might influence consumers’ subsequent evaluations of these well-known brands, Study 2A presented participants with a series of contemporary product advertisements selected from actual real-world marketing campaigns. In this study, participants viewed real product advertisements containing familiar brands of products that appeared either in the center or along the visual periphery of the advertisement.
images. If product location influences consumers’ evaluations by facilitating the identification and understanding of the featured brand, center-placed product advertisements should evoke more favorable evaluations from consumers than margin-placed product ads.

Study 2A: Method

Participants

In exchange for partial course credit, 103 undergraduate students participated in the study and were randomly assigned to conditions.

Stimulus Materials

Visual stimuli for this study included published advertisements for familiar products, selected from contemporary magazines and from internet web pages. Two ads promoting each of the following corporate marketing campaigns were selected: Dasani brand water, Heineken brand beer, Bacardi brand rum, Chanel brand perfume, and Evian brand water. For each familiar product, one ad utilized a center-placed product layout and the other utilized a margin-placed product layout (Figure 1).

Three short paragraphs of celebrity news, headlining on popular internet news pages, were included as filler items in this study. These paragraphs referenced paparazzi regularly such as Britney Spears, Lindsey Lohan, and Christian Bale.

Design and Procedure

Participants completed a computerized experiment, presumably as part of a study on consumer magazine reading habits. In this computerized experiment, participants alternated between viewing and evaluating the content of product advertisements and
reading short, filler celebrity news paragraphs. The news paragraphs were included to bolster the cover story and reduce the likelihood that participants would develop expectations that would divert and guide visual attention away from the center of the screen in anticipation of upcoming images. Participants viewed the advertisement images for 1000 milliseconds each, a duration that replicates the exposure time used in visual search paradigms (see Fenske and Raymond, 2006). After reading a paragraph of celebrity news, participants manually advanced the presentation.

Participants viewed one advertisement for each of the 5 different brands of familiar products and 3 filler news paragraphs as a within-participants manipulation. The featured products appeared in the center or along the margin of each ad, with participants viewing only one ad for each familiar product. As a result, one group of participants saw a stimulus set that contained 3 center-placed and 2 margin-placed product ads, and the second group viewed the counterbalanced version containing 3 margin-placed and 2 center-placed product ads. This created a 2 (product location: center vs. margin) x 2 (stimulus set) mixed experimental design, with product location as the within-subjects variable and stimulus set as the between-subjects variable.

After viewing each advertisement image, participants completed a questionnaire that measured their explicit attitudes regarding both the advertisement image they viewed and the familiar product featured in that ad (see Appendix B). Participants rated how much they liked the ad using a 1 to 11 Likert-type scale. They also rated how desirable the familiar product was. Product desirability was an aggregate measure that averaged across participants’ responses to three questions assessing: how participants felt about the
product (1 = extremely dislike and 11 = really like), how interested participants were in using the product (1 = not at all and 11 = extremely interested), and how likely they would be to actually buy the product (1 = not at all and 11 = extremely likely). Participants also estimated the amount of time they would be willing to wait in line to purchase the product (in minutes and seconds), and the price at which they would be willing to sell the product once owned (in dollars and cents). Participants were then debriefed and dismissed.

Study 2A: Results

Preliminary Analyses and Exclusions

Certain products (i.e., perfume) and advertisement images (i.e., celebrity or sex appeal) may elicit strong, gender-specific reactions (Meyers-Levy, 1994; Purinton & Rosen, 2005). To examine whether gender differences influenced the subjective appeal of the brands of familiar products and advertisement images used in this study, a 2 (product location: center vs. margin) x 2 (participant gender: male vs. female) ANOVA was conducted for each brand.

Study 2A observed no stimulus-specific interaction effects in four of the five familiar product ad pairs on product desirability or image attractiveness variables, with all $F$’s < 1.70. A participant gender by product location interaction effect emerged with ads featuring the classic perfume Chanel No. 5, $F(6, 96) = 3.50, p = .004$. Specifically, females ($M_f = 7.7, SD_f = 1.6$) found Chanel No. 5 to be substantially more desirable than males ($M_m = 4.5, SD_m = 1.3$) after viewing a margin-placed product advertisement that also depicted Nicole Kidman. This gender difference was less pronounced ($M_f = 6.6, SD_f$
= 2.0 and $M_m = 4.9, SD_m = 1.9$) when viewing the center-placed product ad that did not contain this well-known celebrity spokeswoman, $F(1, 102) = 4.60, p = .035$. That is, the quality of content in center-placed compared to margin-placed product ads for Chanel No. 5 clearly produced significant differences in a substantial subset of the participant sample. Because these content differences may have overwhelmed potential effects produced by the main variable of interest (i.e., product location), the Chanel No. 5 ad pairs were excluded from further analyses.

Transformations

The amount of time participants said they would wait to buy the familiar product and the price they would sell it at was square-root transformed and then standardized. For each participant, how much they liked the image, product desirability variables, and standardized wait time and sell prices were averaged across all center-placed product ad trials and across all margin-placed product ad trials.

Reported Attitudes

Four items (how much participants liked the image, how participants felt about the product, how interested they were in the product, and how likely they would be to actually buy the product) showed high internal consistency for both center-placed ($\alpha = .890$) and margin-placed product ads ($\alpha = .823$). As a result, these questionnaire items were averaged to create the aggregate consumer attitude variable. Participants rated center-placed products ($M_c = 7.1, SD_c = 1.7$) more favorably than margin-placed products ($M_p = 6.5, SD_p = 1.4$), $t(102) = 3.32, p < .001$. Center- and margin-placed product ads elicited no statistically significant differences in how long participants would be willing
to wait to purchase the item or how much they would be willing to sell the familiar
product for, with all $t < 1.18$.

**Study 2B**

In parallel to Study 2A, Study 2B explores whether product location actually
influences consumer evaluations of novel brands featured in print advertisements. To
examine whether product location in novel print advertisements for unknown (indeed,
fictitious) brands might influence consumers’ subsequent evaluations of these unfamiliar
brands, Study 2B presented participants with completely novel ad images featuring
unfamiliar, fictitious products, constructed by a graphic designer. If product location
influences consumers’ evaluations by facilitating the identification and understanding of
the featured brand, margin-placed product advertisements of novel brands should evoke
more favorable attitudes from consumers than center-placed product ads, contrary to the
pattern of findings for the familiar brands in Study 2A.

Additionally, Study 2B addresses some possible confounds evident in Study 2A.
Specifically, the center- and margin-placed product ads used in Study 2A differ in ways
other than just the location of the product. A center-placed product ad and a margin-
placed product ad for any given product varied on many important visual dimensions,
including the position and size of the product in the ads. Therefore, Study 2B explored
product location using images that were rigorously matched on these visual dimensions to
eliminate the possibility that any structural differences between two ad images could be
responsible for eliciting different brand judgments. In addition to featuring novel brands
of products, these stimuli controlled for other visual elements between the center- and
margin-placed product advertisements of each brand, such as color scheme, the presence of human actors and the race and gender of those actors, and the size and orientation of the product in the ad. Given that use of conceptually relevant copy text can facilitate consumer understanding of a given advertisement (Schmitt, Tavassoli, & Millard, 1993; Edell & Staelin, 1983; Labroo & Lee, 2004), both versions of each advertisement also incorporated the same tagline.

Study 2B: Method

Participants

In exchange for partial course credit, thirty-eight undergraduate students participated in the study and were randomly assigned to conditions.

Stimulus Materials

A professional graphic designer created five novel brands of products for this study (Figure 2). These ads featured Doggy ‘Do dog shampoo, Vino wine, Toothbrush, Inc. toothbrushes, Koku coffee, and Suds dish soap, and embedded each in one center- and one margin-placed product advertisement. These novel advertisements matched the center- and margin-placed product ad images for a given novel brand on product size and the orientation of the product in the image (i.e., the angle of rotation at which the product is displayed, if any). Furthermore, these two ad images contained similar color schemes and similar degrees of motion within the ad (i.e., the image as a “freeze frame” of active movement, or the image as a static display of nonmoving objects). Finally, the presence of actors, and the gender and race of those actors, were identical between center- and margin-placed product advertisements for each brand.
Design and Procedures

Study 2B employed a within-subjects design identical to Study 2A, replacing the real advertisements with five advertisements featuring novel brands of products. Participants viewed one of two possible stimulus sets constructed in the same manner as Study 2A. Participants indicated how much they liked the advertisement image, the desirability of the product, how long they would wait to purchase the product, and the price at which they would be willing to sell the product once owned using the same questions as Study 2A.

Study 2B: Results

Transformations

Identical to Study 2A, the amount of time participants said they would wait to buy the product and the price they would sell it at was square-root transformed and then standardized. For each participant, how much they liked the image, product desirability variables, and standardized wait time and sell prices were averaged across all center-placed product ad trials and across all margin-placed product ad trials.

Reported Attitudes

The four consumer attitude measures again showed high internal consistency for both center-placed product ads (α = .88) and margin-placed product ads (α = .88) and were averaged across participants. Participants rated products located in margin-placed product ads (M_p = 6.5, SD_p = 1.3) more favorably than products located in center-placed product ads (M_c = 5.9, SD_c = 1.4), t(25) = -2.66, p = .013.
No statistically significant differences were observed between stimulus sets, or between center- and margin-placed product ads on how long participants would be willing to wait to purchase the item or how much they would be willing to sell the product for, with all \( ts > -0.5 \).

**Studies 2A and 2B: Discussion**

Studies 2A and 2B support the hypothesis that processing fluency affects consumer judgments by providing preliminary evidence that a product’s location within an ad can influence consumer attitudes toward the product. In Study 2A, center-placed product ads elicited more positive evaluations of familiar products and of the ad itself than margin-placed product ads. In Study 2B, margin-placed product ads elicited more positive evaluations of familiar products and of the ad itself than center-placed product ads. Together, these studies support the hypothesis that consumers’ ease of understanding is at least partially a function of familiarity with the brand and the spatial location of the product in a given ad. This suggests that simply altering a given product’s spatial location within an advertisement image could improve consumer attitudes toward the featured brand. Students with relevant academic and work experience in the field of marketing appear to possess a greater understanding of this, but to the lay consumer, this evidence is counterintuitive (see Study 1).

**Overview of Studies 3A and 3B: Visual Attention in Viewing Advertisement Stimuli**

One particular confound prevents a straightforward interpretation of the findings in Studies 2A and 2B. These studies assumed that participants attended to the center of the screen as each advertisement image appeared, focusing on the product when it was
placed in the center of the ad image or on the context when the product was placed in the periphery of the ad image. Prior research suggests that viewers’ attention automatically gravitates toward the center of an image on a screen (e.g., Brasel & Gips, 2008a, 2008b; Tosi et al., 1997). Without measures in place to verify that participants attended to the center of each ad in Studies 2A and 2B, however, whether or not participants actually did so remains questionable. Given that novelty attracts attention (e.g., Mitchell, Livosky, & Mather, 1998; Chong, Riis, McGinnis, Williams, Holcomb, & Daffner, 2008; Karacan & Hayhoe, 2008), the possibility remains that, for example, consumers’ focus of visual attention in print advertisements could differ as a function of whether the featured brand is novel or familiar, irrespective of product location. Studies 3A and 3B address this alternative possibility by engaging participants in a secondary addition task to ensure that they attended to the center of the screen as each image appeared before them. These studies replicated Studies 2A and 2B, but employed a guided attention paradigm that drew participants’ attention to the center of the screen as each advertisement image appeared.

**Study 3A**

Study 3A employed a guided attention paradigm that drew participants’ attention to the center of the screen as each of the real-world advertisements from Study 2A appeared by presenting them with a simple arithmetic task. If participants in Study 2A visually attended to the center of each advertisement image as expected based on prior research, participants in Study 3A should accurately perform the arithmetic task. Furthermore, participants in Study 3A should evaluate familiar products and their
advertisement images more favorably after viewing center-placed product advertisements than margin-placed product advertisements, replicating results from Study 2A.

Study 3A: Method

Participants

In exchange for partial course credit, 77 undergraduate students participated in the experiment and were randomly assigned to conditions.

Design and Procedure

The present study utilized a 2 (product location: center vs. margin) x 2 (stimulus set) mixed experimental design, with product location as a within-subjects and the specific set of advertisements viewed as a between-subjects variable. In this experiment, participants viewed and evaluated a series of four print advertisements for four well-known products used in Study 2A. Also similar to Study 2A, half of these ads placed the product at the center of the ad and the remaining half placed the product along the margins of the ad. That is, each participant viewed two center-placed and two margin-placed product ads featuring one of four real, familiar products, presented in the form of two possible stimulus sets that were counterbalanced between participants.

In addition, participants completed a basic arithmetic task as they viewed each advertisement image. This secondary task required them to add three numbers that appeared sequentially at the center of the screen while the advertisement image appeared, forcing participants to attend to the center of each ad image for the duration of the presentation. A new single-digit number appeared every 2 seconds, with the overall ad exposure time lasting 6 seconds. Immediately following each trial of this two-part task,
participants recorded the summed value of the numbers they viewed and identified the last number that appeared on the screen. These values served as a manipulation check to verify whether or not participants indeed attended to the center of the screen while viewing each image.

Participants then completed an explicit attitudes questionnaire on each advertisement image they just viewed. Participants assessed product desirability by rating questionnaire items identical to those used in Studies 2A and 2B. To further probe the extent to which product location differences may influence consumer judgments about familiar and novel brands and the ads in which they are featured, the questionnaire also asked participants to rate how much they trust each brand based on the image they viewed (brand trust) and how eye-catching, attractive, exciting, and appealing the image was (additional ratings of image attractiveness; see Appendix C) on 11-point Likert-type scales in which 1 = not at all and 11 = extremely.

Study 3A: Results

Manipulation Check: Accuracy

If attending to the center of each image, participants should be able to accurately report the sum of values from each 3-number addition trial, as well as the final number presented in each trial. Indeed, participants reported the correct sum value in 91% of all trials and reported the correct final number in 98% of all trials in the experiment. This confirms that participants generally focused their attention on the center of the screen, where each of these numbers appeared during the course of the experiment.
Reported Attitudes

Three *product desirability* items (how participants *felt* about the product, how *interested* they were in the product, and how likely they would be to actually *buy* the product) and the brand trust item all showed high internal consistency for both center-placed product ($\alpha = .89$) and margin-placed product ($\alpha = .89$) ads. Additionally, all five *image attractiveness* items (how much they liked the image and how captivating, appealing, exciting, and attractive they felt the image was) also showed high internal consistency for both center-placed product ($\alpha = .92$) and margin-placed product ($\alpha = .96$) ads. Therefore, these items were averaged to create the aggregate *product desirability* and *image attractiveness* variables.

Two 2 (location: center-placed vs. margin-placed) x 2 (stimulus set) repeated measures ANOVAs on product desirability and image attractiveness revealed that center-placed product advertisements generally elicited more favorable evaluations of the familiar brand ($M_c = 4.4$, $SD_c = 1.1$) than margin-placed product advertisements ($M_p = 4.0$, $SD_p = 1.2$), $F(1, 75) = 9.66$, $p = .003$. Participants also generally rated advertisement images that employed the center-placed product layout more favorably ($M_c = 5.0$, $SD_c = 0.9$) than those employing the margin-placed product layout ($M_p = 4.4$, $SD_p = 1.1$), $F(1, 75) = 11.01$, $p < .001$. No interaction effect or main effect of stimulus set emerged, $F$’s $(1, 75) < 3.38$.

Study 3B

Study 3B determined whether participants viewing novel ads in Study 2B exhibited the same bias towards attending to the center of the image as participants
viewing real ads did in Studies 2A and 3A. To accomplish this, the present study replicated the design used in Study 3A for the novel ads featuring unfamiliar, fictitious products used in Study 2B. Participants in Study 3B should evaluate novel products and their advertisement images more favorably after viewing margin-placed product advertisements than center-placed product advertisements. However, if novel brands attract visual attention, either the pattern of evaluations should change when participants view novel ads using the guided visual attention paradigm, or participants should be inaccurate in the arithmetic task for trials that feature margin-placed product advertisements.

**Study 3B: Method**

*Participants*

In exchange for partial course credit, 78 undergraduate students participated in the experiment and were randomly assigned to conditions.

*Design and Procedure*

The present study utilized a 2 (product location: center vs. margin) x 2 (stimulus set) mixed design, with product location as a within-subjects and stimulus set as a between-subjects variable. This study used a procedure identical to Study 3A, except in one respect. In this experiment, participants viewed and evaluated a series of four print advertisements on four of the unknown products used in Study 2B. Half of these ads employed the center-placed product layout and the remaining half employed the center-placed product layout. That is, each participant viewed two center-placed and two
margin-placed product ads featuring one of four fictitious products, presented in the form of two possible stimulus sets that were counterbalanced between participants.

Study 3B: Results

Manipulation Check: Accuracy

If attending to the center of each image, participants should be able to accurately report the sum of values from each 3-number addition trial, as well as the final number presented in each trial. Indeed, participants reported the correct sum value in 85% of all trials and reported the correct final number in 98% of all trials in the experiment. This again confirms that participants generally focused their attention on the center of the screen, where each of these numbers appeared during the course of the experiment.

Reported Attitudes

The three product desirability items (how participants felt about the product, how interested they were in the product, and how likely they would be to actually buy the product) and the brand trust item all showed high internal consistency for both center-placed product ($\alpha = .93$) and margin-placed product ($\alpha = .91$) ads. Additionally, all five image attractiveness items (how much they liked the image and how captivating, appealing, exciting, and attractive they felt the image was) also showed high internal consistency for both center-placed product ($\alpha = .94$) and margin-placed product ($\alpha = .95$) ads. Therefore, these items were averaged to create the aggregate product desirability and image attractiveness variables.

A 2 (product location: center vs. margin) x 2 (stimulus set) repeated measures ANOVA revealed that margin-placed product advertisements generally elicited more
favorable evaluations of novel brands ($M_c = 4.7$, $SD_c = 1.6$) than center-placed product advertisements ($M_p = 5.3$, $SD_p = 1.8$), $F(1, 76) = 6.63$, $p = .012$. Participants also generally rated advertisement images that employed the center-placed product layout more favorably ($M_c = 5.7$, $SD_c = 1.8$) than those employing the margin-placed product layout ($M_p = 6.5$, $SD_p = 1.8$), $F(1, 76) = 12.804$, $p = .001$. No interaction effect or main effect of stimulus set emerged, $F$’s (1, 75) < 1.01.

Studies 3A and 3B: Discussion

Studies 3A and 3B confirmed that participants’ visual attention gravitated toward the center of each ad appearing on the screen in Studies 2A and 2B by replicating prior findings using a guided attention paradigm. As in Study 2A, Study 3A demonstrated that participants rated familiar brands as more desirable, and the advertisement images as more attractive, after viewing center-placed product ads than margin-placed product ads. Similarly, participants in Study 3B rated novel brands as more desirable, and the advertisement images as more attractive, after viewing margin-placed product ads than center-placed product ads. Together, these findings rule out the alternative explanation that novel products, wherever they are placed in an ad, automatically attract more visual attention than familiar products. Furthermore, these results are consistent the hypothesis that brand familiarity and product location interact to affect ease or speed of processing, which in turn should inform subsequent consumer evaluations of the brand and ad.
Overview of Study 4: Assessing the Processing Experience and Controlling for Stimulus-Based Confounds

With Study 4, I hoped to accomplish 5 goals. First, Study 4 used new sets of rigorously controlled advertisement stimuli, created to address the alternative explanation that prior findings were driven not by product location and brand familiarity, but by other possible variations between the center- and margin-placed product advertisements. Recall that Studies 2A and 3A utilized real-world examples of center- and margin-placed product advertisements of popular American brands, collected from images available on the internet. By using real-world advertisements, these studies offered ecological validity; however, as a result, these studies could not control for other variations in product size, product orientation, color scheme, and other important differences in content and style. Participants evaluating familiar brands could have rated center-placed product ads more favorably not because of differences in product location, but because of other aesthetic differences. Study 4 addresses this alternative by presenting participants with more tightly controlled center- and margin-placed advertisements that systematically manipulated the brand and the spatial location of the product in the context of otherwise identical print advertisements. If the product location and brand familiarity interaction observed in prior experimental studies replicate, participants in Study 4 should respond more favorably to familiar brands after viewing center-placed product advertisements and novel brands after viewing margin-placed product advertisements.

Another concern with prior studies may be the assumption that participants would be familiar with the popular American brands selected for use in Studies 2A and 3A. In
prior studies, the effect of product location appears to be smaller with familiar brands than with novel brands. However, this may occur because participants, in fact, did not overwhelmingly recognize the “familiar,” popular brands I selected for use in these experiments. To explore the possibility that differences in degree of familiarity with the “familiar” brands influenced the effect of product location on consumer appraisals of those brands, participants in Study 4 completed a brand awareness recall test to assess whether participants were or were not highly familiar with the “familiar” brands used in this experiment.

Third, Study 4 investigated whether conceptual coherence between the content of the background image and the featured product matters. By manipulating the conceptual relevance of background image to the product that appears in each ad, this study should show that this visual context helps or hinders consumers’ ease in processing an ad, affecting subsequent evaluations of the product. Consumers should evaluate coherent ads with related contexts more favorably, and process them more easily, than ads in which the background image or visual context is not conceptually related to the featured product.

Study 4 also begins to directly explore processing fluency as the mechanism through which brand familiarity and product placement inform subsequent evaluations. In this study, participants completed additional self-report measures designed to assess the consumer’s processing experience, derived from the processing fluency literature (Schwarz, 2004; Labroo & Lee, 2004; Whittlesea et al. 1990; see Appendix D). If Study 4 replicates the findings of Studies 2A – 3B with new advertisement stimuli and if
processing fluency mediates this effect of ad type on consumer appraisals, then participants should evaluate center-placed product advertisements featuring familiar products as easier to understand than corresponding margin-placed product advertisements. Similarly, participants should evaluate margin-placed product advertisements featuring novel products as easier to understand than corresponding center-placed product advertisements.

Finally, certain individual differences may alter the manner in which a consumer responds to an advertisement image. Because individuals low in need for cognition tend to rely more on cognitive shortcuts and other cues peripheral to message content when forming attitudes and making judgments compared to those high in need for cognition (e.g., Haugtvedt et al., 1988; Cacioppo et al., 1996; Smith & Petty, 1996), Study 4 explored the possibility that need for cognition may moderate the predicted effect of brand familiarity and product location on consumer judgments as well. In the present paradigm, individuals low in need for cognition may be more likely use processing fluency as a cue about their own attitudes. Individuals with a high need for cognition, on the other hand, may respond less favorably toward easy-to-process advertisements or more favorably toward more disfluent, or difficult to process, advertisements than those with a low need for cognition.

Study 4: Method

Participants

In exchange for partial course credit, 235 undergraduate students participated in this experiment.
Stimulus Materials Pretest

Four different product types appeared in the advertisements created for this study. One novel and one familiar brand were selected to represent each of the four different product types. The familiar brands used in this task included the following: Palmolive liquid dish soap, Corona beer, Starbucks coffee, and Fiji bottled water (Figure 3). The novel product brands used in this task included the following: Suds liquid dish soap, Tiger beer, Koku coffee, and Vida bottled water (Figure 4). In a pretest, participants \((N = 34)\) evaluated the novel and familiar brand of each of the four product types as equally attractive, with all \(t's < .95\).

Each of the eight brands listed above appeared in four different versions of an advertisement. That is, each brand appeared at the center or along the margins of an ad containing a conceptually related background image and copy text. Each brand also appeared at the center or along the margins of an ad containing a conceptually unrelated theme. When viewing the background images by themselves, participants \((N = 28)\) rated the related and unrelated background contexts that would be used behind each product as equally attractive, with all \(t's < .59\). When viewing the background image and product together as an advertisement, participants \((N = 18)\) also identified each related context as significantly more related to the featured product than the unrelated context selected for use, with all \(t's > 5.24, p's < .001\). These respondents evaluated the professional quality of familiar-product and novel-product versions of the same advertisement as statistically equal, with all \(t's < 1.64\).
Design and Procedure

To begin the study, each participant completed a brand awareness recall test, one of the most commonly employed methods in marketing research to assess consumer knowledge and awareness of a given brand (Bettman, 1979). A recall test assesses whether or not an individual can freely remember and list the brand name (e.g., Aquafina) when prompted only with the name of the product category (e.g., bottled water; Blythe, 2008). This is superior to other recognition measures that provide consumers with the brand name and ask directly whether or not they recognize or are otherwise familiar with the name, as these methods often falsely elicit positive claims of recognition and familiarity. As part of the test, Study 4 participants were asked to recall and list as many brand names as they could for each of four different types of products: bottled water, beer, dish soap, and coffee.

After the recall test, participants individually engaged in a computer task in which they viewed and evaluated a series of four print advertisements on four familiar or four novel brands of products. The presentation of each ad followed the appearance of a fixation cross at the center of a blank screen. Each ad displayed on the screen for 2000 milliseconds, which reflects the average time consumers spend looking at a given advertisement (du Plessis, 2005). For both real and novel product sets, half of these ads employed a center-placed product layout and the remaining half employed a margin-placed product layout. That is, each participant viewed two center-placed product and two margin-placed product ads. In addition, half of these presented the product within a conceptually related context, and the remaining half presented the product within a
conceptually unrelated context. For example, a related context for a brand of coffee might contain a background of breakfast foods and a steamy mug, accompanied by the words, “Good morning!” An unrelated context for the same brand might contain an image of an SUV atop a mound of crumbling rock and the phrase, “Get straight to the point.” This produced a 2 (brand: familiar vs. novel) x 2 (product location: center vs. margin) x 2 (background context: related vs. unrelated to the product) mixed experimental design for analysis, with brand type as the between-subjects variable and background context and product location as the within-subjects variables.

After viewing each ad, participants then completed a questionnaire designed to measure consumer attitudes, purchase intent, and processing fluency (see Appendix D for a comprehensive list of items). To assess consumer attitudes and purchase intent, this questionnaire adapted items from Studies 2A-B and 3A-B and included measures commonly used in consumer psychology and advertising research, such as attitude toward the ad (Campbell & Keller, 2003; Phelps & Thorson, 1991), attitude toward the brand (Campbell & Keller, 2003; Phelps & Thorson, 1991), and purchase intent (MacKenzie, Lutz, & Belch, 1986). To assess how easily consumers understood each ad, participants completed several measures adapted from or created based on processing fluency research (Labroo & Kim, 2009; Labroo & Lee, 2004; Schwarz, 2004; Whittlesea et al., 1990). Specifically, participants indicated how easy to understand they find each advertisement to be (Labroo & Lee, 2004), how much effort it took to process each ad (Labroo & Lee, 2004), and how clear the picture display was on 11-point Likert-type scales (Whittlesea et al., 1990), for which 1 = not at all easy, effortful, or clear and 11 =
extremely easy, effortful, or clear. Participants also estimated how long they believed the advertisement appeared on the screen (in milliseconds). The questionnaire also measured how familiar each advertisement felt to participants on an 11-point Likert-type scale, where 1 = not at all and 11 = extremely, as a possible alternative measure of processing fluency (Schwarz, 2004). In addition, the questionnaire measured brand familiarity as a manipulation check by asking participants to indicate how familiar they were with the brand on an 11-point Likert-type scale, where 1 = not at all familiar and 11 = extremely familiar, to ensure that participants experienced familiar brands as familiar and novel brands as unfamiliar.

After the computer task, participants completed the Need for Cognition Scale (Cacioppo, Petty, & Kao, 1984) to assess their individual tendency to engage in and satisfaction gained from the process of thinking.

Study 4: Results

Data Reduction

The four attitude towards the ad items (good – bad, appealing – unappealing, pleasant – unpleasant, and high-quality – low-quality) all showed high internal consistency, with Cohen’s α > .942 for each ad type. Additionally, the four attitude towards the brand items (good – bad, appealing – unappealing, pleasant – unpleasant, and high-quality – low-quality) also showed high internal consistency (α’s > .930), as did the three purchase intent items (probable-improbable, likely-unlikely, possible-impossible; α’s > .887). Therefore, these items were averaged to create the aggregate
attitude towards the ad, attitude towards the brand, and purchase intent variables for analysis.

The four processing fluency measures (how clear the image was, how much effort it took to process the advertisement [reverse coded], how easy the advertisement was to understand, and how familiar the advertisement felt) were also combined to create an aggregate processing fluency variable for analysis. However, it is worth noting that these four items showed only moderate internal consistency ($\alpha_{\text{Fam}_C} = .642$, $\alpha_{\text{Fam}_M} = .710$, $\alpha_{\text{Nov}_C} = .665$, and $\alpha_{\text{Nov}_M} = .676$).

Consumer Appraisals

I conducted a 2 (brand: familiar vs. novel) x 2 (product location: center vs. margin) x 2 (background: related vs. unrelated) repeated measures ANOVAs on the three consumer appraisal variables (attitude toward the brand, attitude toward the ad, and purchase intent), with background and product location as within-subjects variables and brand type as the between-subjects variable. A main effect of brand familiarity emerged for each measure, revealing that familiar brands evoked more favorable attitudes toward the ad, $F(1, 233) = 22.72, p < .001$, more favorable attitudes toward the brand, $F(1, 233) = 154.79, p < .001$, and a greater reported purchase intent, $F(1, 233) = 93.63, p < .001$, than novel brands (Table 1). As expected, this analysis did not detect a main effect of product location on any of the three consumer appraisal measures, $F$’s $(1, 233) < 1.31$. However, a significant main effect of background relatedness emerged for each of the three aggregate consumer appraisal variables. Specifically, conceptually related backgrounds elicited more favorable attitudes toward the ad, $F(1, 233) = 78.04, p < .001,$
and brand, $F(1, 233) = 13.37, p < .001$. Participants also reported an increased likelihood of actually purchasing the product after viewing ads that contained conceptually related background images compared to those that contained conceptually unrelated background images, $F(1, 233) = 17.13, p < .001$ (Table 2). This finding provides conclusive evidence that conceptually related background images in these advertisements contribute to consumers’ appraisals of the brand and ad over conceptually unrelated background images.

The repeated measures ANOVAs on attitude toward the brand, attitude toward the ad, and purchase intent failed to produce the predicted two-way interaction between brand familiarity and product location to replicate the findings from Studies 2A – 3B, with all $Fs < 1.13$. No other interaction effects achieved conventional levels of significance, $F’s(1, 233) < 2.88$.

**Processing Fluency**

To determine whether ad type influenced how easily consumers were able to process the contents of the ad, I conducted the same 3-way repeated measures ANOVA on the aggregate processing fluency measure. As expected, a main effect of brand familiarity on processing fluency emerged, $F(1, 233) = 37.47, p < .001$. Participants reported that advertisements featuring familiar brands were easier to process ($M_F = 7.7$, $SD_F = 1.4$) than advertisements featuring novel brands ($M_N = 6.6$, $SD_N = 1.2$). A main effect of product location on processing fluency also emerged, $F(1, 233) = 26.70, p < .001$. Participants reported processing center-placed product advertisements more easily ($M_C = 7.5$, $SD_C = 1.7$) than margin-placed product advertisements ($M_M = 6.8$, $SD_M = 1.2$).
1.8). In addition, a main effect of background relatedness on processing fluency emerged, 
\( F(1, 233) = 70.13, p < .001 \). That is, in line with predictions, advertisements with 
conceptually related backgrounds were easier for consumers to process (\( \text{M}_{\text{rel}} = 7.6, \text{SD}_{\text{rel}} = 1.7 \)) than those with conceptually unrelated backgrounds (\( \text{M}_{\text{un}} = 6.7, \text{SD}_{\text{un}} = 1.7 \)).

However, a 2-way interaction effect of product location and background relatedness on 
processing fluency emerged, \( F(1, 233) = 5.23, p = .023 \). Simple effects t-tests revealed 
that participants processed center-placed product ads more easily than margin-placed 
product ads when the background image was conceptually unrelated to the product, \( t(233) = 5.49, p < .001 \). This was also true for ads containing conceptually related 
backgrounds, \( t(233) = 2.48, p = .014 \), although the difference between means was less 
extreme with these ads than with those containing conceptually unrelated background 
images (see Table 3). One may infer from this result that because participants directed 
their visual attention toward the center of the ad, their identification of center-placed 
products was less affected by scene incoherence, requiring less effort to process, than 
margin-placed products that consumers focused on later in the viewing experience. No 
other interaction effects achieved conventional levels of statistical significance, \( F' \)'s (1, 
233) < 1.64.

I also assessed whether a relationship existed between processing fluency and 
consumer appraisals by computing the correlations between processing fluency and each 
dependent variable for both brand familiarity conditions and for both types of 
backgrounds. As expected, for both familiar and novel brands, processing fluency was 
highly correlated with the consumer’s attitude toward the ad, \( r(119) = .473, p < .001 \) and
Assessing Need for Cognition as a Moderator of Consumer Appraisals

The items on the Need for Cognition Scale (Cacioppo et al., 1984) were highly intercorrelated, $\alpha = .884$. Scores ranged from 30 to 84, with a median score of 59.

Following the procedure used by Petty, Brinol, and Tormala (2002), I conducted a median split on these scores, categorizing any participant with a score of 59 or greater as earning a high need for cognition score and any participant with a score under 59 as earning a low need for cognition score.

I conducted a 2 (brand: familiar vs. novel) x 2 (product location: center vs. margin) x 2 (background: related vs. unrelated) x 2 (need for cognition: high vs. low) repeated measures ANOVA, in which product location and background were within-subjects variables and brand type and need for cognition score were between-subjects variables. In this analysis, there was a single two-way interaction between background
and need for cognition score on purchase intent, $F(1, 230) = 4.43, p = .036$. Specifically, consumers low in need for cognition reported significantly higher purchase prices when the advertisement contained a background context conceptually related to the featured product than when it contained an incoherent background, $t(230) = 4.34, p < .001$. On the other hand, ad coherence did not appear to significantly inform the purchase prices of those high in need for cognition, $t(230) = 1.52$ (see Table 4). The inclusion of the need for cognition variable produced no other statistically significant effects, $F$’s $(1, 230) < 2.63$.

**Consumer Appraisals of Individual Product Types**

I also explored whether participants assigned to view familiar brands actually recognized them. In self-reports of brand familiarity, 32 of the 119 participants in the “familiar brands” condition (27%) indicated that they were not at all familiar, or only somewhat familiar, with the Fiji brand of bottled water. More surprisingly, 50 (42%) respondents in this condition indicated a lack of familiarity with the Palmolive brand of dish soap. For Starbucks coffee and Corona beer, this was less of a concern, with only 11 (9%) and 14 (12%) participants indicating a lack of familiarity with the brand, respectively.

Of particular interest was whether or not participants in the familiar condition successfully recalled and listed the supposedly familiar brand name (e.g., Fiji) in response to a product category label (e.g., bottled water). If a particular brand name is closely linked in one’s memory to its more general product category, participants should be more likely to recall and list this brand name when prompted by the product category
name than those for whom the brand is not as familiar or closely associated with the product category. So for those participants in the “familiar brand” condition, I wished to determine whether those who were familiar enough with the featured brand that they were able to freely recall and the brand name reported more favorable responses to those familiar brands when later viewed in the context of a center-placed, compared to a margin-placed, product advertisement. In the recall test, 91, 48, 165, and 114 of the 235 participants freely recalled the target brand name out of all bottled waters, beers, dish soaps, and coffees, respectively. As expected, no participant cited the name of any of the novel brands used in the experiment during the recall test. For this reason, the following analyses examined data only from participants in the familiar brand condition.

For each familiar brand, I conducted a 2 (recall: free vs. failed) x 2 (product location: center vs. margin) x 2 (background: related vs. unrelated) between-subjects ANOVA. This produced only two statistically significant effects. First, a main effect of free recall on attitude toward the ad, attitude toward the brand, and purchase intent emerged for all familiar brands, $F$'s (1, 111) > 5.03, $p < .027$ (Table 5). The only exception was for Fiji bottled water on attitude toward the ad, $F$ (1, 111) = 1.02. Thus, as expected, greater brand familiarity (as indicated by a brand-awareness free-recall test) led to more positive consumer appraisals. Second, a main effect of background relatedness on attitude toward the ad emerged for three of the four familiar brands, $F$’s (1, 111) > 6.32, $p < .013$ (Table 6). Specifically, participants rated the Fiji bottled water, Palmolive dish soap, and Starbucks coffee advertisements more favorably if the ad also contained a conceptually related background than if it contained a conceptually unrelated
background, as expected. No other main or interaction effects achieved statistical significance in more than one trial for those in the familiar brand condition.

In sum, with the inclusion of brand awareness as an individual difference variable, analyses of each individual product type failed to demonstrate the predicted brand familiarity and product location interaction effect on consumer appraisals.

Study 4: Discussion

Consistent with research on the mere exposure effect and other work on the influence of prior exposure on one’s processing experience with and subsequent evaluations of a target (e.g., Fang et al., 2007; Winkielman et al., 2003; Bornstein, 1989; Zajonc, 1968; Janiszewski, 1988, 1990, 1993), Study 4 confirmed that the consumer’s familiarity with a given brand matters. Ads featuring familiar brands elicited more favorable appraisals of the ad and brand from consumers, and were easier for consumers to process, than otherwise identical advertisements featuring novel brands of the same product type. Moreover, when considering individual differences in brand awareness, participants able to freely recall a brand tended to evaluate it more favorably than participants who were unable to list the brand.

Consistent with prior research on the advantages of scene coherence (e.g., Boyce et al., 1989; Boyce & Pollatsek, 1992; Biederman et al., 1982; Lee & Labroo, 2004; Shapiro, 1999), Study 4 also demonstrated that the conceptual relatedness of background images to the products featured in advertisements informs the consumer’s processing experience and ultimate response. Consumers processed advertisements more easily, evaluated the ad and brand more positively, and reported a greater likelihood of actually
purchasing the product when those advertisements contained backgrounds that were conceptually related to the featured product than when they contained conceptually unrelated backgrounds.

Study 4 also presented participants with more rigorously controlled print advertisements for familiar and novel brands. However, Study 4 did not produce the predicted two-way interaction between product location and brand familiarity on the consumer appraisal or processing fluency measures, failing to replicate findings from Studies 2A – 3B. These findings could suggest that ad type does not inform the consumer’s processing experience or subsequent evaluations. Alternatively, the brand awareness recall test may have inadvertently served as a conceptual prime for these product types, facilitating brand identification speed above and beyond what might have been observed as a result of manipulations of brand familiarity and product location within the ad. If the recall test operated as a conceptual prime, this task may have activated the types of schemas in memory that otherwise would have been activated by the advertisement background contexts, facilitating consumer processing of all ads seen in the context of this experiment.

Finally, individual differences in need for cognition does not appear to moderate the predicted effect of product location and brand familiarity on consumer appraisals. However, need for cognition did appear to moderate the effect of background relatedness on purchase intent. That is, incoherent background contexts elicited less favorable evaluations from individuals low in need for cognition than coherent backgrounds, but for those high in need for cognition, the advertiser’s choice of background image made
no apparent difference. Given that advertisements containing incoherent backgrounds were more difficult to process, this finding indicates that individuals high in need for cognition, who enjoy engaging in effortful thought processes, may have interpreted this processing difficulty in a positive light (see Schwarz, 2004 and Brinol, Petty, & Tormala, 2006 for further discussion of the importance of naïve theories in determining the effects of processing fluency on attitudes and social judgments). However, those low in need for cognition, who often rely more on extrinsic cues and heuristics and less on effortful thought when making decisions (Haugtvedt et al., 1988; Smith & Petty, 1996; Cacioppo et al., 1996), likely interpreted processing difficulty as a negative cue. This suggests that need for cognition may be a useful individual difference variable to consider as a potential moderator when examining the effects of processing fluency or disfluency on consumer appraisals.

In sum, Study 4 confirmed both that familiar brands elicit more favorable consumer appraisals than novel brands and that advertisements containing related background contexts evoke more favorable appraisals than advertisements with unrelated background contexts. Despite this, the brand familiarity and product location interaction effect noted in Studies 2A – 3B failed to replicate, suggesting either that these prior findings could have been driven solely by extraneous stimulus differences or that a priming confound introduced in Study 4 contaminated the present findings.

Overview of Study 5: Does Processing Fluency Inform Consumer Evaluations?

If consumers evaluate brands more favorably as a result of their processing experience, there should be instances when a fluent processing experience produces
different patterns of results. For situations in which processing fluency serves as a negative evaluative cue, as is the case when consumers assess the instrumentality of a product in satisfying their current needs, processing fluency should have the opposite effect on consumer appraisals. In the original demonstration of the instrumentality heuristic, the consumer’s current goal state affected his or her interpretation of processing fluency as an informative cue when evaluating products relevant to these desires (Labroo & Kim, 2009). Participants evaluated easy-to-process ads more favorably than difficult-to-process ads in absence of an active goal state, but when consumers possessed an active goal state relevant to the product featured in the advertisement they viewed, difficult-to-process ads elicited more favorable evaluations than easy-to-process ads. The authors argued that this reversal resulted from a change in the definition of processing fluency (Labroo & Kim, 2009). Specifically, when consumers process targets passively or with low involvement, they tend to evaluate those targets more favorably and are willing to pay more to obtain those targets when their processing experience is a fluent one. However, when consumers possess a relevant goal state, this default interpretation of fluency changes to one in which difficulty, and not ease, is construed as a positive cue. Presumably, this is because consumers associate difficulty with a more useful or instrumental means of achieving one’s goals (consider the old adage that nothing easy is worthwhile).

To determine whether or not processing fluency drives the effects of ad type on consumer appraisals as observed in Studies 2A – 3B, Study 5 manipulated the active goal states of participants prior to viewing advertisements by adopting the experimental
procedures used to demonstrate the instrumentality heuristic. Thus, in the current study, if the presence or absence of a relevant goal state moderates the effects of ad type on the consumer response, then such findings would support the hypothesis that differences in brand familiarity and product location inform consumer appraisals through a processing fluency mechanism.

If processing fluency underlies the effects of ad type on consumer appraisals as proposed, goal states should affect consumer appraisals following these different ad types in predictable ways. In the absence of an active goal state, consumers should evaluate center-placed product and margin-placed product advertisements in a manner identical to Studies 2A, 2B, 3A, and 3B. That is, participants should evaluate the easy-to-process ad more favorably than the more difficult-to-process ad, favoring the familiar brand more after viewing a center-placed product ad than after viewing a margin-placed product ad but favoring the novel brand more after viewing a margin-placed product ad than a center-placed product ad. However, inducing a goal state relevant to the product that consumers then evaluate should cause those consumers to adopt the instrumentality heuristic, with those primed with the goal to feel good ("aim for pleasure") exhibiting a pattern of responses opposite to that observed when the goal is absent. That is, for consumers who enjoy chocolate, those with an active goal state to feel good should evaluate a chocolate bar more favorably after viewing a difficult-to-process ad than an easy-to-process ad. These consumers should then evaluate the familiar brand more favorably after viewing a margin-placed product ad than a center-placed product ad, but
should evaluate a novel brand more favorably after viewing a center-placed product ad than a margin-placed product ad.

If processing fluency does not underlie the effects of ad type on consumer appraisals, however, introducing a relevant active goal state should affect consumer appraisals of all ad types in the same manner. Active goal states facilitate the pursuit of these goals at a nonconscious, automatic level and result in more favorable appraisals of goal-relevant targets (Ferguson & Bargh, 2004). If processing fluency does not underlie the effects of ad type on consumer judgments, the introduction of a relevant active goal state should result in more favorable consumer evaluations equally across all ad types.

Study 5: Method

Participants

In exchange for partial course credit, 220 undergraduate students participated in a study consisting of several ostensibly unrelated surveys.

Stimulus Materials

For this study, I selected one familiar American brand of chocolate (Ghirardelli) and one novel brand of chocolate available only in Australia (Koko Black). Participants in a pretest evaluated the novel and familiar brands of chocolate as equally attractive on a 7-point Likert-type scale, \( t(32) = 1.66 \). When asked whether or not they recognized the brand, a greater proportion of respondents reported that they recognized the familiar brand (88%) compared to the unfamiliar, novel brand (6%), \( \chi^2 (1, N = 34) = 23.07, p < .001 \).
Design and Procedure

Following a procedure similar to that used by Labroo and Kim (2009, experiment 1), this experiment utilized a 2 (goal: feel-good vs. no goal) x 2 (brand: familiar vs. novel) x 2 (product location: center vs. margin) between-subjects design, with participants randomly assigned to one of 8 possible conditions.

Identical to the Labroo and Kim (2009) procedure, participants first completed a word scramble task designed as a goal priming manipulation (see Appendix E). Specifically, participants viewed six different sets of five words each and formed a grammatically correct sentence out of the words provided in each set. Depending on the priming condition, the sentences pertained either to a feel-good goal (e.g., “aim for most pleasure”) or were unrelated to a goal (e.g., “the ball is blue”). For the subsequent, ostensibly unrelated survey, participants briefly viewed and then evaluated an advertisement for a brand of chocolate following the procedure outlined in Study 4. Participants saw one of four possible advertisements that contained either a familiar or novel brand placed either in the center or along the margins of an otherwise identical advertisement (see Figure 5). To evaluate the ad, participants completed a questionnaire similar to that used in Study 4, but which also contained measures used by Labroo & Kim (2009). These items included how much participants wanted the brand of chocolate, how tempting it was, how much they liked chocolate in general, how much attention they paid during the task, how good the task made them feel, and measures of how limited and special the brand of chocolate seemed on a 7-point Likert-type scale in which 1 represented the least and 7 represented the most on each dimension (see Appendix F).
Participants also reported how frequently they eat chocolate on an 11-point Likert-type scale, in which 1 = never and 11 = very frequently.

**Study 5: Results**

*Manipulation Checks*

As expected, participants in the 8 conditions did not differ on how much they like chocolate in general, how frequently they eat chocolate, how much they paid attention during the task, or how the task itself made them feel, $F$'s (1, 211) < 1.10. Moreover, participants rated the familiar brand no differently than the novel brand with respect to how limited or special they perceived the brand of chocolate to be, $F$'s (1, 217) < 1.51. As expected, compared to participants viewing the novel brand of chocolate (Koko Black), those viewing the familiar brand of chocolate (Ghirardelli) reported that brand as being more familiar, $F(1, 217) = 259.12, p < .001$, and recognizable, $F(1, 217) = 244.78, p < .001$.

Thirty-five participants (15.9% of all respondents), however, indicated that they found chocolate to be undesirable. Because participants must perceive chocolate as desirable for it to be instrumental in fulfilling a feel-good goal, these 35 participants were excluded from further analyses.

*Data Reduction*

The four *attitude toward the brand* items from Study 4 again showed high internal consistency ($\alpha = .93$) and were thus combined to create one aggregate dependent variable. Following the procedure outlined in Study 4, I also created the aggregate *attitude toward the ad* ($\alpha = .91$) and *purchase intent* ($\alpha = .90$) variables. Three
participants exceeded three standard deviations from the mean response on one of the two remaining dependent variables: their estimate of how long they believed the advertisement appeared on the screen or how much they would pay for the product. As a result, these three participants were excluded from further analysis.

The four processing fluency measures (how clear the image was, how much effort it took to process the advertisement [reverse coded], how easy the advertisement was to understand, and how familiar the advertisement felt) were also combined to create an aggregate processing fluency variable for analysis. However, these four items again showed only moderate internal consistency ($\alpha = .548$).

**Consumer Appraisals**

I conducted a 2 (goal: feel-good vs. no goal) x 2 (brand: familiar vs. novel) x 2 (product location: center vs. margin) between-subjects ANOVA on purchase price and on attitude toward the ad, attitude toward the brand, purchase intent, and processing fluency. These analyses produced a main effect of brand familiarity on each of the following dependent variables: purchase price, $F (1, 171) = 5.64, p = .019$, attitude toward the brand, $F (1, 171) = 11.70, p = .001$, and processing fluency, $F (1, 171) = 26.10, p < .001$. Specifically, the familiar brand elicited a higher purchase price and more favorable attitudes than the novel brand. Moreover, consumers found the familiar brand advertisement to be easier to process than the advertisement featuring the novel brand (Table 7). No other main effects achieved conventional levels of statistical significance for any other dependent variable, $F$’s $(1, 171) < 3.20$. 
Additional analyses revealed a two-way interaction between product location and goal condition on purchase intent, $F(1, 171) = 4.67, p = .032$. This effect appears to be driven primarily by a difference in the feel-good condition. Specifically, participants in the feel-good goal condition reported a higher intent to purchase the product after viewing the margin-placed product advertisement ($M_M = 7.4, SD_M = 2.6$) compared to those who viewed the center-placed product advertisement ($M_C = 6.3, SD_C = 2.4$).

Most importantly, this analysis revealed the predicted three-way interaction on purchase price, $F(1, 171) = 5.143, p = .025$ (see Table 8 for all means and standard deviations). To more clearly determine the nature of this effect, I conducted separate 2 (brand familiarity) x 2 (product location) ANOVAs on purchase price for both goal conditions. For participants in the no-goal condition, the 2-way interaction effect between brand familiarity and product location noted in Studies 2A – 3B replicated as expected, $F(1, 82) = 7.80, p = .007$. Those who viewed the familiar brand of chocolate reported that they would be willing to pay a marginally greater amount to purchase the product if they viewed the center-placed product advertisement than the margin-placed product advertisement, $t(82) = 1.94, p = .055$. Participants who viewed the novel brand of chocolate reported a higher purchase price after viewing the margin-placed product advertisement than the center-placed product advertisement, $t(82) = -2.01, p = .048$.

However, for participants in the feel-good goal condition, this 2-way interaction effect was eliminated, $F(1, 89) = 0.61$. Although the differences between means do not achieve conventional levels of statistical significance, it is worth noting that these participants demonstrated a modest trend toward reversing the brand familiarity-product location
interaction effect, as predicted. That is, participants in the feel-good goal condition appeared to respond somewhat more favorably to familiar brands after viewing margin-placed compared to center-placed product ads, but to novel brands after viewing center-placed compared to margin-placed product ads (refer to Table 8).

The omnibus 3-way ANOVA tests produced no other significant interaction effects for any other dependent variable, $F$’s (1, 171) < 3.11.

Study 5: Discussion

Recent evidence indicates that the influence of processing fluency on judgments depends on whether or not the perceived target pertains to an active goal state, with consumers evaluating difficult-to-process goal-relevant stimuli more favorably than comparable easy-to-process goal-relevant stimuli (the instrumentality heuristic; Labroo & Kim, 2009). That is, the default metacognitive interpretation of processing fluency as a peripheral cue in judgment appears to be a distinctly positive one, but active goal states can trigger a perceiver’s use of the instrumentality heuristic, conferring a negative interpretation on more fluent processing experiences.

To determine whether processing fluency underlies the observed differences between center-placed and margin-placed product advertisements for familiar and novel brands (as evidenced in Studies 2A, 2B, 3A, and 3B), Study 5 replicated the conditions for the instrumentality heuristic phenomenon to examine consumer judgments in this context. If the introduction of a relevant goal state reversed the traditional effects of ad type on judgments, this study would provide evidence that processing fluency underlies the observed effects of ad type on consumer appraisals. Indeed, in the absence of a
specific goal state, participants evaluated center-placed and margin-placed product
advertisements in a manner similar to the pattern observed in Studies 2A – 3B.
Participants reported that they would pay more money to purchase chocolate after
viewing an easy-to-process ad compared to a more difficult-to-process ad. However,
participants with an active “feel-good” goal were unaffected by these variables and
reported purchase prices that trended in the opposite directions from that observed with
participants in the no-goal condition and in Studies 2A – 3B. That is, participants with a
relevant active goal state reported that they would pay approximately 50 cents less for
brands featured in easy-to-process ad types (the center-placed familiar brand ad and
margin-placed novel brand ad), but approximately 50 cents more for brands featured in
difficult-to-process ad types (the margin-placed familiar brand ad and center-placed novel
brand ad) compared to participants who did not possess a relevant goal state. Thus, the
presence of a relevant goal state did not simply inflate consumer judgments of all ads, as
might be expected if processing fluency did not underlie the effects of ad type on
consumer appraisals. Instead, the presence or absence of a goal state influenced how
consumers differentially evaluated center- and margin-placed product advertisements of
familiar and novel brands, in a manner predicted by research on processing fluency and
the instrumentality heuristic. By replicating the effects of the instrumentality heuristic on
consumer judgments in the present context, Study 5 offers evidence that processing
fluency underlies the observed differences between center- and margin-placed product
advertisements.
Overview of Study 6: Manipulating Brand Familiarity

Studies 1 – 3B indicate that center-placed product advertisements should elicit more favorable evaluations for any brand familiar to the consumer than margin-placed product advertisements. Alternatively, in absence of prior efforts to increase consumers’ familiarity with an unknown product, margin-placed product advertisements should elicit more positive consumer attitudes than center-placed product advertisements. To more conclusively assess the relationship between brand familiarity, product location, and subsequent product attitudes, Study 6 directly manipulated viewers’ familiarity with each of eight real-world products. This experiment removes much of the variance introduced by well-established brand image information and eliminates the alternative possibility present in prior studies that aspects of the well-established image associated with popular, real-world brands or the image associated with users of these brands, and not advertisement processing fluency per se, affects consumer judgments.

The findings from the previous experimental studies should replicate under conditions that involve a direct manipulation of brand familiarity. That is, participants exposed to information about otherwise novel brands before viewing advertisements that feature these products should respond more favorably after viewing a center-placed product advertisement than a margin-placed product advertisement. However, participants who do not receive any prior exposure to or information about these same brands should respond more favorably after viewing a margin-placed product advertisement than a center-placed product advertisement. Furthermore, if ease of understanding improves evaluations of products featured in print advertisements,
participants should evaluate center-placed product advertisements featuring these newly familiar brands as easier to understand than corresponding margin-placed product advertisements. Similarly, participants without prior exposure to these otherwise novel brands should evaluate margin-placed product advertisements as easier to understand than corresponding center-placed product advertisements.

Study 6: Method

Participants

In exchange for partial course credit, 164 undergraduate students participated in a study on consumer attitudes toward products featured in a range of multimedia marketing communications.

Stimulus Materials

For this study, I selected eight novel brands of real-world products from international advertising campaigns using the same pretesting procedures employed in Study 4. I obtained electronic images of and commercials for these brands via Google’s image search tool and Youtube, respectively. In a pretest ($N = 26$), participants rated the attractiveness of all brands of products and all background images on a 7-point Likert-type scale, with 1 = not at all and 7 = very. Mean ratings for each brand and each background image were neutral to positive, earning a rating of at least a 3 or better. No more than 15.4% of responding participants (4 of the 26 surveyed) indicated that they recognized any individual brand. Participants also viewed each advertisement and rated each background image as related to the product, offering a mean rating of at least 3 or better on a 7-point Likert-type scale, with 1 = not at all and 1 = very. These product and
context images created mock-up center-placed product and margin-placed product advertisements similar to those used in Study 4. Participants reported no statistically significant difference in the professional quality of center-placed compared to margin-placed product advertisements for each of the eight brands, with all t(24)'s < 2.064.

**Design and Procedure**

In this study, all participants were randomly assigned to one of four possible conditions. These four conditions determined which brands of products each participant became familiarized with and which brands remained novel, and also determined whether these participants viewed a center-placed or margin-placed product advertisement for each brand. Each participant viewed 2 product advertisements for each of 4 types of ads: center-placed and margin-placed familiar brand ads, and center-placed and margin-placed novel brand ads. Participant responses would be aggregated across both trials for each of the four ad types, creating a 2 (brand familiarity: familiar vs. novel) x 2 (product location: center vs. margin) within-subjects experimental design for analysis.

Upon entering the lab, participants first completed a brand familiarity manipulation task in which they learned about four foreign products that would presumably enter the American market in the coming year. Half of these participants learned about the following brands of products: Hovis bread, the Citroen C4 automobile, Belu bottled water, and Samboy potato chips. The remaining half of these participants learned about the following alternative brands of products: Kingsmill bread, the Tata Indica V2 automobile, Aqua Monta bottled water, and Smith’s potato chips. Participants learned about each set of products by first reading positive consumer reviews (see
Appendix G) and then watching television commercials featuring each of the four brands. They then evaluated each product by writing a brief response that answered open-ended questions about (a) what they found appealing about the product and (b) what they liked about the commercial advertisement (see Appendix H). As a brand familiarity manipulation check, participants also indicated whether or not they possessed knowledge about the brand of product prior to the experimental session and identified how familiar they now felt with the brand using a 7-point Likert-type scale, for which 1 = not at all familiar and 7 = extremely familiar.

In the second part of the experiment, all participants then viewed and evaluated a series of eight mock-up print advertisements using a procedure identical to that of Study 4. Each of the eight target products appeared either in the center or along the margins of an otherwise identical image to create two versions of each advertisement (see Figure 6). Two possible sets of stimuli, featuring four center-placed product and four margin-placed product ads each, presented participants with only one version of each of the eight target product advertisements. Participants evaluated each ad by responding to questionnaire items identical to those used in Study 4, and completed the Need for Cognition Scale (Cacioppo et al., 1984) to conclude the experiment.

Study 6: Results

Manipulation Check: Familiarity

To determine the effectiveness of the brand familiarity manipulation task, I conducted a 2 (time: before and after) x 2 (stimulus set) repeated measures ANOVA on participants’ self-reported ratings of familiarity, collapsed across all four brands. A
significant main effect of time emerged, $F (1, 480) = 1301.97, p < .001$. That is, participants reported a general lack of familiarity with the featured brands prior to the brand familiarity manipulation task ($M_{\text{pre}} = 1.2, SE_{\text{pre}} = .024$) but reported being significantly more familiar with the brands after completing the task ($M_{\text{post}} = 4.6, SE_{\text{post}} = .098$). Participants randomly assigned to learn about Aqua Monta bottled water, the Tata Indica V2 automobile, Smith’s potato chips, and Kingsmill bread responded no differently than participants randomly assigned to learn about Belu bottled water, the Citroen C4 automobile, Samboy potato chips, and Hovis bread, $F (1, 480) = 2.70$. These findings confirm that participants generally felt more familiar with these featured brands after undergoing the brand familiarity manipulation task at the beginning of the experiment.

Data Reduction

As in Studies 4 and 5, the four attitude towards the ad items (good – bad, appealing – unappealing, pleasant – unpleasant, and high-quality – low-quality) all showed high internal consistency, with Cohen’s $\alpha$ of at least .920 or greater for each ad type. Additionally, the four attitude towards the brand items (good – bad, appealing – unappealing, pleasant – unpleasant, and high-quality – low-quality) also showed high internal consistency, with $\alpha$’s > .799, as did the three purchase intent items (probable-improbable, likely-unlikely, possible-impossible; $\alpha$’s > .889). Therefore, these items were averaged to create the aggregate attitude towards the ad, attitude towards the brand, and purchase intent variables for analysis.
The four processing fluency measures using a Likert-type scale (how clear the image was, how much effort it took to process the advertisement [reverse coded], how easy the advertisement was to understand, and how familiar the advertisement felt) were again aggregated to form a processing fluency index variable. However, these four items again showed only moderate internal consistency (all α’s between .527 and .715) and should be regarded with caution.

Finally, for each participant, the attitude toward the ad, attitude toward the brand, purchase intent, standardized price participants would pay for the product, and processing fluency variables were averaged across all center-placed product ad trials and across all margin-placed product ad trials for the familiar and novel brands. This created aggregate values on each dimension for each participant in response to center-placed familiar brand ads, margin-placed familiar brand ads, center-placed novel ads, and margin-placed novel ads.

Consumer Appraisals and Processing Fluency

The Need for Cognition Scale (Cacioppo et al., 1984) questionnaire items were highly intercorrelated, α = .831. Scores ranged from 24 to 99, with a median score of 56. Following the procedure used by Petty et al. (2002) and in Study 4, I conducted a median split on these scores, categorizing any participant with a score of 56 or greater as earning a high need for cognition score and any participant with a score under 56 as earning a low need for cognition score.

I conducted a 2 (brand: familiar vs. novel) x 2 (product location: center vs. margin) x 2 (need for cognition: high vs. low) repeated measures ANOVA in which
brand familiarity and product location were within-subjects variables and need for cognition score was the between-subjects variable on each of the following dependent variables: attitude toward the ad, attitude toward the brand, purchase intent, purchase price, and processing fluency. Consistent with Studies 4 and 5, this analysis produced a main effect of brand familiarity on all five of the dependent variables. Specifically, ads featuring familiar brands were easier to process, $F(1, 158) = 38.50, p < .001$, elicited more favorable attitudes toward the brand, $F(1, 155) = 81.28, p < .001$, more favorable attitudes toward the ad, $F(1, 157) = 31.50, p < .001$, a greater intent to purchase the featured product, $F(1, 157) = 65.35, p < .001$, and a greater purchase price, $F(1, 148) = 9.30, p = .003$, than ads featuring novel brands (see Table 9). In addition, a main effect of need for cognition emerged for purchase price, $F(1, 148) = 5.93, p < .016$. Specifically, those low in need for cognition indicated that they would generally pay more to purchase the featured product ($M_{Z\text{low}} = .101, SE_{Z\text{low}} = .064$) than those high in need for cognition ($M_{Z\text{high}} = -.109, SE_{Z\text{high}} = .058$). No other significant main effects emerged for any other dependent variable, all $F$’s < 2.16.

This analysis also detected a significant interaction effect between brand familiarity and product location on processing fluency, $F(1, 158) = 4.97, p = .027$. Simple effects tests revealed that center-placed product ads were easier for consumers to process than margin-placed product ads for familiar brands, $t(158) = 1.96, p = .05$. No difference emerged between center- and margin-placed product ads featuring novel brands, $t(158) = 0.66$ (Table 10). The predicted interaction between brand familiarity and product location on consumer appraisals, however, failed to emerge, $F$’s < 1.99.
Regardless, to assess whether a relationship existed between processing fluency and each measure of consumer appraisals, I computed their correlations for each of the four ad types. As expected, processing fluency was highly correlated with the consumer’s attitude toward the ad, attitude toward the brand, and purchase intent for each ad type (see Table 11). However, because ad type failed to elicit significant differences in the consumer appraisal dependent variables in this study, a mediation analysis was not warranted.

Additionally, a significant interaction effect of brand familiarity and need for cognition on purchase intent emerged from the repeated measures ANOVAs, $F(1, 157) = 4.38, p = .038$. Simple effects tests revealed no significant difference in purchase intent towards familiar brands between those high and those low in need for cognition, $t(157) = 0.61$. However, participants low in need for cognition reported a significantly greater intent to purchase novel brands than participants high in need for cognition, $t(157) = 2.06, p = .04$ (Table 12). There was also a significant interaction between brand familiarity and need for cognition on purchase price, $F(1, 148) = 4.95, p = .025$. Simple effects tests revealed no significant difference in purchase price for familiar brands between those high and those low in need for cognition, $t(148) = 1.41$. However, participants low in need for cognition reported a significantly greater purchase price for novel brands than participants high in need for cognition, $t(148) = 2.99, p = .003$ (Table 12). No other effects achieved conventional levels of statistical significance, $F$’s < 3.36.
Study 6: Discussion

Study 6 replicated the Study 4 findings that the consumer’s familiarity with a given brand influences the perceiver’s processing experience and informs his or her appraisals of the ad and brand. Ads featuring familiar brands elicited more favorable evaluations from consumers, and were easier for consumers to process, than otherwise identical advertisements featuring novel brands of the same product type.

While Study 6 produced the predicted two-way interaction between product location and brand familiarity on processing fluency, this did not emerge for consumer appraisals. As a result, this experiment failed to replicate findings from Studies 2A – 3B. These results could indicate that ad type, as defined by brand familiarity and product location, does not inform consumer judgments, unlike the results from Studies 2A – 3B and Study 5. However, several plausible alternative explanations for these null findings could explain why the predicted effect of ad type on consumer appraisals failed to emerge.

One alternative explanation for the absence of the predicted effect of ad type on consumer appraisals could be that the brand familiarity manipulation task, like the brand awareness task in Study 4, primed these four product types and facilitated the categorization and identification of any brand belonging to these product categories (i.e., all brands in the experiment), superceding any effect of ad type. However, participants did report that center-placed familiar brands were easier to process than margin-place familiar brands in this study, making this possibility less likely for Study 6 than Study 4. Instead, consumers could have attributed this subtle difference in fluency not to their
attitudes and judgments, but to the brand familiarity manipulation task. By adopting a different naïve theory about the meaning of their fluent or disfluent processing experience, consumers could have eliminated the traditional effects of processing fluency on their attitudes and judgments (cf. Schwarz, 2004; Brinol, Petty, & Tormala, 2006; Wegener & Petty, 1995). Alternatively, by asking consumers to consider certain product types, the initial brand familiarization task in Study 6 and the brand awareness recall task of Study 4 could have induced a relevant active goal state in these participants, reversing or nullifying the effect of processing fluency on consumer appraisals in a manner similar to that observed in Study 5. Finally, in asking consumers to assess their own reactions to brands and ads of the same product category along several dimensions, the very nature of the task in both Studies 4 and 6 may have lent itself to a more analytical, deliberative processing approach that relied less on heuristics, default responses, and peripheral cues in general (Alter, Oppenheimer, Epley, & Eyre, 2007). Consumers who adopted a resource-intensive analytical reasoning style could have corrected for the effects of processing fluency on judgments.

Finally, individual differences in need for cognition does not appear to moderate the predicted effect of product location and brand familiarity on consumer appraisals. However, need for cognition does appear to inform purchase intent and decisions about purchase price. Those low in need for cognition report that they would pay a higher price to purchase products than those high in need for cognition. This discrepancy becomes more marked when the brand under consideration is a novel one: consumers low in need for cognition pay more, and report a greater intent to purchase, novel brands than those
high in need for cognition. Interestingly, although some research indicates that need for cognition may moderate purchase intent across a range of advertising appeals (e.g., Zhang & Buda, 1999; Kim & Kramer, 2006; Putrevu, 2008), to this author’s knowledge, no prior evidence exists to indicate that need for cognition directly informs purchase intent or that need for cognition moderates responses to differentially familiar or novel brands.

In sum, Study 6 confirmed both that familiar brands elicit more favorable consumer appraisals than novel brands and that center-placed familiar brand ads, and margin-placed novel brand ads, are easier for consumers to process than their organizational alternatives. Despite this, the interaction effect of brand familiarity and product location on consumer appraisals of the featured brand noted in Studies 2A – 3B failed to replicate, suggesting either that these prior findings could have been driven solely by extraneous stimulus differences or that a new confound wiped out these more subtle effects.
CHAPTER 3: GENERAL DISCUSSION

An advertising campaign can help jumpstart the popularity of a brand, or usher in its quick demise. Most consumers today, for example, may recognize Nesquik as a brand of flavored milk product, but may not know that a competing brand called Raging Cow ever existed – and for good reason (Ireland, 2004). More common than a brand’s spectacular crash and burn, however, are the subtle, incremental changes in a brand’s performance as a result of advertising (Sutherland & Sylvester, 2000). As illustrated in the present research, some of these subtle, incremental differences in the consumer response may occur when advertising appeals to consumers through psychological mechanisms that are subtler still.

Print Advertisements and Consumer Appraisals

The current research shows that what may appear to be minor modifications in the layout of a print advertisement can gently, but perceptibly, affect consumer judgments. Specifically, the choice of where to place the image of the product in the spatial design of a print advertisement, in combination with the consumer’s familiarity with the featured brand, can inform subsequent appraisals of that brand. To the lay consumer, such a decision appears not to matter to the success of the advertisement (Study 1), but to university students enrolled in marketing courses, the belief that the organization of the ad matters in producing more favorable consumer responses does emerge. These marketing students believed that margin-placed product advertisements would elicit more favorable outcomes for a novel brand than center-placed product advertisements. Across the five of the seven studies that followed to explore actual consumer responses to these
different types of ads (Studies 2A – 3B, Studies 5), advertisements that featured novel brands did tend to elicit more favorable responses from consumers when the product appeared along the margins of the image than when it appeared in the center. However, advertisements featuring familiar brands tended to elicit more favorable responses from consumers when the product was positioned in the center, compared to the margins or visual periphery, of the image. This occurred with real-world advertisements (Studies 2A and 3A), ads created by a graphic designer with no knowledge of the experimental hypothesis (Studies 2B and 3B), and with ads specially developed by the experimenter to account for possible confounds inherent to real-world advertisements between ad types (Study 5). This effect emerged with a range of consumer appraisals, including attitudes (toward the ad and brand), purchase intent, and even purchase price – the amount consumers reported that they would pay to purchase the product. Thus, the apparently simple aesthetic decision about where to position the product in an advertisement image prompted a general effect on subsequent consumer judgments – one that emerged using several methods of measurement for a variety of product types, and one that appeared in response to a diverse collection of ads created by several different individual designers.

*Does Processing Fluency Inform Consumer Appraisals of Advertising?*

The present research provides some evidence that brand familiarity and product location interact to inform the consumer response through a processing fluency mechanism. Processing fluency generally informs any judgment that pertains to the target stimulus, such as the truthfulness of a statement (Reber & Schwarz, 1999), the beauty of an object (Reber, Schwarz, & Winkielman, 2004), or the accuracy of a trivia response
(Alter et al., 2007), in a manner dependent on the metacognitive heuristic applied (Brinol et al., 2006). In predicting consumer appraisals, the important question to consider is whether the perceiver views processing fluency as a positive cue or a negative cue about the target in the provided context. Typically, and particularly in low-elaboration contexts in which the consumer either cannot or chooses not to think critically about the message (Petty & Cacioppo, 1986), perceivers view the experience of ease when processing or identifying a target as a positive indicator of the value of that target on whatever dimension receives consideration (Alter & Oppenheimer, 2009). If processing fluency accounts for the present findings, the more easily consumers identify products featured in the advertisements, the more positively they then should evaluate the target brand.

Unfortunately, Studies 4 and 6 failed to show the predicted interaction effect of brand familiarity and product location on consumer appraisals. Study 6 did demonstrate, however, that center-placed familiar brand ads and margin-placed novel brand ads were indeed easier to process than their matched counterparts (i.e., margin-placed familiar brand ads and center-placed novel brand ads). Moreover, processing fluency self-report measures were highly positively correlated with the attitudinal measures in Studies 4 and 6: When consumers indicated that the advertisement was easier to process, they also offered more favorable appraisals of the featured target following advertisement exposure.

Finally, Study 5 offered an alternative examination of processing fluency that did not rely on consumer self-report measures. Under certain circumstances, such as when the perceiver possesses an active goal relevant to the product being evaluated, consumers
may interpret the experience of fluency as a negative evaluative cue. That is, simply by inducing a relevant goal state in the perceiver, the effects of processing fluency can reverse: Consumer evaluations of an easy-to-process advertisement should decrease, whereas evaluations of a difficult-to-process advertisement should increase (Labroo & Kim, 2009). If processing fluency underlies the effects of product location and brand familiarity, a manipulation of active consumer goals should similarly influence their evaluations of the featured brands. As expected, those participants in Study 5 with no active goal reported a pattern of responses that replicated the pattern of responses observed in Studies 2A – 3B. For those with a relevant active goal state, however, this effect was eliminated, with trends in directions opposite to that observed with the no-goal participants. This, in combination with the positively correlated self-report measures from Study 6 indicating that increases in processing fluency generally elicit more favorable appraisals of the given target, supports the notion that processing fluency underlies the observed attitudinal effects in response to center- and margin-placed product advertisements for familiar and novel brands.

Individual Differences in Consumer Judgment

Studies 4 and 6 offer some indications that need for cognition may moderate the effects of the types of advertisements investigated in the present research on purchase intent and purchase price. Consumers low in need for cognition appear to rely somewhat more on peripheral mechanisms and heuristics, like those used to interpret the meaning of processing fluency, when making their appraisals than consumers high in need for cognition. Specifically, in Study 4, center-placed familiar brand advertisements
persuaded consumers low in need for cognition to report a greater intent to purchase the brand than consumers high in need for cognition. Differences in background coherence also affected consumers low in need for cognition more than those high in need for cognition, with advertisements that feature a coherent background eliciting a greater intent to purchase the brand from low need for cognition consumers than high need for cognition consumers. In Study 6, need for cognition directly influenced consumer appraisals of purchase price. Low and high need for cognition differentially informed appraisals of purchase price and purchase intent with novel brands. Future research may more directly investigate the moderating role of need for cognition in determining the effects of processing fluency on consumer attitudes and judgments.

**Alternative Explanations**

*No Effect or a Priming Effect?*

Studies 4 and 6 both failed to produce the predicted interaction effect between product location and brand familiarity on consumer judgments. This may indicate that this combination of factors does not influence consumer judgments when controlling for other possible confounds like product size, orientation, color scheme, background image, and so forth. However, given evidence of such an effect in five other studies (Studies 2A – 3B and 5), including an experiment that used equally matched print advertisement stimuli (Study 5), it is possible that Studies 4 and 6 failed to replicate the predicted effects because they both incorporated a new confound in their designs. Specifically, both the brand awareness test used in Study 4 and the brand familiarity manipulation used in Study 6 increased the accessibility of the featured product categories and corresponding
brand names, which may have altered how consumers thought about or how quickly they processed the brands they later viewed in the context of print advertisements.

One possibility is that the initial tasks in Studies 4 and 6 primed certain concepts that then increased consumers’ processing speed of the advertisements they later viewed. For example, Study 4’s initial brand recall task could have facilitated participants’ recognition or rapid identification of brands in the subsequently viewed product advertisements by asking them to recall popular brands that belong to the overarching product categories. The brand familiarity manipulation task in Study 6 similarly may have activated consumers’ mental representations of these product categories by presenting them with and asking them to think about information regarding a new competing brand. By asking consumers to consider certain products in advance, these studies increased accessibility of these products, facilitating speed of recall during ad viewing (Collins & Loftus, 1975; Neely, 1977). In initiating this process before consumers viewed the actual advertisements, these tasks could have eliminated the more subtle effect of product location on the consumer’s processing experience. However, participants in Study 6 still reported a more fluent processing experience when viewing center-placed than margin-placed familiar brand ads, as predicted. This indicates that product location still mattered in determining the consumer’s processing experience in this study, and that the processing speed alternative may fall short of a satisfactory explanation.

Alternatively, the initial tasks in Studies 4 and 6 could have altered consumers’ naïve theories about the meaning of fluency, made the source of fluency obvious, or
primed a higher-elaboration analytical reasoning style that corrected for the influence of fluency on judgments. For example, like Study 5’s deliberate goal priming task, Study 4’s brand awareness recall task and Study 6’s familiarity manipulation may have activated relevant goal states in these participants. Because the naïve theories associated with processing fluency change under different goal states, a priming task could have altered the consumer’s metcognitive interpretation of processing fluency, eliminating any brand familiarity and product location interaction effects on consumer appraisals, as observed in Study 5. On the other hand, participants in Studies 4 and 6 could have easily attributed any experienced processing fluency not to their own attitudes, but to the initial task in which they directly considered the same types of products. If the true source of processing fluency is known, the perceiver will not misattribute fluency to other causes, such as the likeability or value of the stimulus (Whittlesea & Williams, 1998, 2001a, 2001b). Furthermore, the initial task in Studies 4 and 6 could have prompted participants to adopt an analytical, deliberative reasoning style (see Alter et al., 2007). As a result, participants could have thought harder about the quality of the ad argument and/or attempted to correct for the influence of peripheral cues in their reported judgments.

To rule out these possibilities, future research could reexamine Studies 4 and 6 with only slight procedural modifications to determine whether the original results presented in this paper replicate, or whether one can attribute the current findings to one of the possible alternative explanations posited above. For example, one could eliminate the brand awareness task in Study 4, and introduce a neutral filler task between the brand familiarity manipulation and the presentation of advertisements in Study 6, to address
these concerns. If such a modified experiment produced the predicted interaction effect of brand familiarity and product location on consumer appraisals, an analysis of self-reported processing fluency as a mediator of this effect, as well as a reassessment of need for cognition as a moderator, may be warranted.

Visual Attention

In the present research, I proposed that a primacy effect in visual attention, in which initially attended visual information guides subsequent perceptual processing, could produce differences in processing fluency between ad types that in turn informs consumer appraisals. What consumers first attend to in a given scene or image does affect the consumer’s processing experience (Boyce & Pollatsek, 1992; Nappa et al., 2004; Gleitman et al., 2007; Toppino, 2003, Pomplun et al., 1996). Under low-elaboration conditions, this processing fluency, as generated using a range of diverse methods, then tends to promote more favorable judgments of the perceived target along a vast array of dimensions, including liking, value, confidence, truth, intelligence, fame, intelligence, and stereotypicality (see Alter & Oppenheimer, 2009 for a review).

A critic may suggest a plausible alternative explanation: The benefit of visual attention could lie not in the information obtained from the initial visual fixation on an advertisement image, but in the proportion of time the perceiver fixates on that location during ad exposure. Instead of the diagnosticity of information obtained in the initial eye gaze influencing the consumer’s processing experience, the total amount of time the perceiver allocates to viewing a perceptual target like the featured product could evoke more favorable evaluations. The distribution of visual attention when viewing a scene
does affect subsequent judgments, with perceivers attributing, for example, greater causality to the more visually salient interactant in a conversation (Taylor & Fiske, 1975). Thus, products placed at the center, compared to those placed along the margins, of an advertisement image could be more visually salient to consumers, capturing a greater proportion of their visual attention during ad exposure as would be expected given evidence of a center bias in visual attention (Mannan et al., 1996, 1997; Tatler, 2007; Foulsham & Underwood, 2008).

This alternative, however, does not explain why consumers might evaluate novel brands more favorably when placed along the margins of the advertisement. If the salience of central visual information is the key, once would expect more favorable evaluations of a product that appears in the center of the advertisement than along the margins, regardless of whether that product was a familiar or novel one. Even if one ignores evidence of the center bias in visual attention, if one instead assumes that consumers direct their visual attention to the product featured in the ad, wherever it is located (i.e., that products are visually salient regardless of placement), this too cannot explain the differences in consumer judgments observed between center and margin-placed product ads. If products attracted attention regardless of their spatial location within the ad, consumers should, for example, evaluate novel brands no differently when they appear in the center of an ad compared to when they appear along the visual periphery. Finally, if no single perceptual feature uniformly captures consumers’ visual attention across the advertisements used in the present research, and visual salience instead depends on a confluence of well-known perceptual factors, such as figure-ground
contrast, size, and luminance, the product location and brand familiarity interaction effect should not consistently emerge in consumer judgments across the variety of advertisements used in Studies 2/3A, 2/3B, and 5. Finally, even if visual salience biased subsequent self-reported estimates of a range of judgments, including processing fluency measures, and the experience of processing fluency is not the mechanism through which different ad types inform consumer appraisals of the brand, this account could not explain why a manipulation of perceiver goal states (Study 5) would moderate the effect of brand familiarity and product location on consumer appraisals (cf. Labroo & Kim, 2009). Thus, the visual salience account fails to address several key aspects of the present findings, offering a poor alternative explanation for the effects of product location on consumer judgments.

Conclusions: Implications and Limitations

Altogether, the current research demonstrates that brand familiarity and product location may interact to affect the ease with which a viewer processes and comes to understand product advertisements in certain cases, and this, in turn, informs the consumer response. Viewers make sense of advertisements featuring novel brands of products more easily and evaluate them more favorably when a conceptually relevant context is featured at the center of the image, helping consumers identify the product that appears along the visual periphery. Advertisements featuring familiar brands of products, however, may elicit more fluent consumer processing and, in turn, more favorable brand outcomes by placing the product at the center of the image. The present studies illustrate how processing fluency may emerge as a result of how an advertisement is organized,
and how it may operate in every day life to influence judgments based on peripheral mechanisms rather than high-elaboration processes. Important to merchandisers, marketers and advertisers, these findings demonstrate that simple differences in the position of familiar or novel brands in print advertisements may influence consumer attitudes about the brand, the audience’s intent to purchase the item later, and what shoppers believe to be a reasonable purchase price for that product. These findings could inform a range of strategic advertising decisions, including what layout to use in designing an advertisement for a particular brand of product, which print advertisement in a given advertising campaign receives full-page treatment, or possibly even whether center-screen pop-ups or margin-placed banner and sidebar options offer more effective means of web-based advertising for a given brand. In combination with other recent research efforts (Torres, Sierra, & Heiser, 2007; Brasel & Gips, 2008a, 2008b; Janiszewski, 1990), the present research may provoke further exploration of alternative methods by which the organizational structure of print, web, and commercial advertising can be modified or manipulated to produce an easier-to-understand or more fluently processed layout.

Limitations

The present investigation, of course, provides only a small snapshot of one manner in which advertising may subtly influence consumer judgments. Ease of understanding an advertisement could be established in ways other than the product location by brand familiarity interaction investigated in this paper. Aside from other well-documented manipulations of processing fluency such as font legibility and figure-
ground contrast (see Alter & Oppenheimer, 2009 for a review), many leading brands cemented their presence in popular culture by developing highly recognizable advertising campaigns. By claiming a unique signature advertising strategy, consumers develop strong associations between the advertising approach and the featured brand. For example, the distinctive Absolut vodka ad campaign almost exclusively features the product. These ads always place a creative visual depiction of the product prominently at the center of the image, accompanied by an only slightly modified tagline. Frequent magazine readers may easily recognize these advertisements based on a quick glance at the format alone. Similarly, margin-placed product advertisements may become equally effective for familiar products if they feature a highly associated target. For example, Coca-Cola developed a strong association between its product and old-fashioned representations of Santa Claus and polar bears. For consumers familiar with this advertising campaign, simply viewing such a depiction of Santa Claus in the grocery store – even in absence of the Coca-Cola product or logo – could activate the representation of Coca-Cola in memory and increase the likelihood that the consumer might retrieve the product for purchase.

Additionally, easy-to-understand advertisements may require more frequent replacement than more complex creative efforts. While easy-to-understand advertisements may initially boost consumer appraisals of the brand, they may also elicit boredom and wear out more rapidly compared to more complex or ambiguous ads (Tellis, 2004). For this reason, advertisers should be prepared to issue a diverse array of these types of ads to minimize consumers’ frequency of exposure to any one specific
advertisement from the campaign. Some advertisers do issue a variety of advertisement images that incorporate an overarching theme associated with the brand. For example, the successful Absolut vodka campaign continually refreshes its array of easy-to-understand ads, using small variations in the slogan (e.g., “Absolut Perfection,” “Absolut Citron,” and “Absolut Attraction”) and bottle context (a halo inserted over the vodka bottle, the vodka bottle imitating an orange lava lamp, and a martini glass bending towards the vodka bottle, respectively) to prevent wear-out.

Finally, the utility and value of product location in advertisements in informing consumer evaluations may change under different circumstances. Under conditions of low elaboration, such as when the decision about which brand to purchase from an array of choices matters little to the consumer or when the consumer does not possess the attentional resources to fully process the advertisement, content-free peripheral cues that do not provide any additional information about the product itself, such as the celebrity status of the product’s spokesperson or, in this case, a design factor that makes the advertisement easier for the consumer to process, may indeed inform consumer judgments (Petty & Cacioppo, 1986). However, the consumer’s metacognitive interpretation of what processing fluency means to a given judgment may change depending on other contextual factors. For example, as indicated by consumer use of the instrumentality heuristic in Study 5, occasionally the difficulty, rather than ease, in processing may elicit more favorable consumer evaluations (see also Labroo & Kim, 2009). Alternatively, when the evaluative question is utilitarian instead of hedonic in nature, increased complexity can actually lead to the perception of greater quality (Galak
& Nelson, 2009). Recent evidence also suggests that when consumers seek “special occasion” goods, difficulty in processing information about those unfamiliar luxury products increases the desirability of those items compared to situations in which product information is easier to process (Pocheptsova & Dhar, 2009). In addition, with increasing awareness of the true source of processing fluency, consumers are less likely to attribute a fluent experience to the favorability of the stimulus (Bornstein & D’Agostino, 1992, 1994). However, when consumers adopt a more deliberative, thoughtful, high-elaboration, analytic processing style, such as when the differences between each brand alternative varies widely or with important, costly decisions like automobile or home purchases, content-free peripheral cues hold less persuasive power (e.g., Petty & Cacioppo, 1979; Johnson & Eagly, 1989). In these cases, the subtle effects of processing fluency on consumer appraisals observed in low-elaboration situations lessen (Kruglanski, Freund, & Bar-Tal, 1996) and may disappear entirely.

In addition to the consumer’s interpretation of processing fluency, the context in which the advertisement appears could influence how easily consumers process its contents. That is, the context in which advertisers choose to place their advertisements could determine whether or not viewers experience the ad itself as easy or difficult to process (Shen, Jiang, & Adaval, in press). Thus, by placing a simple, straightforward advertisement next to an obtuse movie review or beside a comparatively more difficult-to-process advertisement for a competing brand, advertisers could maximize the effectiveness of their advertisement on the consumer response.
In sum, advertisers should carefully consider the confluence of several factors, beyond mere product location choice and consumer familiarity with the featured brand, when crafting their advertisements. First, advertisers should determine the nature of the competition within the category of products to which their brand belongs. Are consumers likely to analyze their purchase decisions for this type of product, assessing the performance of each of their purchase options on a range of important attributes? Advertisers should consider their projected audience as well: Do common goals drive the members of this audience (e.g., a college population) or do the audience members share similar limitations of their attentional capacity (e.g., distracted rush-hour commuters)? Finally, the environmental context in which the ad appears may determine the success or failure of the advertisement. Will consumers view this ad after reading a mentally taxing article, or viewing a complicated ad for a competing brand? Advertisers should carefully consider the convergence of each of these factors when making decisions about the types of strategies discussed in this paper.
REFERENCES


Klauer (Eds.), *The psychology of evaluation: Affective processes in cognition and emotion*, 189-217. Mahwah, NJ: Lawrence Erlbaum.


How effective do you think the following strategies would be in promoting *(brand)*?

(A) The ad should depict a “cool” model who holds the product up to the lens so that most of what you see is *(product)*.

(B) The ad should focus on a popular celebrity or successful athlete, with the *(product)* off to the side in the spokesperson’s hand.

(C) The ad should center in on the *(product)* itself, with nothing competing for your attention.

(D) The ad should focus on a fun scene or activity, with the *(product)* featured in the corner of the page.
APPENDIX B: ADVERTISEMENT ATTITUDES QUESTIONNAIRE ITEMS FOR STUDIES 2A AND 2B

1. How much did you like the advertisement image overall?
2. How do you feel about this product?
3. How interested are you in using this product?
4. How likely would you be to actually buy this product for yourself over other, competing brands?
5. How long would you wait in line at the store in order to purchase this item?
6. If you personally owned this item and other people wanted to buy it from you, how much (in U.S. dollars) would you be willing to sell it to them for?
APPENDIX C: ADVERTISEMENT ATTITUDES QUESTIONNAIRE ITEMS FOR
STUDY 3A AND 3B

Product desirability items:
1. How much do you like this product?
2. How interested are you in using this product?
3. How likely would you be to actually buy this product for yourself over other, competing brands?
4. Based on this advertisement, how much do you trust this brand?

Image attractiveness items:
5. How much did you like the advertisement image overall?
6. How captivating or eye-catching was the advertisement image?
7. How attractive was the advertisement image?
8. How exciting was the advertisement image?
9. How appealing was the advertisement image?
APPENDIX D: ADVERTISEMENT ATTITUDES QUESTIONNAIRE ITEMS FOR
STUDY 4

Familiarity and recognition manipulation check items
1. How well do you recognize this brand (i.e., did you know about this brand before today)?
2. How familiar would you say you were with this specific brand before today?
3. How frequently would you say you use this type of product (including any other brands)?

Attitude toward the brand items
Campbell & Keller (2003):
   The brand is…
   1. Good?
   2. Appealing?
   3. Pleasant?
   4. High-quality?

Phelps & Thorson (1991):
1. How much do you like this brand of product?
2. How valuable is this brand of product?

Attitude toward the ad items
Campbell & Keller (2003):
   The ad is…
   1. Good?
   2. Appealing?
   3. Pleasant?
   4. High-quality?

Phelps & Thorson (1991):
5. How much did you like the advertisement image?
6. How irritating was the advertisement image?
7. How attention-grabbing was the advertisement image?

Purchase intent items
MacKenzie, Lutz, & Belch (1986):
   “I would buy this brand.” This statement is…
   1. Probable?
   2. Likely?
   3. Possible?
Attitudinal items adapted from Studies 2A, 2B, 3A, and 3B
1. How attractive is this brand of product?
2. How much do you trust this brand of product?
3. How likely would you be to actually buy this brand of product for yourself over other, competing brands?
4. How interesting was the advertisement image?

Fluency items
Labroo & Lee (2004):
1. How much effort did it take for you to process this advertisement?
2. How easy to understand was this advertisement?

Based on Schwarz (2004) review:
3. Estimate how long, in milliseconds (ms), you think the advertisement appeared on the screen.
4. How familiar did this advertisement feel?

Based on Whittlesea et al. (1990) findings:
5. How clear was the picture you viewed as it displayed on the monitor?
APPENDIX E: WORD SETS FOR THE GOAL-PRIMING MANIPULATION OF

STUDY 5

Feel-good goal condition:
1. pleasure for most aim happy
2. to want magnet smile I
3. is running content vital being
4. a moment always the enjoy
5. life a seek beauty pleasant
6. car virtue a cheerfulness is

No-goal condition:
1. blue the running is ball
2. a driver I’m slow desk
3. is higher green the grass
4. magnet wanted he go to
5. papers he the rain filed
6. door the running open is
Labroo and Kim (2009), Experiment 1:
1. How much would you pay for a full-size bar of (brand of chocolate)?
2. How much do you want (brand of chocolate)? (not at all – very much)
3. What do you think of (brand of chocolate)?
   a. Very desirable – not at all desirable
   b. Very tempting – not at all tempting
4. How much do you agree – disagree with the following statements?
   a. In general, I like chocolate
   b. (Brand of chocolate) seems limited
   c. (Brand of chocolate) seems special
5. While doing the task, you…
   a. Paid a lot – a little attention
   b. Felt good – bad

Study 4 measures:
Familiarity and recognition manipulation checks
Attitude toward the brand items
Attitude toward the ad items
Purchase intent items
Fluency items
Bread:

Consumer Search.com – Bread review: Popular with lovers of Italian bread, (BRAND NAME) bread is low in fat, high in fiber, and is cholesterol- and transfat-free. In a blind taste test, consumer rated the flavor highly amongst competing brands, nudging past Wonder Bread, a popular American brand. Suggested retail price is $1.29 per loaf.

Automobile:

CR Review – Small Sedans: “The (BRAND NAME) is a comfortable, roomy small car that provides good fuel economy, a quiet and nicely finished interior, and plenty of features for the money. Comes with standard electronic stability control, which is absent on many other small cars. Fun to drive!” Suggested retail price: $19,900 – 26,900.

Bottled Water:

Independent Opinion review – Best bottled water: “Based on public opinion, (BRAND NAME) is rated higher than several popular brands in the U.S., such as Dasani, Aquafina, and Evian. (BRAND NAME) is bottled from a natural source and scientific testing reveals that it contains fewer contaminants than brands that process and repackage tap water.” Suggested retail price for a 24-pack of 500mL bottles is $4.99.

Potato Chips:

Taquitos.net snack review: In a review of 1136 varieties of potato chips, (BRAND NAME) scored among the best. Currently the best brand available in Australia, these chips have a light flavor that is not overpowering but not so mild that you feel cheated. Gentle aroma and not as oily as the competition. Available in several unique and impressive flavors. Suggested retail price for a 1 lb. bag is $3.19.
APPENDIX H: PART I SURVEY ITEMS IN STUDY 6

1. Describe one positive thing you learned about this product.
2. Describe one thing you really liked about the commercial for this product.
3. How familiar were you with this brand BEFORE TODAY? (not at all familiar – very familiar)
4. How familiar ARE YOU NOW with this brand? (not at all familiar – very familiar)
Table 1

*Mean Attitude Toward the Ad, Attitude Toward the Brand, and Purchase Intent, as a Function of Brand Familiarity (Study 4)*

<table>
<thead>
<tr>
<th></th>
<th>Familiar</th>
<th></th>
<th>Novel</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Attitude Toward the Ad</td>
<td>6.3</td>
<td>1.4</td>
<td>5.5</td>
<td>1.1</td>
</tr>
<tr>
<td>Attitude Toward the Brand</td>
<td>7.7</td>
<td>1.6</td>
<td>5.4</td>
<td>1.2</td>
</tr>
<tr>
<td>Purchase Intent</td>
<td>7.4</td>
<td>1.9</td>
<td>5.0</td>
<td>1.8</td>
</tr>
</tbody>
</table>
Table 2

*Mean Attitude Toward the Ad, Attitude Toward the Brand, and Purchase Intent, as a Function of Background Context (Study 4)*

<table>
<thead>
<tr>
<th></th>
<th>Related</th>
<th></th>
<th>Unrelated</th>
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<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
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<td>Attitude Toward the Ad</td>
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<tr>
<td>Attitude Toward the Brand</td>
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<td>6.4</td>
<td>2.1</td>
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<tr>
<td>Purchase Intent</td>
<td>6.5</td>
<td>2.4</td>
<td>5.8</td>
<td>2.6</td>
</tr>
</tbody>
</table>
Table 3

Processing Fluency as a Function of Background Context and Product Location (Study 4)

<table>
<thead>
<tr>
<th></th>
<th>Related</th>
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<th></th>
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<tr>
<td></td>
<td>M</td>
<td>SE</td>
<td>M</td>
<td>SE</td>
</tr>
<tr>
<td>Center</td>
<td>7.8</td>
<td>.123</td>
<td>7.1</td>
<td>.133</td>
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<tr>
<td>Margin</td>
<td>7.4</td>
<td>.146</td>
<td>6.2</td>
<td>.130</td>
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</table>
Table 4

Purchase Intent as a Function of Background Context and Need for Cognition Score

(Study 4)

<table>
<thead>
<tr>
<th></th>
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<th>Unrelated</th>
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<tr>
<td></td>
<td>M</td>
<td>SE</td>
<td>M</td>
<td>SE</td>
</tr>
<tr>
<td>Low Need for Cognition</td>
<td>6.6</td>
<td>.209</td>
<td>5.6</td>
<td>.213</td>
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<tr>
<td>High Need for Cognition</td>
<td>6.3</td>
<td>.198</td>
<td>6.0</td>
<td>.201</td>
</tr>
</tbody>
</table>
Table 5

*Attitude Toward the Ad, Attitude Toward the Brand, and Purchase Intent as a Function of Free Recall by Trial for Familiar Brands (Study 4)*

<table>
<thead>
<tr>
<th>Brand</th>
<th>Attitude Toward the Ad</th>
<th>Attitude Toward the Brand</th>
<th>Purchase Intent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>Fiji</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Free recall</td>
<td>-</td>
<td>-</td>
<td>8.6</td>
</tr>
<tr>
<td>No recall</td>
<td>-</td>
<td>-</td>
<td>7.3</td>
</tr>
<tr>
<td>Palmolive</td>
<td>Free recall</td>
<td>6.6</td>
<td>2.6</td>
</tr>
<tr>
<td>No recall</td>
<td>5.5</td>
<td>1.8</td>
<td>6.4</td>
</tr>
<tr>
<td>Starbucks</td>
<td>Free recall</td>
<td>7.1</td>
<td>2.0</td>
</tr>
<tr>
<td>No recall</td>
<td>6.0</td>
<td>1.9</td>
<td>7.6</td>
</tr>
<tr>
<td>Corona</td>
<td>Free recall</td>
<td>7.7</td>
<td>1.8</td>
</tr>
<tr>
<td>No recall</td>
<td>6.7</td>
<td>2.1</td>
<td>7.2</td>
</tr>
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</table>
Table 6

*Attitude Toward the Ad as a Function of Background Relatedness for Each Familiar Brand (Study 4)*

<table>
<thead>
<tr>
<th>Brand</th>
<th>Attitude Toward the Ad</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiji</td>
<td>Related</td>
<td>6.6</td>
<td>1.6</td>
</tr>
<tr>
<td></td>
<td>Unrelated</td>
<td>4.5</td>
<td>2.1</td>
</tr>
<tr>
<td>Palmolive</td>
<td>Related</td>
<td>6.0</td>
<td>2.0</td>
</tr>
<tr>
<td></td>
<td>Unrelated</td>
<td>5.4</td>
<td>2.0</td>
</tr>
<tr>
<td>Starbucks</td>
<td>Related</td>
<td>7.4</td>
<td>1.7</td>
</tr>
<tr>
<td></td>
<td>Unrelated</td>
<td>5.9</td>
<td>2.0</td>
</tr>
<tr>
<td>Corona</td>
<td>Related</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Unrelated</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
### Table 7

*Attitude Toward the Brand, Purchase Price, and Processing Fluency as a Function of Brand Familiarity (Study 5)*

<table>
<thead>
<tr>
<th></th>
<th>Familiar Brand</th>
<th>Novel Brand</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Attitude Toward the Brand</td>
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<td>1.7</td>
</tr>
<tr>
<td>Purchase Price</td>
<td>$2.54</td>
<td>1.67</td>
</tr>
<tr>
<td>Processing Fluency</td>
<td>8.1</td>
<td>1.5</td>
</tr>
</tbody>
</table>
Table 8

*Mean Purchase Price for the Familiar and Novel Brands as a Function of Goal Condition and Product Location (Study 5)*

<table>
<thead>
<tr>
<th></th>
<th>Feel-Good Goal</th>
<th>No Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Center</td>
<td>Margin</td>
</tr>
<tr>
<td><strong>Familiar Brand Name</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Price</td>
<td>$2.45</td>
<td>1.37</td>
</tr>
<tr>
<td></td>
<td>$2.85</td>
<td>1.47</td>
</tr>
<tr>
<td><strong>Novel Brand Name</strong></td>
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<td></td>
</tr>
<tr>
<td>Price</td>
<td>$2.20</td>
<td>1.43</td>
</tr>
<tr>
<td></td>
<td>$1.61</td>
<td>0.76</td>
</tr>
</tbody>
</table>
Table 9

*Standardized Purchase Price, Processing Fluency, Attitude Toward the Brand, Attitude Toward the Ad, and Purchase Intent as a Function of Brand Familiarity (Study 6)*

<table>
<thead>
<tr>
<th></th>
<th>Familiar Brand</th>
<th>Novel Brand</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SE</td>
</tr>
<tr>
<td>Purchase Price (Z)</td>
<td>.053</td>
<td>.045</td>
</tr>
<tr>
<td>Processing Fluency</td>
<td>8.2</td>
<td>.116</td>
</tr>
<tr>
<td>Attitude Toward the Brand</td>
<td>7.7</td>
<td>.116</td>
</tr>
<tr>
<td>Attitude Toward the Ad</td>
<td>7.4</td>
<td>.121</td>
</tr>
<tr>
<td>Purchase Intent</td>
<td>6.9</td>
<td>.137</td>
</tr>
</tbody>
</table>
Table 10

*Processing Fluency as a Function of Brand Familiarity and Product Location (Study 6)*

<table>
<thead>
<tr>
<th></th>
<th>Center</th>
<th></th>
<th>M</th>
<th>SE</th>
<th>M</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Familiar</td>
<td></td>
<td></td>
<td>8.3</td>
<td>.131</td>
<td>8.0</td>
<td>.135</td>
</tr>
<tr>
<td>Novel</td>
<td></td>
<td></td>
<td>7.4</td>
<td>.150</td>
<td>7.5</td>
<td>.137</td>
</tr>
</tbody>
</table>
Table 11

Correlations between Processing Fluency and Attitude Toward the Ad, Attitude Toward the Brand, and Purchase Intent for Each Ad Type (Study 6)

<table>
<thead>
<tr>
<th></th>
<th>Familiar Center</th>
<th>Familiar Margin</th>
<th>Novel Center</th>
<th>Novel Margin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude Toward the Ad</td>
<td>.357&lt;sup&gt;c&lt;/sup&gt;</td>
<td>.337&lt;sup&gt;c&lt;/sup&gt;</td>
<td>.294&lt;sup&gt;c&lt;/sup&gt;</td>
<td>.402&lt;sup&gt;c&lt;/sup&gt;</td>
</tr>
<tr>
<td>Attitude Toward the Brand</td>
<td>.303&lt;sup&gt;c&lt;/sup&gt;</td>
<td>.292&lt;sup&gt;c&lt;/sup&gt;</td>
<td>.257&lt;sup&gt;c&lt;/sup&gt;</td>
<td>.298&lt;sup&gt;c&lt;/sup&gt;</td>
</tr>
<tr>
<td>Purchase Intent</td>
<td>.272&lt;sup&gt;c&lt;/sup&gt;</td>
<td>.226&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.168&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.285&lt;sup&gt;c&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

<sup>a</sup> $p < .05$.

<sup>b</sup> $p < .01$.

<sup>c</sup> $p \leq .001$. 
Table 12

*Purchase Price and Purchase Intent as a Function of Brand Familiarity and Need for Cognition (Study 6)*

<table>
<thead>
<tr>
<th></th>
<th>High Need for Cognition</th>
<th>Low Need for Cognition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Familiar</td>
<td>Novel</td>
</tr>
<tr>
<td>M SE</td>
<td>M SE</td>
<td>M SE</td>
</tr>
<tr>
<td>Purchase Price (Z)</td>
<td>.116</td>
<td>.067</td>
</tr>
<tr>
<td>Purchase Intent</td>
<td>7.0</td>
<td>.203</td>
</tr>
</tbody>
</table>


Figure 1. Center- and margin-placed product advertisements for five familiar brands used in Study 2A.
Brand 1: Center-Placed Product Ad

"Your pet is like family. Should you treat their shampoo any differently than your own?"
DOGGO DO SHAMPOO

Brand 2: Center-Placed Product Ad

Sip your vacation. Now.

Brand 1: Margin-Placed Product Ad

Brand 2: Margin-Placed Product Ad
Figure 2. Center- and margin-placed product advertisements for five novel brands used in Study 2B.
Brand 1: Center-placed product in a related-context ad

Brand 1: Margin-placed product in a related-context ad

Brand 1: Center-placed product in an unrelated-context ad

Brand 1: Margin-placed product in an unrelated-context ad
Brand 2: Center-placed product in a related-context ad

Brand 2: Margin-placed product in a related-context ad

Brand 2: Center-placed product in an unrelated-context ad

Brand 2: Margin-placed product in an unrelated-context ad
Brand 3: Center-placed product in a related-context ad

Brand 3: Margin-placed product in a related-context ad

Brand 3: Center-placed product in an unrelated-context ad

Brand 3: Margin-placed product in an unrelated-context ad
Figure 3. Center- and margin-placed product advertisements for four familiar brands containing related and unrelated background contexts, as used in Study 4.
Brand 1: Center-placed product in a related-context ad

Brand 1: Margin-placed product in a related-context ad

Brand 1: Center-placed product in an unrelated-context ad

Brand 1: Margin-placed product in an unrelated-context ad
Brand 2: Center-placed product in a related-context ad

Brand 2: Margin-placed product in a related-context ad

Brand 2: Center-placed product in an unrelated-context ad

Brand 2: Margin-placed product in an unrelated-context ad
Brand 3: Center-placed product in a related-context ad

Brand 3: Margin-placed product in a related-context ad

Brand 3: Center-placed product in an unrelated-context ad

Brand 3: Margin-placed product in an unrelated-context ad
Figure 4. Center- and margin-placed product advertisements for four novel brands containing related and unrelated background contexts, as used in Study 4.
Figure 5. Center- and margin-placed product advertisements for the familiar and novel brands of chocolate bars used in Study 5.
Brand 3: Center-placed product ad

Brand 3: Margin-placed product ad

Brand 4: Center-placed product ad

Brand 4: Margin-placed product ad
Brand 5: Center-placed product ad
Love bread!

Brand 5: Margin-placed product ad
Love bread!

Brand 6: Center-placed product ad

Brand 6: Margin-placed product ad
Brand 7: Center-placed product ad

Brand 7: Margin-placed product ad

Brand 8: Center-placed product ad

Brand 8: Margin-placed product ad

*Figure 6.* Center- and margin-placed product advertisements for eight brands used in Study 6.