Can Advertising Creativity Overcome Clutter? Affect, Attention, and Memory

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Thesis Abstract

In the marketplace, advertising clutter refers to the high volume of advertising consumers are exposed to daily. This high quantity of advertisements has negative effects on unfamiliar brands which always face difficulties competing with other more familiar brands from the same product category. This thesis shows that unfamiliar brands have to work harder to overcome advertising clutter. Many academic researchers and marketers find that advertising creativity is an important strategic tool that should be considered when trying to attract consumer attention, increase advertisement and brand liking, and improve advertisement and brand memory. Thus, the thesis investigates “does advertising creativity overcome clutter?” and measuring that effects on attention, affect, and memory.

This thesis includes one theoretical and two experimental papers to address the effects of advertising creativity on brand familiarity and competitive advertising interference. It also uses eye-tracking techniques to measure attention. The experiments were designed as realistic experiments, one session time, using a within subjects design. Participants were exposed to a digital magazine which was designed into the eye-tracking software. The ads in this magazine included 24 advertisements which were manipulated to be attributed to both familiar and unfamiliar brands. Of these, eight were highly creative advertisements which won major advertising creativity competitions. Eight control and eight interference advertisements were also selected. A pre-test identified familiar and unfamiliar brands.

The data were analysing by using GLM models for attention and affect and also logistic regression models for memory. Four dependent variables used to measure attention, which are total fixation duration toward the advertisement, total fixation duration toward brands, non-fixation duration toward the advertisement, and non-fixation duration toward
brands. Memory measures were advertisement recall, brand recall, advertisement recognition, and brand recognition.

The results show that advertising creativity for familiar brands has a negative influence on brand affect and brand recognition. However, advertising creativity enhances visual attention for the advertisements of unfamiliar brands, and it also improves affect toward the ad, affect toward the brand and brand recognition for most situations. In addition, brand familiarity moderates the effect of creativity on ad recognition. Creativity enhanced ad recognition more for unfamiliar brands than familiar brands. And there were no significant effects of creativity on either ad or brand recall.

The results also show that attention has strong relationship with affect and memory. And attention itself was influenced by proactive competitive interference. However, competitive advertising interference has no significant effects on affect toward the ad. And there was negative effects of interference on affect toward the brand. The effects of competitive advertising interference on memory was positive at the most conditions.

Each paper provides implication and future research suggestions. And the thesis conclusion chapter includes implications and future research for both academic and practitioner research.
Statement of Original Authorship

The work embodied in this thesis has not been submitted for a higher degree to any other university or institution. To the best of my knowledge and belief, the thesis contains no material previously published or written by another person except where due reference is made.

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I would like to acknowledge the contribution of my supervisor in each of the studies and subsequent papers.

While I am the principal author for all of the studies and papers, I have been assisted in the writing of the papers by Professor Scott Koslow. The contribution ratio of authors is outlined below.

**Why Use Highly Creative Advertising? Breakthrough Clutter, Buy Time and Build Brands**

Ahmed Al Shuaili – 90 %
Scott Koslow – 10 %

**Is Creative Advertising a Curse or Cure? Why Creativity Is Good for Ads, but Can Be Bad for Brands**

Ahmed Al Shuaili – 70 %
Scott Koslow – 15 %
Lawrence Ang – 5 %
Mark Kigour – 5 %
(The University of Waikato – Hamilton, NZ)
Sheila Sasser – 5 %
(Eastern Michigan University – Michigan, USA)

**Attention in Competitive Advertising Interference: Can Unfamiliar Brands Do Better with More Creative Ads?**

Ahmed Al Shuaili – 70 %
Scott Koslow – 30 %
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CHAPTER 1: INTRODUCTION

Introduction

Consumers receive large numbers of individual advertising messages via radio, television, print advertising, online advertising and direct mail. Marketers aspire to attract consumer attention by investing in media ranging from print to television advertisements, advertising in shopping malls, grocery stores, and train or bus stations. The average rate of advertising exposure in 2014 was more than 5,000 per day (Johnson, 2014). Consumers are exposed to advertisements everywhere and at any time. The amount of advertising they see every day can be overwhelming.

The large number of advertisements in the marketplace is called ‘clutter’, which refers to the high volume of advertising consumers are exposed to daily. Advertising clutter is defined as an amount of advertising in a medium that is considered excessive (Speck & Elliott, 1997). The quantity of advertising sets the level of advertising clutter—this level can be higher or lower in different marketplaces. For example, advertising clutter in the Philippines is twice as high than in Hong Kong, and clutter in Ireland is half that of Hong Kong (Brown, 2015).

Advertising clutter is considered an obstacle for individual advertisers to achieve their fundamental goals, because it is difficult to rise above clutter to stand out and be noticed. Consumers avoid advertisements when they perceive them as clutter (Cho & Cheon, 2004). Hence, clutter reduces advertising impact (Brown, 2015). Most consumers deal with this issue by not focusing on advertisements, for example, ignoring television advertising by engaging with other activities during programming breaks. These reactions make consumers
-less likely to pay attention to advertisements or retain messages. Yet, if advertising clutter was reduced, advertising messages would have a greater impact (Jack Rotfeld, 2006).

Advertisers must consider the role of clutter in consumer engagement, and its effects on target customers. While advertising clutter may harm the marketing environment, the natural response for most companies is to increase spending further effectively making the problem even worse. Money is essentially wasted if advertising does not achieve campaign goals (Brown, 2015).

Advertising clutter has three dimensions: quantity, competitiveness and intrusiveness (Ha, 1996; Zanjani, Diamond, & Chan, 2011). Quantity is described as overloading consumers with a large quantity of information that interrupts consumers’ minds. Ha (1996) reported that quantity has negative effects on attention and information processing, and creates information overload. Competitiveness is described as competitive interference, which can be shown when consumers are exposed to advertisements for different brands from the same product category. For example, simultaneous exposure to Toyota and Volkswagen advertisements can make it difficult for consumers to distinguish which message is related to which brand. In addition, intrusiveness interferes with editorial content on advertisements. Ha (1996) found that there are individual differences in perceived intrusiveness of clutter because it based on reactance theory. In this situation, consumers have the option to skip advertisements or resist persuasion (Ha, 1996; Zanjani et al., 2011).

Advertising clutter can also be divided into two types: competitive and non-competitive. Kent (1993) studied the effects of competitive clutter and non-competitive clutter in television advertising. He reported that competitive clutter has a negative impact on advertising effectiveness. It also harms advertising recall. However, recall is better for
competitions advertisements of non-competitive clutter (Kent, 1995). In the marketing literature, competitive clutter is also called ‘competitive advertising interference’ (Burke & Srull, 1988; Kent & Allen, 1994).

To provide a basis for understanding clutter, interference theory has been proposed. It is based on human memory and occurs in the context of learning information. Memory is harmed in comprehending the new information (Tomlinson, Huber, Rieth, & Davelaar, 2009). Competitive advertising interference is related to the interaction between new and previous information about advertisements from the same category. During information retrieval, interference occurs even when trying to remember new information or previous information.

There are two ways competitive interference influences the way consumers retrieve information. The first type is proactive interference. This type of interference appears when trying to recall an item from other items in the same category, stored in the memory (Anderson & Neely, 1996). The second type is retroactive interference. It refers to the impairment of memory performance when recalling target information, and occurs when learning new information, between storage of the target information and the final test (Danaher, Bonfrer, & Dhar, 2008). These types of interference can occur in consumers’ minds when they attempt to remember advertising information to which they have recently been exposed.

Academic researchers and marketers focus greatly on advertising effectiveness issues. The effectiveness of advertisements on consumers’ thinking and choices could be improved by addressing the issue of competitive advertising interference. There is no easy method to overcome competitive interference effects, but studying competitive interference aspects could encourage marketers to reduce the amount of competing advertising needed.
The number of advertising messages increases every day, confusing consumers with excessive information. Advertisers find it challenging to capture consumers’ attention because of the continual increase in advertising clutter. Often, advertisers find themselves in competition with each other for consumer attention and results. If this type of competition continues, it might undermine advertising effectiveness. Advertising clutter seems an important issue in the marketplace, but how can it be resolved?

Could repetition overcome the negative effects of advertising clutter? Consumers typically have negative reactions to advertisement repetition. Kent (1993) found that repetition did not affect persuasion, likability, attention or recall. Repetition also has negative effects on brand recall and recognition (Jeong, Kim, & Zhao, 2011). In addition, consumers show less interest in advertisements for familiar brands than those of unfamiliar brands because they already know the familiar brand (Campbell & Keller, 2003). While repetition could have positive effects on unfamiliar brands, it is also more costly, which will place pressure on advertising budgets. How can advertisers overcome the negative effects of advertising clutter without utilising repetition?

Advertisers can avoid the negative effects of advertising clutter by making their advertising messages more easily understood and staying away from complicated messages. Target audiences can simply comprehend these messages. However, most advertising messages are designed simply already. If advertisers make messages even easier, they will compete strongly with advertisers who believe in the value of simple messaging to achieve their fundamental goals. The question could be arise, are simple messages adequate to highlight a brand in a cluttered environment?

Another alternative is improving brand familiarity. Increasing brand familiarity could help advertisements stand out in clutter. Familiar brands are already known by consumers, and have more demonstrated impact on consumers’ attitudes than unfamiliar brands. For
unfamiliar brands, marketers face greater difficulty in improving familiarity. Brand competition is intense in the marketplace, so it is not an easy way for brands to achieve familiarity. Marketers need to develop unique and long-term strategies that could improve brand familiarity. However, these kinds of strategies require considerable effort and investment. In the meantime, advertising clutter continues to harm unfamiliar brands. Marketers have to find better ways to overcome the negative effects of advertising clutter.

Creativity could be an answer to the problem of clutter. Creativity has long been considered an important advertising quality by academic researchers and marketers. For example, White and Smith (2001) found that creativity is an important factor in advertising effectiveness. Advertising creativity is based on balancing two factors: originality and appropriateness (Koslow, 2015; Runco, 2007; Runco & Jaeger, 2012). Heiser, Sierra, and Torres (2008) suggested that distinctiveness theory is based on the idea that distinctive advertisements have atypical traits that differentiate them from others. It is important to make advertisements more noticeable and memorable to consumers. Creative advertisements lead to more positive advertising impacts, such as attitude toward the advertisements, attitude toward the brand, and purchase intention (Heiser et al., 2008).

**Purpose of Thesis**

The overwhelming number of individual advertising messages received by consumers in their everyday lives create major obstacles for advertisers who want to direct consumers’ attention towards their advertisements. It could also reduce advertising memorability for those advertisements that are attended to. Marketers have found that their brands’ goals are difficult to reach if their target consumers are not exposed to their brands’ advertisements. Thus, advertising is only effective if it is seen, however, advertising clutter appears to be an obstacle for brands, especially unfamiliar brands.
Marketers and academic researchers are of the view that advertising clutter has widespread negative effects in the market place and have engaged in discussions and undertaken investigations to address this issue. Today, most companies have increased their spending on advertising, but this has only exacerbated the problem (Brown, 2015). Some of this spending will be for additional advertisements, but some companies have increased their advertising repetition to overcome the negative effects of clutter. However, Kent (1993) found that advertising repetition has non-significant effects on consumers’ persuasion, likability, attention or recall. Additionally, advertisement repetition has non-significant effects on brand recall and recognition (Jeong, Kim, & Zhao, 2011).

Another response to clutters is that marketers have attempted to deliver simpler messages in their advertisement. While this approach has ensured that advertising messages are easier to understand, most advertising messages today are already quite simply designed. Increasing brand familiarity could help advertisements stand out from the clutter because familiar brands have more impact on consumers’ attitudes than unfamiliar brands. Thus, marketers face difficulties in increasing brand familiarity for unfamiliar brands, as this requires long-term strategies and significant effort.

The question arises: If many academic researchers and practitioners are so focused on dealing with the effects of clutter in the market place, why is there still so much clutter? Is this just another “tragedy at the commons” where if one person advertises, everyone is better off, but if everyone else does it, everyone loses? While this may be the case, it may also be possible that marketers and academic researchers have still not identified the core problem.

As stated above, unfamiliar brands are always the victims of clutter. These brands face many difficulties in distinguishing themselves from their competitors and will be trodden under foot when it occurs without alteration from others. A good analogy is to imagine that
you are sitting in a dark room, listening to people (you cannot see) talk and chat to each other. In this situation, if you can easily identify a familiar voice, you are unlikely to pay attention to the other voices. However, if you hear another person speak unusual words or talk in an unusual tone, you may direct your attention towards that voice, but the question arises, why have these unusual words or this unusual sounds attracted your attention? The same thing may occur when there are a large number of advertisements on a wall, one advertisement may attract your attention, but what makes this advertisements attract your attention?

To stand out from clutter, an advertisement needs to be creative. Creative advertising has the power to attract consumers’ attention and is considered an important advertising quality by academic researchers and marketers. Creativity is an important factor in advertising effectiveness (White, & Smith, 2001), as it is also based on originality and appropriateness (Koslow, 2015; Runco, 2007; Runco, & Jager, 2012). Creativity also uses distinctive ideas that differentiate advertisements from one other and has a more positive effect on consumers’ attitudes towards advertisements, brands and purchase intentions (Heiser, Sierra, & Torres, 2008). Thus, creative advertising could be one of the best solutions to overcoming clutter.

Having considered the problem from all angles, this thesis contends that advertising creativity could mitigate the negative effects of clutter in the marketplace, especially for unfamiliar brands. It also investigates the effects of brand familiarity and competitive advertising interference by considering and testing consumers’ attention and memories, as well as, affect towards the ad and affect toward the brand.
Overview of Literature Review/Theory Development

This advertising literature review foreshadows important areas for this thesis. The first paper (Chapter 2) reviews and discusses the literature in more detail. The majority of the research cited shows that creativity is an important aspect in the marketplace.

Advertising Clutter as Competitive Interference

Clutter has been used in the literature to describe a large number of competitive advertisements in the marketplace (Danaher, Bonfrer & Dhar, 2008). The advertising literature also refers to the concept of ‘competitive advertising interference’ (rather than ‘competitive clutter’) to address advertising effectiveness on consumers (Burk, & Srull, 1988; Kent & Allen, 1994). Competitive advertising interference is an important aspect within the literature. As rates of exposure to advertising increase daily, advertisers cannot control the resulting clutter. Studies of memory interference can help organisations to improve their advertisements and increase brand recognition and retention by reducing the negative effects of memory interference.

Forgetting information has been attributed to competitive interference effects (Kent, 1993; Kumar, Besharat, Lindsey, & Krishnan, 2014). Interference could harm consumers’ responses to advertising (Baqozzi & Silk, 1983; Bettman, 1979) and affect brand name recall (Brown, & Rothschild, 1993; Webb, 1979). Further, competitive advertising interference affects consumer-communicated brand information such as product category, brand name and specific brand claims (Burk, & Srull, 1988). It can also affect processing perspectives. One study used brand information to show that competitive interference had no effect on brand name recall (Anderson, 1983).
The advertising literature shows that competitive interference affects competitive brands in the same product category (e.g., Burke & Srull, 1988; Keller, 1987, 1991; Kumar, 2000). Unconnected memory traces (Lee & Lee, 2007) may also increase the difficulty of remembering advertisement related information. Interference has been found to occur when consumers are exposed to different print advertisements (Burke & Srull, 1988; Keller, 1987, 1991) and television commercials (Kent & Machleit, 1992; Kumar, 2000) with similar claims and brand names.

Competitive advertising interference has identified two types of interference that can affect the learning of information: (i) proactive competitive interference; and (ii) retroactive competitive interference. These types of interference may occur in consumers’ minds as they attempt to remember advertising information to which they have recently been exposed (Anderson & Neely, 1996; Danaher, Bonfrer, & Dhar, 2008).

However, there are other possible moderators of interference. Brand familiarity may have an effect on competitive clutter because familiar brands can be stand out from the clutter because they are well-known brands in the market. It’s just easier for consumers to recognize and remember better known brands. Therefore, interference could has positive or negative effects to both familiar and unfamiliar brands.

**Advertising Clutter and Brand Familiarity**

Research has suggested that competitive advertising clutter differs between familiar and unfamiliar brands. Peter and Olson (1987) reported that after consumers were exposed to brand advertising, new information for a familiar brand will be linked only to the ‘node’ for the relevant brand. Pryor and Ostrom (1981) noted that new attribute information for an unfamiliar brand will be stored during advertising exposure under another attribute brand such as following a new brand from the same product category or under a familiar brand from
the same product category. Thus, familiar brands are less affected by competitive interference.

Kumar (2000) reported that interference can affect different advertisement elements such as pictures, texts, colour and layout. He also found that interference has negative effects on brands and brand claims and that these effects can occur across familiar and unfamiliar brands (Kumar, & Krishnan, 2004). Additionally, Besharat, Lindsey and Krishnan (2014) found that inhibiting the power of advertising interference in the recall of brand claims can be mitigated. The effectiveness of consistent messages depends on brand familiarity. For familiar brands, moderately consistent messages improve brand information recall while for unfamiliar brands, recall is higher when highly consistent messages are used (Ballester, Navarro & Sicilia, 2012).

Numerous studies have examined the effect of competitive advertising interference and advertisement repetition in relation to familiar and unfamiliar brands. Laroche, Cleveland and Maravelakis (2006) reported that recall was greater for familiar and unfamiliar brands when competition was absent. Recall and cued recall were most affected by advertising repetition when followed by attitude accessibility. Keller (1987) found that increased brand knowledge might produce a stronger link in a consumer’s memory under a brand advertisement trace and might also mitigate the harmful effects of competitive interference.

Further research has shown that brand ‘schema’ has a role in interference effects in relation to both familiar and unfamiliar brands (Peter & Olson, 1987). Additionally, consumers’ motivations for processing brand information may have a significant effect. MacInnis, Moorman and Jawoski (1991) and Moorman (1990) showed that consumers encountering a large number of advertisements could experience competitive interference effects and found it difficult to elaborate on the information presented in advertisements for familiar and unfamiliar brands.
Advertising creativity, however, could alter the negative effects of interference for familiar and unfamiliar brands. And it provides much advantages to overcome advertising clutter.

**Advertising Creativity and Advertising Clutter**

The advertising creativity literature has used several psychological models featuring recall and perception to predict the effectiveness of advertisements. Perception is closely related to advertising effects on consumers’ perspectives (Du Plessis, 1994; Stone, Besser, & Lewis, 2000). Kover, Goldberg and James (1995) found that consumers placed advertising creativity on the same dimensions.

The literature has also addressed two perspectives in relation to advertising creativity. First, individual perspectives such as consumers or advertising agency professionals (Koslow, Sasser, & Riordan, 2006). Second, the perspectives of agency employees from different departments such as copywriters, graphic designers and account managers (Ensor, Cottam, & Band, 2001). Sasser and Koslow (2008) developed a framework to shape future research agendas for advertising creativity; that is, the three ‘Ps’: person (i.e., creative individuals and people), place (i.e., environments, clients and advertising communities) and process (i.e., work processing).

The research in this thesis focuses on advertising creativity as an important factor that can be used to mitigate clutter. Early advertising research examined advertisement creativity by focusing on the operational definitions of creativity, different research paradigms and the effects of advertising creativity on a variety of cognitive, affective and conative variables. According to Smith and Yang (2004), creative advertisements attract more attention from viewers, as divergence creates a contrast with less-creative advertisements. Smith et al.
(2007) found that advertising creativity had powerful effects on attention and advertisement liking and suggested that creativity perceptions have a significant effect on divergence, relevance and the attention and attitudes of consumers towards advertisements and brands. They also suggested that divergence interacts with relevance on motivation to process and the depth of processing.

In addition, novelty affects people by holding their attention. Mendlson (2001) found that viewers’ responses were higher to novel photographs when photographs were viewed separately rather than in newspapers or other situations. Further, distinctive advertisements attract consumers’ attention more than other advertisements and can attract and hold consumers’ attention and influence their responses to advertisements (Diao & Sundar, 2004; Neely & Schumann, 2004). Heiser, Sierra and Torres (2008) found that the use of cartoon spokespeople in print advertisements could lead to more positive consumer advertising outcomes and influence attitudes towards advertisements, brands and consumers’ purchase intentions.

Brand familiarity can be influenced by creative ads, especially for unfamiliar brands. Creativity could help to improve brand familiarity as it carries more original ideas, and consumers may receive and process creative messages easily.

**Advertising Creativity and Brand Familiarity**

Studies have shown that brand familiarity improves the effectiveness of advertisements and may help unfamiliar brands compete in a crowded marketplace. The effects of brand familiarity have been studied from different perspectives.

Research on brand familiarity and creativity has been examined to develop hypotheses that predict consumer attention, advertisement and brand effects and creative
advertising memory effects. Pieters, Warlop and Wadel (2002) studied creativity by comparing eight creative award-winning advertisements with control advertisements. Instead of relying on judges’ assessments of overall advertisement familiarity, brand familiarity was manipulated directly. The results showed that creativity heightens attention to, attitudes towards and memory for the advertisements of minor brands, but frequently harms advertising responses to major brands.

Brand familiarity also influences consumers’ ability to recall advertising information. A key reason for poor memory of advertisements is inattention (Burke & Srull, 1988). According to Kent and Allen (1994), consumers pay more attention to familiar brands’ advertisements for no other reason than that they recognise that these familiar brands are available. Brand familiarity is central to information processing and guides consumers’ attention (Alba, Hutchinson, & Lynch, 1991). Additionally, brand familiarity is a key theoretical construct. Researchers have tended to use market share position to operationalise brand familiarity when designing studies (e.g., Hardesty, Carlson, & Bearden, 2002). A few researchers (e.g., Laroche, Cleveland, & Maravelakis, 2006) made the connection between brand familiarity and market position explicit; however, most researchers have not.

Creative advertisements are more distinctive. However, distinctive stimuli may be easier to recognise, but harder to recall. More distinctive stimuli connect with existing memory less, so when trying to recall advertisements or brands, there may be fewer memory cues on which to rely (Heiser, Sierra, & Torres, 2008). Thus, creative advertising that is more distinctive may suppress advertisements and brand recall. Distinctiveness theory suggests creativity may reduce recall, yet its effect may depend on brand familiarity. The additional attention creative advertisements garner for less well known brands may encourage deeper processing that could compensate for the negative influence that distinctiveness has on advertisements and brand recall. However, given that major brands already receive more
attention, the relative benefit of increased attention may be minimal and the net effect of creativity could be negative.

**Conceptual Model**

The variables used in the thesis can be presented in model form and shows the relationship between independent and dependent variables. Brand familiarity (familiar vs. unfamiliar brands) moderates the influence of advertising creativity (creative ad vs. uncreative ads). And it is also moderates competitive advertising interference (retroactive competitive interference “RCI” or proactive competitive interference “PCI” vs. no interference), and also between two types of competitive interference. (RCI vs. PCI).

**Thesis Variables Model**

![Thesis Variables Model Diagram]
The thesis model assumes that advertising creativity has direct and significant effects on attention, affect toward ad and affect toward brand, ad recall, brand recall, ad recognition, and brand recognition. That means advertising creativity can improve consumers’ attention, which may lead to more ad and brand liking, and ad and brand memories. Creative advertising is always touching consumers’ thought and interacting with consumers’ senses and feelings. So, each creative ad has its own story of various design elements for the ad and brand, and each ad has own way of delivering to their target consumers. These aspects worked together to improve the quality of the advertisements which may increase the ability of attention and then for memory and affect. This thesis points out that marketers for unfamiliar brands have a high chance to improve their brand familiarity by advertise creative ads, but advertising creativity does not necessarily works as well for familiar brands.

Regarding the interactions of brand familiarity with advertising creativity, this model expected that creativity increases ad and brand recognition when the brand is unfamiliar, but reduce them for familiar brands. That means unfamiliar brand could receive more advantages from creativity more than familiar brand which is already known in the market.

In addition, the model shows that competitive advertising interference has an effect on consumers’ attention. If the goal in advertising is to get attention began with, then the advertising message will flow among consumers. Therefore, that consumers’ attention has an effect on consumers’ memories and affect toward ad and brand, but it is not necessarily

*RCI: Retroactive Competitive Interference.
**PCI: Proactive Competitive Interference.
***Attention has been measured in this thesis by measuring the visual attention directed toward the total ad and the visual attention direction toward the brand elements in the ad, and the non-fixation periods.
always the case. There are important differences among ads, and some ads have more significant effects than others.

In the market place, ad interference “clutter” has been considered an issue for long time: it is like a big, formidable mountain standing in the way of unfamiliar brands holding them back from standing out from the clutter. This thesis collected data which come from a natural environment of magazine exposure. Thus, a normal reaction consumers may have is that give little attention to what they exposure to. However, a small amount of interference could have positive effects between ads in general. And it may be that interference produces more trouble for unfamiliar brands in instead of familiar brand because familiar brand is already known in the market.

In general, the model shows there are some important relationships between dependent and independent variables which have been measured and tested in this thesis. The model also integrated the three papers on one point of view to provide a clear, intellectual pathway for this thesis.

**Thesis Contribution and Significance**

The studies in this thesis have significant implications for both theoretical and empirical sectors. They help bridge the bodies of literature that have examined advertising creativity, competitive advertising interference and brand familiarity. The study’s investigation extends current knowledge in several important ways. For example, creativity is an important aspect of everyday business. Businesses with creative thinkers and resources have a higher chance of success and effective competition. Managers will find this thesis helpful in focusing on creativity to reduce the negative effects of advertising clutters.

Eye-tracking technique provides high quality data because this technique records eye movement by the millisecond, and provides clear data for fixation duration and non-fixation
duration at each advertisement element. Thus, this thesis is significant for academic researchers because they can develop future research ideas from the results.

Moreover, this thesis significantly contributes to current knowledge and theory in advertising creativity literature. The study’s results are for one specific context that involves advertising competitive interference and brand familiarity, as well as attention, memory and affect as dependent variables.

The studies in the three experiments were conducted in natural settings, without forcing advertising exposure on participants. An eye-tracking machine was used to collect data. Participants were exposed to eight different versions of an online digital magazine. In addition, several pre-tests preceded the main studies. These tests involved brand familiarity, advertisement choice (high creative, low creative and distractor advertisements), the design of a mock magazine with eight versions (using a hyper-Greco-Latin square for balance the design for both order and treatments), a Tobii studio for recording data and measuring attention, questionnaires (including advertising booklets), and Statistical Analysis System (SAS) used for data analysing. The types of methods used could provide a model for other academics and research managers.

Moreover, this thesis provides suggestions for mangers to mitigate the effects of advertising clutter, and, for academic researchers, more logistic results. This thesis helps mangers make decisions to improve advertising effectiveness and brand familiarity. Additionally, it also gives them direction to avoid the negative effects of advertising clutter.

Academic researcher will find elements of this thesis helpful for natural experimental design: high techniques for recording attention, tested memory, and measuring advertisement and brand liking.
**Construction of Thesis**

The thesis discussed the main question: does advertising creativity help overcome competitive interference? It considered many aspects related to creativity and interference, as well as brand familiarity. The thesis also investigated advertising clutter through several experimental studies that discussed the effects of advertising creativity and advertising competitive interference.

Chapter 2, ‘Why Use Highly Creative Advertising? Breakthrough Clutter, Buy Time and Build Brands’ focuses on the most important aspects of this thesis. Advertising creativity is an important element, and is reviewed and discussed with additional information about creativity definition and other related factors. Advertising competitive interference also has space in the first paper of this thesis, along with discussions about the types of interference: proactive and retroactive. In addition, brand familiarity, attention and the eye-tracking technique are reviewed and discussed.

Chapter 3, ‘Is Creative Advertising a Curse or Cure? Why Creativity Is Good for Ads, but Can Be Bad for Brands’, manipulates brand familiarity with advertising creativity within subject design. The eye-tracking study features a more in-depth discussion about advertising creativity’s influence on attention, memory, affect toward the ad and affect toward the brand.

Chapter 4, ‘Attention in Competitive Advertising Interference: Can Unfamiliar Brands Do Better with More Creative Ads’, investigates the effects of competitive advertising interference on attention, memory and affect toward advertisements and brands. This manuscript includes four experimental studies. The first two studies (1a and 1b) were used low creative advertisements with two conditions of interference appear (before or neither, after or neither), and the study 2a and 2b were replicated the study 1a and 1b by using highly creative advertisements with two types of interference appear (before or after). The dependent variable is also related to attention, memory, affect toward the advertisement and
affect toward the brand. An important and surprising finding is that interference is not as 
disastrous as previous thought and many of interferences presumed effects may be demand 
artefacts of the forced exposure paradigm used.

Chapter 5 presents the thesis conclusion, which provides a capstone for the thesis. This chapter provides an integrative summary of all studies conducted in this thesis. It begins with summary discussion and continues with implications for researchers and practitioners. Finally, the chapter outlines implication, limitations and suggestions for future research.

References


motivation, opportunity, and ability to process brand information from ads. *Journal of Marketing*, 55(October), 32-53.


CHAPTER 2: THE FIRST PAPER

Brief Introduction to the First Paper

The first study in this thesis, ‘Why Use Highly Creative Advertising? Breakthrough Clutter, Buy Time and Build Brands’, is the theoretical study that discusses advertising creativity strategy as an important tool which has been used in the marketplace and is considered a critical theme in the advertising research literature. This study aims to provide an overview and discuss the relationships between advertising creativity and brand familiarity, as well as the competitive advertising interference literature.
The review focuses on the recent literature in the last decade but also considered earlier research. It explains the fundamental research arguments related to creativity's definition and dimensions, and how the advertising literature addresses creativity in the marketplace. This study connects advertising creativity effects with others aspects that have been explored in the literature. Brand familiarity is also introduced and discussed theoretically. Familiar brands have a great deal of equity in term of consumer knowledge, but unfamiliar brands received less attention than familiar brands.

Competitive advertising interference is another concept that is reviewed and discussed especially proactive competitive interference and retroactive competitive interference. The interference effects could be positive or negative which is investigated further in the third paper. Proactive and retroactive interference have been discussed as two types of competitive interference which should have a place in the advertising literature.

Consumers’ attention is considered an important theoretical issue for creativity research and we recommend that eye-tracking techniques are explored as the most suitable method to measure consumers’ attention. Forced-exposing participants’ attention on advertisements was a traditional way of studying attention and memory, however, this study suggested that for results to be useful exposure time has to be control by participants themselves to simulate what they do in their normal lives.

This study points out that advertising creativity can breakthrough clutter by capturing consumers’ attention. This outcome is theoretically supported. The study also provides the theoretical background for the second and third paper in this thesis.
Why Use Highly Creative Advertising?

Breakthrough Clutter, Buy Time and Build Brands

Abstract

Why use highly creative advertising? Is it because advertising creativity can break through clutter? Some advertising researchers have suggested that using highly creative advertisements increases consumers’ attention to the total advertisements or to the advertisement’s elements. And that attention also has been shown on brand’s elements in the
This study reports theoretical thoughts about the creativity as an important aspect of marketplace dynamics. And it also provides a theoretical discussions concerning two important aspects, brand familiarity and competitive advertising interference. Attention is also addressed as a route to improving advertisement and brand memory. The relationships between these aspects are also discussed. Then an eye-tracking technique is suggested as the most suitable method to be used on time of measuring attention. This study points that for unfamiliar brands creative advertisements could breakthrough clutter by attracting more attention than uncreative advertisements. It can also help to build brand familiarity. This study provides suggestion for the future when manipulating the effects of advertising creativity on brand familiarity and competitive advertising interference.

Keywords: Advertising creativity; Brand familiarity; Competitive Advertising Interference, Attention; Memory; Eye-tracking techniques

Creativity research in advertising is an area of growing importance (Sasser & Koslow, 2008). Once relegated to the “too hard box”, creativity research is now a major stream in current advertising research. We increasingly know much about how the social environment around advertising development process influences the creative calibre of the advertising produced (Li, Dou, Wang, & Zhou, 2008; Stuhlfaut, 2011; Verbeke, Franses, Blanc, & van Ruiten, 2008). We also are learning about creative thinking techniques and how they influence advertising (Goldenberg, Mazursky & Solomon, 1999; Kilgour & Koslow 2009). The impact of creativity on consumers is also an area of active research (Baack, Wilson &
Till, 2008; Goldenberg & Mazursky, 2008; Lehnert, Till & Carlson, 2013). As a field, advertising researchers seem to love advertising creativity (Koslow, 2015).

However, with the increasing focus on creativity comes the possibility that the field forgets the reasons for creativity. This already happens in creativity award competitions among the professional advertising community in that those campaigns winning these awards are presumed to have little grounding the clients’ strategy (Kilgour, Sasser & Koslow, 2013). In a number of well cited research articles, creativity alone is seen as an appropriate outcome for advertising, rather than strategy or effectiveness (e.g., Koslow, Sasser & Riordan, 2006). Creativity should be seen as a means to an end in advertising rather than a goal in and of itself. And the more focused the field stays on the reasons underlying creativity, the better and more focused the field will develop.

A complicating factor in advertising creativity research is the methods we use. The most common method of testing advertising remains the forced exposure experiment. Faber (2015) recently repeated Stewart’s (1992) criticism concerning our over reliance on the forced-exposure experiment. Real consumers viewing, watching, listening to or participating in real media are not forced to pay attention to an ad for 30 seconds because they will be quizzed on it later. Real consumers choose to pay attention. It is presumed that good advertising contributes to the attention consumers give to advertising (Kover, 1995), but unfortunately, little research has addressed the issue. Regrettably, the forced-exposure study obliterates any likelihood that we can see directly or measure reliably real attention, forcing researchers to use retrospective (and possibly biased) reports of consumers telling us whether they paid attention or not (e.g., Smith, Chen & Yang, 2008). To really understand attention one either needs a researcher to be in the room watching an audience (Jayasighe & Ritson, 2013) or even better an eye tracker (Smit, Boerman & van Meurs, 2015). Without such tools to actually connect attention to creativity, it seems ironic that some researchers claim that
they have gone “beyond attention affects” when they actually have never measured attention instead using a forced-exposure experimental procedure (Smith et al 2007).

To better understand our knowledge of creativity and its effect, we focus on three areas where creativity should have substantial effects: 1) gaining attention in a cluttered media environment, 2) keeping attention so to enhance memory, and 3) building awareness of lesser known brands. To address these issues, we first review the creativity literature, with emphasis on the explosive growth in this research in the last decade. The organising framework for this work is Sasser and Koslow’s (2008) 3Ps approach, which deals with the person, place and processes in the creative development of advertising. Although one may often be interested in the creative products—advertisements—this framework assumes that such ads are the focus, and the role of the other three Ps is to understand how to obtain such a goal. We then review the literature on advertising interference, which mostly deals with competitive interference and is from the last century, with only a few exceptions. The problem of clutter continues to be a challenge for researchers and additional frameworks are required to go beyond the largely descriptive approaches applied. Next, we explore brand familiarity research, which is again fairly old but extremely central to marketers concerned with the value of brands. Finally, we address the measurement of attention through eye-tracking methods. Although advertising researchers have long considered attention critical and placed the concept centrally, surprisingly little research has addressed it until recently. The advent of eye-tracking methods now enables researchers to design studies and test effects that only up until recently was impossible.

ADVERTISING CREATIVITY

Definition and Elements
The definition of advertising creativity can be based on two balanced factors: originality and appropriateness (Koslow, 2015; Runco, 2007; Runco & Jager, 2012). Koslow (2015) addressed four types of situations that consider these two factors. Advertising can be considered ‘weird’ when it is original but not appropriate. However, advertising can be effective when it is appropriate but not original and is made with the right message to consumers. Advertising can fail when it is neither original nor appropriate and is therefore ‘bad’ advertising. Overall, originality is easy to distinguish by consumers but appropriateness has been defined in different ways (Sasser & Koslow, 2008), so Koslow (2015) suggested that appropriateness should be ‘on-strategy’ advertising. Finally, originality and appropriateness with advertising is creative.

The creativity of an advertisement can be measured by the interaction between originality and appropriateness. Originality has been used to study creative advertisements. For example, Smith, Chen and Yang (2008) used an extremely elaborate system of measuring originality, which they call divergence.

According to Smith, MacKenzie, Yang, Buchholz and Darley (2007) and Reinartz and Saffert (2013) advertising creativity involves five factors. The first factor is ‘originality’, which is seen in ads that contain rare elements and are out of the box. The second factor is ‘flexibility’, which is seen in ads that contain different ideas and flexibly switch from one perspective to another. ‘Elaboration’ is the third factor, which is seen in ads that contain unexpected details and extend basic ideas to be more intricate. The fourth factor is ‘synthesis’, which is seen in ads that combine, connect or blend normally unrelated objects. ‘Artistic value’ is the fifth factor, which is related to the effects of artistic variables such as attractive colours and shapes.

Moreover, Koslow, Sasser and Riordan (2003) suggested that four items should be used to measure creativity from an originality perspective: original, unexpected, novel and
different. However, Mumford and Gustafson (1988) argued that originality is not enough to measure creativity. To measure the creativity of an ad, researchers need to examine some related concepts such as originality, novelty and distinctiveness.

**Advertising Creativity and Attention**

Early advertising research examined ad creativity by focusing on the operational definitions of creativity and different research paradigms, as well as the effects of advertising creativity on a variety of cognitive, affective and conative variables. Smith and Yang (2004) reported that creative ads help to attract more attention from viewers because divergence creates a contrast with less-creative ads. Further, Smith et al. (2007) examined the impact of divergence and relevance, and the effects of advertising creativity on consumers processing and response. The processing variables are the amount of attention allocated to the ad, the motivation to process the ad and the depth of ad processing. The response variables are ad attitude, brand attitude and purchase intention. Smith et al. (2007) suggested that creativity perceptions have a significant impact on divergence, relevance and their attention and attitudes towards the ad and the brand. The study findings also suggested divergence interacts with relevance on motivation to process and depth of processing. Smith et al.’s (2007) study shows the powerful effects of advertising creativity on attention and ad liking.

Moreover, novelty affects people by maintaining their attention. Through several experiments, Nunnally and Lemond (1973) found that novel stimuli dominated visual attention, as subjects were mostly spending time to resolve any information conflict with a new object. In addition, Mendlson (2001) examined the effect of novelty in news photographs on attention and memory and found that readers’ responses were higher to novel photographs when viewing them on their own rather than in a newspaper or in other situations. This indicated that novelty works well to attract more attention.
The advertising literature shows that distinctive ads attract consumers’ attention more than other ads in the environment. Distinct stimuli are capable of attracting and holding consumers’ attention and influencing their responses to the ad (Diao & Sundar, 2004; Neely & Schumann, 2004). Pick, Sweeney and Clay (1991) examined the von Restorff effect for advertising slogans and found that distinctive slogans were considered to be clearly substandard, and a significant von Restorff effect was obtained with a high-quality slogan but not with a substandard slogan. Heiser, Sierra and Torres (2008) applied the distinctiveness theory to a creative cartoon spokesperson in print ads in a between subjects design. The study results were compared with a human spokesperson in the same advertisements. Heiser et al. (2008) found that the use of cartoon spokespeople in print ads could lead to more positive consumer advertising outcomes by influencing attitudes towards the ad and the brand and purchase intention. Ads with cartoon characters attract more attention from consumers than similar ads using non-animated spokespersons.

**Advertising Creativity and the 3Ps**

Sasser and Koslow (2008) reviewed the methodology used in studies of advertising creativity and developed a framework for future research that consisted of three ‘3Ps’: person, place and process. ‘Person’ refers to the creative individuals and people who create advertising, ‘place’ refers to environments, clients and advertising communities, and ‘process’ refers to work processing, which deals with agencies and clients’ organisations, as well as thinking techniques and systems. Sasser and Kaslow (2008) categorised theories of advertising creativity in this research framework. This section uses Sasser and Koslow’s (2008) framework to review the advertising creativity literature after 2008.

**Persons**
The creative advertising literature continues to be studied from the perspective of ‘persons’, which can include consumers, practitioners, advertisers or any responders. Most studies in this area usually take the perspective of one of these types of persons, which is usually a consumer’s perspective about how creativity influences them. Some studies, however, take an industry perspective, like those of art directors (e.g. Phillips, MacQuarrie & Griffin, 2014), or make comparisons across several groups, like agency professionals, advertisers and consumers (e.g. Kim & Yu 2015; West, Kover & Caruana, 2008).

Consumers and Professionals. To begin with the studies that take multiple person viewpoints, Kim and Yu (2015) examined three levels of advertising creativity (low, medium and high) with three individual professional roles: consumers, advertisers and advertising agencies. Three different attitudes were investigated as dependent variables: attitudes towards the advertising, the advertised brand and the advertised product. The brands’ names and their related products appeared in the study advertisements. The study sample included 382 participants: 138 ad agency professionals, 105 advertisers and 139 consumers. The participants’ attitudes were measured by three different scales: general impressions of ads, individuals’ attitudes towards the brand and individuals’ attitudes towards the product. The results indicated that advertising creativity affected individuals’ attitudes towards ads, advertised brands and advertised products. In addition, there was a significant difference in individuals’ attitudes towards ads between advertising creativity levels and the different positions of ad agency professionals. The researchers found that advertising creativity level was more important than professional roles in affecting attitudes towards brands and products seen in the study ads. They also found that study consumers responded favourably to ads characterised as low creative and ads that conveyed messages that were easy to understand (Kim & Yu, 2015).
Phillips et al. (2014) investigated the relationship between advertising creativity and visual brand identity from the art director’s perspective. Individual in-depth interviews were conducted with 15 art directors, employed by 10 different advertising agencies and design firms in New York City. Before the interviews, each participant received a package containing colour images of three ads for a regional brand and three other ads for a lesser-known brand from the same product category. Each ad had 10 visual elements. The interview results extended the definition of visual brand identity as a ‘holistic look and feel of a brand, manifest as consistency among the brand, its strategy and all its individual visual elements, ongoing over time’ (Phillips et al., 2014). The interviews also indicated that a conflict with the client may arise because visual elements can contribute to a brand’s visual identity. The participants identified four primary elements: the brand’s logo, typography, colour and layout. Phillips et al. (2014) suggested that future research should also examine how consumers interpret and evaluate a brand’s visual identity.

West et al. (2008) compared practitioners’ and consumers’ definitions of advertising creativity. There were 480 participants in the study: 52 in the practitioners group and 428 in the consumers group. Two stages of processing were conducted. In the first stage, the participants answered a one-ended questionnaire that was used to identify the creativity definition of each group. In the second stage, the participants were exposed to 10 television commercial advertisements selected from winners of the One Show Creativity Awards and asked to answer a questionnaire about it in no more than half an hour. Then, the creative process was discussed for 45 minutes to one hour. The purpose of this stage was to evaluate advertising from a creative perspective. The results showed that 75% of the practitioners’ defined creativity as ‘appropriate’ and 25% coded it as ‘originality’. However, 52% of the consumers defined ad creativity as ‘appropriate’, and the others coded it as ‘originality’. Therefore, the practitioners viewed advertising creativity as being more ‘appropriate’ than
‘originality’, while the consumers viewed advertising creativity as being a balance of ‘appropriate’ and ‘originality’ (West et al., 2008).

Professionals. Ashely and Oliver (2010) studied the development of advertisements over 30 years by focusing on the creative leader’s perspective. They used a sample of 120 interviews, including 95 creative leaders’ interviews from 1977 to 2001, which were listed on the Advertising Education Foundation’s Website, four interviews from 2002 to 2007 from the Wall Street Journal website, and the researchers’ own interviews with 21 creative leaders. The results showed there were some developments in client interaction, audience communication and brand parity over this period. In addition, there was increasing time pressure, audience cynicism and media fragmentation, but global boundaries had decreased.

In a focus on individual consumer responses to creativity, Modig, Dahlen and Colliander (2014) extended the marketing signal literature by studying the positive and negative effects that consumers’ perceptions of sender expense and effort might have on brand perceptions. They evaluated 20 advertisements: five had won creativity awards, five had won effectiveness awards, and 10 had not won an award but were randomly selected as control advertisements from 43 non-award winning advertisements that had been judged to be neither particularly nor efficient. The study sample consisted of more than 4,000 consumers and each advertising rating was made by at least 200 respondents. Each participant rated the perceived expense, brand attitude and brand interest on seven-point Likert scales. The study found that advertising with higher-than-average perceived expense and effort have positive impacts on brand attitudes, brand interest and word-of-mouth (WOM). However, a lower-than-average perceived expense had a negative impact on the advertisements. Overall, creative advertising enhances consumers’ perceptions of sender expense and effort, whereas efficient advertising lowers their perceptions.
Consumers. The perspective of consumers also is important and Borghini, Visconti Anderson and Sherry (2010) studied the creative tensions and synergies between countercultural and commercial forms of street art and advertising. There were 12 key information artists in Italy and eight in the US, and 60 consumers were interviewed. Borghini et al. (2010) showed that street art can be considered a commercial advertising template that carries different types of messages: enjoyment, ideological critique and activist exhortation.

Rosengren, Dahlen and Modig (2013) studied the unintended effects of advertising with three experiments. The first experiment focused on consumers’ exposure to advertising creativity (high or low) by means of a questionnaire and a creativity test. The second experiment replicated the findings of the first experiment using more reliable measures of processing and perceived own creativity, with a total of 420 members of a nation-representative internet panel. The participants viewed pairs of ads from four product categories with variation in terms of picture, text, picture only and text only. To avoid idiosyncratic effects, the advertiser was masked in all ads. The third experiment exposed participants to a lifestyle magazine dummy featuring more creative versus less creative advertising. After the participants read the magazine dummy, they filled out a questionnaire. The study results showed that advertising creativity has a positive influence on the consumers’ own creativity. The study suggests that it is important to encourage advertisers to (1) take responsibility for avoiding unintended negative effects on consumers, (2) explore what could have positive effects and benefit consumers (Rosengren et al., 2013).

Lehnert, Till and Carlson (2013) examined the role of advertising creativity and repetition on consumer recall and ad ‘wearout’. The study’s independent variables were advertising creativity (creative or control ads) and number of exposure time (once, twice or four times) within a 30-minute television programme. The dependent variables were ad recall, brand recall and attitude towards the ad. There were 74 participants who were
randomly signed into one of three conditions based on number of exposure time. Each group was exposed to commercial advertisements with a different exposure time number during the television programme. Creative advertisements were selected from Communication Arts award-winning advertisements, and control advertisements were selected randomly from broadcast television and had not won any advertising awards. The participants answered the study questionnaire after one week of exposure time. The results of this study showed that recall was significantly higher for creative ads than control ads. As the number of exposures increased, ad recall also increased. Creative ads were also more liked. The effects of ‘wearing’ progress more quickly and are less susceptible to ‘wearout’ (Lehnert et al., 2013).

Heath, Nairn and Bottomley’s study (2009) found that emotive content on television advertisements could have a negative influence on consumers’ attention. Emotive content is defined in this research as anything that influences consumers when they are exposed to television advertisements. This study examined eye-movement techniques in viewing a 30-minute television programme with three commercial breaks. A total of 12 ads were presented, with four ads in each break. Attention was measured in real time and media took place in a natural situation. The study used a scale of six items with seven different semantic choices to measure the ‘strength’ of the emotive content. The study gleaned 336 observations (12 ads x 28 participants) and showed that emotive content could harm consumers’ attention towards an ad, as participants paid less attention to ads that carried emotive content than other ads. The researchers suggested the benefit of emotive creativity on lowering consumers’ attention and inhibiting counter-arguments (Heath et al., 2009).

Novelty and usefulness have also been studied in the literature. For example, Sheinin, Varki and Ashley (2011) examined the effects of two advertising creativity dimensions (novelty and message usefulness) the following dependent variables: attitude towards the ad, attitude towards the brand, brand trust, ad recall and brand recall. Three studies were
conducted. In the first study, 129 participants were tested online in groups of 15 to 20 and exposed to a set of four ads (three chosen as fillers and one stimulus ad). To measure ad novelty and usefulness, participants were asked to measure the stimulus ad by using a seven-point Likert scale of 11 items. The second study had 113 participants and explored the recall effects: ‘novelty leads to better short term ad recall than long-term’ and ‘usefulness will lead to better brand recall, both short term and long term’. There were 112 participants for the third study, which replicated and extended the other two studies by manipulating two levels of novelty (low v. high) with two levels of usefulness (low and high) between subject designs. The results showed that novelty and usefulness impact on attitude towards the brand, novelty leads to better short-term ad recall, while usefulness influences brand trust and leads to better short-term and long-term brand recall.

The understanding and processing of creative ads in collectivist culture could re-order important elements of advertising creativity. Kim, Han and Yoon (2010) developed and validated the advertising creativity measurement for a collectivistic culture. Based on the findings of in-depth interviews with 19 prominent leaders in Korea, 103 items were chosen to compare advertising creativity aspects and build semantic differential scales in the form of Likert scales. These items were used in the data analysis in Studies 1 and 2. In addition, stimulus ads were selected in five processing steps and used in Studies 2 and 3. The researchers selected 21 ads from 294 ads, using seven ads each for the high, medium and low creativity groups. In Study 1, 232 participants were asked to measure advertising exposure by using their definition of advertising creativity. In Study 2, 256 participants were randomly exposed to pre-selected stimuli ads (measured as low, medium and high creativity) before completing a questionnaire. In addition, there were 151 participants in Study 3, which focused on the reliability and validity of the newly developed scale that included four dimensions of advertising creativity: originality, considerateness, Confucian norms of the
society, and contextual elements of the advertisements. The scores of the scale’s reliability and validity were accepted statistically.

Processing emotion in creative ads could influence consumers in some ways. Yang and Smith (2009) modelled the persuasive emotional effects of advertising creativity. The independent variables for the study were divergence, relevance and ad processing involvement. Each variable had two levels: high and low. The dependent variables were intentions and brand purchase intentions. Three studies were conducted to develop the research model. The first study replicated a pre-test under high involvement conditions and manipulated between study conditions. The second study tested model validity beyond attention effects. The third study examined the relationship between desire to postpone closure (DPC), defined as ‘an important variable that can directly influence resistance to persuasion’, and the intention variables. There were 151 participants. Yang and Smith (2009) tested divergence and relevance by using manipulating checks and found that participants were successfully manipulated. The ad creativity model was found to be supported from the three studies. The new model is developed and examined statistically by using structural question analysis.

Smith et al. (2008) examined the effects of advertising creativity on consumer processing and response by reviewing the traditional hierarchy-of-effect (HOE) in advertising and persuasion. They identified five major stages in the literature: brand awareness, brand learning, accepting or rejecting ad claims, brand liking and brand intention. The first four stages included three dependent variables each: attention, interest and awareness in brand awareness; comprehension, depth of processing and memorable in brand learning; curiosity, changed mind and resistance in accepting or rejecting ad claims; and entertainment, ad attitude and brand attitude in brand liking. The experiment manipulated two levels (high, low) of the two major elements of advertising creativity: divergence and relevance. There
were 120 participants who were asked to play one of 40 CDs and then complete the questionnaire. The results showed interaction effects between divergence and relevance for 12 out of the 13 dependent variables. This interaction could be the best representation of advertising creativity. In addition, divergence can influence consumer response and has powerful effects on brand awareness and brand liking. Overall, Smith et al. (2008) found that the traditional HOE model fairly captures the effects of advertising creativity.

**Discussion.** Although attention is often one of the most critical psychological processes involving creativity—either directly stated or implied—it has been poorly studied. Most research is similar to Smith et al (2008) in that attention is something consumers self-report after the fact. Although practitioners focus on the attention aspects of creating ads, there is still little emphasis on them learning about the whys of what actually got attention in advertisements.

A comparison can be made with the copy testing literature in which industry based data to understand the causal patterns in executional factors. The copy testing work by Stewart and colleagues (Stewart & Furse 1985; Stewart & Koslow 1989) has been widely disseminated within the profession community and the set of 12-18 main factors that keep appearing as significant (e.g., brand differentiating message, problem-solution format, use of humor, etc.) have been dubbed “The Formula” within the professional community, even if most practitioners are unaware of its origins. The critical learnings, however, is the importance of message simplicity and the absence of distractions.

To advance creativity theory, the people involved with the process need to be more central to it. That is, consumers and practitioners need to both be involved to come up with learnings about creativity. Looking at one group or the other will proposed important hypotheses, but it is only when both sides can be viewed together can knowledge be advanced.
Place

Research on the ‘place’ of advertising examines how the social environment of agencies influences the kinds of advertising produced in various ways. For example, Sasser, Koslow and Kilgour (2013) investigated whether clients really need highly creative advertising, defining advertising creativity as both original and appropriate or strategic. The study included four dependent variables: copy-testing, client willingness to explore new ideas, agency politics and client decision insecurity. They used a questionnaire with 14 items and received 408 respondents from 22 different advertising agencies. The participants were asked about three advertising campaigns on which they had worked personally, and they reported on a total of 1,125 campaigns. The results showed that in situations of low willingness to explore new ideas, the effect on creativity was negative; thus more creative campaigns were fare less likely to be adopted. Clients were more likely to reject less creative advertisements when they were open to exploring new ideas. Furthermore, clients had a dramatic positive impact on creativity in campaigns. The interaction of organisational politics and client insecurity means that politics may facilitate greater creativity (Sasser et al., 2013).

Sasser and Koslow (2013) examined four aspects of advertising creativity: motivation, organisational support, expertise and politics. The research proposed a dynamic framework for these aspects. There were 413 respondents from 22 different advertising agencies with a total sample of 1,188 advertising campaigns. Participants answered a questionnaire in their free time, which took 25 to 30 minutes. The results of the study showed that management that supports creativity serves to enhance passion. However, the influence of expertise on creativity was suppressed by organisational politics.

The creative director’s leadership role in an advertising agency was examined by Mallia, Windels and Broyles (2013). The researchers interviewed 43 participants, including
art directors, copywriters, creative directors, senior managers and presidents, from six advertising agencies (three large and three small agencies) in four different cities in the United States (US). Their findings suggested that successful creative directors have more expertise in creativity, strategy and interpersonal communication, and oversee brand identities. Creative directors can also liaise between creative people and clients and with other agency departments (Mallia et al., 2013).

Some studies have developed measurement tools for creativity within organisations. For example, Stuhlfaut and Windels (2012) developed a tool to measure the organisational impact on creativity and reported that the creative code is affected by creative practitioners’ boundaries of creative expression. The tool measured the intensity of this creative code by using a qualitative study to develop a model that was used then used in a quantitative study. There were 197 participants from 88 advertising agencies. Stuhlfaut and Windels (2012) suggested further research on the effects of the creative code on other variables (e.g. the creative process within advertising agencies).

Creative code is an important aspect of research on advertising agencies. Stuhlfaut (2011) investigated creative code based on organisation-culture theory. Interviews were used to collect data from 20 participants from the creative department: five copywriters, five art directors, six group creative directors, two designers, one associate creative director and one associate creative director-designer. Stuhlfaut (2011) suggested that a creative code can consist of independent and dependent variables in the advertising creativity literature. In addition, being more cognisant of the creative code could benefit client, agency managers and creative employees.

Nyilasy and Reid (2009) examined agency practitioners’ meta-theoretical beliefs, which are defined as ‘fundamental underlying assumptions about the possibility of knowledge in advertising’. In-depth interviews were conducted with 28 participants from
three career groups: account managers, account planners and creative directors. Each interview lasted from 45 to 90 minutes. The study found that there is no rule in generating creative content in advertising. The genesis of ideas is subjective because it is more based on opinion than firm knowledge. In moderating factor rules, Nyilasy and Reid (2009) found there is a negative effect in advertising. From the participant perspective, there is an ‘inverse relationship’ between rules and creativity and that could link agency practitioners’ definition of creativity, presented in the study as ‘advertising’s leverage’, and moderate rules.

In addition, the ontological status of advertising is mostly placed outside of the scientific research model. Advertising knowledge is described as ‘layered’, and the creative layer is more much thicker than other layers. Overall, the study findings address the academic-practitioner gap in advertising and provide more fundamental data for advertising industry professionals.

In general, the focus on original work is endemic in place-oriented studies. What is unusual here is that originality’s value in attention is rarely acknowledge, but is usually just under the surface of any of these studies. This theme continues with process-oriented studies.

**Process**

The advertising creativity literature has also examined ‘process’ in relation to how information and creativity elements work in advertisements. Creativity elements are important for understanding the effects of advertising. For example, Lehnert, Till and Ospina (2014) examined advertising creativity by studying the role of divergence versus meaningfulness. The concept of divergence contains elements of novelty, aesthetic representation, newness and difference, and the concept of meaningfulness has elements of appropriate and connectedness. The study used 30 randomly selected television commercial advertisements, half of which were highly creative ads from award-winning One Show and
Communication Arts ads and the other half were less creative ads obtained from regular television. There were no more than two ads from the same product category. After subjects viewed each of the 30 ads, they were asked to measure creativity, meaningfulness and divergence. They also rated overall creativity for the ads on a 1- to 100-point scale, as well as a generalised relevance item. To generalise the results, Lehnert et al. (2014) replicated this study three times. The study sample for the first study was from the US and for the second study was from Colombia. The third study used a sample of consumers and advertising practitioners. The study found that when advertising is not meaningful it is not creative. Moreover, divergence is an important element of creativity, and meaningfulness is a very important aspect to ad effectiveness.

Advertising awards have been studied from different points of view. West, Caruana and Leelapanyalert (2013) examined the benefits and consequences of advertising-award shows and creativity awards based on various characteristics: the role of judges, the composition of the adjudicating panel, the selection criteria adopted, the judging process and the timeline used. Data was collected from 10 respondents who had been organisers in 10 different award shows. The research found that heuristics dominates the entire process and suggested that an informal approach is more prevalent.

Kilgour, Sasser and Koslow (2013) investigated what advertising awards actually measure, focusing on how award judges and expert groups who target these awards with their work view advertising creativity awards. The study is based upon 621 creative advertising campaigns reported by 217 respondents, with 99 participants from creative departments. A questionnaire was used to measure advertising professionals’ views of their own work. The measurements for consumers included attitude towards the advertisement, attitude towards the brand and purchase intention. Kilgour et al. (2013) found that originality was high when campaigns were worthy of creativity award recognition, and most award-winning ads were
not highly strategic. Originality bias contained in award-winning advertisements may affect the usefulness of creativity, but originality is an important aspect of creativity. Strategy and appropriateness were not adequately reflected.

In addition, Wang, Dou, Li and Zhou (2013) examined the effects of advertiser risk-taking propensity on campaign originality. Originality is an important aspect for the effectiveness of an advertisement. Wang et al. (2013) tried to enhance advertising originality by developing two behavioural strategies: creative qualification and trust in agency. The Chinese advertising industry was selected as the study field, and the measurement scales and survey were translated from English to Chinese. The findings of the study showed that an advertiser’s risk-taking increases the creative qualification efforts and trust in a chosen agency. Both strategies contributed to campaign originality and performance of the advertisements.

Kilgour and Koslow (2009) examined when creativity thinking technique is divergent or convergent in creative ideation processes. Originality and appropriateness were analysed as dependent variables. There were 158 participants from three populations: creative people, account executives and students. The participants were divided into two groups. The first group received a convergent thinking prime and the second group received a random word divergent technique. Each participant designed three creative campaigns for a hypothetical brand. The results of the study showed that originality is improved by account executives when using a divergent thinking technique. However, appropriate ideas were more produced by creative people when using a convergent thinking technique. The students were found to have little influence and lacked knowledge of techniques and domain. Kilgour and Koslow (2009) suggested that creativity thinking techniques were not a one-size-fits-all proposition but need to be designed to each participant individually.
Discussion. Originality in advertising—without losing sight of the strategy required—is one of the most common areas explored in the whole of the advertising creativity literature. This is not just in the process-oriented studies, but place and persons as well. The irony is that while there is such focus on originality, rarely does the research acknowledge attention oriented theories, merely assuming that any creativity will be able to attract the needed attention. To again compare to the work of Stewart and colleagues (Stewart & Furse 1985; Stewart & Koslow 1989), there are attention getting devices like “front-end impact” that were clearly negative in terms of effectiveness. To better understand the role of creativity in advertising, we need to better understand how creativity relates to attention.

ATTENTION DESPITE CLUTTER: UNDERSTANDING COMPETITIVE ADVERTISING INTERFERENCE

What is Advertising Interference?

The early advertising literature used ‘clutter’ to describe a large number of competitive advertising in the marketplace (Danaher, Bonfrer & Dhar, 2008). The literature also used ‘competitive advertising interference’ as a suitable concept rather than ‘competitive clutter’ to address advertising effectiveness on consumers (Burk & Surll, 1988; Kent & Allen, 1994).

Competitive advertising interference refers to the impaired ability to remember an item previously stored with similar items in memory or a new item (Anderson & Neely, 1996), or to remember new information learned from the same previous information set. This definition designated interference in sort of information need to learn (new information) or to remember (previous information), and these sorts of information interfere with each other related to the type of processing information in memory.
Kent (1993) distinguished between competitive and non-competitive advertising interference. He found that competitive interference effects could arise from forgetting information. The effects of competitive interference on consumers can be seen in the marketplace when consumers are buying one brand instead of another from the same product category (Kumar, Besharat, Lindsey, & Krishnan, 2014). A high level of interference harmed consumers’ responses to advertising (Baqozzi & Silk, 1983; Bettman, 1979). Early experimental work by Webb (1979) found that brand name recall can be affected negatively by competitive interference and that effect increases when interference is high. However, Brown and Rothschild (1993) found that competitive interference has no effect on brand name recall.

Burk and Srull (1988) reported that most advertisements have an effect on consumer-communicated brand information with product category, brand name and specific brand claims and also processing perspective by using the brand information (Anderson, 1983).

Most competitive interference studies have focused on the interference accused by competing brands from the same product category (e.g. Burke & Srull, 1988; Keller, 1987, 1991; Kumar, 2000) and their basic argument is related to the results of unconnected memory traces (Lee & Lee, 2007), which may increase the difficulty of remembering which ad is associated with which brand. Interference has also been found when consumers were exposed to different print ads with similar claims and brand names (Burke & Srull, 1988; Keller, 1987, 1991) and television commercials (Kent & Machleit, 1992; Kumar, 2000).

Consumers’ minds work by category-specific bits of information, which are stored as concepts in distinct nodes (Kumar & Krishnan, 2004). Those nodes are linked together, making an information network (Kumar et al., 2014). Sometimes consumers face some difficulties remembering information related to a specific brand or ad. This is influenced by two aspects: passage of time between receiving and retrieving information, and coding of
additional information during time of ad exposure (Lee & Lee, 2007). Furthermore, Keller (1987) explained that interference effects occur when consumers are exposed to two ads for two brands from the same product category, which are subsequently stored close together in memory; consumers may later have difficulty distinguishing the two brands, which would detrimentally impact the communication effects of the target brand. Advertising repetition is one technique used to reduce competitive interference effects, and the literature has generally revealed a positive relationship between ad repetition and recall (Anand & Sternthal, 1990; Cacioppo & Petty, 1979; Ray & Sawyer 1971; Vakratsas & Ambler, 1999).

The literature shows some reasons for the drop in advertising effectiveness due to competitive interference, including interference with additional learning and temporal effects such as advertising decay and wear out (Danaher et al., 2008). An early study in psychology by McGeoch (1932) found that ‘forgetting’ due to additional learning has a greater effect on learning interference rather than the passage of time. Other reasons are related to learning information, which involves two types of competitive interference: proactive competitive interference (PCI) and retroactive competitive interference (RCI).

**Proactive Competitive Interference (PCI)**

PCI is explained when previous information is stored in the memory by way of an associative links, which is also used to store new information in the same memory set. Interference occurs when a consumer is asked to remember an item from items in the same association stored in the memory. For instance, when asking consumers where they parked their cars at a local shopping centre, if it is their first time in this centre, they may find it easy to recall their car’s location and there are no interference effects. However, if the consumers park in this shopping centre frequently, they may find it difficult to recall where they parked on the current visit. Anderson and Neely (1996) suggested that memory interference for such
consumers (who frequently park their car in this shopping centre) is related to ensuring the recall ability of a new information spot, which involves the suppression of earlier information in the same lot.

Following the same lines, in this study participants were exposed to a magazine that included two ads (A and B) from the same product category for two brands, and ad ‘A’ presented before ad ‘B’. When asked to remember information on the current ad ‘B’, PCI can arise because the previous information for ad ‘A’ comes to mind. The PCI effects on participants’ minds can differ by frequency of exposure to previous information (on ad ‘A’). For example, imagine you switch your mobile phone company, the old company will keep coming to mind when you are asked about your new mobile phone company. If you have a new mobile phone number, you face some difficulties to recall it because the old one comes to mind. Such examples give an idea of how PCI occurs in our minds.

In an early study of PCI processes and memory, Blankenship and Whitely (1941) examined grocery store ads and designed two lists of 18 food items for each, such as fruits, vegetables and baked items. Study participants were separated into two groups: the first group learned the target list of foods and the second learned the same list after studying another list of similar food items. The first group was better at recalling after a 48-hour delay than the second group. Thus, Blankenship and Whitely (1941) found that PCI has negative effects on consumer memory. Keller (1987) also found that PCI has negative effects on brand recall but no impact on brand evaluations such as ad and brand attitude and purchase intentions.

**Retroactive Competitive Interference (RCI)**

RCI refers to impaired memory performance to recall target information when learning new information between the storage of the target information and final test. RCI has
a negative effect on learning information in advertising because it causes subsequent exposure to a competitive brand’s messages (Danaher et al., 2008). The previous example about car parking gives an idea of how RCI affects our memories. You may not remember where you parked your car on the last visit to the shopping centre because you have parked in the same lot on several subsequent occasions. In addition, an early study by McKinney (1935) examined the RCI process in forgetting information. Participants were divided into two groups. The first group was asked to learn material in one full-page magazine ad, followed by a ‘rest condition’ of number-cancelling activities. The second group was asked to learn the same material in one full-page magazine ad, followed by a ‘work condition’ of learning two additional ads for two new products. McKinney (1935) found that the first group was better able to recall the slogan of the first product than the second group. In addition, the interpolated task had only a slight effect on memory for picture content and headline and no effect on recall of the brand name or body copy. The results showed there are negative effects of RCI on memory.

However, RCI is dependent on a different feature. It refers to previous learning information effects when we learn more recent information. For instance, it is difficult to remember your old mobile phone number because during the recall process the new mobile phone number interferes with your memory. In addition, in this study participants were exposed to a magazine that included two ads (A and B) from the same product category for two brands, and ad ‘A’ was presented after ad ‘B’. When asked to remember information on the previous ad ‘B’, RCI can arise because the new information for ad ‘A’ interferes with the previous information (ad ‘B’). The effects of RCI on subjects’ minds can differ according to the amount of new information received (on ad ‘A’).

**Contextual Competitive Interference**
Contextual interference has been examined more recently (Kumar, 2000; Kumar et al., 2014; Kumar & Krishnan, 2004). Interference can arise from exposure to similar ad elements such as pictures, texts, colour and layout, which reduces the memory for brand and brand claim (Kumar, 2000) and for both familiar and unfamiliar brands (Kumar & Krishnan, 2004). In addition, Besharat, Lindsey and Krishnan (2014) studied the effects of contextual and competitive interference on consumer memory, manipulating the similarities and differences of advertising elements for the two types of interference. They found that the inhibiting power of advertising interference in the recall of brand claims is mitigated. The interference effects can be dissipated on condition of viewing ads for the same product category with similar executional elements, and the additive effect of the two types of interference may be detrimental to memory for brand claims when participants are supported with cues other than a product category-brand name cue.

Ballester, Navarro and Sicilia (2012) examined the effects of brand message and brand knowledge structure and how brand familiarity moderates these effects. The results showed that the effectiveness of consistency among messages depends on brand familiarity. For familiar brands, moderately consistent messages improve brand information recall, and for unfamiliar brands, the recall is higher when highly consistent messages are used.

Discussion

Although much research has focused on attention, little of it has gone beyond retrospective self-reports or forced-exposure studies. In many ways, this literature can be likened to the state of purchase panel data prior to the advent of electronic scanner. As Koslow and Tellis (2011) explain, purchase panel data had long been done, but were based on retrospective self-reports where consumers filled out a form on a weekly basis listing what they purchased. Some of the biases of this reporting method were obvious, like the bias
toward major brands. For example, consumer would fill these sheets out the day they were due back, and if they could not remember what brand they purchased, they guess by writing down their “usual” brand. Across large populations, it was clear that the implied market share of the major brands was bigger than that the actual market share. For attention measurement, retrospective self-reports require conscious memory of attention, which in most cases is quickly forgotten. The long history of mere exposure effects suggests that much of the attention we give to advertising is not remembered anyway, despite leaving clear affects. Further, attempts to simulate attention under a forced-exposure approach leaves time for exposure easily ten or more times longer than typical advertising exposure. Just as the advent of electronically collected scanner panel data lead to a focus on price promotions that could not have been anticipated (Koslow & Tellis, 2011), so too may reliable electronic measurement of attention revolutionize the role of creativity and attention.

**KEEPING ATTENTION TO BUILD MEMORY**

**Attention in the Advertising Literature**

In an early study in the advertising literature, Sandage (1945) found that attention is a mental stream of thought leading to purchase and the first function of an advertisement is to attract consumers’ attention. The advertising literature shows that gaze and attention constitute two essential parts of print advertising, and most studies focus on how viewers look at advertising, which ad and brand elements catch their attention most quickly and what makes a product look most desirable to consumers (Clark, Brock & Stewart, 1994).

According to Rosbergen, Pieters and Wedel (1997), gaze duration is defined as the sum of the fixation duration on stimulus elements or stimulus as whole. They demonstrated the validity of gaze duration as an indicator of visual attention towards the whole ad or towards ad elements. Gaze duration has been used in the advertising literature as the
measurement of eye-movement data. Furthermore, attention can be the amount of mental effort or cognitive capacity allocated to a task (Kahneman, 1973). Attention is also described as ‘thought’ (Mackenzie, 1986), which is conceived as having both directional and intensive aspects. The direction of attention is based on mental effort and the intensity is the amount of mental effort that is focused in a particular direction (Kahneman, 1973); obviously, paying more attention to an ad or brand involves more processing effort.

According to Clark et al. (1994), an important aspect of the attention concept is attention itself, which is orienting response to a stimulus signifying that the stimulus has made contact with a sense organ. Attention is unstable in itself as a concept and it can be varied at will to change the clarity of sensory representations. That means consumers can choose to focus on a specific area of an ad or brand elements to make that area more clearly accessible to the mind. This area of focus can be described in two levels of attention: the area itself and the surroundings or outside of the area. Focusing on a specific element of a brand or ad decreases the clarity of all other elements in that ad or brand. The consumer’s mind is more attentive in remembering that element or area shown only for a brief period.

The literature shows that attention-getting properties of stimuli can be classified physical properties and collative properties (Mackenzie, 1986). The physical properties have an effect on the intensity of the stimulus, such as brightness, colour and size. According to Soley and Reid (1983), physical properties attract consumers’ attention and most physical properties have a positive effect on recognition, such as ad size, size of illustration and type of sizes. Other elements that have a positive effect on recognition include the areas of copy and colour, and the number of colours, illustration units and copy units (Diamond 1968; Hanssens & Weitz 1980; Twedt, 1952). Consumers may respond differently to physical ad properties (Celsi & Olson, 1988) because their responses may mask the actual relationship between the physical ad proprieties and attention (Rosbergen et al., 1997).
Furthermore, the collative properties are connected to comparison or collation of stimulus elements such as complexity, motion, unit formation and novelty. Studies have investigated the impact of collative properties of advertisements on allocation of attention, finding that ads rated as ‘surprising, incongruous, or funny’ were more likely to have been read (Holbrook & Lehmann, 1980) and the visual complexity of magazine ads was positively related to looking time (Morrison & Dainoff, 1972).

Prior research on visual attention and advertising has predicted that design characteristics of advertising elements influence behavioural outcomes through their effects on attention (Zhang, Wedel & Pieters, 2009). For instance, Pieters, Wedel and Zhang (2007) found that the sizes of several feature ad design elements significantly affected consumers’ attention to the advertisements. Nisbett and Ross (1980) examined the attention-getting properties of information contained in messages and manipulated ‘vivid’ and ‘non-vivid’ information. They hypothesised that ‘vivid’ information has a greater impact on judgments than does ‘non-vivid’ information because it attracts more attention and remains in thought longer. This showed that vivid information expresses more deeply than non-vivid information (Nisbett & Ross, 1980; Taylor & Thompson, 1982).

Moreover, visual attention is described as an operation in the mind, which can be a localised priority in processing information and may lead to improved speed and a reduced threshold for processing events (Deubel & Schneider, 1993; Pieters, Wedel & Batra, 2010; Rosbergen et al., 1997). Visual attention can be affected positively in evaluating consumers’ responses after exposure to a print ad (Smit, Boerman & Meurs, 2015). In addition, the ad itself and its location can attract consumers’ exposure, especially within a print vehicle (Finn, 1988). Greenwald and Leavitt (1984) investigated the effectiveness of advertising massages on consumers’ involvement by processing four levels in order from low to high: pre-attention, focal attention, comprehension and elaboration. They found that the lower level
requires relatively little capacity, whereas the high level requires more attentional capacity and increases durable cognitive and attitudinal effects. Pre-attention processing enables the consumer to determine that action, and the ad is not a continuation of what was being processed previously (Finn, 1988). In the pre-attention stage, consumers’ minds may not able to continue processing information. Continuing exposure to an ad in the pre-attention stage leads to processing of the ad in a manner that will contribute most efficiently to achieving the consumers’ goals. Processing at the focal attention stage requires enough additional capacity to determine what the ad is about (Greenwald & Leavitt, 1984).

**Attention and Memory**

The advertising literature shows a positive relationship between attention and consumers’ memory, recall and recognition (e.g. Finn, 1988; Franke, Huhman & Mothersbaugh, 2004; Gronhaug, Kvitastein & Gronmo, 1991; Zhang et al., 2009).

According to Wright and Lynch (1995), consumers pay more attention to information about product attributes when it is ‘media-congruent’. This means advertising information seems more congruent with search products than experience products. Franke et al. (2004) suggested that there is a greater effect of information on readership for search products than for experience products.

Consumers may pay less attention to ads that are irrelevant to their experience of brands or products, and they may spend less time thinking about them (Burk & Srull, 1988). However, a new ad or brand attribute attracts more attention than an old attribute, and this attention enhances consumers’ memory to recognise or recall brand or ad information (Unnava & Sirdeshmukh, 1994). Furthermore, brand familiarity is related to attention. For example, Kent and Allen (1994) reported that a familiar brand catches more attention than an unfamiliar brand because it is recognised as being available to consumers. At the point of
purchase, brand familiarity works well to guide consumers’ attention towards a specific brand (Alpa, Hutchinson & Lynch, 1991).

Additionally, a feature advertisement also works well at the point of purchase. According to Shankar and Krishnamurthi (1996), when consumers pay more attention to feature advertisements it increases the likelihood of that featured product being added to their shopping list. Moreover, it increases sales when consumers rely on memory to retrieve product information at the point of purchase (Treistman & Greg, 1979). This means there is a positive relationship between consumers’ attention and brand sales. An experimental study by Van der Lans, Pieters and Wedel (2008) demonstrated the relationship between visual attention and in-store decision making. They suggested that the amount of attention consumers pay to feature advertisements can positively affect the sales outcomes of the featured products.

According to Kroeber-Riel (1984), about 90% of viewers fixate on the dominant pictures in an ad before they fixate on the whole ad or ad copy. The long-term focal attention effect can be influenced by an ad’s visual image, which may make subsequent recognition possible (Finn, 1988). Eye-movement studies indicate that this step is achieved most economically by processing the pictorial material first. Greenwald and Leavitt (1984) reported that the enduring effect of focal attention is the formation of a visual image of the ad. Thus, recognition of an ad’s pictorial content is indicative of processing at the focal-attention stage.

Carroll, Young and Guertin (1992) studied the effects of pictorial and text print ad elements on consumers’ attention, with two main findings. The first one is related to processing information from picture and text. That type of processing seemed to be relatively isolated events in that viewers did not move back and forth repeatedly between the picture and the caption. The second finding is that the picture frequently was not fully inspected until
the caption had been read, which means that examining attention to the whole ad may be a better way to understand the effectiveness of advertising elements. In the same stream, Rayner, Rotello, Stewart, Keir and Duffy (2001) investigated attention to the print ads by manipulating two elements: ad texts and pictures. They divided viewers into two groups: the first group was told to pay special attention to the car print ads and the second group was told to pay special attention to the skin-car ads. The results showed that viewers paid more attention to text areas than picture areas, but the fixation duration and saccade length were longer in the latter. The viewers tended to read large print rather than smaller print ads.

Carroll et al. (1992) also found the average fixation duration on the ad picture (270 ms) was longer than on the text (236 ms), but the average saccade sizes were slightly higher on the text (2.79 ms) than on the pictures (2.68 ms). Furthermore, they found that results in shorter saccades than typically occurs for most scenes. Andrews and Coppola (1999) and Rayner (1998) also compared eye movement in reading and scene perception, and reported that fixation duration and saccade length tended to be longer in scene perception.

**Discussion**

Although some research has started to take electronic measurements of attention via eye tracking much attention research is based on reanalyses of existing data sets collected for professional purposes. That is, commercial market research firms will collect eye tracking data to evaluate the advertising responses and report back to brand managers a thumbs up or down on advertisements. What can be done is straight forward research like the movement of eyes from headline to picture and copy, which may be valuable to a brand manager, but not always to a researcher. Largely, commercial eye tracking studies merely give an assessment of specific ads. While is this valuable, it does not, however, try to get the mechanism for how attention, and then memory, lead to higher order effects like brand preference. To learn more
about brand attitude formation, we also need to understand the role of the basic processing of brand information and the most fundamental of these is brand familiarity.

BUILDING BRAND FAMILIARITY

Overview

Brand familiarity is a continuous variable that is described as the reflections of an expertise brand accumulated by the consumer (Alba & Hutchinson, 1987; Hoch & Deighton, 1989). Baker, Hutchinson, Moore and Nedungadi (1986) noted that it could be directly linked to the amount of time that has been spent processing brand information, regardless of the type or content of the processing involved. Brand familiarity can also be described in terms of what the consumer knows or thinks about the brand (Flynn & Goldsmith, 1999). Consumer knowledge about a brand is an important aspect in identifying the familiarity of the brand or for other brands from the same product category. This knowledge can be received by advertising exposure. The brand prior knowledge and strong of belief have an effect on consumers expertise the brand (Ha & Perks, 2005). The literature highlights two features of brand familiarity. First, brand familiarity is a context-independent variable and second, it can be affected by experience such as advertising exposure, purchase behaviour and product consumption. Focusing on the experience of advertising exposure presents the advertising effectiveness on consumers’ attention, memory and affect.

In addition, some studies have suggested that advertising in the national media tends to achieve a high level of brand familiarity (Kent & Allen, 1993; Stewart, 1992). Kent and Allen (1994) examined the familiarity levels of brands that advertise in national magazines and found that they were more familiar to respondents than other types of national media. Consumers can read magazines in their own time, which may increase the time to process
advertising information. Baker et al. (1986) distinguished brand familiarity as the amount of time that consumers have to spend on processing brand information. Brand information stored in consumers’ minds through a specific way of learning new information at the time of exposure. The processing of new information about a target brand can be influenced by the brand’s familiarity, exposure time and interference effects that arise from receiving additional information about another brand from the same product category.

**Brand Familiarity and Interference**

Researchers have suggested that competitive interference differs between familiar and unfamiliar brands. Peter and Olson (1987) reported that new attribute information for a familiar brand will be stored in consumers’ minds as existing information for the same brand. After consumers’ exposure to brand advertising, new information for a familiar brand will be linked only to the ‘node’ for the relevant brand. However, a new attribute information for an unfamiliar brand will be stored during advertising exposure under another attribute brand such as following new brand from the same product category or stored under a familiar brand from the same product category (Pryor & Ostrom, 1981). Familiar brands therefore should be less affected by competitive interference.

Laroche, Cleveland and Maravelakis (2006) also examined the effect of competitive advertising interference and ad repetition for familiar and unfamiliar brands. They found that recall for both familiar and unfamiliar brands was greater when competition is absent. Recall and cued recall were most affected by advertising repetition when followed by attitude accessibility.

Moreover, the advertising literature shows that the brand ‘schema’ has a role in interference effects for both familiar and unfamiliar brands. A brand schema is defined as the hierarchical network of associations to the brand (Peter & Olson, 1987). A schema can be
developed by experience of a brand. A high level of experience with a brand leads to more development of the brand schema, which may increase the link between the brand and its attributes and between the brand and its product category. Those links should improve retrieval of the brand information. Therefore, there is a positive relationship between an attribute and its brand on one side and retrieval of the brand information attribute on another side. A stronger relationship improves retrieval of the brand information attribute (Hutchinson & Zenor, 1986). In addition, Keller (1987) reported that greater brand knowledge might produce a stronger link in a consumer’s memory under brand ad trace and might also mitigate the harmful effects of competitive interference.

The consumers’ motivation to process brand information may also be significant (MacInnis, Moorman & Jawoski, 1991; Moorman, 1990). Consumers encountering a large number of ads could lead to competitive interference effects, as they find it difficult to elaborate information on ads for familiar and unfamiliar brands. During the time of ad exposure, consumers might also tend to manipulate familiar and unfamiliar brand information. Consumers might pay more attention to product information for familiar brands because they recognise those brands as being available to them. Therefore, brand familiarity is affected by competitive interference and guides the consumers’ attention to a specific brand.

Unfortunately, most of the literature trying to understand the role brand building is prior to the advent of eye tracking. There is a literature on brands from advertising, it has largely moved away from the kinds of issues in building brands with advertising. However, before concluding, some additional discussion is needed to explore eye tracking.

NEW METHODS: EYE TRACKING

Definition and Techniques
Eye tracking is defined as determining what viewers look at (http://www.labnol.org). It is also described as a technique allowing the tester to determine the eye movements and eye-fixation patterns of a person (Namahn, 2001), which shows exactly where an observer is looking. From the definition, this technique is based on observers’ eye movements, which shows the observers’ consideration of view.

Why is eye movement important in eye tracking? People always move their eyes to bring information into their minds about what happens around them in each particular moment and location. For example, with a visible field of view, people bring into their minds a particular portion of that view, which is in this case related to the central gaze of direction (Duchowski, 2007). The focus on some portion of the view could be described as points that gain more attention than other points in the same view. This behaviour may be described as the person’s consideration on the object of interest. To investigate that consideration, researchers need to observe gaze direction and fixation duration.

According to Courboulay, Mohamed and Silva (2007), humans illustrate better gaze direction than other mammals based on two facts: the development of the visual cortex and humans’ sclera. The visual cortex in humans’ eyes, located in the posterior pole of the occipital cortex, is more developed than in other mammals (Duchowski, 2007). Furthermore, humans have a clearly visible white area (sclera) around the pigment part of their eyes (iris) (Courboulay et al., 2007). We can see the development of eye contact and gaze direction in newborn babies who are able to focus on their mother’s eyes in their first days of life and will later discover the world using their eyes. Eye contact and gaze direction will also have a role in social communication throughout their live.

The eye-tracking technique has been used in different areas of study such as psychology, medicine, education and advertising. This technique started in 1879 (by Louis
Emile Javal) when studying readers’ behaviour. Up until the present day, it has proved its usefulness in academic research (Nielsen & Pernice, 2010).

The eye-tracking technique gives advertisers some insight into what consumers find interesting and what draws their attention. It may also provide clues regarding how consumers perceive information after their advertising exposure. Moreover, to understand the effects of advertising on consumers’ minds, an advertiser needs to understand how consumers pay attention to advertising and how that attention contributes to improving brand memory (see Pieter et al., 2007; Rayner, 1998; Suppes, 1994; Wedel & Pieters, 2000).

An action of the eye movement contains a sequence of three aspects: fixation, eye immobility periods and saccades, which are quick jumps from fixation location (Wedel & Pieters, 2000). During an eye movement, some extraction of information occurs. That information is received during fixations, which could reflect the moment of attention to the stimulus, whereas an image is basically suppressed during saccades (Sperling & Weichselgartner, 1995). The literature shows that eye fixation seems to have different stimulus features. Rayner (1998) presented the eye-fixation concept as two types of information: pictorial or textual information, which may related to the ad or brand. That means the eye-tracking technique is the best way to measure consumers’ attention to both brands and ad elements.

The advertising literature shows that eye-tracking measurement has provided reliable information on attention to advertisements. Wedel and Pieters (2000) presented a model of eye-fixation effects on brand memory. This model is calibrated to eye-movement data, which was collected during experimental exposure of 88 subjects to 65 print advertising examples. The authors used this model of eye-tracking technology to record eye movements and to identify the gaze directions and eye fixation. The recorded data was counted in a total number
of fixations by each participant on each advertising element of each ad and was then followed by a Poisson distribution.

DISCUSSION

Although research has dealt with many of the pieces that make up the role of creativity in building strong brands, little research has “connected the dots” and put many of the components together to make informed explorations into these effects. As for what is limiting scholars, it is largely the availability of eye tracking machines, which are still expensive. Although a few researchers have them, knowledge of what one can do with them appears scarce and many scholars are not willing to spend the time and energy investing in the method paradigm. It does not help matters that the existing eye tracking research focuses on reanalyses of existing data sets and thus cannot show scholars the value of using controlled experiments. Given the way the forced-exposure experiment is imbedded in advertising research traditions, more startling (and counter intuitive) results will be needed to show the value of eye tracking.

Several future directions, however, can be suggestion. For example, interference research has been so consistently negative on competitive effects in advertising, any findings that may suggest interference could be positive would be surprising. It may be that interference may serve to peak consumer interest in a category given that that close proximity of ads allow more of a side-by-side comparison between brands—something that is often valued in comparative advertising. Although ordinarily ads may be viewed for only a few seconds—hardly enough to form any conscious memory—interference in memory may be something that is a function long forced-exposure times only. Thus, interference could be a positive force in advertising and it may be of value for consumers to find ads in all the same place in a similar way consumers value retail stores being together in a center.
The link between attention and brands may also be of interest. Well-known brands have a great deal of equity in terms of consumer knowledge, so a worthwhile question is how that greater knowledge shows up in attention. For example, it may be that familiar brands are viewed less time than unfamiliar ones, but that time is spent more on deep thinking about the brand. Instead, viewing unfamiliar brands may be more focused on just trying to learn about the existence of the brand rather than any other information. That is, there is a processing fluency that favors familiar brands, and thus the goal of an unfamiliar brand is to build a similar level of processing fluency. To do that, advertising needs strong engagement of consumers and to do that, a highly level of creativity may be required.

It is known that knowledge of consumers influences the creative quality of work creatives produce (Kilgour & Koslow 2009; Koslow, Sasser & Riordan 2006). However, it unclear whether creatives learning how their work is received by consumers would react to such knowledge. One argument is that they will be able to better refine their work and more accurately predict what kinds of creativity will best draw attention of consumers. Alternatively, this information may distract creatives such that they are less able to come up with original work, instead focusing on the most appropriate work, which may be of questionable creativity.

Creativity is an area that has long excited advertising researchers—despite the fact that it is only recently that those researchers have focus on the topic. In many ways, creativity and attention measurement via eye tracking are areas that must go together. If the main benefit of creativity is attention—something that has wide agreement in the field—then until strong measurement of attention practiced widely, the full potential of creativity research cannot not be achieved. However, given this call to research this article represents, we hope we will not need to wait much longer for truly provocative and counter-intuitive research that will alter and expand our research paradigm.
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CHAPTER 3: THE SECOND PAPER

Brief Introduction to the Second Paper

The second study in the thesis, ‘Is Creative Advertising a Curse or Cure? Why Creativity Is Good for Ads, but Can Be Bad for Brands’, is an experimental study that uses an eye-tracking technique as the main study method. The goal of this study is to investigate the interaction of two main themes: brand familiarity and advertising creativity. This study sets a baseline for other studies involving how their fence will be viewed. The study confirms that advertising creativity benefits unfamiliar brands, but harms familiar brands.

The study manipulates brand familiarity (familiar versus unfamiliar brand) with advertising creativity (low versus high) within the subject design. A pre-test is used to identify familiar and unfamiliar brands. Highly creative advertisements were selected from award winners. An online magazine with eight versions was designed using 24 advertisements. Consumers’ attention, memory and affects were measured. The subjects participated in a one-session eye-tracking experiment, and asked to read the online magazine as they would in their own daily lives.
The study suggested that creativity leads to greater attention. Additionally, creativity combined with brand familiarity heightens attention, which influences memory and affects. It used a generalised liner model (GLM) to predict attention and affect, and a logistic regression model for memory. All study data were analysed using SAS. Attention was measured in seconds and transformed by a logarithmic scale. Questionnaires were used to measure memory and affects, and data were coded.

In addition, attention-oriented dependent variables are total fixation duration toward advertisement \([\log(\text{TFD}_{\text{ad}})]\), total fixation duration toward brand \([\log(\text{TFD}_{\text{brand}})]\), non-fixation duration toward the advertisement \([\log(\text{NFD}_{\text{ad}})]\), and non-fixation duration to the brand \([\log(\text{NFD}_{\text{brand}})]\). In addition, the affect dependent variables are affect toward the advertisement \((A_{\text{ad}})\), and affect toward the brand \((A_{\text{brand}})\) were tested as dependent variables. Memory-oriented dependent variables are advertisement recall, brand recall, advertisement recognition and brand recognition.

The study produced important findings for both advertisements and brands. The main finding is that advertising creativity has a negative influence on familiar brands, but has a positive influence on unfamiliar brands. In addition, the primary contribution of this study is that highly creative advertising may have negative impacts on major brands. It provides insights as to why advertising creativity is good for advertisements, but potentially bad for brands. The study also provides important managerial recommendations and suggestions for academic researchers.
Is Creative Advertising a Curse or Cure?  
Why Creativity Is Good for Ads, but Can Be Bad for Brands  

Abstract

Is highly creative advertising actually *bad for brands*? Are brand managers correct to avoid highly creative advertising campaigns for tried and true formulas? Although many agencies and researchers advocate using highly creative advertising, brand managers often are resistant, preferring less creative alternatives. This study reports findings from an eye-tracking experiment demonstrating how brand familiarity moderates the effects of creativity. In an electronic magazine format, eight creative award winning print ads were compared with eight control ads. Brand familiarity was manipulated with half of the exposures attributed to familiar brands and the other half to less familiar brands. Results show that creative advertising enhances visual attention for ads supporting unfamiliar brands, and improves ad affect ($A_{ad}$) and ad recognition for most situations. However, creative advertising leads to *less* brand affect ($A_{brand}$) and brand recognition for *familiar* brands, but *more* brand affect ($A_{brand}$) and brand recognition for *unfamiliar* brands. Creativity may be a powerful tool available to marketers, but it must be carefully managed. Sometimes less creative advertising may be a better option.

Keywords: Advertising creativity; Brand familiarity; Affect; Memory; Eye-tracking experiment
Academics and practitioners frequently advocate developing and using highly creative advertising campaigns. Academics show creative advertisements can enhance consumer memory (Baack, Wilson and Till 2008; Lehnart, Till and Carlson 2014), attitudes (Rosengren, Dahlén and Modig 2013; Ang and Low 2000; Sheinin, Varki and Ashley 2011), attention (Pieter, Warlop and Wedel 2002), processing (Smith, Chen and Yang 2008; Smith et al 2007), and effectiveness (Goldenberg and Mazursky 2008; Goldenberg, Mazursky and Solomon 1999; Li, Dou, Wang and Zhou 2008; Sasser and Koslow 2008). Practitioners seek out and celebrate examples of how highly creative campaigns are highly effective (Bernardin and Kemp-Robertson 2008; Field 2011; Hurman 2011; Twose and Jones 2011).

While some marketing managers welcome highly creative work others are still wary of it (Koslow, Sasser and Riordan 2006; Wang et al 2013). Some brand managers signal their agencies that they are not open to highly creative work, so if they are presented with such work, they refuse to support it (Sasser, Koslow and Kilgour 2013). Researchers (West 1999; West and Berthon 1997) show that many managers consider highly creative advertising inherently risky and they hesitate to take on that risk unless the brand is in trouble. Although creativity is often seen as good marketing (Andrews and Smith 1996), are many managers failing to get the best work for their brands by succumbing to the tangible, but irrational fear of new, innovative ideas (Sullivan 2012; Wood and Moreau 2006)?

The limited empirical evidence on creativity’s effects is mixed. Creativity can enhance attitudes and memory, but it doesn’t always “stick” (Till and Baack 2005; Baack, Wilson and Till 2008). If creative ads increase consumers’ attention, then consumers’ ability to recall and recognise both ads and brands may also increase (Pieters, Warlop and Wedel 2002). So advertising needs to stop consumers and hold their attention in likeable ways (Pieters and Wedel 2004; Pieters, Wedel and Batra 2010) and this becomes increasingly difficult with rising media noise and ad avoidance. Yet, some creative ads may overwhelm
consumers and never get attention (Pieters and Wedel 2004; Pieters, Wedel and Zhang 2007; Zhang, Wedel and Pieters 2009; Baack, Wilson and Till 2008). Creative ads may “wear-in” faster (Rosengren, Dahlen and Modig 2013; Lehnert, Till and Carlson 2013), but many ads, creative and non-creative alike, never “wear-in” at all (see Pechmann and Stewart 1988). Thus, creative ads may not work better for all brands in all cases and a reason for this may be the brand’s market share position.

Some managers for large brands insist that they must carefully manage the creativity in their advertising (Benady and Kemp 2013). Their goal is to stay up to date without fundamentally changing the brand formula. Maintaining consistency means nothing corrupts the carefully delineated brand. It is not that they are against creativity, but rather they are extremely constrained in its use. However, smaller brands, often called “underdog” brands, appear to thrive on creative advertising. Caan (2013) advocates that start up smaller brands embrace more creative advertising approaches including internet marketing and social media.

To make sense of the conflicting information, it is posited that brands with lower market share have the most to gain from leveraging creativity, but brand leaders have much to lose. Pechmann and Stewart (1990) note how ads for major brands attract consumers’ attention and already have a built-in advertising effectiveness advantage over ads for minor brands, so to enhance minor brands’ advertising, they used comparative ad claims to attract attention. It is proposed that ad creativity performs a similar function. Although heightened attention may benefit ads for “underdog” brands whose ads might otherwise get ignored, there are important costs to creativity for strong brands. Consumers possess a great deal of accumulated knowledge about major brands and the information presented in a creative ad may be confusing if the new stimuli conflicts with established brand information. Thus, many consumers pay attention to and even like creative advertisements for dominant share brands.
Yet, the associated confusion leads to net negative effects on brand attitudes and memory, a parallel finding to what Pechmann and Stewart (1990) reported as brand misidentifications.

Insights from advertising industry anecdotal evidence suggests greater creativity not only leads to more effective advertising but that creativity also has more positive effects on underdog brands. The literature on brand familiarity and creativity is examined to develop hypotheses that predict consumer attention, ad and brand affect, as well as the memory effects of creative advertising. An eye tracking experiment is used building on Pieters, Warlop and Wadel (2002). Creativity is manipulated by comparing eight creative award-winning ads with control ads. Brand familiarity is manipulated directly, instead of relying on judges’ assessments of overall ad familiarity. The results demonstrate that creativity heightens the attention to, attitudes toward and memory for minor brands’ advertising, but frequently harms advertising responses for major brands.

The managerial implication is that creative advertising has widespread benefits for minor brands, but introduces interesting concerns for dominant brands. Of course, it is possible that a creative campaign that squarely reinforces the inherent truths of a major brand could prove to be most effective. A surprising conclusion is that creativity is a powerful advertising force that must be carefully managed and greater creativity may uncork unusual effects. Using creativity in advertising may be a formidable strategy, but sometimes less creative advertising that reinforces prior positive attitudes might be a better option.

Background

Anecdotal evidence suggests a strong relationship between underdog brand status and highly creative advertising. Recent winners of the 2013 Cannes Lions advertising competition include many new, emerging or less known brands. For example, the Film Lions Grand Prix
winner for 2013, McCann’s Metro Trains Melbourne campaign, *Dumb Ways to Die*, a public safety campaign, would not be a top of mind brand for even the most regular Melbourne rail commuters. A casual perusal of the Cannes Lions winners’ lists shows an eclectic mix of both well-known and unfamiliar brands, such as Cheil Worldwide’s *Bridge of Life* for Korea’s market share leader, Samsung Life Insurance, but also Y&R Dubai’s *Pelicans* for less well known upmarket British retailer, Harvey Nichols (Kilgour, Koslow and Sasser, 2013).

Similar checks of award listings confirm that underdog or emerging brands leverage creativity to gain awareness and breakthrough clutter. The British Institute of Professionals in Advertising (IPA) runs a biannual effectiveness competition rating campaigns as gold, silver and bronze. What is unique about this competition—and the data that comes out of it—is that the IPA keeps careful track of which advertisements won creativity awards both before and after entry into the competition. Although it is clean data—an unusual virtue in advertising effectiveness studies (Jones and Blair 1995; Koslow and Tellis 2010; Wood 2009)—the data is observational in nature. Reports based on the IPA effectiveness data (Field 2011; Hurman 2011; Twose and Jones 2011) show the higher the level of effectiveness award granted a campaign, the more likely it was to also win a major creativity award. IPA gold winners often win creativity awards, but the percentage drops as one goes from gold to silver to bronze, with those entered campaigns not receiving an IPA award rarely winning creativity awards.

The authors’ own reanalysis of IPA data shows an indicative but surprising pattern in that the relationship between creativity and effectiveness may be moderated by a brand’s market position. For example, of the 29 gold level winners of the IPA’s effectiveness awards, 11 also won creativity awards (38%), but these 11 are mostly for less well known brands. Leading brands like Tesco, Marks & Spencer, Virgin and Colgate tend to dominate the remaining 18 who did not win creativity awards, and there were only a few underdog brands among this group. Only 11 of the 70 bronze level winners (16%) also won creativity awards,
and of those 11, all but two (Virgin and BMW) are underdog brands. Of the remaining 59 bronze level campaigns garnering no creativity awards, they are dominated by major brands like Kellogg’s, Sainsbury, Johnson & Johnson, British Telecom, Sony Ericsson, and Boots.

Not only are campaigns winning higher level effectiveness awards more likely to win creativity awards, underdog brands are more likely to win creativity awards—and are presumably more likely to gain from creative advertising. Do creative campaigns perform better in terms of attention, attitude formation and memory? And are the effects stronger for underdog brands? To address these questions, experimental laboratory studies examining the effectiveness of creativity are needed. However, researchers also need to forge a theory of creativity’s effect. Thus, a productive starting point is to examine the differences between leading and underdog brands, an area that is usually operationalized as brand familiarity.

**Brand Familiarity and Consumer Information Processing**

Brand familiarity has been defined as a uni-dimensional construct directly related to the time spent processing brand information, regardless of the type or content of processing involved (Baker, Hutchinson, Moore, and Nedungadi, 1986). The construct is context-independent but can also be affected by advertising exposure, purchase behaviour, and product consumption (Rosengren, Dahlen and Modig 2013). Alba and Hutchinson (1987) define brand familiarity as the brand reflections accumulated by a consumer and they focus on product-related experiences through advertising exposure, product usage, and purchase behaviour. Hoch and Deighton (1989) present brand familiarity as the brand related experiences accumulated by consumers. The concept also refers to consumer knowledge about the brand, and described in terms of what the consumer thinks about the brand (Flynn and Goldsmith, 1999). Brand familiarity serves as an umbrella term related to consumer expertise, prior knowledge, and strength of belief (Ha and Perks, 2005). Brand familiarity can
be increased by brand experiences such as advertising exposure or product usage which improves consumer knowledge about the brand.

Brand familiarity also influences consumers’ ability to recall advertising information. A key reason for poor memory for advertising is inattention (Burke and Srull 1988). Unfortunately for minor brands, consumers pay more attention to familiar brands’ ads if for no other reason than that familiar brands are recognised as being available to them (Kent and Allen 1994). Brand familiarity is central to information processing and it guides consumers’ attention (Alba, Hutchinson, and Lynch 1991).

Although brand familiarity is a key theoretical construct, researchers tend to use market share position as its operationalization when designing studies (e.g., Hardesty, Carlson and Bearden 2002). A few researchers (e.g., Laroche, Cleveland and Maravelakis 2006) make the connection between brand familiarity and market position explicit, but most do not. Although some brands like Louis Vuitton or BMW are familiar, since they are exclusive luxury brands, they are aspirational rather than dominant share leaders. In general, major share brands are more widely used by consumers which bestow advantages in familiarity, awareness and fluency (Pechmann and Stewart 1990).

How could attention towards ad for unfamiliar or minor share brands be increased? One way is to make ads more creative because such ads tend to draw and hold attention (Kover, Goldberg, and James, 1995; Till and Baack, 2005; Sasser and Koslow, 2008). But the question is whether the advantages of creativity are specific to unfamiliar brands or all brands? To address this issue, the literature on creativity’s effects is reviewed.

**Do Creative Ads Lead to Better Liking for Ads and Brands?**

Advertising agency practitioners consider the relationship between creativity and effectiveness to be almost a truism—but outside the agency environment not everyone
agrees. The Cannes Lions Festival, which celebrates the advertising’s creative successes, has recently added an awards category on effectiveness due to pressure to show how creativity can enhance marketing effectiveness. Sasser and Koslow (2013) detail how some clients support creativity by seeking it out, but others are reluctant to explore, preferring to stick with a safer approach. Although West and his colleagues (West 1999; West and Berthon 1997) detail how clients are often afraid to take risks with creative advertising, other scholars show how the creative excellence of campaigns is a key factor in selecting and remaining with an agency (Griffin, McArthur, Yamaki, and Hidalgo 1998; Henke, 1995; Waller 2004). This controversy illustrates that it is still unclear if creative ads work better in all cases.

Given the definition of creativity, it should be a positive force in a brand’s communication strategy. The most accepted creativity definitions have two components: originality plus some kind of appropriateness measure (Sasser and Koslow 2008). Such a measure may range from being on-strategy (Koslow, Sasser and Riordan 2003) to consumer-relevant (Smith et al 2007) to culture-consistent (Kim, Han and Yoon 2010).

Some evidence suggests a positive relationship between creativity and effectiveness (El-Murad and West 2004). Pieters, Warlop and Wadel (2002) show that the originality component of advertising enhances attention and Smith, Chen and Yang (2008) explain how it increases brand awareness. Yang and Smith (2009) propose that creativity works by postponing closure among consumers leaving them more willing to entertain, and possibly accept, creative ad claims. This corresponds to the implicit theories that creatives have regarding how creativity works, that first one needs to breakthrough (gain attention) and then one can have a dialogue (deliver a persuasive message) (Kover 1995; Nyilasy and Reid 2009). Kover, Goldberg, and James (1995, p.29) argue creativity “Pushes the message into a viewers’ mind”. The relationship between creativity and effectiveness may look like two
sides of the same coin and creativity is critical to be invited in to engage with the consumer (Sasser 2008).

To explain the opposition some marketing managers have regarding creative ads, it could be: 1) managers are merely being risk averse to things they don’t understand or 2) this aversion reflects a deeper truth that is yet to be uncovered. Some commentators are convinced of the former argument (Rothenberg 1994; Sullivan 2012), but others support the latter (Politz 1960). Some think creative ads tell a story from an artistic point-of-view, but sometimes fail to tell the brand’s story as well. Creative ads may be viewed as “eye-candy,” a pun on the selfish desire of some creatives to produce modern art rather than a persuasive message (Sasser and Koslow 2008). Such ads might be creative to someone whose definition of appropriateness has a large artistry component, but for those who view appropriateness as strategy the same ads might not be creative (Koslow, Sasser and Riordan 2003).

Definitional issues aside, there still are concerns about consumer comprehension of creative ads. Creative advertising’s purpose may be to elicit deeper processing (Kover 1995; Smith et al 2007), but another interpretation is that creative ads require more processing. Some insight may come from the related concept of ad incongruency. Most, but not all, studies of ad incongruency suggest these ads increase processing and improve attitudes. Such ads require more “work” from consumers, thus rewarding the advertised brand. Ad-brand incongruencies improve some responses, but harm others (Dahlén 2005; Dahlén et al 2008). However, most ad incongruency studies use forced exposure (e.g., Heckler and Childers 1992) giving subjects little choice but to solve the incongruency. In distracted environments like airports, consumers may ignore creative billboards due to information overload and avoid direct eye contact with the ad. But in a forced exposure situation like a cinema, where all eyes are directed on a focal point screen, creativity may help (Baack, Wilson and Till 2008).
Creative advertising’s problems with comprehension get worse when consumers know enough about brands such that significant—and hard to resolve—incongruities occur. Incongruity between the country of origin implications of foreign-sounding brand names and actual country image can become so severe that they sometimes backfire (Melnyk, Klein and Volckner 2012). So can putting together two brands associated with different cultural schemata (Torelli and Ahluwalia 2012). For an ad’s creative elements to work as intended, several elements have to align themselves. As Alden, Mukherjee and Hoyer (2000) show in the related area of humor in advertising, multiple elements serve as mediators and moderators to produce an effective humorous ad such that the right sequence of thoughts happens.

Creative advertising might attract more attention, and possibly even enhance ad affect (Smith, Chen and Yang 2008), but that doesn’t mean that it leads to higher order effects like positive brand attitudes. As Mehta, Hoegg and Chakravarti (2011) note, expertise is a double edged sword in that consumers want to “fill in the gaps” of information about things they know about, but creative advertising can produce a variety of unusual implicatures. For familiar brands, there is more of a likelihood of running into unresolvable connotations and connections that will bring down attitudes toward the brand. However, when the brand is unfamiliar, it is a “blank slate” and any implicatures will fit and enhance brand attitudes. This may explain the recent spate of corporate name changes by firms with negative public opinion (e.g., Verizon and forerunners Bell Atlantic and Nynex). Fresh new branding can help a firm escape difficult implicatures that the old familiar brand cannot change.

H1a: Highly creative advertising reduces brand attitude for major brands.

H1b: Highly creative advertising increases brand attitude for minor “lesser known” brands.
Do Creative Ads Lead to Better Memory?

Although scholars suggest that creative advertisements enhance memory, such influence is not assured. MacInnis and Price (1987) suggested that when advertising employs the vivid imagery often associated with highly creative advertising, it can enhance the ability to recall brand and ad information. Ang, Lee, and Leong (2007) reported that highly creative slogans are easy to recall and recognise and found that highly creative ads produce higher recall than control ads. Creativity also improves ad recall with a one-week delay (Till and Baack, 2005). Creativity enhanced ad and brand recall and recognition in a cinema environment, but not in an airport setting (Baack, Wilson and Till 2008). Creativity’s enhancement of ad recognition increased over time. However, studies have not measured whether this is due to the benefits of increased attention given to creative advertising.

Creative ads are also more distinctive (Heiser, Sierra and Torres 2008) introducing another double-edged sword: distinctive stimuli are sometimes easier to recognize, but harder to recall. More distinctive stimuli connect with existing memory less, so when trying to recall ads or brands, there are few memory cues to rely on. Thus, creative advertising, which is more distinctive, may suppress ad and brand recall. Even though distinctiveness theory suggests creativity may reduce recall, its effect may depend on brand familiarity. The additional attention creative ads bestow on less well known brands may encourage deeper processing which could compensate for distinctiveness’s negative influence on ad and brand recall. But major brands already receive more attention, so the relative benefit of increased attention may be minimal, and the net effect of creativity will be negative.

H2a: Highly creative advertising suppresses advertising recall for major brands.

H2b: Highly creative advertising suppresses brand recall for major brands.
The major benefit of creative advertising may come in recognition because distinctive stimuli are more recognizable. For smaller brands, the upside of distinctiveness may have large benefits. Such brands and their ads are less likely to be recognized in the first place and creativity may provide additional attention that these brands will not otherwise receive. A creative advertisement may greatly increase recognition for a less familiar brand, but major brands see little additional value in creative advertising. These brands may already enjoy high recognition so there is little potential for gains. A creative ad for a major brand can be likened to an “extreme makeover,” or drastic change to the point of being unrecognizable, and may be as confusing in advertising as it is in personal appearance (Gallagher and Pecot-Hebert 2007). Small, underdog brands may have the most to gain in recognition, but creativity’s influence on recognition may be negative for major brands.

H3a: Highly creative advertising enhances advertising and brand recognition for “lesser known” minor brands.

H3b: Highly creative advertising reduces advertising and brand recognition for major brands.

To set these effects in context, the hypotheses are presented as part of a complete model in Figure 1. It has not been subject to a hypothesis, but it should be confirmed that creativity leads to better attention. Creativity’s effects are also mediated through the familiar hierarchy of effects process (e.g., Smith, Chen and Yang 2008), in which attention leads to memory and affect. In this way the moderating effects of brand familiarity are observed.
Figure 1
Initial Hypothesised Model

Method

Advertising Eye Tracking Research
Tracking consumers’ eyes gives advertisers insight into what participants found interesting and what drew their attention. It also provides insights regarding how participants perceived information during and after their exposure to advertising. To understand advertising’s effect on a consumer’s mental processing, an advertiser needs to understand how consumers pay attention to advertising and how that attention contributes to improving brand memory (see Suppes, 1994; Rayner, 1998; Wedel and Pieters, 2000; Pieters, Wedel, and Zhang, 2007; Pieters, Wedel, and Batra, 2010; Rosengren, Dahlen and Modig, 2013). This study builds on previous research using an experimental treatment approach consistent with earlier scholarly methods.

The literature shows a strong relationship between attention and memory. Wedel and Pieters (2000) presented a model of eye-fixation effects on brand memory which was calibrated with eye-movement data collected during experimental exposure of 88 subjects to 65 print ads. The authors recorded gaze directions and eye-fixations, counting the total number of fixations by each subject on each mocked up ad’s advertising elements.

Eye movement contains a sequence of three aspects: fixation, eye immobility periods, and saccades, which are quick jumps from fixation location (Wedel and Pieters, 2000). Information is predominately received during fixations, which reflects the moment of attention to the stimulus, but the image is suppressed during saccades (Sperling and Weicheslgartner, 1995). Eye-fixation seems to have different stimulus features such that eye-fixation incorporates two types of information: pictorial or textual (Rayner, 1998). Thus, an eye-tracking approach measures consumers’ attention for the both types of information.

This study focuses on four types of eye tracking measures. First was the total time consumers fixated on ads, and second, the time they fixated only on the brand elements in the ads (e.g., logo or brand name on packaging, product or elsewhere). The third and fourth measures were for ad and brand non-fixation time, which measures the time spent looking in
the direction of these elements, but the eyes were not focused on the surface of the screen. This indicates a relaxation of one’s visual focus such that it goes beyond the surface or just in front of it. During these brief intervals, consumers are no longer focused on visual elements and instead are processing information. As usual with eye tracking methods, over a dozen other measures were available, but the main story can be told around these four.

**Experimental Design**

The experiment utilises a $2 \times 2$ within subject design. The independent factors are (1) brand familiarity (high versus low), and (2) advertising creativity (high versus control). The dependent variables are attention, affect toward the advertisement and brand, plus advertisement and brand name recall as well as recognition. Each participant viewed a mocked up online magazine, called *Rosna*, on a Tobii X120 eye-tracking machine and asked to go through one version of the digital magazine in one session and then answer the related questionnaire in an immediately following session.

Twenty-four full page advertisements were interspersed in the digital magazine, with eight ads being creative award winners, eight control advertisements, and eight distractors. All subjects saw all creative advertisements and all control advertisements. What differed between them was which brand the ad was attributed to, either a familiar or unfamiliar brand. A hyper-Greco-Latin square design was used to counter balance the design for both order and the treatments. There were eight magazine versions and in each, half of the creative ads were attributed to high familiarity brands and half low familiarity. The eight control ads also were attributed to high and low familiarity brands. Subjects were randomly assigned.

**Procedures**

Subjects were told a false purpose for the study stating we were studying the relationships among magazine format, reading style, and media attitudes. Each subject was
introduced to the eye tracking equipment and calibrated. Any subjects who could not be calibrated were thanked and dismissed. Subjects were told to look at the magazine as they would usually look at a magazine if they were waiting for the doctor or public transport. They were also told they had up to 15 minutes to view the magazine, but could spend less or more time if they wanted to. They averaged 12 minutes looking at the magazine total with 52 seconds fixating on the ads and could freely move forward or backwards at their own pace.

Subjects were always shown a two page spread and usually it was a page of text on one side and an advertisement on the other. Occasionally, two ads faced one another, but this was incorporated into the counter balanced design, along with right and left hand positions for the ads. After completing the eye tracking portion of the study, they were moved to a separate room where they were given a paper and pencil questionnaire. It was about seven minutes between viewing the magazine and filling out the questionnaire.

Subjects were asked first to recall any advertisements or brands they remembered and these were recorded and coded. Then they were given a series of probes for categories and brands and asked if they could remember any. Finally, they received a recognition task for all 24 ads. For the prompted recall and the recognition tasks, they were also asked about an additional eight distractor categories, brands and ads that were never in the online magazine so to test for false recognition. Finally, subjects were asked about their affect toward the brand and ad for each sixteen target brand/ads and sixteen distractor brand/ads. Following Bergkvist and Rossiter’s (2007) focus on doubly concrete scales, two were used, “I like this brand” and “I like this ad” each with a seven point scale going from “strongly disagree” to “strongly agree”. A final question was a single item manipulation check on creativity.

**Independent Variables**
To identify high and low familiarity brands, the researchers used a pre-test to examine thirty six students at a medium sized public university on the Pacific Coast. Students received a questionnaire which asked them to write any brand names they could remember related to the particular product categories. The questionnaires prompt respondents to list brands in the target product categories. The highest level of first mentions was taken in each category, and in all cases the brand was the market share leader in the local area. Another brand was chosen as the low familiarity choice that was the least mentioned, but still operated in the local area. In all cases these were much smaller brands by comparison to the large ones.

The sixteen product categories used were: cars, retail supermarkets, mobile phone services, internet services, newspapers, magazines, cooking television programs, travel agencies, computers, pasta, coffee, dress shoes, juice drinks, ice cream, toothpaste, and facial tissues. The first eight ads were always the high creativity advertisements, while the last eight were always the low creativity advertisements.

The creative advertisements were all multiple award winners from a number of creativity competitions: ADCE, Campaign Press, Cannes, Clio, Creative Circle, D&AD, and OneShow. To be included, ads had to gain at least a bronze medal in three competitions, and silver in one (or equivalent awards). However, six of the campaigns had multiple gold awards, one had a single gold and only one had silver for its highest rank (the television program ad). An additional constraint was that a copy of the print ad needed to be available to the researchers with its text in English. The control and distractor ads were selected at random from English language overseas magazines for brands not available in the test location.

Dependent Variables
Subjects were asked first to recall any advertisements or brands they remembered and these were written down and later coded by four coders. After the free recall task, subjects were given a series of probes for product categories and brands and asked if they could remember the ads or brands. An additional eight distractor categories—brands and ads that were never in the online magazine—were introduced for a total of sixteen distractors used in the experiment, along with the sixteen focal ads. Finally they received a recognition task for all 32 ads. The level of false recognition claims for ads that never were in the online magazine turned out to be a minimal 2.9%.

Finally, subjects were asked about their affect toward the brand and ad for each of sixteen target brand/ads and sixteen distractor brand/ads. In keeping with Bergkvist and Rossiter’s (2007) recommendations regarding single-item doubly concrete scales, we used two: “I like this brand” and “I like this ad”. Each item used a seven point Likert scale going from “strongly disagree” to “strongly agree”. A final question was a single item manipulation check on the subject’s perceived creativity of each ad using the same seven point Likert scale.

**Findings**

The dependent variables of attention and affect are predicted using generalized liner model (GLM) in SAS. A logistic regression model was used to analyze memory-oriented dependent variables which are ad recall, brand recall, ad recognition, and brand recognition. Attention was measured in seconds and transformed by a logarithmic scale. Final models were selected by a stepwise procedure that drew from all one-way variables and their two-way interactions. When a significant two-way interaction was included, so were the corresponding one-way effects, regardless of significance level. The significance level cut off used was $p=.05$, but in one case a cut off of .1 was used (see below).
**Attention**

*Total Fixation Duration toward the Ad* $[\log(TFD_{ad})]$. In the final model for total fixation duration for the ad $[\log(TFD_{ad})]$, $R^2$ is 57.6% and includes a two-way interaction between advertising creativity and brand familiarity. Also included was a separate mean for each individual to estimate individual differences, plus the interaction between these individual differences and creativity. Table 1 presents the results for $\log(TFD_{ad})$, and it shows a one-way effect of creativity significant at $p < .0001$. However, the one-way effect of brand familiarity itself is not statistically significant. There were significant differences among the advertisements themselves ($p < .0001$), but these differences were also nested within the creativity treatment. Figure 2 shows the least square means for the total fixation duration for each of the 16 ads, with the control ads on the left and the creative award winners on the right.
### Table 1
Models Predicting Attention

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<th>Total Fixation Duration toward the Ad [\log(\text{TFD}_{\text{ad}})]</th>
<th>Total Fixation Duration toward the Brand [\log(\text{TFD}_{\text{brand}})]</th>
<th>Non-Fixation Duration toward the Ad [\log(\text{NFD}_{\text{ad}})]</th>
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<td>1</td>
</tr>
<tr>
<td>Creativity X Brand</td>
<td>1</td>
<td>154</td>
<td>1</td>
<td>154</td>
</tr>
<tr>
<td>familiarity</td>
<td>1</td>
<td>4.1</td>
<td>&lt;.0001</td>
<td>1</td>
</tr>
<tr>
<td>$R^2$</td>
<td>.576</td>
<td>.533</td>
<td>.557</td>
<td>.345</td>
</tr>
</tbody>
</table>
The two-way interaction between advertising creativity and brand familiarity was statistically significant $p < .0001$. Figure 3 shows that advertising creativity increases the total fixation duration of the ad for unfamiliar brands rising from 4.23 seconds for non-creative ads to 5.07 seconds for creative ads. However, the Figure 3 also shows that advertising creativity has a non-significant influence on familiar brands. TFD$_{ad}$ decreased slightly from 4.69 seconds when familiar brands use uncreative ads to 4.62 seconds when familiar brands use creative ads. Thus, creativity seems to illicit more attention to the ads of less familiar brands. The significant interaction between individual differences and creativity ($p > .0008$) indicates that the mean level effects of creativity differed from subject to subject.
Total Fixation Duration toward the Brand $\log(TFD_{brand})$. The final model for total fixation duration to the brand ($\text{TFD}_{\text{brand}}$) has an $R^2$ of 53.3%. Advertising creativity has a significant one-way effect ($p < .0001$), but brand familiarity has a non-significant one-way effect ($p = .873$). There were differences among the advertisements themselves ($p < .0001$), nested within the creativity treatment. Table 1 shows that advertising creativity interacts with brand familiarity ($p < .013$). High levels of creativity increased brand fixation for unfamiliar brands in Figure 4, rising from 1.52 seconds for the control ads to 2.01 seconds for the creative ads. When brands are familiar fixation increased more rising from 1.42 seconds to 2.15. The significant interaction between individual differences and creativity means that creativity’s effect differed from subject to subject ($p > 0.0033$). In taking these two fixation results in tandem, creativity increased ad attention for unfamiliar brands, but increased attention toward brand elements for familiar brands. The increased attention for familiar brands appears to have crowded out attention for the rest of the ad.
Non-Fixation Duration toward the Ad \([\log(NFD_{ad})]\). The final model for non-fixation duration of the ad \([\log(NFD_{ad})]\) has an \(R^2\) of 55.7\%. Table 1 shows only non-significant differences between the \(\log(NFD_{ad})\) for creative and non-creative ads. The brand familiarity’s effect was also non-significant. The two-way interaction between creativity and brand familiarity was marginally significant \((p=.076)\) but retained in the model because it was significant in the prior two models. The mean plot is shown in Figure 5. There are significant differences among advertisements nested within the creativity treatment \((p < .0001)\), as well as differences in the effects of creativity by subject \((p < .001)\).
Non-Fixation Duration toward the Brand [log(NFD_{brand})]. The $R^2$ for the final model for non-fixation duration to the brand [log(NFD_{brand})] was 34.5%. Non-fixation duration (NFD_{brand}) with creative ads was 0.30 seconds but dropped to 0.20 seconds for control ads ($p < .0001$). However, brand familiarity was not significant. The two-way interaction between creativity and brand familiarity was also not significant. There were significant differences among advertisements, nested within the creativity treatment ($p < .0001$) as well as individual differences in the effects of creativity ($p < .001$).

Across all four attention models, the results show that respondents have significant one-way effects ($p < .0001$). There were also differences among the specific advertisements used (nested within the creativity treatment) as well as individual differences in the effects of creativity. ($p < .0001$). Advertising creativity had a significant one-way effect in three of the four attention measures. Creativity seems to enhance an ad’s non-fixation time for unfamiliar
brands, but reduce it for familiar brands. However, non-fixations time toward the brand elements was longer for creative ads.

**Affect toward the Ad (A_{ad}) and Brand (A_{brand})**

*Affect toward the Ad (A_{ad}).* General Liner Model (GLM) was used to analyse the affective dependent variables. The $R^2$ for the final model for affect toward the ad ($A_{ad}$) was 39.0%. Significant one-way effects are observed for advertisement differences (nested within creativity), brand familiarity, and respondent individual differences, as well as total fixation duration toward the ad $[\log(TFD_{ad})]$ and brand $[\log(TFD_{brand})]$, plus the ad non-fixation duration $[\log(NFD_{ad})]$. The results in the Table 2 show there were two significant interactions. Brand familiarity improved affect toward the ad ($A_{ad}$), rising from 4.24 (when brands are unfamiliar) to 4.49 second (when brands are familiar). The standardized beta for the ad’s total fixation duration $[\log(TFD_{ad})]$ is .104, and for the ad’s non-fixation duration $[\log(NFD_{ad})]$, the parameter is .097. Both fixation and non-fixation toward an ad improved ad affect ($A_{ad}$).
Table 2
Models Predicting Affect

<table>
<thead>
<tr>
<th></th>
<th>Affect toward the Ad (A_{ad})</th>
<th>Affect toward the Brand (A_{brand})</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DF</td>
<td>Type III SS</td>
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<tr>
<td>Individual differences</td>
<td>154</td>
<td>795.1</td>
</tr>
<tr>
<td>Creativity</td>
<td>1</td>
<td>59.4</td>
</tr>
<tr>
<td>Creativity(Advertisement)</td>
<td>14</td>
<td>593.2</td>
</tr>
<tr>
<td>Brand familiarity</td>
<td>1</td>
<td>41.5</td>
</tr>
<tr>
<td>Ad total fixation duration [log(TFD_{ad})]</td>
<td>1</td>
<td>7.0</td>
</tr>
<tr>
<td>Brand total fixation duration [log(TFD_{brand})]</td>
<td>1</td>
<td>21.5</td>
</tr>
<tr>
<td>Ad non-fixation duration [log(NFD_{ad})]</td>
<td>1</td>
<td>11.4</td>
</tr>
<tr>
<td>Creativity X Individual differences</td>
<td>154</td>
<td>555.4</td>
</tr>
<tr>
<td>Creativity X Brand total fixation duration [log(TFD_{brand})]</td>
<td>1</td>
<td>6.7</td>
</tr>
<tr>
<td>Creativity X Brand familiarity</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>(R^2)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
There were two interactions and the first, involving creativity and individual differences, shows that the effects of creativity differed among respondents. Creativity also interacted with the total fixation duration for an ad’s brand elements \([\log(\text{TFD}_{\text{brand}})]\). When the ad is creative, the parameter for brand total fixation duration \([\log(\text{TFD}_{\text{brand}})]\) is .169 but, when the ad is not creative it is .056, or not statistically different from zero. Fixation on an ad’s brand elements \([\log(\text{TFD}_{\text{brand}})]\) only improved ad affect \((A_{\text{ad}})\) when the ad was creative.

**Affect toward the Brand \((A_{\text{brand}})\).** For affect toward the brand \((A_{\text{brand}})\), the \(R^2\) was 33.9%, and the interaction between creativity and brand familiarity is significant \((p < .0001)\). There are significant one-way effects of ads, brand familiarity, ad non-fixation duration, and individual differences. Although all models up to now showed individual differences in the effects of creativity, this interaction was not significant in this model. The longer the ad’s non-fixation time \([\log(\text{NFD}_{\text{ad}})]\), the more brand affect is observed with a standardized parameter of .122.

As shown in Figure 6, when consumers are familiar with brands, brand affect \((A_{\text{brand}})\) is more positive overall. For unfamiliar brands, creative advertising increases affect toward the brand \((A_{\text{brand}})\), moving from 3.92 (on a seven point scale) in the case of control advertisements, to 4.17 when advertisements are creative. Yet, control ads for familiar brands have a brand affect \((A_{\text{brand}})\) of 5.17, falling to 4.72 when creative ads are used. Brand affect \((A_{\text{brand}})\) is still higher for familiar brands relative to unfamiliar ones, but the advantage substantially narrows for creative ads. Thus, there are contrasting effects on ad and brand affects such that creativity doesn’t interact with brand familiarity to predict ad affect—creative ads are always more liked—but the two constructs interact to predict brand affect.
Figure 6
Affect toward the Brand ($A_{brand}$) by Creativity and Brand Familiarity

Memory

Ad Recall. Logistic regression models estimated memory effects as shown in Table 3. Ads were correctly recalled 23.5% of the time. The results show one-way significant effects ($p < .0001$) for the ad’s total fixation duration [$\log(TFD_{ad})$] and non-fixation duration [$\log(NFD_{ad})$] as well as ad differences (nested within creativity). Brand familiarity has a one-way significant difference ($p = .0003$) with respondents recalling ads of familiar brands more than those of unfamiliar brands. There were no interactions or effects of creativity.
Table 3
Models Predicting Memory

<table>
<thead>
<tr>
<th></th>
<th>Ad Recall</th>
<th>Brand Recall</th>
<th>Ad Recognition</th>
<th>Brand Recognition</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Chi-Square</td>
<td>p</td>
<td>Chi-Square</td>
<td>p</td>
</tr>
<tr>
<td>Individual differences</td>
<td>-</td>
<td>ns</td>
<td>-</td>
<td>ns</td>
</tr>
<tr>
<td>Creativity</td>
<td>-</td>
<td>ns</td>
<td>1</td>
<td>.181</td>
</tr>
<tr>
<td>Creativity(Advertisement)</td>
<td>15</td>
<td>66.1 &lt;.0001</td>
<td>15</td>
<td>123.9 &lt;.0001</td>
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<tr>
<td>Brand familiarity</td>
<td>1</td>
<td>26.0 .0003</td>
<td>1</td>
<td>32.6 &lt;.0001</td>
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<tr>
<td>Total Fixation Duration toward the Ad [log(TFD_{ad})]</td>
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<td>27.5 &lt;.0001</td>
<td>1</td>
<td>27.7 &lt;.0001</td>
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<tr>
<td>Total Fixation Duration toward the Brand [log(TFD_{brand})]</td>
<td>-</td>
<td>ns</td>
<td>1</td>
<td>0.1 .564</td>
</tr>
<tr>
<td>Non-Fixation Duration toward the Ad [log(NFD_{ad})]</td>
<td>1</td>
<td>8.1 .0045</td>
<td>-</td>
<td>ns</td>
</tr>
<tr>
<td>Non-Fixation Duration toward the Brand [log(NFD_{brand})]</td>
<td>-</td>
<td>ns</td>
<td>-</td>
<td>ns</td>
</tr>
<tr>
<td>Brand familiarity X Total Fixation Duration toward the Brand [log(TFD_{brand})]</td>
<td>-</td>
<td>ns</td>
<td>1</td>
<td>5.9 .015</td>
</tr>
<tr>
<td>Brand familiarity X Non Fixation Duration toward the Brand [log(NFD_{brand})]</td>
<td>-</td>
<td>ns</td>
<td>-</td>
<td>ns</td>
</tr>
<tr>
<td>Creativity X Brand familiarity</td>
<td>-</td>
<td>ns</td>
<td>1</td>
<td>6.6 .010</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>18</td>
<td>216.4 &lt;.0001</td>
<td>19</td>
<td>290.0 &lt;.0001</td>
</tr>
<tr>
<td>AIC (intercept only)</td>
<td>2706.9</td>
<td>1916.6</td>
<td>2222.8</td>
<td>3434.4</td>
</tr>
<tr>
<td>AIC (intercept and covariates)</td>
<td>2526.5</td>
<td>1944.7</td>
<td>1830.4</td>
<td>2947.3</td>
</tr>
</tbody>
</table>

AIC (intercept only) 2706.9 2196.6 2222.8 3434.4
AIC (intercept and covariates) 2526.5 1944.7 1830.4 2947.3
**Brand Recall.** Brands were correctly recalled 16.2% of the time. Table 3’s results show one-way significant effects ($p < .0001$) for total fixation duration toward the ads [log(TFD$_{ad}$)], brand familiarity, and advertisements nested within the creativity treatment. Creativity’s effect is not significant. There is a significant two-way interaction ($p = .015$) between the total fixation duration toward the brand [log(NFD$_{brand}$)] and brand familiarity. Figure 7 shows the percentage of respondents recalling the brand increased about 3% if they fixated on the brand elements longer—so long as it was the less familiar brand. Yet, when brand familiarity is high, fixating on the brand name is associated with a 2% decrease in brand recall.

![Figure 7](image)

**Ad Recognition.** Ads were correctly recognized 83.6% of the time. The results for ad recognition show one-way significant effects ($p < .0001$) for the total fixation duration toward the brand [log(TFD$_{brand}$)] and advertisements nested within the creativity treatment. Table 3 also shows a one-way significant effects for the total fixation duration toward the ad (log(TFD$_{ad}$), $p = .01$) and non-fixation duration toward the ad (log(NFD$_{ad}$), $p = .0026$).
Although there were no one-way effects of creativity or brand familiarity, their interaction is significant ($p<.01$), with means shown in Figure 8. When brand familiarity is high, creativity increases ad recognition. When brand familiarity is low, creativity results in a much greater rise in ad recognition. Familiar brands have a significant ad recognition advantage when ads are not creative, but the advantage is eroded when ads are creative.

Figure 8
Ad Recognition by Creativity and Brand Familiarity

![Graph showing ad recognition by creativity and brand familiarity.]

Brand Recognition. Subjects correctly recognized 47.7% of the brands. The results in Table 3 for brand recognition show there were one-way significant effects ($p < .0001$) for brand familiarity, total fixation duration of the ad $[\log(TFD_{ad})]$, respondent differences and advertisements nested within the creativity treatment. In addition, the total fixation duration toward brand $[\log(TFD_{brand})]$ has a one-way significant effect ($p = .012$).

The results for brand recognition in Table 3 identify three significant two-way interactions. The first was between total fixation duration toward the brand $[\log(TFD_{brand})]$
and brand familiarity ($p<.001$), shown in Figure 9. Longer fixation on brand elements increases recognition for major brands, but the increase is even larger for less familiar brands. Very high levels of fixation remove the recognition advantage larger brands enjoy. A second interaction is between non-fixation duration toward the ad [log(NFD$_{brand}$)] brand familiarity ($p<.015$). When brands are familiar, non-fixation duration toward brand elements has no influence on brand recognition, but when familiarity is low, non-fixation time reduces brand recognition. Finally, there is a significant interaction between creativity and brand familiarity ($p<.0001$). As seen in the Figure 6 for brand affect, Figure 10 shows creativity has a negative influence on brand recognition when brand familiarity is high. However, when brands are low in familiarity, creativity enhances brand recognition.

Figure 9
Brand Recognition by Total Fixation Duration toward the Brand [log(TFD$_{brand}$)] and Brand Familiarity

![Brand Recognition Graph](image-url)
Summary

Table 4 presents a summary of results for creativity and brand familiarity. Figure 12 shows the final model. Hypotheses 1a and 1b proposed that advertising creativity for major brands has a negative influence on brand affect ($A_{brand}$), however, for minor brands, the influence is positive. The findings support this. However, the second pair of hypotheses (H2a & H2b) were not supported. There is no effect of creativity on either ad or brand recall. Ads and brand names for familiar brands were better recalled than those that received more attention, and there was not even a significant mediated effect of creativity through attention measures ($p>.2$). For the third pair of hypotheses, it was expected that creativity increases ad and brand recognition when brands are unfamiliar (H3a), but reduces them for familiar brands (H3b). This was supported only for brand recognition (see Figure 11). Brand familiarity did moderate the effect of creativity on ad recognition. Although ads for low familiarity brands were less recognized, creativity enhanced their recognition more so than
those of familiar brands. In fact, creativity enhanced the brand recognition for unfamiliar brands so much it levelled the ad recognition “playing field” between familiar and unfamiliar brands (see Figure 8). Familiar brands saw their brand recognition decline when creative advertisements were used, but unfamiliar brands had their brand recognition improved when creative advertisements were employed. The revised final model presented in Figure 11 shows four model links where brand familiarity moderated the effects of creativity. These were for attention, brand affect ($A_{brand}$), ad recognition and brand recognition.
### Table 4

**Summary of Findings**

<table>
<thead>
<tr>
<th>Category</th>
<th>Dependent measure</th>
<th>One-way effects</th>
<th>Interaction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Attention</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ad fixation (TFD\textsubscript{ad})</td>
<td>+</td>
<td>ns</td>
<td>Creativity $\uparrow$ ad fixation only when brand is unfamiliar</td>
</tr>
<tr>
<td>Brand fixation (TFD\textsubscript{brand})</td>
<td>+</td>
<td>ns</td>
<td>Creativity $\uparrow$ influence on brand fixation when brand is familiar</td>
</tr>
<tr>
<td>Ad non-fixation (NFD\textsubscript{ad})</td>
<td>ns</td>
<td>ns</td>
<td>Creativity $\downarrow$ ad non-fixation when brand is familiar</td>
</tr>
<tr>
<td>Brand non-fixation (NFD\textsubscript{brand})</td>
<td>+</td>
<td>ns</td>
<td>Creativity $\downarrow$ ad non-fixation when brand is unfamiliar</td>
</tr>
<tr>
<td><strong>Affect</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ad (A\textsubscript{ad})</td>
<td>+</td>
<td>+</td>
<td>ns</td>
</tr>
<tr>
<td>Brand (A\textsubscript{brand})</td>
<td>ns</td>
<td>+</td>
<td>Creativity $\downarrow$ brand affect when brand is familiar</td>
</tr>
<tr>
<td><strong>Memory</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ad recall</td>
<td>ns</td>
<td>+</td>
<td>ns</td>
</tr>
<tr>
<td>Brand recall</td>
<td>ns</td>
<td>+</td>
<td>ns</td>
</tr>
<tr>
<td>Ad recognition</td>
<td>ns</td>
<td>ns</td>
<td>Creativity $\uparrow$ ad recognition, especially when brand is unfamiliar</td>
</tr>
<tr>
<td>Brand recognition</td>
<td>ns</td>
<td>+</td>
<td>Creativity $\downarrow$ brand recognition when brand is familiar</td>
</tr>
</tbody>
</table>

*ns = not significant
$+$ = positive effect
$\uparrow$ = increases
$\downarrow$ = decreases
The primary contribution of this study is that highly creative advertising may have a negative impact on major brands, thus supporting many brand manager’s contentions that safe, formulaic approaches to advertising are better at reinforcing strong brands than radical creative campaigns. Thus, some of the instinctual notions and biases of brand managers are
actually borne out. This research shows that highly creative advertising has a greater effect on minor “lesser known” brands, and it is indeed risky to utilize such campaigns for major brands. Such highly creative advertising is best directed at new or emerging brands, as they are launched in the marketplace or within new channels of distribution. Thus, the influence of creative advertisements was shown to be moderated by brand familiarity, with unfamiliar brands receiving more positive effects from using creativity than familiar brands. On two key measures, brand affect ($A_{brand}$) and brand recognition, creative advertisements for familiar brands had a clear negative influence. However, unfamiliar brands were enhanced on these two measures using the same creative advertisements. So, were the brand managers right all along to be so cautious with the brand?

Although not expected, creativity’s effect on attention was also moderated by brand familiarity. The control advertisements for familiar brands drew more total attention than did the same ads for unfamiliar brands. Although there were “noisy” differences observed among respondents and advertisements that needed to be controlled for, advertising creativity still changed the dynamic between brand familiar and attention. When creative advertisements are introduced, they narrow or eliminate the advantages that familiar brands usually have. For example, when unfamiliar brands use creative advertisements, they get a substantial boost in total attention to the ad, far above the level enjoyed by familiar brands. Although creativity enhanced the visual fixations on the brand elements of ads for both familiar and unfamiliar brands, the effect was more pronounced for unfamiliar brands, increasing by 50%.

Creativity, however, had negative effects on ad non-fixation duration for familiar brands and positive influence for unfamiliar brands. That is, compared to unfamiliar brands, control ads for familiar brands normally receive more non-fixation attention. There seems to be an unknown mental process going on that favors the brands advertised. In the control condition, the advantage enjoyed by major brands may not appear to be much, a mere .1
seconds of non-fixation attention. However, the non-fixation attention given to familiar brands seems to wane when a creative ad is used, and non-fixation attention grows when unfamiliar brands use the same creative advertisements. Something about creative advertising allows unfamiliar brands to achieve non-fixation parity with ads for familiar brands. Although this interaction was at a marginal level of significance, it is still considered instructive in gaining a complex understanding of how creativity and brand familiarity interact.

Overall, creativity does good things for ads, but does it do good things for brands? Findings support the conventional wisdom of many brand managers for familiar brands: creativity needs to be carefully managed. One reason for the problems seen with creative advertising for major brands may be that the respondents already know much about them, and this interfered with by the implicatures the creative ads suggested. Many creative ads often make implicatures that don’t fit the familiar brands they seek to advertise possibly leaving consumers confused. Such confusions may lead to negative effects on brand liking and brand recognition—despite the fact that the ads themselves are well liked and well recognized.

Our findings also support the value of creativity for less well-known brands. These brand have little to lose from using creative ads and much to gain from the added attention they can provide. Yet the power of creative advertising is not limited to increased attention. For unfamiliar brands creativity enhanced brand affect directly, as well as ad and brand recognition. If one’s brand is an underdog brand, there appears to be little reason not to consider the creative ideas presented by a brand’s advertising agency. More than being a technique to be used only when the brand is trouble (West and Berthon 1997), seeking highly creative advertising campaigns is a strategy appropriate for any less familiar brand.

Future directions should also consider the role of delays in testing recall. With some delayed measurements, researchers can determine if the distinctiveness of creative
advertising helps them to be less prone to decay than standard advertising. Another direction may be the role of creativity in competitive interference. Ideally, a more distinctive creative advertisement should be more resistant to potential advertising interference. Finally, the effects found in this study need to be replicated with other media and more ads.

Although practitioners widely use eye tracking to diagnose specific ads, academic researchers also need to explore the importance of these methods. Advertising researchers have long focused on the decision making and mental processing implications of advertising design, but usually in forced exposure situations with little natural clutter. As Kover (1995) argued, “breaking through,” referred to in this study as gaining attention, may well be equally important as “dialoguing” with consumers, something often thought of as decision making and mental processing. Yet attention is much less researched. The eye tracking equipment needed for attention-oriented advertising research may be expensive, but for the effects explored herein, one would be hard pressed to show many of the effects any other way.

In the marketplace battle for consumers’ scarce attention, fickle attitudes and malleable memory, creativity improved results for unfamiliar brands, but had less sanguine outcomes for familiar brands. Yet, creativity remains a potent elixir that is neither curse nor cure. The power of creativity is either a controversial lightning rod or a golden beacon of light that beckons researchers to explore and understand why, how and where it works.
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CHAPTER 4: THE THIRD PAPER

Brief Introduction to the Third Paper

The second study in the thesis, ‘attention in competitive advertising interference: can unfamiliar brands do better with more creative ads?’ is an experimental study that uses an eye-tracking technique as the main research method. The goal of this study is to explore the effects of highly creative advertisements when manipulating brand familiarity and competitive advertising interference. This article includes four experimental studies.

The first and second experiments used standard uncreative advertisements. The first experiment manipulates two levels of brand familiarity (familiar brand versus unfamiliar brand) with two levels of proactive competitive interference (interference present versus interference absent). The second experiment manipulates two levels of brand familiarity (familiar brand versus unfamiliar brand) with two levels of retroactive competitive interference (interference present versus interference absent).

The third and fourth experiments used highly creative advertisements as the target. The third experiment manipulates unfamiliar brands with two types of advertising competitive interference (proactive interference versus retroactive interference). The fourth experiments replicate the third experiment by using familiar brands rather than unfamiliar brands. And the same advertisements and brand names were not repeated via the four experiments.

In addition, attention-oriented dependent variables were total fixation duration toward advertisement \([\log(\text{TFD}_{\text{ad}})]\) and total fixation duration toward brand \([\log(\text{TFD}_{\text{brand}})]\). The affect dependent variables are affect toward the advertisement \((A_{\text{ad}})\), and affect toward the brand \((A_{\text{brand}})\) were tested as dependent variables. Memory-oriented dependent variables are advertisement recall, brand recall, advertisement recognition and brand recognition.
The study used a generalised liner model (GLM) to predict attention and affect, and a logistic regression model for memory. All study data were analysed using SAS. Attention was measured in seconds and transformed by a logarithmic scale. Questionnaires were used to measure memory and affects, and data were coded.

The study produced important findings for both advertisements and brands. First, competitive interference is not as problematic as prior scholars have suggested. These past studies have all used a forced exposure paradigm where subjects study ads for 30 seconds or more. In a realistic environment, subjects view ads for as little as 3 seconds, and interference can increase attention in the majority of cases, memory as well.

Another main finding is that unfamiliar brands do better with creative advertisements. Interference does have negative attention effects on unfamiliar brands, but creative ads compensate greatly for this weakness. The study provides important managerial recommendations and suggestions for academic researchers.
Attention in Competitive Advertising Interference: Can Unfamiliar Brands Do Better with More Creative Ads?

Abstract

Prior research on advertising clutter has used the memory interference paradigm to argue that when competing ads show up near each other in the same media, everyone loses, but the brand that advertises the most loses the least. This research, however, takes an attention-oriented perspective and therefore uses eye tracking techniques to explore what consumers actually do with print advertising embedded in an on-line magazine. In contrast to prior research that forced exposed consumer to ad for 30 seconds, the more realistic 3 or 4 second average exposures to ads used in a more natural media presentation suggests different dynamics. Overall, advertising interference has both positive and negative effects. Unfamiliar brands are sometimes harmed by clutter but familiar brands can be helped. Yet, unfamiliar brands have the option to use more creative advertising to compensate for lack attention, something that doesn’t work for familiar brands.

Keywords: Advertising creativity; Brand familiarity; Competitive Advertising Interference, Affect; Memory; Eye-tracking experiment
A traditional lament in advertising is the high level of clutter observed in most media (Burke & Srull, 1988; D'Souza & Rao, 1995). Most television programs have over 20 minutes of other ads for every hour of programing, and magazines have dozens of pages of alternative ads as well, often more than half the issue’s pages. Although most of these ads are for different categories, something called “contextual interference” (see Kumar, 2000; Kumar and Krishnan, 2004; Kumar, Besharat, Lindsey, & Krishnan, 2014), a more troublesome problem is presumed to be “competitive inference” when alternative brands in the same category advertise in closely spaced media. In this case, memory for ads, brands and their claims drop significantly—and so can brand evaluations (Keller, 1987; Keller, 1991). Although competitive interference effects are tested in laboratory settings, they are also suggested in field studies involving real consumers looking at real media (Danaher, Bonfrer & Dhar, 2008).

The advertising interference literature’s findings can be liked to being heard in a noisy room: to be effective one needs to shout above the din. Advertisers who spend the most, do the best, and any situation with competitive ads should be avoided. While there may be an observed correlation between share of market and share of voice, advertisers do not appear to avoid competitive interference to the extent the literature suggests. Magazines like Hearst’s Car and Driver or Source Interlink’s Motor Trend should not be able to survive if competitive interference among automotive brands were so disastrous. Possibly there are other perspectives.

A memory mechanism is usually assumed to underlie advertising interference’s impact and other mechanisms are not explored. In general, later exposure to competitive advertising is said to lead to some kind “forgetting” of earlier information. Prior exposure to advertising is also presumed to lead to memory retrieval problems for later ads. However, based on the paper-and-pencil laboratory technology used in most competitive interference
studies, it is impossible to measure the difference between a memory-based mechanism over an attention-based one. When one sees an ad for a given category, and then sees another for the same category, one can either attend to the second ad for a longer or shorter period. Given the difference in exposures, this alone could affect memory for the second brand, but researchers have never tested this confound.

Even more problematic may be the forced exposure paradigm advertising interference research has routinely taken. For example, Kent and Allen (1994) took a memory approach to understanding brand familiarity and had respondents consider print ads for 30 second—at least 10 times longer than most consumers actually consider advertising. It may be that the challenge is to get consumers to remember anything from an ad, rather than those studiously formed memories interfering with one another. Instead of it being that familiar brands are less susceptible to interference, their ads may be more closely attended to and thus better remembered in the first place. Prior research has shown that familiar brands have effects on attention (Pechmann & Stewart, 1990), affect (Chaudhuri & Holbrook, 2001) as well as memory (Peter & Olson, 1987). Memory effects may still be common in interference, but we need to control for attention to understand more.

The relevance of differentiating attention from memory mechanisms is that while memory may not be controllable from an advertisers’ standpoint, attention can be. If attention is a critical component of interference, then other mechanisms that draw attention may compensate for situations where interference is problematic. For example, less known brands frequently come out the poorer when facing competitive interference with better known brands, so finding ways for lesser brands’ ads to stand up to the attention-getting power of major brands is important. Koslow (2015) called for use the use of highly creative advertising for smaller brands to capture more attention, and thus negate some of the influence interference can impose.
To tease out attention effects, we use an eye tracking approach to data collection. Student subjects viewed an on-line magazine in an otherwise natural environment, and we measure the total time spent viewing each ad, and each brand-name related element of those ads. Subjects were also tested for ad affect, brand affect, unprompted ad recall, unprompted brand recall, ad recognition and brand recognition. Four studies consider the effects of various advertisements and for the first two studies, only standard, mainstream and uncreative advertisements were used to consider the effects of brand familiar and type of interference on affect, recall and recognition. Two more studies consider the effects of highly creative advertising, whether presented using proactive or retrograde interference.

Although we find some negative effects for interference, we also find positive ones as well. The main concern for advertisers, however, does not appear to be memory interference, but rather getting attention in the first place. Overall, this research demonstrates that attention matters in interference and is a key component in what we previously consider to be a purely memory effect. The research also calls for more work in more natural advertising settings.

THEORY

Competitive Advertising Interference

Advertising interference has a long history and the early advertising literature used the term “clutter” to describe many competitive advertisements in a medium (Danaher, Bonfrer, & Dhar, 2008). More recently researchers have focused on the term “interference” to address the effects a large volume of alternative advertisements have on individual consumers (Burk & Surll, 1988; Kent & Allen, 1994). The current term has its origins in psychology, and some scholars even define competitive advertising interference in memory terms as the impaired ability to remember items previously stored with similar items in memory, or to remember new information learned from the same previous information set (Anderson & Neely 1996).
Kent (1993) considered the distinction between competitive and non-competitive advertising interference. He argued that competitive interference effects could arise due to information forgetting. The effects of competitive interference on consumers can be shown in the marketplace when consumers are buying one brand instead of another from the same product category (Kumar et al., 2014). Early work showed a high level of interference harmed consumers’ response to advertising (Bagozzi & Silk, 1983; Bettman 1979; Webb, 1979). Later work by Burk and Srull (1988) reported that most advertisements which have an effect on consumers communicated brand information about the product category, brand name, and specific brand claims, and memory for these should be reduced due to interference.

Competitive interference studies focus on competing brands from the same product category using forced exposures of 30 second or more (Burke & Srull, 1988; Keller 1987, 1991; Kumar, 2000). The rationale in these studies relates to unconnected memory traces (Lee & Lee, 2007) which may increase the difficulty of remembering which ad associated with which brand. Interference effects are also found when consumers are exposed to different print ads with similar claims and brand names (Burke & Srull, 1988; Keller, 1987, 1991) as well as similar television commercials (Kent & Machleit, 1992; Kumar, 2000).

Consumers’ minds are presumed to work by sorting category specific bits of information as concepts and storing those concepts in distinct nodes (Kumar & Krishnan, 2004). Those nodes linked together making an information network which connected with different bits of relative information (Kumar et al., 2014). Sometimes consumers face some difficulties remembering information related to a specific brand or ad. Forgetting information is influenced by two aspects, passage of time between receive information and retrieval time, and coddng additional information during time of ad exposure (Lee & Lee, 2007). Keller (1987) explained that interference effects occur when consumers are exposed to ads for two
different brands from the same product category and subsequently are stored close together in memory. Consumers may later have difficulty distinguishing between the two brands, which would detrimentally impact the communication effects of the target brand. Advertising repetition is one technique used to reduce competitive interference effects, and the literature has generally shown a positive relationship between ad repetition and recall (Ray & Sawyer, 1971; Cacioppo & Petty, 1979; Anand & Sternthal, 1990; Vakratsas & Ambler, 1999).

Researchers often differentiate between proactive and retrograde competitive interference. Proactive deals with the interference of ads that came before an ad of interest, whereas retrograde refers to the interference of ads that followed an ad of interest. Keller (1987) found that proactive competitive interference has negative effects on brand recall and this interference could not demonstrate any impact on brand evaluations such as ad and brand attitude and purchase intentions. Retroactive competitive interference also has a negative effects on learning information from advertising because of subsequent exposure to competitive brand’s messages (Burke & Srull, 1988).

Although researchers usually assume that interference must have a negative influence on consumers’ memory and attitudes, this need not always be the case. Some like Brown and Rothschild (1993) found that competitive interference has no effect on brand name recall. Kamen (1987) finds the curious result that ads for two different brands appearing in the same magazine issue can lift the performance of both ads. Although Kamen (1987) attributes the result to memory-based factors typical of the interference approach, other issues may be at work that have not been previously isolated.

**Brand Familiarity**

Brand familiarity is a continuous variable which is described as the reflections of an expertise brand that has been accumulated by the consumer (Alba & Hutchinson, 1987; Hoch
& Deighton, 1989). Baker et al. (1986) discuss how brand familiarity could be directly linked to the amount of time that has been spent processing brand information, regardless of the type or content of the processing involved. In addition, brand familiarity refers to consumer knowledge about the brand, and is described in terms of what the consumer thinks about the brand (Flynn & Goldsmith, 1999). Brand prior knowledge and belief strength also have an effect on consumers’ expertise with the brand (Ha & Perks, 2005).

Familiar brands appear to be more resistant to interference’s effects (Kent & Allen 1994) and one explanation is that memory for well-known brands is better organized. Peter and Olson (1987) reported that new attribute information for familiar brand may be stored in consumers’ minds as an existing information for the same brand. After consumers exposure brand advertising that new information for familiar brand will be linked only to the “node” for relevant brand. However, a new attribute information for unfamiliar brand will be stored during advertising exposure under another attribute or brand such it is less accessible (Pryor & Ostrom, 1981). A stronger relationship increases easy retrieval of the brand information attribute (Hutchinson & Zenor, 1986). In addition, Keller (1987) reported that great knowledge for brand might produce stronger link on consumers’ memory under brand ad trace and it might also improve the harmful effects of competitive interference.

Although brand familiarity differences appear to influence memory, it is harder to show effects on preference. Laroche, Cleveland, and Maravelakis (2006) studied competitive advertising interference and ad repetition for familiar and unfamiliar brands. Recall for both familiar and unfamiliar brands was greater when competition is absent. Recall and cued recall are most affected by advertising repetition when followed by attitude accessibility. But competitive interference’s influence on actual brand preference was modest.

Although brand familiarity can influence how interference works, there may be other ways to approach interference. It is well known that consumers are more motivated to process
information related to major brands (MacInnis, Moorman & Jaworski, 1991; Moorman 1990). Therefore, if one is more motivated to process leading brands, then the time one takes to attend these ads may be higher as well. To explore a processing time approach to competitive interference, the attention literature will be reviewed.

**Attention**

Early research in advertising (Sandage, 1945) argued that attention is a mental stream of thought leading to purchase, and the first function of an advertisement is to attract consumers’ attention. Later research has continued to see attention as the amount of mental effort or cognitive capacity allocated to a task (Kahneman, 1973). Attention is also described as “thought” (Mackenzie 1986) which is conceived as having both directional and intensive aspects. The directional of attention based on the mental effort, and the intensity is referred to amount of the mental effort which is focused in a particular direction (Kahneman, 1973), obviously, paying more attention toward ad or brand involves more processing effort. However, the most widespread and current measure of attention, gaze duration, is defined as sum of the fixation duration on a stimulus elements or stimulus as whole and Rosbergen, Pieters, and Wedel (1997) demonstrate the validity of the measure to indicate the visual attention toward a whole ad or toward ad elements.

Visual attention is also described as a mental operation which can produce a localized priority in processing information and thus it may lead to improved speed and reduced threshold in processing events (Deubel & Schneider, 1993; Rosbergen, Pieters & Wedel, 1997; Pieters, Wedel & Batra, 2010). That is, visual attention can influence consumers’ responses after exposure to print ad (Smit, Boerman & Meurs, 2015).

A number of processing models have been developed incorporating attention. Greenwald and Leavitt (1984) investigated the effectiveness of advertising massages on
consumers’ involvements by processing four levels: pre-attention, focal attention, comprehension, and elaboration. When this approach has been tested, the general pattern of lower level attention leading to higher level attention was supported, but not that consumers must progressively go through these stages in this order in a strictly bottom-up manner alternatively (Finn, 1988). Instead, a more divergent approach was supported such that the comprehension step can sometimes be skipped. That is, different goals the consumer might have can lead to different pattern of attention (Mitchell, 1983).

Patterns in how consumer attend to ads have been identified. According to Kroeber-Riel (1984) about 90% of viewers fixate on the dominant pictures in an ad before they fixate the whole ad or ad copy. Carroll, Young, and Guertin (1992) studied the effects of pictorial and text print ad elements on consumers’ attention generalizing two main findings. The first is related to processing information from picture and text. That type of processing seemed to be relatively isolated events in that viewers did not move back and forth repeatedly between the picture and caption. The second finding is that frequently the picture was not given full inspection until the caption had been read. That means studying the attention given to the whole ad may better help understand the advertising elements’ effectiveness. Rayner et al. (2001) investigated attention to print ads by manipulating two elements: ad texts and pictures. Viewers give more attention to text areas than picture areas but the fixation duration and saccade length are longer for pictures than texts. Viewers better attended larger than smaller fonts. Finally, Carroll et al. (1992) also found the average fixation duration on the ad picture (270 ms) was longer than on the text (236 ms), however, the average saccade sizes were slightly higher on the text (2.79 ms) than on the pictures (2.68 ms).

Hypotheses
Attention may explain much of what we previously attributed to memory alone. Consumers viewing advertisements can choose how long they look at various elements of those ads and longer viewing time may lead to better memory. Longer viewing times may also lead to other effects like improved liking for ads or brands. Memory may continue to be a key element in understanding interference, but the moderating role consumers have in choosing to attend to some advertisements more than others needs to be understood especially in the context of familiar and unfamiliar brands.

A natural confound in prior interference research involves attention and proactive/retroactive inference. If the interference precedes the target ad, one may attend the target advertisement longer possibly altering the pattern of results. Such a difference is not possible when interference follows the target ad. Use of eye tracking methods can control for this. In either case, the amount of visual attention should explain part of the effects of advertising recall, recognition and attitudes for both brands and ads.

Typically, consumers look at an ad for only a few seconds, get what they want out of it, and then move on. However, if getting what they want out of an ad takes more effort, they might attend the ad more, and one of the things making ads harder to understand is competitive inference. If interfering ads advocate similar brands consumers may become confused and sometimes give more attention to compensate. Thus, if the target ad follows the interference, they have the opportunity to think about the ad and its message more to compensate for the confusion, and hence they may have longer visual attention—assuming they do want to understand the ad and what the ad is selling. Given that familiar brands are more relevant to consumers, they should be willing to give more attention to ads for familiar brands under proactive interference. However, when an unfamiliar brand is advertised, proactive interference will not produce the same kind of motivation. These brands are less
relevant to consumers, and no additional effort may be expended to understand them—and if anything, the extra confusion may lead to a reduction of effort and a decrease in attention.

H1: Under proactive interference, high brand familiarity will increase the amount of visual attention, but low brand familiarity will decrease it.

To determine how likeable ads and brands are under interference, the starting point is again whether consumers can get what they want out of an ad and what makes it harder for them. The interference is at the brand level, rather than ad, so the ads themselves may not interfere with one another because their features are distinctive enough. If ads themselves are not interfering with one another, liking for the ads may not be subject to interference effects.

H2: Competitive inference will not influence affect toward the ad.

However, much will be different for liking toward the brands, which can interfere with one another. Under normal circumstances, the longer one looks at an ad, the more liked the brand, especially when interference follows the target ad such that there can be no changes or compensation in attention. However, when the target ad follows the inference ad, the proactive inference case, consumers may alter the length of time they view the target ad. When consumers do view the target ad longer, it is mostly likely due to dealing with some kind of confusion needing additional attention to resolve, so the additional time spent on the ad may not be the benefit to a brand it normally is. If anything, the influence of attention on brand liking may reduce, and possibly even become negative. However, if a consumer is having increased difficulty processing information about the brand requiring lingering on the
ad longer, this difficulty may spill over into negativity toward the brand, and therefore a drop in affect toward the brand under proactive inference.

H3: Under retroactive inference, brand familiarity and attention will predict affect for the brand, but under proactive inference, attention will have less an influence, but interference will have more influence.

Almost all prior studies of advertising interference have done two things: 1) forced exposed consumers to advertising for relatively long periods of time well in excess of their normal viewing duration and 2) found negative memory effects for interference. However, if consumers choose the amount of attention they given advertisements, these traditional dynamics may change because consumer are no longer studying ads for 30 seconds or more. For example, most ads are viewed for as little as two or three seconds, so if interference increases attention to four seconds, there is a possibility that memory could increase. Given there is not enough information on how memory interference could work, only a research question is offered.

RQ: In a realistic viewing situations, how does attention in advertising interference influence memory?

**STUDY 1**

The focus of Study 1 is to manipulate brand familiar and competitive interference, and it is divided into two parts (a & b). Study 1a focuses on retroactive interference in which the interference follows the target ad exposure. Study 1b focuses on proactive interference where the interference ad precedes the target ad and thus consumers may choose to give more or
less attention to the target ad. A similar structure was followed in both experiments and thus considerable detail is given for Study 1a, but less to Study 1b.

**Study 1a: Experimental Design**

The experimental design for the study 1a is $2 \times 2$ within subject design. The independent variables are (1) brand familiarity (high versus low), and (2) competitive advertising interference (target ad before interference versus no interference). The dependent variables are attention, affect toward the advertisement and brand, plus advertisement and brand name recall as well as recognition. Each participant set in one experimental session. First, the participants viewed a mocked up online magazine on a Tobii X120 eye-tracking machine and asked to go through one version of the digital magazine. Then the participants answered the related questionnaire in an immediately following session. The digital magazine includes twenty-four full page advertisements, with four uncreative experimental ads. Two ads have competitive advertising interference presented before them and another two ads do not have competitive advertising interference, and twenty distractors ads.

All subjects saw all target advertisements and all distractors advertisements. What differed between them was which brand the ad was attributed to, either a familiar or unfamiliar brand. A hyper-Greco-Latin square design was used to counter balance the design for both order and the treatments. There were eight magazine versions and in each, two of the target ads were attributed to high familiarity brands and another two were attributed to low familiarity. The twenty distractors ads were attributed to high and low familiarity brands. Competitive advertising interference ads were attributed to medium brand familiarity. Subjects were randomly assigned.

**Study 1a: Subjects and Procedures**
Thirty six participants undertook a pre-test to identify high and low familiarity brands. The participants were students at a medium sized public university on the Pacific Coast. Students received a questionnaire which asked them to write any brand names they could remember related to commonly purchased target product categories. The highest number of first mentions was taken in each product category, and in all cases the brand was the market share leader in the local area. Another brand was chosen as the low familiarity choice that was the least mentioned, but still operated in the local area. In all cases these were much smaller brands by comparison to the large ones.

The main sample of this study had 154 participants who were told a false purpose for the study. Again, they were students at a medium sized public university on the Pacific Coast. Each was introduced to and calibrated on the eye tracking equipment. Successful calibration is an important condition to participate on this experiment so any subjects who could not be calibrated were thanked and dismissed. Subjects were told to look at the magazine as they would usually look at a magazine as they do on their normal life such as when they were waiting for the doctor or public transport. They were also told they had up to 15 minutes to view the magazine, but could spend less or more time if they wanted to. They averaged 12 minutes looking at the magazine total with 52 seconds fixating on the ads and could freely move forward or backwards at their own pace.

The eight versions of the digital magazine were designed in two page spreads and usually it was a page of text on one side and an advertisement on the other or two ads faced one another. Thus, each version of the digital magazine was incorporated into the counter balanced design, along with right and left hand positions for the ads. After completing the eye tracking portion of the study, the participants were moved to a separate room where they were given a paper and pencil questionnaire. It was about seven minutes between viewing the magazine and filling out the questionnaire.
First, participants were asked to recall any advertisements or brands they remembered and these were recorded and coded. Second, they were given a series of probes for categories and brands and asked if they could remember any. Third, they received a recognition task for all target ads. For the prompted recall and the recognition tasks, they were also asked about distractor brands and categories. Finally, participants were asked about their affect toward the brand and ad for the target ads. Following Bergkvist and Rossiter’s (2007) focus on doubly concrete scales, two were used, “I like this brand” and “I like this ad” each with a seven point scale going from “strongly disagree” to “strongly agree”. A final question was a single item manipulation check on creativity.

There were four product categories used in this study: Pasta, dress shoes, coffee, and computers. The four target ads (called “100% passion”, “New style shoes”, “Spoon” and “Laptop promotion”) and competitive interference ads were always the low creativity advertisements. The all ads were selected at random from English language magazines for brands not available in the test location which then had brand names altered. False recognition claims for ads that never were in the online magazine was a minimal 3%.

**Study 1a: Results**

Generalized liner model (GLM) was used to analyse attention and affect, and logistic regression models used to estimate memory effects. Attention was measured in seconds and transformed by a logarithmic scale. The attention-oriented dependent variables are total fixation duration for the ad \([\log(\text{TFD}_{\text{ad}})}\)] and total fixation duration to the brand \([\log(\text{TFD}_{\text{brand}})}\)]. Affect toward the ad \((A_{\text{ad}})\) and affect toward the brand \((A_{\text{brand}})\) are affect-orienting dependent variables. Memory-oriented dependent variables are ad recall, brand recall, ad recognition, and brand recognition. Memory was coded “1” for remembering the ad, “0” otherwise. All variables were included in the models initially, and then non-
significant effects were dropped from the models, except where noted. The cut-off significance level used was \( p=0.05 \).

**Attention**

In the final model for total fixation duration for the ad \([\log(\text{TFD}_{ad})]\), \( R^2 \) is 63.2% and there are one-way significant effects (\( p < 0.0001 \)) for individual and ad differences (see Table 1). The mean attention for the four target ads in this study: “100% passion” 3.68 sec, “New style shoes” 3.54 sec, “Spoon” 4.55 sec, and “Laptop promotion” 6.37 sec. There were no significant effects for either brand familiarity or the presence of interference.
Table 1
Models predicting attention for Study 1a and Study 1b

<table>
<thead>
<tr>
<th></th>
<th>Study 1a: Target ad before interference</th>
<th>Study 1b: Target ad after interference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total fixation duration</td>
<td>Total fixation duration</td>
</tr>
<tr>
<td></td>
<td>toward the ad [\log(TFD)_{ad}]</td>
<td>toward the brand [\log(TFD)_{brand}]</td>
</tr>
<tr>
<td></td>
<td>Mean square</td>
<td>Mean square</td>
</tr>
<tr>
<td>Individual differences</td>
<td>1.262</td>
<td>.453</td>
</tr>
<tr>
<td>Ad differences</td>
<td>7.617</td>
<td>11.790</td>
</tr>
<tr>
<td>Brand familiarity</td>
<td>.816</td>
<td>.816</td>
</tr>
<tr>
<td>Interference</td>
<td>.456</td>
<td>.456</td>
</tr>
<tr>
<td>Brand familiarity X</td>
<td>2.508</td>
<td>2.508</td>
</tr>
<tr>
<td>X interference</td>
<td>.0028</td>
<td>.0028</td>
</tr>
</tbody>
</table>

Mean square: \[\log(TFD)_{ad}\] and \[\log(TFD)_{brand}\]

\[p\] values for each model factor.
In addition, the final model for total fixation duration to the brand elements (logTFD\textsubscript{brand}) has an $R^2$ of 59.6%, and individual and ad differences have a significant one-way effects ($p < .0001$, see Table 1). The four target ads obtained different amount of attention at the situation of total fixation duration to the brand (logTFD\textsubscript{brand}): “100% passion” 2.11 sec, “New style shoes” 1.00, “Spoon 1.66 sec, and “Laptop promotion” .68 sec. Again, there were no differences due to brand familiarity.

Affect

Table 2 shows the $R^2$ for the final model for affect toward the ad (A\textsubscript{ad}) is 40.8%. Significant one-way effects at $p < .0001$ are observed for respondent and ad differences. Also significant are brand familiarity ($p = .008$), and the total fixation duration toward the ad [log(TFD\textsubscript{ad})] ($p = .006$). The results show that ads for unfamiliar brands are less liked by .27 units of affect toward the ad (A\textsubscript{ad}), but to move from one standard deviation below the mean of ad attention to one standard deviation above would lead to increase liking of .80 units. Interference’s effect is not significant.
<table>
<thead>
<tr>
<th></th>
<th>Study 1a: Target ad before interference</th>
<th>Study 1b: Target ad after interference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Affect toward the ad</td>
<td>Affect toward the brand</td>
</tr>
<tr>
<td>Mean square</td>
<td>p</td>
<td>Mean square</td>
</tr>
<tr>
<td>Individual differences</td>
<td>2.678</td>
<td>.0001</td>
</tr>
<tr>
<td>Ad differences</td>
<td>27.452</td>
<td>.0001</td>
</tr>
<tr>
<td>Brand familiarity</td>
<td>11.465</td>
<td>.0072</td>
</tr>
<tr>
<td>Total fixation duration toward ad</td>
<td>12.246</td>
<td>.0055</td>
</tr>
<tr>
<td>[log(TFD)\text{ad}]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interference</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
In the model for the affect toward the brand (A\textsubscript{brand}), the $R^2$ is 42% with significant effects at $p < .0001$ for both ad differences and brand familiarity (see Table 2). There are also significant individual differences ($p = .0207$) and the effect of total fixation duration toward the ad [log(TFD\textsubscript{ad})] ($p = .0357$). Unfamiliar brands are less liked is by 0.78 units of affect toward the brand (A\textsubscript{brand}), and when attention drops from one standard deviation above the mean to one below, then affect drops .55 units. Again, interference’s effect is not significant.

Memory

Table 3 lists results for the logistic regression models predicting the four memory measures, ad and brand recall and ad and brand recognition. The same four variables were significant in each model and individual differences were included to provide continuity with the attention and affect models. The significant variables were ad differences, brand familiarity, interference and total fixation duration [log(TFD\textsubscript{ad})]. In each of the four models, the effects of brand familiarity and attention were positive, with better memory for familiar brands and longer attention. However, in three of the four models, the effect of interference was positive. Only in the ad recognition model did interference reduce memory. Figure 1 details the percent remembering the ad or brand with and without interference.
### Table 3
Logistic Regression Models Predicting Memory for Study 1a

<table>
<thead>
<tr>
<th></th>
<th>Ad recall Wald $\chi^2$</th>
<th>Ad recall $p$</th>
<th>Brand recall Wald $\chi^2$</th>
<th>Brand recall $p$</th>
<th>Ad recognition Wald $\chi^2$</th>
<th>Ad recognition $p$</th>
<th>Brand recognition Wald $\chi^2$</th>
<th>Brand recognition $p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual differences</td>
<td>31.05</td>
<td>1.000</td>
<td>18.00</td>
<td>1.000</td>
<td>63.48</td>
<td>1.000</td>
<td>76.74</td>
<td>1.000</td>
</tr>
<tr>
<td>Ad differences</td>
<td>11.04</td>
<td>.0115</td>
<td>28.50</td>
<td>.0001</td>
<td>19.65</td>
<td>.0002</td>
<td>32.89</td>
<td>.0001</td>
</tr>
<tr>
<td>Brand familiarity</td>
<td>4.83</td>
<td>.0280</td>
<td>10.27</td>
<td>.0014</td>
<td>11.53</td>
<td>.0007</td>
<td>42.24</td>
<td>.0001</td>
</tr>
<tr>
<td>Interference</td>
<td>7.73</td>
<td>.0054</td>
<td>8.92</td>
<td>.0028</td>
<td>10.53</td>
<td>.0012</td>
<td>4.50</td>
<td>.0338</td>
</tr>
<tr>
<td>Total fixation duration toward the ad [log(TFD_{ad})]</td>
<td>12.01</td>
<td>.0005</td>
<td>7.42</td>
<td>.0065</td>
<td>6.56</td>
<td>.0104</td>
<td>11.23</td>
<td>.0008</td>
</tr>
</tbody>
</table>
Study 1b: Design and Results

The second study was identical in design to the first study with the exception of ads used and interference type. In this study, the target ad followed the interference ad. Again brand familiarity was manipulated and attention was measured. The four product categories used were toothpaste, fruit drinks, ice cream and tissues. The ads were called “Family dental plan”, “Healthy drink”, “Indulge” and “Kill viruses” and each was a standard, uncreative ad. As in the prior study, all were selected at random from English language magazines for brands not available in the local area. False recognition claims were less than 2%.

Attention

Table 1 lists the GLM model for total fixation duration toward the ad \( \log(TFD_{ad}) \) , \( R^2 \) is 63.1%, and significant one-way effects are observed for individual and ad differences (\( p < .0001 \)). The mean attention times for “Family dental plan”, “Healthy drink”, “Indulge”, and “Kill viruses” are 5.36, 4.06, 3.69, and 5.58 seconds respectively. However, there is a
significant interaction between whether or not there is interference and brand familiarity ($p=.0028$), which is graphed in Figure 2. When brand familiarity is high, interference increased the amount of time respondents attended the advertisements. However, when familiarity is low, interference reduces attention.

Figure 2
Study 1b: Predicting total fixation duration toward the ad (in seconds) with brand familiarity and interference

![Graph showing total fixation duration vs. interference and brand familiarity](image)

The final model for total fixation duration to the brand $[\log(TFD_{\text{brand}})]$, also in Table 1, has an $R^2$ of 61.2%. There are one-way significant effects ($p < .0001$) for respondent individual and ad differences. The four target ads achieved different amounts of attention: “Family dental plan”, .81 seconds, “Healthy drink”, 2.87 seconds, “Indulge” 1.45 seconds, and “Kill viruses” 1.22 second. There was two-way significant ($p = .0065$) interaction between brand familiarity and interference shown in Figure 3. For familiar brands, the presence of interference increases the amount of attention subjects gave the brand elements of
the ads. For less familiar brands, the effect of interference was the reverse such that interference reduced attention.

**Figure 3**

Study 1b: Predicting total fixation duration toward the brand (in seconds) with brand familiarity and interference

![Graph showing total fixation duration toward brand divided by interference and brand familiarity](image)

**Affect**

In the final model (see Table 2) for affect toward the ad ($A_{ad}$), $R^2$ is 52.8%, and there are one-way significant effects ($p < .0001$) for individual and ad differences, brand familiarity and total fixation duration toward the ad [$\log(TFD_{ad})$]. The results show that unfamiliar brand reduces affect by 0.39 units of $A_{ad}$ compared with familiar brands. Attention toward the ad [$\log(TFD_{ad})$] has positive effects on ad affect. Moving from one standard deviation below the mean to one above increase ad affect by 1.29 units of $A_{ad}$. There was no significant effect for interference.
The $R^2$ for the final model for affect toward the brand ($A_{brand}$) is 61.8%, and there are one-way significant effects ($p < .0001$) for individual and ad differences, brand familiarity, as well as, interference ($p = .0359$). More familiar brands had higher brand affect by 1.73 units. Those ads subject to interference had a lower level of brand affect, dropping .18 units when interference was present. The amount of attention paid to advertisements was not significant.

**Memory**

The logistic regression models predicting memory show slightly different variables to be significant in each of the four memory models. In only one of the four models was interference significant, ad recall, and interference improved memory. However, to illustrate an important pattern, Figure 1 plots the mean percent who remembered the ads or brands assuming the interference variable was significant. For ad and brand recall and brand recognition, brand familiarity and ad differences were significant. In each model, time spent attending the ad $[\log(TFD_{ad})]$ was significant and the more time subjects attended the ads the better their memory. For the two recognition measures, attention to the brand elements $[\log(TFD_{brand})]$ also improved memory.
Table 4
Logistic Regression Models Predicting Memory for Study 1b

<table>
<thead>
<tr>
<th></th>
<th>Ad recall</th>
<th></th>
<th>Brand recall</th>
<th></th>
<th>Ad recognition</th>
<th></th>
<th>Brand recognition</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Wald $\chi^2$</td>
<td>p</td>
<td>Wald $\chi^2$</td>
<td>p</td>
<td>Wald $\chi^2$</td>
<td>p</td>
<td>Wald $\chi^2$</td>
<td>p</td>
</tr>
<tr>
<td>Individual differences</td>
<td>50.062</td>
<td>1.000</td>
<td>39.997</td>
<td>1.000</td>
<td>49.791</td>
<td>1.000</td>
<td>71.550</td>
<td>1.000</td>
</tr>
<tr>
<td>Ad differences</td>
<td>26.295</td>
<td>.0001</td>
<td>37.339</td>
<td>.0001</td>
<td>29.985</td>
<td>.0001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brand familiarity</td>
<td>8.206</td>
<td>.0042</td>
<td>34.680</td>
<td>.0001</td>
<td>76.399</td>
<td>.0001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total fixation duration toward the ad [log(TFD_{ad})]</td>
<td>18.886</td>
<td>.0001</td>
<td>15.128</td>
<td>.0001</td>
<td>28.697</td>
<td>.0001</td>
<td>14.805</td>
<td>.0001</td>
</tr>
<tr>
<td>Total fixation duration toward the brand [log(TFD_{brand})]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>11.889</td>
<td>.0006</td>
<td>10.371</td>
<td>.0013</td>
</tr>
<tr>
<td>Interference</td>
<td>8.491</td>
<td>.0036</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Study 1a & 1b Discussion

Attention was shown to have a strong relationship with affect and memory, with increased attention improving them both. Attention itself was predominately influenced by the design of the various advertisements and the inclusion of familiar brands, but it was also influenced by proactive interference. When the target ad followed the interference ad such that the subject could vary their attention to the target ad, brand familiarity moderated that attention. When brands were familiar, subjects chose to attend target ads more, but when brand were less familiar, this attention decreased. This supports H1.

Interference never influenced affect toward the ad ($A_{ad}$) and this supports H2. In Study 1b, the proactive interference case, there was a more complex relationship. The model predicting affect toward the brand ($A_{brand}$) did not include a measure for attention. It may have been that the greater levels of attention need to compensate for interference offset an otherwise positive effect of attention on affect. However as H3 suggested, there was a negative effect of interference on affect toward the brand ($A_{brand}$). Thus, H3 is supported. It is important to note that this situation was one of only two where interference’s effect was negative. Here, brand attitude decreased by less than .2 units, which is modest in comparison to past research, but still a troubling effect for managers forcing into this situation.

The greatest surprise, however, where the effects on memory. In five of the eight possible effects on memory, the effect of interference was positive, which goes directly against the long history of interference research in advertising. There are two key differences about this research, however. First, subjects could view ads for the short periods of time typical of most consumer situation, and accordingly, those times were much briefer than most prior forced exposure interference research. Considering Figure 1, the pattern is that only when the memory task is easy relative to the attention time spent—as was ad recognition is for retroactive inference—does interference have the traditional negative effect. In prior
research, the long 30 second forced exposure times may have made it easier for subjects to develop memory for ads such that it could interfere. However, in the short, more realistic, times considered here, memory wasn’t formed deeply enough to actually interfere with other memory. Instead, it was a challenge to merely be attended to and remembered in the first place. For many ads, attention was enhanced by interference and memory increased.

Although not the subject of a hypothesis, the lower attention, affect and memory given unfamiliar brand stands as a note of caution. Managers of unfamiliar brands should find this effect troublesome—and in their perspective far too common a situation. If, as these first two studies suggest, attention is an important part of interference, then possible attention is something that can be controlled for the benefit of less familiar brands. It was the case that there were large differences among different ads, and some of them drew attention better, lead to more positive affect and memory. One useful direction may be to focus on encouraging additional attention toward smaller brands such that this attention may offset some of the disadvantages of being an unfamiliar brand. Koslow (2015) argues that for smaller brands highly creative advertising is a useful path to follow.

**STUDY 2**

If attention is a central part of how advertising interference works, attention is a key goal for advertisers. This is even more so for less familiar brands who will may be viewed less under proactive interference. One suggestion is that highly creative advertising may help gain attention and improve ad effectiveness for ads (Smith, Chen & Yang, 2008). This approach is consistent with the two stage communication model proposed by Kover (1995), where ads seek to breakthrough clutter and then commutate with the consumer. To expand on this approach, first the role of creativity in advertising will be reviewed and then applied to
brands. However, it is proposed that creativity is more critical for unfamiliar brands than familiar ones (Koslow, 2015).

The literature shows that the attention getting properties of stimuli can be classified in two aspects: physical properties and collative properties (Mackenzie, 1986). The physical properties have an effect on intensity of the stimulus such as brightness, colour, and size. These physical properties of ads attract the consumers’ attention and most elements of the physical prosperities have positive effect on recognition. For example, size on the stimuli such as ad size, size of illustration, and type sizes. Other elements are also have positive effect related to recognition such as area of copy, number of colours, area of colour, number of illustration units, and number of copy units (Diamond 1968; Hanssens & Weitz, 1980; Twedt,1952). According to Soley and Reid (1983), the physical ad prosperities are considered to play a central role in attracting consumers’ attention. For instance, consumer may respond differently to the physical ad properties (Celsi & Olson, 1988) because consumers’ responses may mask the actual relationship between the physical ad proprieties and attention (Rosbergen, Pieters, & Wedel, 1997).

Collative properties, however, are connected to comparison or collation of stimulus elements such as complexity, motion, unit formation, and novelty. The literature investigated the impact of collative ad properties on allocation of attention (such as Holbrook & Lehmann, 1980; Morrison, & Dainoff, 1972). Ads rated as “surprising, incongruous, or funny” were more likely to have been read (Holbrook & Lehmann, 1980), and the visual complexity of magazine ads was positively related to looking time (Morrison & Dainoff, 1972)

Prior research in visual attention predicted that design characteristics of advertising elements influence behavioural outcomes through their effects on attention. For instance, Pieters, Wedel, and Zhang (2007) found that the sizes of several feature ad design elements significantly affect consumers’ attention to the advertisements. Nisbett and Ross (1980)
examined the attention getting properties of information contained in messages. The researchers manipulated between "vivid" and "non-vivid" information. They hypothesised that “vivid” information has a greater impact on judgments than does "non-vivid" information because it attracts more attention and remains in thought longer. That shows vivid information express more deep than non-vivid information. That means properties of information make it vivid (Nisbett & Ross, 1980; Taylor & Thompson, 1982).

However, Pechmann and Stewart (1990) proposed that familiar brands already have such strong memory advantages, any situation that might increase confusion is likely harmful for them. That is, if interference increases confusion, then major brands have much to lose. However, Pechmann and Stewart (1990) also noticed that an unfamiliar brand will also be subject to confusion, but for them the possibility of confusing some consumers is better than being ignored by most of them. Comparative advertising appears to work because sometimes it increased consumer attention toward ads—which is the same reason why creativity is presumed to work (Sasser & Koslow, 2008). It may be that creative advertising is confusing, especially in an interference situation, but if it means an unfamiliar brand can gain attention it might not otherwise get, it can be positive for them. However, creativity may not lead to more attention for a familiar brand that already has significant attention, and the confusion it creates may not be worth it. Although attention will not be able to change for the target brand’s ad under retroactive interference, it can under proactive interference so creativity will influence attention for unfamiliar brands in that interference condition.

H4: When a highly creative target ad follows an interference ad, attention will increase for unfamiliar brands, but decrease for familiar brands.
Study 2a and 2b: Overview

Studies 2a and 2b build off of Studies 1a and 1b in that they also use eye tracking in the same on-line magazine with 24 ads inserted. Study 2a manipulates brand familiarity (high versus low) and the type of interference (retroactive versus proactive) and focuses on unfamiliar brands. The product categories are magazines, travel services, phone service and a television program with the creative advertisements called “Decorating magazine”, “Hello, Tokyo”, “I talk in bulk”, and “James’ school dinner” respectively. Study 2b uses the same design, but uses familiar brands. The categories are supermarkets, newspapers, internet services and automobiles, and the ads called “Fresh veg”, “Gastro pub”, “Indian guy”, and “Diesel car”. The focus of the results is attention models, but the downstream effects on affect and memory will also be discussed.

Study 2a: Results

Table 5 gives the details of the final GLM models predicting total fixation duration toward the ad [log(TFD_{ad})] and toward the brand [log(TFD_{brand})]. The first of these models had an $R^2$ of 85.3% and the second 71.1%. In both cases, more attention was given to the target ad when it followed the interference ad and the consumer had the opportunity to attend the ad more as a result of interference. The extra attention given the ad in total was .60 seconds and the extra attention toward the brand elements was .32 seconds.
Table 5
Models predicting attention for Study 2a and Study 2b

<table>
<thead>
<tr>
<th>Study 2a: Unfamiliar brand in target ad</th>
<th>Study 2b: Familiar brand in target ad</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total fixation duration toward the ad $[\log(TFD)_{\text{ad}}]$</td>
<td>Total fixation duration toward the brand $[\log(TFD)_{\text{brand}}]$</td>
</tr>
<tr>
<td>Mean square $p$</td>
<td>Mean square $p$</td>
</tr>
<tr>
<td>Individual differences</td>
<td>.607 .0001</td>
</tr>
<tr>
<td>Ad differences</td>
<td>1.146 .0015</td>
</tr>
<tr>
<td>Type of interference</td>
<td>.697 .0437</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Attention in turn influenced affect and memory. Although the logistic regression details are not provided, attention toward the brand elements, total fixation duration toward the brand \([\log(TFD_{\text{brand}})}\], positively related to affect toward the brand \((A_{\text{brand}})\) at \(p=.0539\). Attention toward the brand elements also predicted brand recall \((p=.001)\) and brand recognition \((p=.0001)\). Total fixations duration toward the ad \([\log(TFD_{\text{ad}})}\] also positively predicted ad recall \((p=.0003)\) and ad recognition \((p=.0001)\).

**Study 2b: Results**

Table 5 also details the GLM details for models predicting total fixation duration for the target ad \([\log(TFD_{\text{ad}})}\] as well as for the brand \([\log(TFD_{\text{brand}})}\], and their \(R^2\)’s were 76.1% and 77.3% respectively. Although the type of interference was marginally significant in the model for ad attention, the effect was negative. When the target ad followed the interference, the time attending the ad for the familiar brand declined. When the creative ad comes after the interference ad, the creative ad was attended to .49 seconds less than when it was the first ad observed.

The attention variables also influenced affect and memory measures, but only the key details are provided here. Attention toward the ad increased ad affect \((A_{\text{ad}})\) \((p=.0258)\), brand affect \((A_{\text{brand}})\), ad recognition \((p=.0001)\) and brand recognition \((p=.0358)\).

**Study 2a and 2b Discussion**

The pattern of attention between the Study 2a and 2b shows that brand familiarity leads to distinct patterns of attention. When the brands are unfamiliar, proactive interference leads to increased attention for creative ads. When the brands are familiar, proactive
interference leads to decreased attention or creative ads. Between the two studies, there is
support for H4, which proposed that creativity will improve attention for unfamiliar brands,
but reduce attention for familiar brands. There were downstream effects of attention on affect
and memory, so attention was a critical step in the process. The half second increase in
attention for unfamiliar brands who use highly creative advertising is will offset the attention
loss caused by being an unfamiliar brand.

GENERAL DISCUSSION, LIMITATIONS AND CONCLUSIONS

This research has shown that much of what we thought we knew about advertising
interference may be wrong. Although it may well be the case that if consumers study an ad
for 30 second, reliable interference effects may occur. But rarely do consumers give ads such
focused attention. Instead, the goal in advertising is to get attention to begin with.
Interference between ads may be positive for ads in general, although unfamiliar brands do
have more trouble in some situations, especially for brand affect when they follow an ad for a
competing brand. What unfamiliar brands can do is use more creative ads and this is an
advantage that familiar brands cannot replicate.

Although Faber (2015) has criticized advertising researches over reliance on the
forced exposure experiment, there may be other more fundamental problems concerning
advertising’s routine borrowing of psychological theories. The origin of memory interference
effects come from psychology’s attempt to explain learning difficulties. For example, the
original studies on memory interference concern the learning of list of random words
extrapolating primacy and recency effects to retroactive and proactive interference.
Consumers may learn about brands from advertising, but they do not study ads the way
psychology subjects study lists of words. Memory interference may be perfect good
psychology research, or even legitimate consumer behavior research, but that does not mean it is insightful advertising research. With the benefit of hindsight, it may seem remarkable that advertising researchers so readily accepted the memory interference paradigm when the requirements of the effects were rarely substantiated in typical realistic advertising exposures. But advertising research needs to be about advertising—and not a weak imitation of outdated psychology theories.

Advertising researchers should remind themselves that our field has been the origin of theories psychology now claims as its own. For example, the stages of creative thinking proposed by James Webb Young (2003) or the creative problem solving approach of Alex Osborn (1953) both came out of advertising practice. What is unfortunate is that advertising researchers failed to capitalize on such advances and the momentum in creativity research shifted first to educational research and more recently social psychology. This, however, is a tradition, we as a field need to reclaim.

No study is without limitations and this research is not an exception. Certainly, it may be that the amount of attention subjects gave the experimental ads was still more than typical consumers give advertising and if viewing times drop to the range of a second or two, different patterns in attention, affect and memory may occur. The subject pool, students, may again be unusual in that they were just more attentive than the general population. There were only eight creative ads and these may be too few to genuinely represent the broad array of possible creative formats. The study was also done in print magazines, and other media could have different effects. For example, clutter in television advertising may have different dynamics than clutter in outdoor or transit media.

Future research will need confirm and extend these findings to situations more typical of actual advertising. As noted in the introduction, if clutter were such a difficult challenge to advertising effectiveness, automotive magazines full of automotive ads should surely have
difficulty finding paying advertisers. Yet, this clearly is not the case. Rather than explore how ads clutter up media and reduce each other’s effectiveness, possibly we need more work on how some media serve as a conduit to greater effectiveness in that thematic media may help build a “center of interest” which may lift the attention and depth of processing consumers give to advertising. Combined with tools like eye tracking, there is much that advertising research can achieve.
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motivation, opportunity, and ability to process brand information from ads. *Journal of Marketing*, 55(October), 32-53.


Chapter 5: THESIS CONCLUSION

Summary

The thesis aims to overcome the negative effects of advertising clutter by extending our understanding of how advertising creativity moderates brand familiarity and advertising competitive interference especially relative to attention. The thesis shows that unfamiliar brands have to work harder to overcome advertising clutter. The most academic researchers and marketers find that advertising creativity is an important strategic tool that should be considered when trying to gain scare consumer attention or building brand familiarity because of creativity’s importance in the marketplace. However, it seems a complex area of study in academic research which has not been helped by the methods used by prior studies. This thesis includes one theoretical and two experimental papers to address the effects of advertising creativity on brand familiarity and competitive advertising interference. And it also measures attention, memory, and affect toward the ads and brands. Furthermore, this thesis uses eye-tracking techniques to measure attention.

Attention has been measured in this thesis by measuring the visual attention directed toward the total ad and the visual attention direction toward the brand elements in the ad. This thesis is the second paper to test non-fixation periods which are described as brief periods of non-attention when the eyes move from place to place on the ad, or from brand elements to other ad features. The results show there are some important findings related to the both the total ads’ visual attention and the brand elements visual attention.

In the second paper, advertising creativity effects were moderated by brand familiarity. The findings show that highly creative advertisements receive more visual attention toward the total ads when they were attributed to unfamiliar brands than when they
attributed to familiar brands. However, the low creativity advertisements drew more visual attention toward the total ads for familiar brands than for unfamiliar brands. This is not an expected finding and it shows that advertising creativity may not be an ideal strategy for advertising familiar brands but it may be a good choice for unfamiliar brands.

Advertising creativity still has some positive influences on familiar brands. The visual attention toward the brand elements of the highly creative advertisements is higher when advertising familiar brands than when advertising unfamiliar brands. Consumers pay more visual attention into the total ad when it is for an unfamiliar brand but they pay more visual attention to the familiar brand elements in the ad.

Although the thesis’ papers focused on fixation time, additional research considered non-fixation time. The non-fixation period of the total of the ad has some influence on the brand familiarity in term of using high creative advertisements. The paper of non-fixation times mirrored the fixation times. The length of eyes movements recorded were higher when consumers were exposed to highly creative advertisements for unfamiliar brands but less eye movements recorded when they expose advertisements for familiar brands. Compared to unfamiliar brands, the length of eyes movements was recorded high on low creative advertisements for familiar brands. Thus, consumers move their eyes more when they were exposed high creative advertisements for unfamiliar brands, and they did the same thing when they were exposed low creative advertisements for familiar brands.

In the third paper, there are some important findings after manipulating competitive advertising interference with brand familiarity when using standard uncreative advertisements. The attention measure recorded a significant differences with advertisement used. Some advertisements receive more attention than others not because they are presenting familiar or unfamiliar brands but it is related to differences among the advertisements
themselves. That is, some ads were just better than others. Consumers also have individual differences in the way their attention varies but overall they give more visual attention toward some advertisements for both familiar and unfamiliar brands.

The visual attention toward brand elements in the advertisements were moderated by brand familiarity and the type of interference. Not surprisingly, advertisements have non-significant effects for brand familiarity on visual attention toward brand elements when the advertisements use retroactive competitive interference. However, the proactive competitive interference case demonstrates an interaction between brand familiarity and whether or not there is interference especially when predicting visual attention toward the total advertisement and affect toward the brand elements in the advertisement. Thus interference position influences consumers’ attention to the total advertisement and to the brand elements in the advertisement. Consumers pay more attention to advertisements when they are presented after interference advertisements.

The hypothesis of using creative advertisements for unfamiliar brands was supported in that visual attention directed toward the total ad is higher when advertisements interfered by retroactive interference than proactive interference. Consumers pay more attention to the whole target advertisements when the interference advertisements are shown before than when they show after. That attention was observed more with unfamiliar brands than familiar brands. And consumers give more attention to the brands elements in the advertisements for unfamiliar brands.

**Affect** has been measured in this thesis by measuring affect toward the advertisement and affect toward the brand. The results show surprising interactions between affect and advertising creativity, and also between affect and brand familiarity. In the second paper, an important finding shows that creative advertisements are more liked. Overall, using creativity
has positive effects on consumers’ affect toward the advertisements, as well as toward the brands. Thus creativity has the power to alter consumers’ liking for advertisements and brands.

In addition, creativity has strong influence on unfamiliar brands for both advertisements and brands. Consumers give positive reactions when they are exposed to creative advertisements, and this reaction increases when they notice that advertisements are related to unfamiliar brand. Then their positive reactions increase toward the brand’s name when it unfamiliar. However, that reaction is clearly negative toward the familiar brands.

The findings show positive relationships between affect toward the advertisements and both visual attention direction toward the total advertisement and visual attention direction toward the brand elements in the advertisement. That is, consumers pay more attention to the advertisements they liked than advertisements they do not liked. This positive relationship was found more for creative advertisements but not found as a significant regarding brand name. Consumers do not pay much attention to the brand elements in the advertisements but they attend to liked unfamiliar brands more than familiar brands.

The in the third paper, the important findings show that using standard uncreative advertisements could show some positive and negative effects. Consumers have positive reaction on advertisement liking for familiar brand but that reaction could turn negative when the advertisement is related to an unfamiliar brand. Proactive competitive interference has positive effects on affect toward the advertisement and those effects were not shown on affect toward the brand. Interference also has negative interaction with visual attention direction of the total of advertisement. In addition, consumers show more brand liking when they pay attention to the total advertisement but that attention reduced on visual brand elements in the advertisement.
In the situation of using retroactive interference, that visual attention of brand elements in the advertisement is significant in term of affect toward the advertisement, as well as in terms of affect toward the brand. Consumers increase brand liking when the interference advertisement appears after the target advertisement. Thus, interference position has positive influence on brand liking but not on advertisement liking. In addition, the findings of creative advertisements for both familiar and unfamiliar brands show no significant effects between presenting proactive competitive interference or retroactive competitive interference. The largest effects were shown to be based on respondent individual differences and advertisements names.

**Memory** has been measured in this thesis by measuring advertisement recall, brand recall, advertisement recognition, and brand recognition. The important findings in the second paper show that creative advertisements were less recalled for both familiar and unfamiliar brands. Even though creative advertisements receive high visual attention when advertising unfamiliar brand, consumers face some difficulties to recall creative advertisements for unfamiliar brands. As well as they show similar difficulties on recalling creative advertisements to their familiar brands.

Consumers may pay more attention to the brand elements in the advertisements for familiar brands, but the models cannot reach significance for advertisement recognition when advertising familiar brands. Thus, creative advertisements were less recalled and recognized for familiar brands. Furthermore, advertising creativity has positive influence on advertisements recognition for unfamiliar brands. That consumers can better recognize creative advertisements for unfamiliar brands than creative advertisements for familiar brands.
Advertising creativity has positive effects on brand recognition but not on brand recall. And it is also has positive influence brand recognition. This finding shows that advertising creativity helps consumers to recognize brand for unfamiliar brands but it has negative influence on brand recognition for familiar brands.

In the third paper, the important findings show that visual attention toward the total advertisement has positive influence on advertisements recall, brand recall, ad recognition, and brand recognition. Thus, consumers pay attention to the standard uncreative advertisements and that attention helps them to recall and recognize both advertisements and brands. Also that influence is shown on advertisements themselves so some advertisements were recalled and recognized better than others. Furthermore, the brand familiarity has significant effects on memory’s measurements.

The position of using interference has significant effects on memory. The position of retroactive competitive interference influenced consumers’ memory on recalling advertisements and brands, as well as on recognizing advertisement and brand. However, in the situation of using proactive interference those effects cannot shown on brand recall, ad recognition, or brand recognition. And there is positive relationship between visual attention of brand elements in the advertisement and ad recognition, as well as with brand recognition. Overall, the most memory cases show that advertising competitive interference has positive influence on memory.

**Implications**

This thesis has generated a number of implications of interest to both academic and practitioner research, and contributes to the existing research on advertising creativity as an important aspect of dealing with the negative effects of advertising clutter. From the findings
this thesis noted above, advertising creativity has several significant effects on ads and brands showing that advertising creativity can deal with the negative effects of competitive advertising interference. This section provides some perspective regarding the effects of advertising creativity on both ads and brands, and provides a discussion of how advertising creativity could be used in practice to reduce the negative effects of competitive interference. This section also discusses how creativity may be a valuable tool for improving the familiarity for unfamiliar brands. Overall, the ideas in this section are intended to stimulate thinking on how insights from the thesis findings from this thesis might affect marketplace dynamics.

Implication for Consumers:

Consumers tend to avoid advertising messages because of perceived advertising clutter (Elliott & Speck, 1998). The results of this thesis support the notion that more creative advertising could reduce the negative effects of advertising clutter; in fact, marketers often agree with this finding, because many believe that creativity could be a solution the challenge of clutter problems. For example, creativity in advertising could deal with clutter problems better than dull messages delivered multiple times within the same vehicle of advertisements (Rotfeld, 2006). Consumers find that a large number of messages have negative effects on ads, as well as on brands.

Consumers tend to ignore messages that do not relate to them. For example, people often disregard direct mail in their e-mail inbox when irrelevant to them (Cho & Choen, 2004). They also turn away from the television during ad breaks (Jayasinghe & Ritson, 2013). Marketers need to think carefully when planning brand promotions, taking into account that unrelated messages from the advertising will reduce consumers’ attention. To deal with this problem, marketers need to consider creative ways to resolve clutter for relevant consumers.
More creative ads would have a positive impact on consumers, because creative messages often carry information that consumers would like to receive. Therefore, this strategy could help marketers reach their goals.

The thesis results also show that creativity helps advertising avoid the effect of competitive advertising interference, which creative ads have been found to do, as compared with non-creative ads. Marketers also have to consider that advertising creativity has its most positive impact on unfamiliar brands. This thesis investigated the two types of competitive interference: proactive competitive interference (PCI) and retroactive competitive interference (RCI).

Advertising creativity reduces the negative effects of PCI. For example, PCI has negative effects on memory because previous information confuses consumers when learning a new information. This problem could be avoid by using a creative learning technique. For example, a good learning environment often builds on creative tools and technique such as using creativity on pictures, texts, signs, ways of presenting information, and ways of attracting attention and how to keep attention longer. This technique could increase information absorption at the first instance and reduce PCI at situations of using creativity. As a result, reflecting this idea on learning information from advertisements could benefit marketers to improve their ads and brands memories. Creative advertisements improve consumers’ attention which in due course increases ad and brand memories.

In addition, RCI has negative effects on ads and brands memories. RCI is related to the attenuation of memory for previous information as a results of learning a new information. Marketers can again avoid the negative effects of RCI by based on creativity as well. For example, an interesting way of learning helps students become more attracted to learning new information. And it is especially important to link information with something creative and relevant to the students. Creativity can be thought it as technique for transferring
information to a format that peaks the audiences’ interests. As a result, reflecting these ideas of learning information into advertisements, marketers need to consider that creative advertisements have to be relevant to the target consumers and presenting in a more attractive way.

Advertising creativity could also increase attention and motivation towards ads. MacInnis, Moorman and Jaworski (1991) reported that creative ads are more liked and motivated, and consumers paid more attention to creative ads than control ads. The findings in this thesis are supported that advertising creativity benefits unfamiliar brands and familiar brands both as well creativity may be good for ads but it is not always a good solution for brands. Therefore, creativity is important aspect for unfamiliar brands, and marketers have to think about the strategy of using creativity before advertising their unfamiliar brands. They should not ignore the effectiveness of advertising creativity on unfamiliar brands; otherwise, the ads will not reach their fundamental goals.

**Implication for Unfamiliar Brands:**

The learning opportunity offered by unfamiliar brands is greater than the opportunity of learning provided by familiar brands because the most of information for unfamiliar brand is still new to consumers. And presenting this information by using creative advertising encourages consumers to be motivated when processing this information so to mentally store this based on its own distinctive attributes and not a competitor’s. However, if the new information is presented in uncreative or standard advertising, it may not gain consumers’ attention and fail at motivating consumers to think more deeply. And information for an unfamiliar brand may be stored in memory under the familiar brands’ attributes, which is not problem from which memory interference arises (Kent & Allen, 1994; Lynch Jr & Srull, 1982). Thus marketers can avoid competitive advertising interference by using creativity
when they advertise unfamiliar brands. And marketers have also to consider that creativity factors may be the most important features for effective advertisements.

Creativity in advertising has to be balanced between two factors: originality and appropriateness (Koslow, 2015; Runco, 2007; Runco & Jaeger, 2012). The literature addresses four types of situations related to these factors (Koslow, 2015). The first situation is the state of being original but not appropriate. In this situation, advertisements were described as ‘weird’, but not effective. The second situation is appropriate but not original. The advertisements in this situation were designed with the right message to consumers, but were also considered not effective. The third situation is that the advertisements are neither original nor appropriate, and such advertisements were described as bad advertising. To avoid the negative effects of competitive advertising interference, marketers need to avoid these three situations; as much as originality is an important feature of advertisements, marketers have to balance both originality and appropriateness.

High competition in the marketplace increases the difficulties for unfamiliar brand marketers to compete and improve their brands familiarity. Marketers for unfamiliar brands face high competition from familiar brands from the same product category. They know that the large number of familiar brands in the market has negative effects on their unfamiliar brands. Thus, they have to build familiarity by using more suitable solutions. As found in this thesis, advertising based on creativity could help improve of familiarity for unfamiliar brands, and advertising creativity benefits unfamiliar brands.

In addition, this finding has been supported in the literature. For example, the effects of advertising creativity has been investigated with regard to ad recall (Baack, Wilson & Till, 2008; Lehnert, Till & Carlson, 2013; Sheinin, Varki & Ashley, 2011; Smith, Chen & Yang, 2008; Southgate, Westoby & Page, 2010), and also in relation to enhancing consumers’ attention, recall and recognition (Sasser & Koslow, 2008; Sheinin et al., 2011). The majority
of the academic research supports that idea of advertising creativity has a positive influence on consumers’ attention and memory, as well as on liking (Lehnert et al., 2013; Southgate et al., 2010). Creativity is also an important component of advertising effectiveness (Sasser & Koslow, 2008). Based on these findings, using creativity could support unfamiliar brands to improve familiarity.

Attention works as a gateway to brand familiarity. If marketers looking to improve their brands familiarity, they have to capture consumers’ attention. The attention needed is more than just attention toward the ad; unfamiliar brands need to find a way to keep that attention long enough to process brand information. In addition, creative advertisements get more attention than others advertisements for several reasons. Creativity theory provides increased capacity or flexibility in processing information which they make consumer’s mind be more active during time of exposure. That is creativity may move consumers from shallow processing to deeper processing. For example, during exposure time, consumers need enough time to process information, however, if the information they are present with is more active, so they need less time of processing information. To force this activity on consumers as with “front end impact” only is overly draining on consumers (Stewart & Furse, 1986; Stewart & Koslow, 1989). Some marketers based on advertising cheap tricks to capture consumers’ attention, but using cheap tricks in advertising without strategy may affect attention negatively. But using creativity correctly within advertisements improves consumers’ attention.

Creativity itself may not always be enough to capture consumers’ attention. Marketers need to inject creative advertisement with a suitable media and exposure time. They have to consider their target consumers’ interest on the type of media and exposure time. As much as they build consumers’ interest is as much as they can capture their attention. Brand information, then, will be stored on memory during exposure time. Later, stored information
could help consumers on the time of purchase decision, however, competitive advertising interference may arise at this time as well. Therefore, marketers need to avoid that competitive advertising interference by using creative technique of learning new information.

Consumers usually attend to and learn information about their brands they are interested in. They usually attend to information about brands they liked. Then consumers can retrieval brands information with less of difficulties. Familiarity for brands could improve when unfamiliar brands be better recognized and liked. Later brand familiarity could improve even more after consumers developing expertise with the product itself.

Marketers often feel they have to repeat their advertisements to get sufficient memory for their audience. Marketers for unfamiliar brands often believe that repetition has a positive influence on their brands. This strategy could help improve on brand memory, but it requires a large budget. Marketers have to consider the efficacy of spending more money on repeat advertising especially because it does not necessarily help an unfamiliar brand to reach consumers’ attention despite placing pressure on advertising budgets. This thesis has shown creative ads are much more beneficial for unfamiliar brands. Lehnert et al. (2013) found that creative ads are able to increase recall in overall, and with less repetition than less creative ads. That means that, with creative ads, there is no reason for marketers to increase spending on advertising repetition.

**Implication for Familiar Brands:**

The thesis findings described that advertising creativity can harm liking for familiar brands. That negative effects are related to several other concerns. Creativity could affect motivation on learning information about familiar brands, and that motivation can be described on three themes. Familiar brands are already well-known which may not motivate
consumers’ attention. Yet, consumers may have access to previous information about brands they are familiar with. This previous information could also decreases consumers’ motivation of learning new information about the same brands. Further creative advertisements for familiar brands may present information which may not be that attractive to the target consumers. That can be shown when provide messages which are not challenging consumers brand knowledge. Thus, that motivation plays as the important role on the advertising attention.

Consumers do pay less attention to the information they already know. But they are also looking to receive more information about familiar brands different than what they have. Marketers for familiar brands need to provide specific and unique information when they advertise their brands. Even though, consumers prefer to receive much information about brand familiar to them, creative advertisements try to present simple and quick message contains original feature. Thus, consumers may find that not enough information and not be attracted them. However, low creative ads may be designed with great deal of information which encourages consumers to receive more information about their familiar brands. For that reason, marketers need to consider that consumers’ reaction is an important aspect when they advertise their familiar brands.

Consumers often like to try new options on the market. And they may have already expertise with their familiar brands. Consequently, consumers may already have expertise the related brand products, they are most likely to ignore the familiar brands advertisements. Marketers have to give more considerations on consumers’ reactions toward their brands. And they have to be careful when they advertise their familiar brands. Thus they have to know that uncreative advertisements may better for their familiar brands. In few words, marketers for unfamiliar brand may have not to realise on creativity itself is the best solution
of their brands problems. They need to think about other aspects on the market environment which could influence their ads and brands on a positive way.

**Limitations**

There are some limitations to the studies in this thesis, which are highlighted in this section. The first limitation is related to the ads tested. In the second paper, there were 24 ads (eight creative, eight control and another eight distractor ads). The third paper used a subset of these ads, with eight uncreative ads (four target ads in Study 1a and another four target ads in Study 1b). And it also used another subset of eight creative ads (four target ads in Study 2a and another four target ads in Study 2b). The question is whether this is a large enough ‘universe’ of representative ads. The studies in this thesis used more ads than is standard in the advertising literature; however, some studies may use more. For example, Wedel and Pieters (2000) tested 65 print ads using an eye-tracking experiment. Smit, Boerman and van Meurs (2015) conducted 68 tests in their study, and the total number of observation was 19,278. Therefore, increasing the number of ads may support academic research with more significant findings.

Another thesis limitation may be the advertisements used for the main studies. The advertisements were chosen carefully by different types of criteria. The creative ads selected were winners of awards for advertising creativity. And low creative ads were selected from normal magazines. However, using different ads may show different effects specific to the ad itself. For this reason, researchers can provide more important findings by changing ads or adding more. And the variability between the ads could not be standardised, since some ads may have been more effective than others. Each ad has own way to achieve the effectiveness. Sometimes that advertisement effectiveness is related to the brands name or types of product. For example, in the market place some brands were more accepted than others such as
domestic brands in the some societies are more liked. And types of product category can influence advertisements. Consumes like to expose advertising for products that fit with their society’s norms or customs.

The second limitation is related to the studies’ samples. The population of each study sample was 154 undergraduate students at a medium sized public university on the Pacific Coast. All participants were native English language speakers. Many studies in the literature included students as participants for many reasons: students are more intelligent and active than others in society; they are also more likely to participate in studies and they are easy to deal with.

However, including non-students may increase the external validity of the findings. Students often have similar motivations to each other as a result of demographic similarity, but non-students may have more varied motivations. For example, motivation to learn could be higher in students than non-students, meaning that students may be more open to learning new information more than non-students. On the other hand, non-students may have more experience with ads and brands, and may have previous information about the brands, which could affect their attention and liking of ads and brands.

The third limitation is related to the number of competitor advertisements for brands from the same product category. This thesis limited that each target advertisement is interfered by one advertisement for brand from the same product category. And it is also interfered by other advertisements for other brands from the different product categories. For example, the Toyota advertisement was interfered with at the competitive-level by Honda advertisement. Both advertisements were interfered with at the contextual-level by other advertisements in the magazine. This thesis finds that a modest amount advertising interference could benefit the target brands. However, this finding may not apply on a situation of using more than one interference advertisements for brands from the same
product category because the effects of competitive advertising interference on advertisement and brand memory could be related to the volume of interference. Thus, one interference advertisement may encourage consumers’ memory to process information about the both advertisements for brand from the same product category, interference advertisement and the target advertisement. But more interference advertisements could be harmed consumers’ memory.

The last limitation is related to the study stimuli. A mock magazine called Rosna, a name suggested by the researcher for the purpose of this thesis, was designed with ads and articles. There is no magazine called Rosna currently on the market in the test location. The magazine articles were collected from different resources, such as general interest magazines and websites, and they were presented with the original authors’ names. However, the novelty of the new magazine may have led to deeper thinking than usual. In addition, ads in the magazine were used as stimuli, but the results may be limited to this one type of media. The study’s results may apply to other types of media, such as television advertising.

Television advertising usually ties products or brand information to interesting audio and visual information, but this strategy cannot be used on print ads. Television advertisements capitalise on the flexibility of visual and audio elements; however, print ads must restrict themselves to fewer elements, such as text and image, which limits reinforcement potential. Further, information-learning techniques require using one or more senses as an information input. For example, consumers use sense of hearing to listen to radio advertising, and vision when exposed to magazine ads. Consumers require both vision and hearing when they watch television advertising. Therefore, different types of senses can be used to attract consumers’ attention, and this combination is required when learning information: using more senses leads to more attention and therefore to more information received.
Future Research

Future research is suggested at the end of each paper, but this section highlights the most important suggestions for future research. The studies in this thesis were designed as single session experimental studies. It is important to replicate the experiments in two sequential sessions, the first one in which the message is reviewed and this flows into testing session, with longer delays in between. For example, on day one, attention should be measured, and after one or more days, brand recall can be measured, along with ad and brand recognition using delay measurements. This would provide an idea of how long creative ads affect consumers’ memory for both familiar and unfamiliar brands.

The second suggestion is to extend the studies in this thesis by including non-students in study samples. This could create interesting results, because non-students might have paid more attention to brands they already have exposure to. Academic researchers might therefore investigate how creative ads encourage a general population sample to increase their brand and ad memory and liking, as well as their brand persuasion. Replicating the studies with non-students may provide more important outcomes for non-student reactions, and such results could be compared with the current studies’ results. I think future findings will support the findings of this thesis with even more interesting results.

The studies in this thesis tested a specific number of ads per study, mentioned as one of the limitations of this thesis. Thus, future research could include more ads by following the same procedures and evaluating advertising creativity in term of ad positions, with or without competitive interference. For example, future research has to manipulate two levels of advertising creativity (low versus high) × two conditions of ads’ positioning in the magazine (ads presented on the front cover of the magazine versus ads presented inside the magazine) × two conditions of advertising competitive interference (with competitive interference and
without competitive interference). Researchers may replicate this suggestion with one type of competitive interference in each study. For example, the first study could include proactive interference and the second study could include retroactive interference. Results could be compared and then generalised.

Replicating the studies in this thesis in other media, such as commercial television advertising or web pages advertising, could support the thesis findings. The replication of the studies may provide more insight about ad effectiveness in terms of creativity. Advertising repetition is an important variable that could be included. For example, researchers could test two levels of television advertising creativity (low versus high) × two conditions of competitive advertising interference (proactive versus retroactive) × two conditions of advertising repetition (no repetition versus repetition). This could contribute good findings to advertising literature by investigating the role of advertising creativity in overcoming competitive advertising interference in the situation of repeat advertising.

Finally, an important suggestion is studying advertising creativity in terms of building brand familiarity, especially for unfamiliar brands. Related to this suggestion, academic researchers may need to explore how advertising creativity builds knowledge for unfamiliar brands, while increasing effectiveness of familiar brands. Future research should first examine the effects of advertising creativity with different brand familiarity from different product categories for the purposes of measuring attention, memory and affect toward ads and brands. Researchers should then divide advertisements into two groups: creative advertisements and non-creative advertisements, and test those groups in two eye-tracking experimental studies within subject design, with a one-session experiment and a two-session experiment.

Further study of unfamiliar brands can be done by testing persuasion and brand decision-making. This study has to be done in a real marketplace environment, such as
supermarkets or stores. The same participants in the first study can be asked to select types of products related to the same brands used in the first study. Using eye-tracking glasses is important to measure brand name attention and how long it takes to make brand decisions.

With the results of this further study, researchers will demonstrate that creativity in advertising is important for unfamiliar brands, helping marketers to improve familiarity for unfamiliar brands, and to stand out from advertising clutter. Academic researchers can identify the effect of creativity on building brand familiarity by replicating this suggestion in different ways, such as using different types of product categories, media or target consumers.

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Imagination.


### Appendices

**Appendix (A)**

**Brand Familiarity Pre-test**
Brand Familiarity Pre-test

Date: ......../ ......../ 2011

I am doing a research project which is part of my PhD degree (marketing specialization). The research project is about the consumers and their brands so I want to know about the brands that people are familiar with in different product categories.

For Each product category, please write down all the brands you can think of. For example, when you think of TVs, what brands come to mind?
<table>
<thead>
<tr>
<th>Product Categories</th>
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<tbody>
<tr>
<td>Supermarkets</td>
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<tr>
<td>Decorator</td>
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<tr>
<td>Magazines</td>
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<tr>
<td>Newspapers</td>
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<tr>
<td>Mobile Services</td>
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<tr>
<td>Internet Services</td>
</tr>
<tr>
<td>Travel Agencies</td>
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<tr>
<td>/Services</td>
</tr>
<tr>
<td>Chef/Cooking</td>
</tr>
<tr>
<td>Television program</td>
</tr>
<tr>
<td>Cars</td>
</tr>
<tr>
<td>Product Categories</td>
</tr>
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<td>--------------------</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Product Categories</th>
<th>Toothpaste</th>
<th>Drink Juice</th>
<th>Coffee</th>
<th>Computers</th>
</tr>
</thead>
<tbody>
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</tr>
</tbody>
</table>

**Nationality:**  □ New Zealander  □ Other (……………………………………………………………….……………………………….)
Gender: □ Male  □ Female

Occupation:

□ Post graduate student
□ Undergraduate student
□ Other  ( ____________________________________________________________ )

Thank You

Appendix (B)
Participant Information Sheet
Overview:
The purpose of this study is to assess relationships between magazine format, reading style, and media attitudes. It is intended for doctoral research in Marketing.

Who is responsible?
The primary researcher is Ahmed Al Shuaili, a doctoral research student at the University of Waikato Management School under the supervision of Drs Scott Koslow and Carolyn Costley.

The researcher can be contacted at 07-838-4466 extn: 4069, ahaha1@students.waikato.ac.nz

The contact details of my two supervisors are:
Dr. Scott Koslow  
Associate Professor  
Marketing Department  
Phone: 0838-4466 ext: 8587  
Email: skoslow@waikato.ac.nz

Dr. Carolyn Costley  
Associate Professor  
Marketing Department  
Phone: 0838-4466 ext: 8648  
Email: ccostley@waikato.ac.nz

### What is involved in the research?

The researcher uses an eye-tracking machine, a highly technical device used in eye-movement studies. Eye tracking determines what viewers look at by reflecting light off the eye. You will need to sit in front of a screen. Nothing touches your eyes. But, if your eyes are sensitive to the rays emitted from computer monitors, you are advised not to participate. If you participate, you will look through a magazine (presented as pdf file), using a mouse to move from one page to the next. The researcher will demonstrate how to do that. After you finish the eye tracking part of the study, you will move to another room and complete a questionnaire. Be sure to write your code number on the questionnaire so the researcher can match it with your eye-tracking data. The whole thing should take about half an hour.

### What will happen to the information collected?

The information collected from the experiment will be used towards writing the PhD thesis, presentations for national and international conferences and articles for publication in relevant journals. No participants will be named in any research output. The recorded data (eye-tracking machine data and the questionnaire data) will be used for academic purposes. Supervisors, examiners and academic members of Waikato Management School are the people who are likely to see and hear reports on this research.

### Declaration to participants:

If you take part in the study, you can:
- Withdraw from the study at any time during the course of the experiment, right up until you sign the “Consent for data use”.
- Ask any further questions about the study that occur to you during your participation.
- Receive access to a summary of the findings from the study when it is concluded.
- If you have eyes that are sensitive to the rays emitted from computer monitors, you are not...
advised to participate.

Appendix (C)

Consent for Data Use
Can advertising creativity overcome competitive memory interference: Attention, Affect and Memory

Consent Form for Participants

I understand that the study is really about the influence of advertising creativity on memory for brand names and not about the relationships between magazine format, reading style, and media attitudes. I consent to the researcher using my eye-tracking data and my questionnaire responses for his research. I understand that my name will be not appear in any reports on this research.

Your code number: ______________________________
Signed: _____________________________________________

Name:  _____________________________________________

Date:  _____________________________________________

Rechercher’s Name and contact information:
Ahmed Al Shuaili (PhD Student – Marketing Department)
E-mail: ahaha1@students.waikato.ac.nz
Phone: 0838- 4466 ext 4069

Supervisor’s Name and contact information:
Scott Koslow (Associate Professor- Marketing Department)
Email:skoslow@waikato.ac.nz
Phone: 0838-4466 ext: 8587

Carolyn Costley (Associate Professor- Marketing Department)
Email: ccostley@waikato.ac.nz
Phone: 0838-4466 ext: 8648

Appendix (D)

Ads names and orders as shown on the eight versions
of the Rosna magazine
### Brands and their ads’ names

<table>
<thead>
<tr>
<th>Product Category</th>
<th>Brand Familiarity</th>
<th>Competitive Advertising Interference</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Brand name</strong></td>
<td><strong>Ad name</strong></td>
<td><strong>Brand Familiarity</strong></td>
</tr>
<tr>
<td>Cars</td>
<td>Toyota</td>
<td>diesel car</td>
</tr>
<tr>
<td>Food Supermarket</td>
<td>New World</td>
<td>fresh veg</td>
</tr>
<tr>
<td>Mobile services</td>
<td>Vodafone</td>
<td>I talk in bulk</td>
</tr>
<tr>
<td>Travel agencies</td>
<td>Flight centre</td>
<td>Hello Tokyo</td>
</tr>
<tr>
<td>Internet Services</td>
<td>Telecom</td>
<td>Indian guy</td>
</tr>
<tr>
<td>Newspapers</td>
<td>The New Zealand Herald</td>
<td>Gastro pub</td>
</tr>
<tr>
<td>Magazine</td>
<td>NZ house and Garden</td>
<td>Better Homes and Gardens</td>
</tr>
<tr>
<td>Chef T.V programme</td>
<td>Master Chef</td>
<td>Top Chef</td>
</tr>
<tr>
<td>Computers</td>
<td>Dell</td>
<td>Lenovo</td>
</tr>
<tr>
<td>Pasta</td>
<td>San Remo</td>
<td>Leggo’s</td>
</tr>
<tr>
<td>Dress Shoes</td>
<td>Hush Puppies</td>
<td>Bata</td>
</tr>
<tr>
<td>Coffee</td>
<td>Nescafé</td>
<td>Bushells</td>
</tr>
<tr>
<td>Toothpaste</td>
<td>Colgate</td>
<td>Close.up</td>
</tr>
<tr>
<td>Facial Tissues</td>
<td>Kleenex</td>
<td>TenderSoft</td>
</tr>
<tr>
<td>Drink Juice</td>
<td>Just Juice</td>
<td>Golden Circle</td>
</tr>
<tr>
<td>Ice cream</td>
<td>Tip Top</td>
<td>Häagen-Dazs</td>
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</tbody>
</table>


Advertising orders: High creative ads and competitive interference ads

<table>
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</tr>
</thead>
<tbody>
<tr>
<td>Cars “A”</td>
<td>“M”</td>
<td>Toyota</td>
<td>AM</td>
<td>AM</td>
<td>AM</td>
<td>AM</td>
<td>AM</td>
<td>AM</td>
<td>AM</td>
<td>AM</td>
</tr>
<tr>
<td></td>
<td>“m”</td>
<td>Volkswagen</td>
<td>Am</td>
<td>Am</td>
<td>Am</td>
<td>Am</td>
<td>Am</td>
<td>Am</td>
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<tr>
<td></td>
<td>“i”</td>
<td>Honda</td>
<td>iA</td>
<td>iA</td>
<td>iA</td>
<td>iA</td>
<td>iA</td>
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<tr>
<td>Food Supermarket “B”</td>
<td>“M”</td>
<td>New World</td>
<td>BM</td>
<td>BM</td>
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<td>BM</td>
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<td></td>
<td>“m”</td>
<td>nosh</td>
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<td>Bm</td>
<td>Bm</td>
<td>Bm</td>
<td>Bm</td>
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<td></td>
<td>“i”</td>
<td>Woolworths</td>
<td>iB</td>
<td>iB</td>
<td>iB</td>
<td>iB</td>
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<tr>
<td>Mobile Service “C”</td>
<td>“M”</td>
<td>Vodafone</td>
<td>CM</td>
<td>CM</td>
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<td>CM</td>
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<td></td>
<td>“m”</td>
<td>Boost mobile</td>
<td>CM</td>
<td>CM</td>
<td>CM</td>
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<td>CM</td>
<td>CM</td>
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<td>“i”</td>
<td>2 degrees</td>
<td>iC</td>
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<td>iC</td>
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</tr>
<tr>
<td>Travel Agencies “D”</td>
<td>“M”</td>
<td>Flight centre</td>
<td>DM</td>
<td>DM</td>
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M: familiar brand; m: unfamiliar brand; i: competitive brand; A,B,C,D,E,F,G,H: product categories
Advertising orders: Low creative ads and competitive interference ads

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Ads’ order in the eight versions of the *Rosna* Magazine

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<td>iB</td>
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<td>gm</td>
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<td>Hm</td>
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<td>FM</td>
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<td>iF</td>
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<td>hm</td>
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Appendix (E)

The study Questionnaire
(This questionnaire relative to version number one of the digital magazine “Rosna”)
Questionnaire

The following questionnaire about the advertisements for various brands seen in the "Rosna" magazine using the eye-tracking device. Please read the instructions below and answer the questionnaire:

- Remember, if you do not want to participate in this study, you can leave the room any time.
- All data in this questionnaire will be used for academic purposes only.
- Answer the questionnaire question by question.
- Do not turn to another page until you have answered the present page.
- Each time you turn to next page, please do not turn back to the previous page.
- There is no time limit to answer this questionnaire so feel free to write your answers at your own pace.
- Between each type of questions in this booklet there is a cover page with the question number and this phrase "Please Turn the Page", written on it.
- Please do not forget to write your code number that you used in eye-tracking device.

Your Code number/name: ..................................................

Ahmed Al Shuaili
PhD Student
Question Number: 1

Please Turn the Page
You saw some brands’ advertised in the electronic magazine called “Rosna” during eye-tracking study. Please write in the boxes everything you can remember about the brands and ads you saw, one ad per box. If you need more boxes, Ahmed can give you more.
Question Number: 2

Please Turn the Page
You saw several brands advertised in the magazine called “Rosna” during the eye-tracking study. Please tick (✓) each product category below which relates to an ad you remember seen in “Rosna” magazine. If you can recall the brand name, please write it on for each product category you ticked.

<table>
<thead>
<tr>
<th>Product Category</th>
<th>Did you see an ad for the following product category?</th>
<th>If you recall the product category, please write the brands’ name, if you remember it</th>
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</thead>
<tbody>
<tr>
<td>Computer</td>
<td></td>
<td></td>
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<tr>
<td>Travel Agencies</td>
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<td>Ice Cream</td>
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<tr>
<td>Drink Juice</td>
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<tr>
<td>Biscuit</td>
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<tr>
<td>Product Category</td>
<td>If you recall the product category, please write the brands’ name, if you remembered.</td>
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<td>Toothpaste</td>
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<td>Chef Television Programme</td>
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<tr>
<td>Personal Audio and Music</td>
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<tr>
<td>Facial Tissues</td>
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Question Number: 3
(Magazine Version Number: 1)

Please Turn the Page
In the “Rosna” magazine you just saw, please tick (√) if you remember seeing an ad for the brands listed below:

- Acer
- NZ House & Garden
- Two Degrees
- Olympus
- Fayva
- Oreo
- Hush Puppies
- Nosh
- Just Juice
- Boost Mobile
- Lipton
- Hell’s Kitchen
- NZ City
- Slingshot
- Toshiba
- Fresh. up
- Toyota
- Samsung
- Lays
- Top Chef
- Leggo’s
- Tip Top
- Lenovo
- Telecom
- Ritz
- Honda
- Nescafé
- SanDisk
- Flight Centre
- Natural
- Tender Soft
- Close.up
You have in front of you a booklet of ads which are numbered from 1 to 32. The numbered ads in the booklet refer to the row numbers in the first column in the table below. Please **turn to the first ad in the booklet** and answer the questions across the row before turning to next ad and doing the same on that row. That is, for each ad in the booklet **tell us if you remember seeing the ad before** in the electronic magazine (“Rosna”) used in today’s eye tracking study, and **then tell us how much you agree or disagree** with the other three statements. **Answer the three questions whether or not you remember the ad.** Please indicate your answer below circling the appropriate word/number below:

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<tr>
<th>Ad number from the booklet</th>
<th>Do you remember seeing this ad in the magazine you just viewed?</th>
<th>I like this ad.</th>
<th>I like this brand.</th>
<th>This ad is creative.</th>
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<td>No</td>
<td>Strongly Disagree</td>
<td>Disagree</td>
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236
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<th>I like this ad.</th>
<th>I like this brand.</th>
<th>This ad is creative.</th>
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<td>Somewhat Disagree</td>
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<td>Do you remember seeing this ad in the magazine you just viewed?</td>
<td>I like this ad.</td>
<td>I like this brand.</td>
<td>This ad is creative.</td>
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Demographic Details:

Gender:
- □ Male
- □ Female

Major:
- ..............................................................

Degree:
- ..............................................................

Age:
- □ Under 18 years old.    □ 29 to 35 years old.
- □ 18 to 21 years old.    □ Above 35 years old.
- □ 22 to 28 years old.

Ethnicity:
- □ European New Zealander.
- □ Maori New Zealander.
- □ European British.
- □ Chinese.
- □ Indian.
- □ Others (.................................)

What’s your native language?  (.................................................................)

In your native language, do you read from left to write or right to left?
- □ Left to right.
- □ Right to left.
In your native language, do you read from top to bottom or bottom to top?

☐ Top to bottom.

☐ Bottom to top.

Thank You for Participating
In the “Rosna” magazine you just saw, please tick (√) if you remember seeing an ad for the brands listed below:

- Acer
- Better Homes and Gardens
- Woolworths
- Close. up
- Fayva
- The New Zealand Herald
- Oreo
- Hush Puppies
- New World
- Just Juice
- Vodafone
- Lipton
- Waikato Times
- Tlestra
- Toshiba
- Fresh. up
- Volkswagen
- Samsung
- Lays
- Master Chef
- Leggo’s
- Tip Top
- Lenovo
- New Zealand gardener
- Ritz
- sta
- Nescafé
- SanDisk
- Webjet
- Natural
- Tender Soft
- Olympus
Question Number: 3
(Magazine Version Number: 3)

In the “Rosna” magazine you just saw, please tick (√) if you remember seeing an ad for the brands listed below:

- Puffs
- New Zealand House & Gardens
- Moccona
- Colgate
- Barilla
- NZ City
- Oreo
- Bata
- nosh
- Golden Circle
- Boost Mobile
- Lipton
- Bushells
- Telecom
- Toshiba
- Hell’s Kitchen
- Toyota
- Samsung
- Lays
- Top Chef
- Rush Munro’s
- Häagen-Dazs
- Dell
- Slingshot
- Ritz
- Two Degrees
- Kleenex
- SanDisk
- Flight Centre
- San Remo
- Honda
- Olympus
Question Number: 3
(Magazine Version Number: 4)

In the “Rosna” magazine you just saw, please tick (√) if you remember seeing an ad for the brands listed below:

- Puffs
- Better Homes and Gardens
- Moccona
- Colgate
- Barilla
- The New Zealand Herald
- Oreo
- Bata
- New World
- Golden Circle
- Vodafone
- Lipton
- Bushells
- Telstra
- Toshiba
- Waikato Times
- Volkswagen
- Samsung
- Lays
- Master Chef
- Rush Munro’s
- Häagen- Dazs
- Dell
- Woolworths
- Ritz
- New Zealand Gardner
- Kleenex
- SanDisk
- Webjet
- San Remo
- sta
- Olympus
In the “Rosna” magazine you just saw, please tick (√) if you remember seeing an ad for the brands listed below:

- Puffs
- Better Homes and Gardens
- Moccona
- Close. up
- Barilla
- The New Zealand Herald
- Oreo
- Hush Puppies
- New World
- Just Juice
- Vodafone
- Lipton
- Nescafé
- Telstra
- Toshiba
- Waikato Times
- Volkswagen
- Samsung
- Lays
- Master Chef
- Rush Munro’s
- Tip Top
- Lenovo
- Woolworths
- Ritz
- New Zealand Gardner
- Tender Soft
- SanDisk
- Webjet
- Leggo’s
- sta
- Olympus
In the “Rosna” magazine you just saw, please tick (√) if you remember seeing an ad for the brands listed below:

- Puffs
- NZ House & Garden
- Moccona
- Close. up
- Barilla
- NZ City
- Oreo
- Hush Puppies
- nosh
- Just Juice
- Boost Mobile
- Lipton
- Nescafé
- Telecom
- Toshiba
- Hell’s Kitchen
- Toyota
- Samsung
- Lays
- Top Chef
- Rush Murno’s
- Tip Top
- Lenovo
- Honda
- Ritz
- Two Degrees
- Tender Soft
- SanDisk
- Flight Center
- Leggo’s
- Slingshot
- Olympus
Question Number: 3
(Magazine Version Number: 7)

In the “Rosna” magazine you just saw, please tick (√) if you remember seeing an ad for the brands listed below:

☐ Fayva
☐ NZ House & Garden
☐ Woolworths
☐ Colgate
☐ acer
☐ The New Zealand Herald
☐ Oreo
☐ Bata
☐ New World
☐ Golden Circle
☐ Vodafone
☐ Lipton
☐ Bushells
☐ Telstra
☐ Toshiba
☐ Waikato Times
☐ Volkswagen
☐ Samsung
☐ Lays
☐ Master Chef
☐ Fresh. up
☐ Häagen-Dazs
☐ Dell
☐ New Zealand Gardener
☐ Ritz
☐ Natural
☐ Kleenex
☐ Sandisk
☐ Webjet
☐ San Remo
☐ sta
☐ Olympus
Question Number: 3

(Magazine Version Number: 8)

In the “Rosna” magazine you just saw, please tick (√) if you remember seeing an ad for the brands listed below:

- □ Fayva
- □ NZ House & Garden
- □ Two Degrees
- □ Colgate
- □ acer
- □ NZ City
- □ Oreo
- □ Bata
- □ nosh
- □ Golden Circle
- □ Boost Mobile
- □ Lipton
- □ Bushells
- □ Telecom
- □ Toshiba
- □ Hell’s Kitchen
- □ Toyota
- □ Samsung
- □ Lays
- □ Top Chef
- □ Fresh. up
- □ Häagen-Dazs
- □ Dell
- □ Honda
- □ Ritz
- □ Natural
- □ Kleenex
- □ SanDisk
- □ Flight Centre
- □ San Remo
- □ Slingshot
- □ Olympus
### Questionnaire

#### Question number 4

The order of ads on the booklets

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Note: Each booklet includes 32 advertisements:

- 8 high creative advertisements
- 8 low creative advertisements
- 8 interference advertisements
- 8 distractor advertisements, which were not used in the magazine:
  Lay’s, Samsung, SanDisk, Olympus, Oreo, Ritz, Toshiba, and Olympus.
Appendix (F)

Ethical Approval Letter
1st September 2011

Ahmed Al Shuaill
68 Pollen Crescent
Melville
Hamilton 3205

Dear Ahmed

Ethical Application WMS 11/159
Can advertising creativity overcome competitive memory interference: Attention and Memory
As per my earlier email the above research project, as outlined in your application, has been granted Ethical Approval for Research by the Waikato Management School Ethics Committee.

Please note: should you make changes to the project outlined in the approved ethics application, you may need to reapply for ethics approval.

Best wishes for your research

Regards,

Amanda Simombe
Research Manager
Title: Can advertising creativity overcome competitive memory interference: Attention and memory.

Researchers: Ahmed Al Shuaili

Supervisor: Dr Scott Koslow and Dr Carolyn Costley

Date: 1 September, 2011

The research plan as I understand it:

- A PhD research exploration into competitive interference in advertising.
- The stimulus is a digital magazine produced by the researcher specifically for the experiment.
- Participants will examine the digital magazine through an eye-tracking machine.
- Anonymous data will be collected by matching questionnaire response with eye tracking data.
- After the data is collected the participants will be told the 'true aims of the experiment' and full consent requested at that time.

Recommendations:

- Add the following words to the end of the first sentence in the last paragraph of section 2.2 of your proposal. "At that time the participants will be asked to sign the 'consent for data use form'." Then add something to the effect that the data will not be used without such fully informed consent.

- In the 'Participant information sheet' please highlight the following words in some fashion 'if your eyes are sensitive...'

Approved with minor recommendation
Application for Ethical Approval of Research

Waikato Management School
Te Rauapa

Project Title: Can advertising creativity overcome competitive memory interference: Attention and Memory

Principal Investigator: Ahmed Al Shuaili

Department: Marketing

Phone Number: 0211540329

Email address: ahahal@students.waikato.ac.nz

Mailing address: 58 Pollen Crescent, Melville, Hamilton 3206

This is an application for ethical approval of: (tick one)

☐ WMS Staff research project involving data collection from Human Subjects
☐ Course which involves student projects that collect data from Human Subjects
☐ Undergraduate/graduate paper (498/599) which involves data collection from Human Subjects
☐ Masters degree research
☐ MBA/MBM project
☐ PhD research (☐ preliminary) (☐ final)

Supervisor's Name: Dr. Scott Koslow & Dr. Carolyn Costley

Supervisor's approval (signature) ________________________________

☐ I request approval for this research and attach the appropriate documentation for Ethical Approval of Research


Principal investigator's signature ________________________________

Date 23/09/2011

Waikato Management School Ethics Committee Action

☐ Approved
☐ Approved with recommendations
☐ Request modifications
☐ Approved with modifications
☐ Declined
☐ Forwarded to University Committee

Signature ________________________________ Dated __________

Signature ________________________________ Dated __________

Signature ________________________________ Dated __________

Signature ________________________________ Dated __________

Signature ________________________________ Dated __________

Revised: 24 June 2009

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Appendix (G)

Study’s Stimuli

(Ads were used in the third paper)
Bushells

WIN IN AN INSTANT

$100,000 IN PRIZES

6 Rinnai Buffet Outdoor Kitchen BBQ’s, 12 Masport Patio Heaters.
4 Devon 6-Piece Outdoor Furniture Sets, 500 Random House Best Sellers.
2200 Bushells Foldaway Chairs. Plus enter the draw to win this entire $5000 Outdoor Package. SEE PACKS FOR DETAILS.

Moccona

THERE’S ONLY ONE WAY TO PACK COFFEE
AND THAT’S ONE WAY

FRESH COFFEE IS GOOD. FRESH AIR IS GOOD. BUT FRESH AIR ISN’T GOOD FOR FRESH COFFEE. THAT’S WHY WE FLUSH THE OXYGEN FROM OUR PACKS BEFORE WE SEAL THEM AND THAT’S WHY ALL MOCCONA PACKS WILL NOW COME WITH OUR NEW ONE-WAY AROMA FRESH VALVE™. IT ALLOWS THE NATURAL COFFEE GASES WHICH OCCUR AFTER ROASTING TO BE RELEASED WITHOUT LETTING ANY DAMAGING AIR IN. BECAUSE WE FIGURE IF YOU’RE BUYING FRESH COFFEE YOU EXPECT IT TO BE FRESH.

GET MORE OUT OF COFFEE
NEW STYLE
Original ostrich & crocodile skin

Bata
THE ONLY COMFORT SHOES

Distinctive Styling in Distinguished Leathers
in Consul Black
by Fayva

There's a smart international appeal to French Shriner's latest styling achievements. The new sculptured lines of these handsome dress and casual styles is best emphasized in distinctive Consul Black. Choose from a variety of styles in flawless calf, lined with satin-welt kidhides. French Shriner shoes are priced from $12.95 to $26.00.

*Also available in Embassy Brown

Ambassador
Envoy
Brush your teeth and go to sleep.

FAMILY DENTAL PLAN

It's a fact: Canadian children have fewer cavities today than ever before. And over the past twenty-five years, the fluoride toothpaste that's helped prevent more cavities than any other, is Colgate. Shouldn't you make Colgate part of your family dental plan?

MAKE IT YOUR FAMILY DENTAL PLAN.
KEEPING THE KIDS HEALTHY NEVER TASTED THIS GOOD.

The new Golden Circle range combines more tropical fruits to give your whole family extra vitamins and nutrients. Plus one 250 ml glass can count as one of your 5 daily servings of fruit and vegetables. So whichever one you choose, you can relax knowing everyone’s getting great taste and goodness in a glass.

100% JUICE

Yes! The newly improved Fresh Up fruit drinks are now made pure juice! No sugar added for your daily healthy routine.
Indulge!
All you can eat*
$3.90

Spot the Difference

RUSH MUNRO'S
100% NATURAL NEW ZEALAND ICE CREAM

The Udder Guy's Old-fashioned Ice Cream,
born and raised on Vancouver Island.
Available in 24 flavours made from scratch.
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Thank Goodness for Kleenex, tissues.

ALWAYS READ THE LABEL. USE ONLY AS DIRECTED.

*Virucidal against Influenza A & B, Rhinovirus Type 1A and 2 and Respiratory Syncytial Virus in the tissue within 10 minutes.
NEW ZEALAND GARDENER
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MAGAZINE

INSPIRED BY NATURE: A CERAMIC ARTIST'S INNER-CITY HAVEN
GARDENING HITS THE RIGHT NOTE FOR TV3'S SARAH BRADLEY
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This bloke can't cook your food isissing

Don't come back salad boy
Stick your carrots up your arse

2

Hells Kitchen

Starts Mon 26 Sep 8.00 pm

If looks could grill.
Perfectly Balanced Mediterranean Vegetables with Couscous
$2.45 each & $4.90 per 1kg

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woolworths
the fresh food people

Rockwell • Makati • Shangri-La Plaza • Gateway
Katipunan • Magallanes • Greenbelt • Forbes Park
Pilot 2WD
(rated 5 Stars in recent NHTSA safety test)

What’s in name? Sure, the Pilot 2WD by any other would still be as safe. Featuring advanced safety and protection systems, it would still rival the most expensive SUVs on the market. Its performance and handling would still compete with those of luxury sedans.

And in 2004 tests by the US National Highway Traffic Safety Administration (NHTSA), it would still have received the coveted five-star rating for frontal and side impact safety. So, check it out at www.honda.co.nz and see why this SUV lives up to its name.

The new RAV4. Don’t forget it’s a diesel. TOYOTA
Appendix (H)

Rosna Magazine

Example: Version number 2
Clearing the Rocks in Your Head.

How to get Good Night’s Sleep?

Do You Attract Success?
FAMILY DENTAL PLAN

It's a fact: Canadian children have fewer cavities today than ever before. And over the past twenty-five years, the fluoride toothpaste that's helped prevent more cavities than any other, is close-up. Shouldn't you make close-up part of your family dental plan?

MAKE IT YOUR FAMILY DENTAL PLAN.
Columns

Give Way Rules to change
March 2012
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10 Tips For A Good Night’s Sleep without Pills
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Rugby World Cup 2011
Page 35
Perfectly Balanced
Mediterranean Vegetables with Couscous
$2.49/400g $6.2 per 120g
Brush your teeth and go to sleep.
Give way rules to change March 2012

By Newstalk ZB staff

The give way rule at intersections will change from March next year. The changes have been signed off by Transport Minister Steven Joyce.

Currently if someone is turning left they have to give way to right turning traffic, but that will be reversed. The give way rule for those making right-hand turns at uncontrolled T intersections will also change.

Currently, the right-turning vehicle on the continuing road has to give way to a right-turning vehicle on the terminating road, but the change will reverse that to give priority to traffic on the continuing road.

The changes put us in line with most other countries.

Mr Joyce says the changes will help reduce confusion on our roads by removing some of the demand the current rule places on drivers' decision-making at intersections.

A high profile education campaign will be carried out closer to the time.
Get Them Fresh only at Woolworths

the fresh food people

Rockwell · Makati · Shangri-La Plaza · Gateway
Katipunan · Magallanes · Greenbelt · Forbes Park
Kill viruses* with a single blow.

The revolutionary Anti-Viral Tissue from the makers of TenderSoft® brand tissue may be soft on noses, but it's lethal on cold and flu viruses*. Each tissue contains an inner virucidal layer that kills 99% of cold and flu viruses* in the tissue before they can spread. This inner layer is covered with an ultra-soft tissue, specially coated with a softness additive to ensure the tissues are gentle on skin. This means freshly sneezed viruses are killed in the tissue before they spread.

Thank Goodness for TenderSoft Tissue

ALWAYS READ THE LABEL. USE ONLY AS DIRECTED.

*Virucidal Against Influenza A & B, Rhinoviruses Type 1A and 2 and Respiratory Syncytial Virus in the tissue within 15 minutes.
Tourism New Zealand's tourism marketing campaign is New Zealand 100% Pure You.

By The Ministry of Tourism (NZ)

The current campaign has evolved from the iconic 'New Zealand 100% Pure' advertising message, first launched in 1999. New Zealand 100% Pure You is used in the majority of our international marketing work - including advertising, international PR activity and online marketing, while New Zealand 100% Pure is used in some event and sponsorship activity.

When 100% Pure New Zealand was launched in 1999, it was the first time New Zealand had one message in all of its tourism markets around the world. The campaign was developed to be clear and concise: to communicate a single message about New Zealand that captured the imagination of our target market.

Major Tourism New Zealand research undertaken in 2010 suggested New Zealand could improve its appeal as a holiday destination by personalising its marketing message and focusing on more than stunning landscapes and awesome scenery. The addition of 'You' to the successful 100% Pure New Zealand advertising message was a logical next step and is the natural evolution of our successful decade-old message.

The new message, 'New Zealand 100% Pure You', aims to personalise the New Zealand holiday experience and bring to life the diverse tourism experiences available in New Zealand. Authentic and memorable experiences will become the major draw card, while New Zealand's beautiful scenery and environment will continue to be a vital part of the ongoing story as the backdrop.
New Zealand 100% Pure You aims to capture the imagination of our target market whether they are in Melbourne, London, Guangzhou, Los Angeles, Berlin or Tokyo by communicating the special combination of activities, landscape, people and culture that create a uniquely New Zealand experience.

Consumer marketing and advertising:

Consumer Marketing - including advertising, promotions and online marketing work - is the most visible part of Tourism New Zealand's work.

Increasingly Tourism New Zealand's advertising is evolving from print, television, cinema and billboard advertising, to greater use of technology to promote New Zealand as a holiday destination to our target audience wherever they are, and whatever they might be doing, in their daily lives.

This has meant embracing new media such as mobile technology, social media and online advertising. The Internet has become a more influential communication channel, and our advertising has moved to embrace mobile media and social networking tools and to direct consumers to New Zealand's award-winning travel website, www.newzealand.com.

Advertising is only as effective as the research that sits behind it, which is why Tourism New Zealand has a dedicated marketing research team that is continually analyzing visitor preferences, opinions, trends and behaviour. The data this team gathers is used to review and inform our campaign activity and to enable ongoing evolution and focus that reflects the needs of those travellers who are considering visiting New Zealand shores.
The new 150 bhp Golf GTI. Don’t forget it’s a diesel.
KEEPING DE KIDS HEALTHY
NEVER TASTED DIS GOOD.

The new Just Juice Plus range combines more tropical fruits to give your whole family extra vitamins and nutrients. Plus one 250 ml glass can count as one of your 5 daily servings of fruit and vegetables. So whichever pack you choose, you can relax knowing everyone’s getting great taste and goodness in a glass.
International Public Relations and media

Gaining compelling, high-profile media coverage to motivate our target market to travel to New Zealand is the main aim of Tourism New Zealand's international public relations team.

Tourism New Zealand's international media programme hosts around 400 international journalists in New Zealand each year from print, online and broadcast organisations.

Broadcast media are often the main target because they can best capture what New Zealand has to offer, followed by high-profile magazines, websites and newspapers.

Among the many media Tourism New Zealand has hosted in 2011 are a host of international rugby media from the UK, the crew and participants of the hit US reality TV series The Biggest Loser, popular Australian reality television show MasterChef, Australian morning TV show TODAY and many travel writers from around the world.

Influencing the Influencers

Tourism New Zealand is also hosting a growing number of respected influencers - opinion leaders, journalists, writers and thinkers who endorse New Zealand internationally. Influencers are hosted with the understanding that they will gain widespread media attention in New Zealand's main visitor markets.

Influencers are influential people who can effectively and credibly promote the New Zealand experience through a variety of media outlets, and can talk directly with Tourism New Zealand's target market either online through their websites and blogs, or in person at events in our offshore markets.

Word of mouth is one of our most powerful marketing tools, and the reach and credibility of influencers makes their word even more powerful. Working with these individuals helps extend New Zealand's profile and inspire travellers from our target market to come here on holiday.
hello tokyo
Yes! The newly improved Fresh Up fruit drinks are now made pure juice! No sugar added for your daily healthy routine.
Clearing the Rocks in Your Head

By Sharon Roser

I am blessed to live on a beautiful acre of land in New York’s Hudson Valley. We are surrounded by trees, within sight of a small lake, and grow tomatoes, beans, and a few other select vegetables each summer. But mostly what I feel like we harvest around here are rocks.

Every time we turn the soil for planting, or as happened last summer when our lawn was pillaged during a septic system repair, stones of varying sizes erupt on the surface of the land. In clearing the massive crop from that mess, I was amazed again how many there were, continuously heaving themselves up from deep below.

Over the years of working the patches where we grow annuals and vegetables, though, I have noticed a change. I can see that, in the places where the ground is worked each year and we are taking pains to clear, nourish, and develop it for desired growth, the stones show up less and less. And the ones that do show up are smaller and smaller.

How Congested is Your Mental Garden?

Finding your way to greater peace and clarity is a bit like that. You have to develop your skill at weeding out the big rocks and paying less attention to the small ones.

What are some of the biggest mental boulders that get in your way?

It’s all too easy to get weighed down, both by externals:

1. Your talkative sister-in-law who never seems to pay attention to the fact that you’re not paying attention.

2. The friend who insists on bringing you cookies, even though you’ve explained over and over again that you don’t eat wheat any more.

3. The sheer overabundance of stuff that wears you out every time you think about your bedroom closet or attic.
And by the internal rocks 
that pile up when you’re not looking:

- the feeling that something is 
missing or not quite right, even 
though life is generally going along 
“just fine.”

1. The recognition that gravity 
gets heavier as you get older, and 
that your tush starting to resemble 
the couch cushion.

2. A need to shake things up a bit 
that somehow always gets filed 
away under “later.”

How do we remove those big mental 
rocks, and feel less annoyed by the little 
one 
that remain strewn across our 
mental field? By engaging in 
the cultivation of 
loving-kindness

Here’s The Secret: Love Everything, Even When You Can’t Stand It

One of the best ways I know to soften and melt those big rocks of pain and frustration down 
to little pebbles is through the practice of loving-kindness meditation. By sending wishes of 
well-being to ourselves and others, we use our conscious attention like water working away 
at stone. Over time, blessings of love and compassion will bring softness and space to hard, 
darkened corners of our mind and spirit.

Loving-kindness consists of a series of phrases that we say silently to ourselves once we have 
settled into a comfortable, centered posture and taken a few full, deep breaths. Some classic 
phrases are as follows: 
May I be safe. May I be happy. May I be healthy. May I live with ease.

We begin always with ourselves, saying the phrases for our own wellbeing before moving on 
to offering them to others. Often we are the ones who most need our compassionate acceptance, so I suggest that you work here for as long as it takes to feel a true sense of relief and 
sweetness.
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10 Tips For A Good Night’s Sleep without Pills

By Kavit Haria

A few months ago, I had a terrible time sleeping and getting up. After a party one night, I slept late and for the next 20 days, couldn’t get my sleeping pattern back on track. I fell asleep very late every night at around 3 AM and wasn’t able to get up till at least 11 AM each day. For someone like me who usually sleeps by midnight and gets up at 6 AM, I didn’t enjoy this. I was eventually able to overcome that problem and now have a way to get a good night’s sleep anytime I need to get back in the habit I enjoy. I did all that without taking drugs or sleeping pills.

Here are ten ways you can get a good night’s sleep naturally. Try to implement one or more together and you’ll get better sleeping patterns, deep sleep and body rest.

1. Stick to a schedule. Mum was right when she set a time we always had to go to sleep as kids. Sticking to a schedule allows your body to set its internal rhythm so you can get up at the time you want, consistently, every single day. Also, make sure you try to keep the same schedule on weekends too, otherwise the next morning, you’d wake later and feel overly tired.

2. Sleep only at night. Avoid daytime sleep if possible. Daytime naps steal hours from nighttime slumber. Limit daytime sleep to 20-minute, power naps.

3. Exercise. It’s actually known to help you sleep better. Your body uses the sleep period to recover its muscles and joints that have been exercised. Twenty to thirty minutes of exercise every day can help you sleep, but be sure to exercise in the morning or afternoon.
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The New Zealand Herald
Exercise stimulates the body and aerobic activity before bedtime may make falling asleep more difficult.

4. Taking a hot shower or bath before bed helps bring on sleep because they can relax tense muscles.

5. Avoid eating just before bed. Give yourself at least 2 hours from when you eat to when you sleep. This allows for digestion to happen (or at least start) well before you go to sleep so your body can rest well during the night, rather than churning away your food.

6. Avoid caffeine. It keeps you awake and that’s now what you want for a good nights sleep. We all know that.

7. Read a fiction book. It takes you to a whole new world if you really get into it. And then take some time to ponder over the book as you fall asleep. I find as I read more and more, regardless of the book, I get more tired at night and so find it easier to fall asleep. Different for others?

8. Have the room slightly cooler. I prefer this to a hot room. I prefer to turn off the heat and allow the coolness to circulate in and out of the windows.

If I get cold, I wear warmer clothes. It also saves on the bills as you’re not going to require the heat all night long.

9. Sleep in silence. I find sleeping with no music or TV on more easy and restful. I guess others are different, but sleep with no distractions is best for a clearer mind.

10. Avoid alcohol before bedtime. It’s a depressant; although it may make it easier to fall asleep, it causes you to wake up during the night. As alcohol is digested your body goes into withdrawal from the alcohol, causing nighttime awakenings and often nightmares for some people.
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The Great Seducer turned to Marisha and mouthed with his eyes "$10 off wireless broadband and free ADSL." At that she was his.

"Spurn your unloving network and let me seduce you with freebies on wireless broadband over $79" he murmured.
Do You Attract Success?

By Gerri Smith

“The quality of a person’s life is in direct proportion to their commitment to excellence, regardless of their chosen field of endeavor.” - Vince Lombardi

What is success? Success is accomplishment, achievement, victory, or triumph. Anyone of these is within your ability to attract. So, how do you plan to reach your particular achievements? Your emotions along with your actions play a huge part.

Have you set goals that are unique from everyone else’s?

Do you celebrate each of your minor successes and strive to reach other goals? What motivates you to fulfill your goals and dreams?

When you fail to recognize your dreams you may be disconnecting your power to think from your ability to take personal action.

To keep your thoughts and actions strong, you only need to keep focusing on your faith and make sure your emotions agree with your dreams.

Make it a point to dream big.
100% PASSION

If you share a passion for delicious, easy meals, you’ll love Leggo’s range of authentic Chunky Pasta Sauces and Pasta Bakes.

Our new Chunky Bolognese with Mushrooms is an appetising blend of rich red tomatoes and tasty mushrooms with a light complement of onions and herbs. And our new Lasagne Bake, Creamy Tomato & Herb will help make a simple meal sensational.

So if you’re looking for great tasting, easy meals that the whole family will love, look no further than Leggo’s Chunky Pasta Sauces and Pasta Bakes.

Leggo’s

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New Zealand Gardener

Gardens Magazine

- INSPIRED BY NATURE: A CERAMIC ARTIST'S INNER-CITY HAVEN
- GARDENING HITS THE RIGHT NOTE FOR TV3'S SARAH BRADLEY
- Q&A
- ALLERGY-FREE LANDSCAPING SPECIAL
- SUNFLOWERS
- GARDEN ADVICE
Make it a point to dream big. Then plan and take action to turn your dreams into accomplishments. Learn to complete projects that you start. If one project fails, start again, and again until you accomplish it. Even one small successful step adds greatly to your sense of accomplishment.

So focus your thoughts. Make it a habit to put power in your thinking so that you force your attention on what you desire and on what feels right to you. The opportunity that comes from creating clear thoughts leads you to the right action. For example, learn to determine your own fate by not limiting your thoughts.

Starting looking at your life with a feeling and that you can accomplish almost anything. Think about what you wish to happen rather than what you do not wish to happen. When you pay close attention to the way you feel, this is easy. Your feelings will always guide you to the necessary action required to take you in the direction you need to go.

Create a sense of purpose and accomplishment by getting things done. Focus on positive and successful outcomes for anything you attempt to do. Then turn your highest thoughts into action and go on to turn your dreams into reality.
When your faith is strong enough, you can relax and let it take over. Many miracles happen this way, and it is a good feeling. Continue to develop and practice your faith. A strong, passionate belief (emotion) in your ability to attract success is the secret power behind faith that makes it happen.

Do you have any weaknesses? Recognize what your limits are and what may be beyond your reach. If you are or a new idea, for the areas you do not have enough knowledge in, get help. Or, learn the skills needed to accomplish the task on your own.

These inspirational secrets are just a small part of living your life well, happy, prosperous, and wise. Stay positive and grateful for any skill that helps you reach your goals. Use your God given talents, and not only will you attract success, you may conquer any economic struggles that face you today.
Distinctive Styling in Distinguished Leathers

in

Consul Black

by

fayva

There’s a smart international accent to French Shriner’s latest styling achievements. The new sculptured lines of these handsome dress and casual styles is best emphasized in distinctive Consul Black*. Choose from a variety of styles in flawless calf, lined with satin-soft kidskin.

French Shriner shoes are priced from $21.95 to $75.00.

*Also available in Embassy Brown

Ambassador

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Fortress Stadium
The Rugby World Cup is the premier international rugby union competition. The event is organised by the sport's governing body, the International Rugby Board (IRB), and is contested by the men's national teams. The inaugural tournament was held in 1987, hosted by both Australia and New Zealand, and it is contested every four years. The tournament is one of the largest international sporting competitions in the world.

The winners are awarded the William Webb Ellis Cup. William Webb Ellis was the Rugby School pupil who – according to popular myth – invented the game by picking up the ball during a game akin to one of the many codes of medieval football. South Africa is the current World Champions, having won the 2007 Rugby World Cup final in France on 20 October 2007 with victory over England, the 2003 World Champions. The 2011 Rugby World Cup is taking place in New Zealand. The hosts for 2015 and 2019 have been announced as England and Japan respectively.

The 2011 Rugby World Cup is the seventh Rugby World Cup, a quadrennial international rugby union competition inaugurated in 1987. The International Rugby Board (IRB) selected New Zealand as the host country in preference to Japan and South Africa at a meeting in Dublin on 17 November 2005. The IRB Council eliminated South Africa in the first of two rounds of voting.

It is the largest sporting event ever held in New Zealand, eclipsing the 1987 Rugby World Cup, 1990 Commonwealth Games, 1992 Cricket World Cup, 2003 America's Cup and 2005 British and Irish Lions tour to New Zealand. The organisers expect 95,000 visitors from overseas to travel to New Zealand for the event.

The schedule of games runs over seven weeks starting on 9 September 2011. The final will be played on Sunday 23 October 2011, a date chosen because it falls on a long weekend caused by the New Zealand public holiday of Labour Day (Monday, 24 October 2011). The final is scheduled to be played in Auckland at Eden Park.

After speculation that the number of participating teams would be reduced to 16, the IRB announced on 30 November 2007 that the 2011 tournament would again feature 20 teams. Twelve teams qualified as a result of finishing in the top three in each pool in the 2007 tournament. The remaining eight berths were determined by regional qualifying tournaments. Of the 20 countries that competed in the previous World Cup in 2007, there was only one change – Russia replaced Portugal.
masterChef School Dinners
Starts Wed 23 Feb 9.00pm

THE KIDS ARE HAVING NONE OF IT

THIS bloke CAN'T cook

your food is WINGING

2

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