

Coming to Your Senses:
The use of Sensory Appeals
In Magazine Advertising

Mass Communication Senior Thesis
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Abstract

This body of research was done to compare the persuasiveness of magazine advertisements that appeal to the basic senses of touch, taste, sound, and smell to magazine advertisements that do not appeal to these basic senses. It revealed that ads appealing to the senses of taste and touch are more persuasive than ads that do not use these appeals, while ads appealing to the senses of smell and sound are less persuasive than ads that do not use these appeals.

Introduction

My thesis originated from my own curiosity and love for the world of creative advertising. I found advertisements quite fascinating in their choice of visuals and text, as well as the ways that the creative strategy was focused to gain the attention of a specific audience. In particular, I found ads that appealed to my basic senses to be very effective. For example, an ad that left me feeling cold and invigorated, or an ad that I could almost smell the sweetness of the fruit seem to influence me more than advertisements that I felt are trying to appeal to me with an image or guilt.

Through all of my studies and understanding about advertising and the various appeals that advertisers use to gain consumer's business, I had not run into many ads that utilized the basic senses as an appeal in itself. I thought that his novelty was perhaps the reason I found this type of ad so effective. In addition to wanting to find out how often sensory appeals were used in advertising, I wanted to know if other people were as receptive and persuaded by ads that appealed to the basic senses as I was.

Mass media advertisers may find my research particularly relevant and important because its findings show where appeals to the basic senses are used, and which targeted audiences are particularly receptive to them. Marketing research of this kind is more and more important today in tailoring messages to solicit specific responses from particular audiences, and my research would help to know the directions that these messages are effective.

Hypothesis

Sensory appeals in magazine advertisements are more persuasive than advertisements without sensory appeals because they engage the viewer by automatically appealing to the basic senses, in addition to sight.

Research Questions

Do advertisements use sensory appeals?

What senses are appealed to in ads?

What gains a reader's attention to view an ad?

What advertisements are the most persuasive?

Do sensory ads engage people's basic senses?

What senses are the most persuasive?

Are sensory ads more memorable to readers?

Literature Review

An Introduction

Research in the field of imagery used in advertising has shown that visual images, photographs, and illustrations have the ability to significantly increase the number of people who will read an advertisement, remember its content, and remember the company name. Thus, visual images in advertisements that creatively entertain readers have the priceless opportunity to reinforce an ad's theme, set the tone for the company, and reach a specific target consumer group. (Granat, 1991)

Pictures have the natural advantage of giving visual images in the consistent modality, or type of information encoding form to be internalized for readers on a personal level. (Rossiter and Percy, 1980; as cited in Babin and Burns, 1997) The effect of "picture superiority" occurs because visual information tends to be remembered more than audio information. This happens as pictures are assumed to activate both visual and verbal encoding processes, called the "dual coding hypothesis." (Paivio, 1986; as cited in Babin and Burns, 1997)

Because imagery and pictures in advertisements entertain readers, create multi-sensory paths for information retrieval, and have a great opportunity to be personally relevant and internalized, their use as important parts of advertising's persuasion power is generally accepted.

Much research in the area of advertising imagery has been conducted in order to learn more about the effects that pictures used in ads have on readers. Advertisers and marketers want to know how reader's impressions, attitudes and recall are influenced by images in advertisements so they can utilize imagery as a way to reach the viewer more effectively. In addition to understanding how images affect readers, research has also

focused on reader's motivation to view and internalize an advertisement in relation to their willingness to offer cognitive resources to its consumption. And finally, research studies looking specifically at the use of sensory appeals in advertisements offers a platform for investigation regarding the utilization and effectiveness of advertisements that appeal to reader's basic senses.

Advertising Imagery Affects Readers

“Imagery is defined as the representation of any sensory experience in working memory and can range from a few simple and vague images to many complex and clear images.” (MacInnis and Price, 1987; as cited in Bone and Ellen, 1992)

Research has shown that imagery increases recall, positively affects a consumer's attitude towards the brand, and positively influences behavioral intentions. (MacInnis and Price, 1987; as cited by Bone and Ellen, 1992) Behavioral intentions are primarily influenced by the information that is at the top of a consumer's mind at the time of their purchasing decision. Information that is received through images is likely to be more available for the consumer to call upon because it is more likely to attach to existing information in the consumer's mind, (Kisielius and Sternthal, 1984, 1986; as cited by Bone and Ellen, 1992) and be stored in both verbal and visual forms. (Unnava and Burnkrant, 1991; as cited by Bone and Ellen, 1992) In simple terms, imagery offers readers stimuli for multiple senses, so there are more paths to retrieve that information later. (Bone and Ellen, 1992)

Advertisers especially care about using imagery in this way because it is a good way to get information out of consumer's long-term memory and into the active, working memory. Advertising utilizes “thought imagery” which is voluntary and “stimulated by instructions from an external source,” which is particularly important for advertising, because this naturally occurring process can be utilized to increase a viewer's recall of the content of the ad. (Burns, Biswas, and Babin, 1993)

Using pictures, graphics, and imagery in advertising makes the information in the ad easier to internalize and recall later. Contributing to the chance that advertisers have in putting positive information in the minds of readers, Bone, Ellen and MacInnis named a phenomenon called the “positivity bias.” This idea is “associated with imagery because people are disinclined to fantasize about negative outcomes, and note that imagery processing is likely to pertain to pleasant emotional or affective elements of the stimulus... and given the general positive nature of most ads, the view suggests the content of consumer imagery stimulated by an advertisement would be positive and would result in positive affect.” (Burns, Biswas, and Babin, 1993; as cited in Babin and Burns, 1997)

While having the ability of formulating multiple retrieval paths, suggesting positive attitudes, and positively affecting behavioral intentions, the effectiveness of advertising imagery depends greatly on how the focal character is perceived. A reader sees the focal character of an ad to be either self or other-related. A self-related focal character is when the reader imagines himself or herself engaging in the happenings of the picture. Whereas an other-related focal character is when the reader sees the action of the ad as being separate from themselves, and not being personally involved in it at all. (Bone and Ellen, 1992)

Closely related to focal character is the plausibility level in an advertising image, which influences the degree of imagery a reader will allow himself or herself to experience. Plausibility refers to the “likelihood of the person’s finding himself or herself in that situation or scene.” Studies have shown that the acceptance of imagery that a reader will experience increases the more familiar they are with the subject or product being advertised. Therefore, because consumers are more familiar with the mundane events in life, studies have found that ads that depict these situations are more likely to create more imagery for readers than unique images and events to which a viewer cannot relate. (Bone and Ellen, 1992)

Research of focal character and plausibility was done to see how each affected evoked imagery, and what this effect was on the viewer of the ad. A study by Bone and Ellen in 1992 measured the vividness, quantity, ease of evoked imagery, focal character, plausibility, attitude towards the ad, attitude towards the brand, and behavioral intentions of subjects after being exposed to ads with varying levels of imagery. Results showed that more imagery and more *vivid* imagery occurred when the self was seen as the focal character. Also found was the lack of correlation between the level of plausibility and evoked imagery. It was found that readers want to see themselves as being involved in an ad's activity, but they don't mind if it is not likely to occur in reality. (Bone and Ellen, 1992)

Also important is the thinking that the focal character in print advertisements are more likely to be other-related because readers judge based upon the subject that is actually used in the image in the ad. Whereas radio advertisements are more likely to be self-related because consumers are forced to create their own image for the situation they are hearing. (Bone and Ellen, 1992)

Also influencing the effectiveness of an advertisement is the level of concreteness or abstractness of the ad's imagery. A concrete image has a subject that is realistic, lifelike, and easy to identify as a person, place or object. While an abstract image has a subject that is not easily identifiable and is perhaps more confusing. (Rossiter and Percy, 1983; as cited by Babin and Burns, 1997)

Because concrete images are usually identified more quickly than abstract images, they are also easier to be described verbally. This is where studies have shown that because mental images from concrete photographs are more vivid in visual and verbal forms, the multiple sensory pathways created have more opportunities for the ad's information to be recalled. (Paivio, 1969; Pavio and Csapo, 1969; as cited by Babin and Burns, 1997) On the other side, an abstract image that cannot easily be described with words would result in less recall of the ad's information because it will only be stored in the visual part of the reader's memory. (Babin and Burns, 1997)

A study by Babin, and Burns in 1997 looked at how an advertisement's use of a concrete picture, a less concrete picture, or no picture at all; copy encouraging imaging or no copy encouraging imaging affected how a reader processed the ad's information, their attitude towards the ad, and towards the brand. After viewing ads for 90 seconds, subjects answered questions about the imagery used. Results of this study found that concrete images led to more vivid imagery for the reader, a more positive attitude towards an advertisement, and a more positive attitude towards the brand. (Babin and Burns, 1997)

This study also found that the abstract pictures led to more elaborate imagining by subjects than did the ads with concrete pictures or no pictures at all. Possible reason behind this finding is that in a concrete picture, "everything is provided in the stimulus, which may actually stifle further mental imagery," a consideration for advertisers when determining how much imagery they want to control and how much should be left up to the viewer to personalize. (Babin and Burns, 1997)

Although much research has noted the effectiveness of pictures in advertisements, specifically concrete imagery over abstract imagery, Babin and Burns point out that it cannot *always* be predicted that the use of this imagery will result in more positive attitudes among viewers than less concrete pictures will. For example, concrete images of violence or brutality will likely lead to less positive attitudes than an abstract image would. However, since concrete and positive images are used the most in advertisements, their effectiveness as tools of persuasion is generally accepted. (Babin and Burns, 1997)

In addition to the influence of concrete and abstract images, individual reader differences such as their familiarity with the product category in the ad, past experiences, the believability of the ad and their individual information processing style affects the level of imagery that is experienced. (Burns, Biswas, and Babin, 1993) A study by Burns, Biswas, and Babin in 1993 found that if students saw an advertisement as being more believable, they were more likely to be drawn into the imagery, have a more positive attitude about the ad, and towards the brand. (Burns, Biswas, and Babin, 1993)

Within the context of our society, it is important to step back and look at photographs as symbolic statements of some kind of reality, meaning that photographs are not reality in themselves, but are simply windows to reality at best. This is found because regardless of if an image is easily called “reality” or some form of abstract, it gets processed cognitively within the context of our past experiences and understanding, and the processed image is very different than the physical material represented in that photograph. (Scott, 1994)

Humans are taught in nature and in our society how to see, and what to look for through their eyes. “The rules of seeing we must learn are not universal principles but are formed by the natural and social environments that teach us both what to look at and how to look.” (Cole and Scribner, 1974; as cited by Scott, 1994) Based upon this, there is a general acceptance in American society to accept the straightforward, literal representations of images, and to consider them “better.” Whereas the abstract images sometimes used in advertising may actually offer a fresh look at a product, and a way to breakthrough the boredom of perfect and concrete realism, but are often less effective in reaching consumers, presumably based upon our society's teachings of what is “good.” (Scott, 1994)

In 1985, Durgee introduced to consumer research that visuals are social rather than logical; code and elaborated, rather than a restricted system. Therefore, it should *never* be expected that there will be an exact, mirror reflective image from the elements in the photograph to the meaning derived from the representation of those elements, or the photograph itself. (Durgee, 1985; as cited in Scott, 1994)

Because humans naturally fill in missing information in an image to make the entirety of the picture make sense, inferences about a product being advertised are often made based upon the ad’s picture, the copy, or a combination of both. “When consumers process advertising messages, they often form inferences about product attributes for which no explicit claims are made, in addition to beliefs about attributes that are explicitly described in the ad.” (Smith, 1991) These viewer-simulated inferences can be both

beneficial and detrimental, depending upon what is inferred about the product being advertised. Not only can these inferences affect a reader's response to an ad and the ad's effectiveness as a tool of persuasion, possible problems with advertising regulation on misleading ads can be detrimental to a creative ad campaign. (Smith, 1991)

Visual imagery has also been found to be a strong influence in idea construction when consumers are reading an ad's copy, or words. It makes sense that readers will relate information presented in an ad's copy with that presented in the image itself. (Burns, Biswas, and Babin, 1993)

Truly testing the power of imagery as a persuasive advertising tool, research has been conducted to see if readers will fill in missing information in an advertisement based upon what the ad actually shows or upon inferences that the reader has made about the product's attributes based upon the pictures in an ad; also if an ad has both explicit visual and explicit verbal claims about two different product attributes, which information source inferences will be based upon. A survey was taken of subjects after they looked at ads with only pictures, only text, pictures and text with the same claim, or pictures and text with differing claims, each giving information on some feature attribute and leaving others out. Results found that inferences about missing information were made, and were usually based upon visual cues when the claims made in the picture were different from those made in the ad's text. "Pictures apparently constitute the basis both for beliefs about attributes for which explicit claims are made as well as for inferences about other attributes." (Smith, 1991) Also noted was that although inferences were more likely to be based upon images in an ad, these beliefs were weaker than those based upon the text copy, presumably because the written word is seen as more reliable than a reader's dependency upon their own interpretation of a photograph. (Smith, 1991)

Because readers have the tendency to fill in missing information in an advertisement, and the use of irrelevant photographs in ads is prevalent, it naturally follows that readers could base their inferences upon irrelevant images. A study by Mitchell and Olson done in 1981 tested how subjects evaluated both relevant and irrelevant photographs in an ad

when determining product attributes. Results of this study found that the relevancy of the image to the actual product being promoted did not matter in the ad's overall effectiveness with viewers. In fact, it actually increased the reader's tendency to infer about the product and its attributes. For example, subjects inferred that the toilet tissue promoted in one of the ads was soft, based upon the image of the kitten used. When the image was that of a spectacular sunset over the ocean, subjects inferred that the toilet tissue came in a variety of colors. Whereas subjects saw the image of an abstract painting as inferring that the toilet tissue was "cheaper" and "less sturdy." (Scott, 1994)

Also important in the effectiveness of an advertisement is the requirement of the reader to either perceive and process the information in the ad, or actually form an image of it to recall later. Studies have found that both perceiving and imaging from advertisements happened equally, thus the manipulation of mental imagery calls upon the same resources that perception does. In fact, a study by Roland and Friberg in 1985 found that subjects had the same level of "high blood flow in the area of the brain thought to be related to visual activity whether subjects actually saw" an image or simply visualized it. Meaning that imagery resulting from inferences from an advertisement's pictures can be stored in the same place as imagery that is actually seen. (Unnava, Agarwal, and Haugtvedt, 1996)

A study by Unnava, Agarwal, and Haugtvedt in 1996 found that ads that were presented in the same way that imagery was provoked by them received greater recall than if these two factors did not match. For example, ads that gave information provoking visual imagery by auditory cues were received and recalled with less strength than ads that gave the information in the same (visual) form. (Unnava, Agarwal, and Haugtvedt, 1996)

In addition to the effects of advertising imagery relating to the consistent form of its presentation, the advertising phenomenon of the "meme" is able to move through time and space, both in consumers minds and in the social world, while "establishing its own repetition." A meme can be a theme, an image, a picture, or a phrase that is perpetuated onward, with no continuing support from the original source. This effect can be achieved

through novelty, vividness, imitations, or large quantities of copies of a possible meme in the media. (Gelb, 1997)

The use of imagery in advertisements can be designed to make the perpetuation of a campaign's theme more likely, which can be an asset for the brand because the image surrounding it can penetrate deeper into society and people's everyday lives while the company can simply sit back and watch. So, if a meme can gain the attention of society, its effect can go farther than anything that the company could possibly purchase because money cannot buy acceptance of an advertisement's message into society's culture. However, since a meme is out of the company's control, its perpetuation could also consist of negative ideas or feelings, which would then live on, and on, and on. (Gelb, 1997)

Research in the field has found that print advertisements receive only 49% of a reader's attention in a real-world consumption situation. Thus, studies that evaluate the effectiveness of advertisements where subjects give 100% of their attention to the ad could result in skewed results. (Rossiter, 1998; as cited by Burns, Biswas, and Babin, 1993)

With a base understanding of how and why images used in advertising affect readers, their attitudes, behavioral intentions, and purchase decisions, a deeper delve into ad viewer's motivation and available cognitive resources can begin.

Viewer's Motivation and Cognitive Resources

A foundation for investigating the cognitive paths that consumers follow is found in the Elaboration Likelihood Model (ELM), offered by Petty and Cacioppo to judge how involvement affects the influence of images. This model says that persuasiveness can work peripherally or centrally. (Petty and Cacioppo, 1981, 1986a, 1986b; as cited in Minard, Bhatla, Lord, Dickson, and Unnava, 1991)

An ad is judged peripherally when there is a lack of motivation or ability by the viewer to look at issue-relevant information, resulting in attitudes that are based upon superficial cues, or elements in the message that are irrelevant to the product's actual attributes. (Minard, Bhatla, Lord, Dickson, and Unnava, 1991) These peripheral cues could include the physical attractiveness of the image, the attractiveness of the product, or the attractiveness of the spokesperson in the ad. In peripheral processing, any extra stimulation to catch the reader's attention and point them towards a special part of the ad or product attribute is helpful. (Meyers- Levy and Peracchio, 1995)

In the central route, readers judge and process an advertisement based upon relevant issues and product related attributes, making their final judgment depending upon the strength of these arguments presented in the ad. (Minard, Bhatla, Lord, Dickson, and Unnava, 1991) This occurs when a reader's motivation to internalize an advertisement is high, and they are more likely to invest more cognitive time and resources in order to extract important information about the product from the ad. In this situation, the stimulation of sensory cues can either point them towards important attributes to be considered, or it may drain the reader's cognitive resources and undermine the advertisement by taking attention away from the important attributes. This visual noise can distract attention and shift it towards the irrelevant information at the expense of more important product information that this motivated viewer was looking for. (Meyers- Levy and Peracchio, 1995)

The same element in an advertisement can act as both a central or a peripheral cue, depending upon the individual reader's motivation, and resources that are available to them. (Meyers- Levy and Peracchio, 1995)

Based upon the Elaboration Likelihood Model, studies have shown that advertisers need to choose their ad images depending upon which processing route viewers are likely to take. This is because peripheral cues used in an ad that is judged centrally will result in distracted attention and less favorable attitudes, and viewers searching for peripheral cues in an ad using central cues are likely to skip the ad entirely or retain very little of its

information. (Minard, Bhatla, Lord, Dickson, and Unnava, 1991) Because an ad's effectiveness depends upon "how attitudes can be affected by the correspondence between the cognitive resources made available and those required for ad processing," it is important to consider what elements in an ad support or drain these important resources. (Anand and Sternthal; as cited in Meyers- Levy and Peracchio, 1995)

Findings of Stuart, Shrimp, and Engle in 1987 indicate that effects from peripheral cues involve the direct transfer of inferences from an image to the product, similar to classical conditioning principles that in effect teach certain responses to certain stimuli. (Stuart, Shrimp, Engle, 1987; as cited in Minard, Bhatla, Lord, Dickson, and Unnava, 1991) This "affect-transfer process" occurs when viewers associate characteristics of an image as being the same as the product or brand's attributes. These inferences can also be based upon secondary opinions such as the viewer's opinion of the usefulness of an image in the ad for understanding the product's actual attributes, if the viewer sees the image as being unrelated, he or she may disregard the entire product because of this feeling. (Minard, Bhatla, Lord, Dickson, and Unnava, 1991)

One study relating to the effects of the usefulness of an ad's photograph investigated how motivation and the attractiveness of an irrelevant image in an advertisement affected consumer's reception of the ad's information, and also how relevant images in ads compared to irrelevant images when the attractiveness of both was equal. Motivation was created in this study by telling student subjects that they would receive the product that they preferred of those advertised after they gave their evaluation of the ads. Results showed that attitudes were influenced by peripheral images, but as the level of involvement and motivation rose, the level of persuasion from these cues fell. The more involved students were the more relevant correlations they made between the picture and the brand. It was also found that subjects looking at ads with relevant images had more thoughts about the brand that could be attributable to the product's image. (Minard, Shatla, Lord, Dickson and Unnava, 1991)

In addition to a viewer's processing style, advertisers are interested in what motivates them to be moved towards action from an advertisement. Many companies are choosing to utilize "frequency marketing" to advertise as a way to gain loyal customers (those who purchase the target brand 50% of the time they make a purchase in that product category) as opposed to simply gaining *more* customers. This is done based on findings that if consumers are brand loyal, they will be easily motivated to repurchase. The problem with this rationale is that even if a consumer doesn't make a purchase, an advertisement can affect their attitude towards the brand and put it at the top of their mind, which can be more valuable in the long run than an immediate purchase without internalization and acceptance of the brand. (Wansink and Ray, 2000)

A study by Wansink and Ray in 2000 measured consumption intentions prior to the viewing of an ad, and after viewing an ad to see if these differences translated into actual purchase or consumption. Subjects who were already considered to be users of a brand were questioned three months after the initial study to see the number of times they had consumed the targeted brand. Results showed that "the basic correlation between consumption intentions and reported consumption were barely significant and certainly not diagnostic." It was found that "measures of attitude were very weak predictors of consumption," and that intentions to purchase correlate and predict later consumption better than attitudes do, especially if a consumer is already brand loyal. (Wansink and Ray, 2000)

The importance of this study is to note that even when reader's processing style and motivation are considered and imagery is utilized, consumers are unpredictable and cannot be guaranteed to follow through on the attitudes they formulate after the viewing of an advertisement.

In addition to imagery processing, consumer's available cognitive resources and motivation has been researched relating to the impact of cognitive demands on highly motivated consumers when they are processing the stimulus of color in an advertisement as compared to a black and white advertisement. One such study looked at if motivated

subject's attitudes, motivation, recall, and evoked thoughts were influenced by the use of color verses black and white advertisements with identical form, image, and information. Results of this study showed that when readers are "highly motivated and processing the ad consumes few resources," cues assisting the viewer to process are helpful. But when processing an advertisement demands a lot of resources, a more simple and less distracting ad is more effective. When consumers have low or no motivation to process an ad, cues that guide them through the ad and through product attributes are not only helpful, but necessary for the message to be internalized. (Meyers- Levy and Peracchio, 1995)

Not only do advertising images hold great power in influencing readers and shaping their attitudes, readers also hold great power in attending to advertising's messages through their levels of cognitive resources and motivation allocated to a particular ad. The effectiveness of an advertisement can also be affected with the stimulation of the basic human senses of smell, touch, taste, and hearing, and the imagery used to provoke them.

Advertising Images and Basic Senses

Since the basic senses of smell, taste, touch and hearing are just cognitive representations of reality, it is possible for a person to experience a sensory stimulus without its actual physical presence. And since good visual imagery can activate all of the human senses without the actual stimulus being present, advertising can utilize this naturally occurring phenomenon. (Rossiter, 1982; as cited in Burns, Biswas and Babin, 1993)

Research in the area of sensory appeals has found that both emotional and physical states can be affected by the simple belief that an odor is present, even if it physically is not. (Knasko, Gilbert, and Sabin, 1990; as cited in Ellen and Bone, 1998)

An Ellen and Bone study in 1998 investigated the use of scent appeals in advertisements, and if they have the power to "influence attitudes by altering mood state, or by hedonic transfer of perceived scent pleasantness." The subject's level of motivation to process the

advertisement was considered in how much they were influenced by the suggested scent of the ad. It was evaluated if low motivation to process an ad makes the scent cue less effective because the subject never identifies the scent, and how the congruence between the suggested scent and its relevance to the product being advertised affected evoked attitudes. (Ellen and Bone, 1998)

Results of this study found that the viewer's belief of the suggestion of a scent, "can influence mood state, which in turn affects attitude toward the ad." The more pleasant a scent was perceived as being, the more positive the viewer's attitude was towards the advertisement. Also noted was that subjects that were more motivated to process the ad had their attitudes towards the brand more influenced by the level of congruence between the suggested scent and the product itself. This seemed to be because subjects who were motivated to gather more information about the product found the suggested scent cue as valuable information. (Ellen and Bone, 1998)

Because basic senses are the first line in contact with the world surrounding making humans naturally trust them to provide valuable information about the world, and smells first affect the limbic system in the brain which is responsible for emotional responses... This creates the opportunity for an advertiser to follow this open path to a consumer's decisions based upon the emotional tie between a scent and a product. After being processed physically, senses are processed cognitively, where meaning is attached to them. This is where attributes can move from the evaluation of the sensory cue to the evaluation of the product or brand in an advertisement, called a "mood state transfer" or "mood shift." (Ellen and Bone, 1998)

Conclusive summary

The effects that advertising images have on the attitude, elaboration, recall, and consumption behavior of viewers has been researched and found to be quite powerful. So much that studies have seen that viewers are willing to place inference about the product's attributes solely upon the images in the ad. Just as important as the power of

advertising's images is the motivation and cognitive resources that the viewer brings to the decoding of the advertisement itself. Being that the effects of an ad happen within the viewer's mind, this combination of the advertiser's ability to persuade with images and the viewer's ability to accept or deny the message based upon their interpretation of its claims seems to even out the playing field for an ad's persuasiveness. In this situation, the basic senses that provide the viewer with their first perception to understand the outside world seems to lend a path for research to follow, one that is necessary to investigate to find the outcome of advertisement's utilization of this naturally occurring process.

Methodology

I used three methods of research to find out the answers to my research questions and to see if my hypothesis was supported. I did a content analysis of magazine advertisements, a survey of the general population, and a focus group discussion.

Content Analysis:

To find out how often the basic senses are used as an appeal in magazine advertisements and which senses are used the most I did a content analysis of the top two circulating magazines in each reader category according to the Audit Bureau of Circulations. I looked at all of the advertisements in the January, April, July, and October of 2003 issues of these magazines and coded which sense each ad appealed to or if it did not appeal to any sense, which product each ad was for, and the size of the ad on the page. These items are detailed in my content analysis coding sheet shown in Appendix A. The magazines coded for each reader category were:

Women: Good Housekeeping, Family Circle

Men: Playboy, Maxim

Teen girls: Teen, CosmoGirl

Teen Boys: Game Pro, *Game Informer

General: TV Guide, Time

*After searching via the internet, interlibrary loan in the MNSCU system, interlibrary loan through all of the Minnesota public libraries, the Circulations manager, the company headquarters, and the warehouse, I was unable to locate any 2003 issues of Game Informer magazine. So, this part of my content analysis was incomplete due to the fact that I was simply unable to locate this material.

Survey:

To find out which ads people would stop to view, which ads they were persuaded by, which senses were the most persuasive, and which ads were the most memorable, I conducted a survey. The survey, shown in Appendix B, was done by convenience sampling of 343 people in the general population. Surveys were taken at the Mall of America, Subway Restaurants in the Twin Cities area, Bemidji Eagles Club, Bemidji School District teachers, faculty, and students, and classes at Bemidji State University. Respondents looked at full size and full color examples of magazine advertisements that used sensory appeals and advertisements that did not and answered questions about their perceptions and preferences of the ads. There was one ad that appealed to each basic sense of touch, smell, taste, and sound and a partner ad for each with the same products used in these ads that did not appeal to any basic sense. The survey was set up this way so responses could be evaluated as to whether they liked an ad because of the product or because of its appeal to the basic sense.

Ad #1 (smell): An ad for Glad trash bags that showed a bag of garbage spilling open all over the ground.

Ad #2: A non-sensory ad for Maxwell House coffee showing two out of focus people smiling and hugging.

Ad #3 (touch): An ad for Cottonelle toilet paper showing a soft and fluffy yellow puppy dog napping on a pile of fluffy toilet paper, which was sitting on soft shag carpet.

Ad #4: A non-sensory ad for a car that showed the back quarter of the vehicle and pointed to the energy efficient gas tank.

Ad #5: A non-sensory ad for Scott toilet paper showing a baseball game with a man sliding into home base with a roll of toilet paper in his hands that had wound all around the bases.

Ad #6 (sound): An ad for a vehicle that showed the trunk of the car open and black inside with the word "BURP" inside of the trunk.

Ad #7: A non-sensory ad for Glad trash bags that had solid yellow background with the product sitting in the center.

Ad #8 (taste): An ad for Millstone coffee showing a chocolate cake with a spout pouring steaming coffee into a cup below at the bottom of the page.

Focus Group:

To get more in depth answers about how people think sensory appeals work in advertisements and how their basic senses are engaged, I ran a focus group discussion. The group consisted of three males and three females, in an age range from 14 to 82. We discussed what they liked and disliked about the same ads used in the survey, and reasons for their preferences.

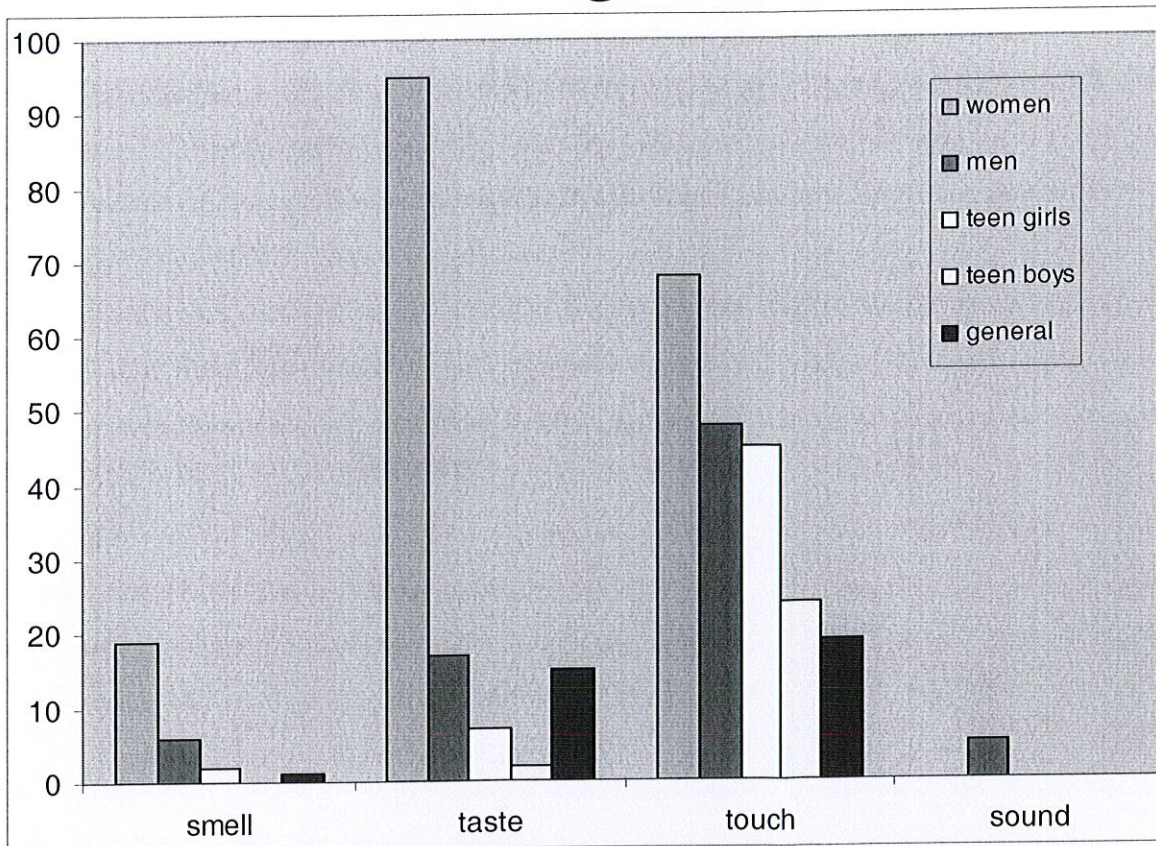
A more in depth discussion was focused specifically on their perceptions of the advertisements that utilized sensory appeals, although participants were not told why these specific ads were singled out. I asked specifically how each ad engaged them or how they interacted with it in their minds, and probed them to explain in detail why they liked the parts that they did.

Then each participant was asked to write down if they thought each of these ads appealed to their senses in any way. After giving time for them to fully consider on their own an answer for each ad, everyone shared their thoughts with the group on which senses they felt were appealed to in each advertisement. Discussion then followed about how these sensory appeals worked well or worked negatively in each of these examples.

Graphed Results

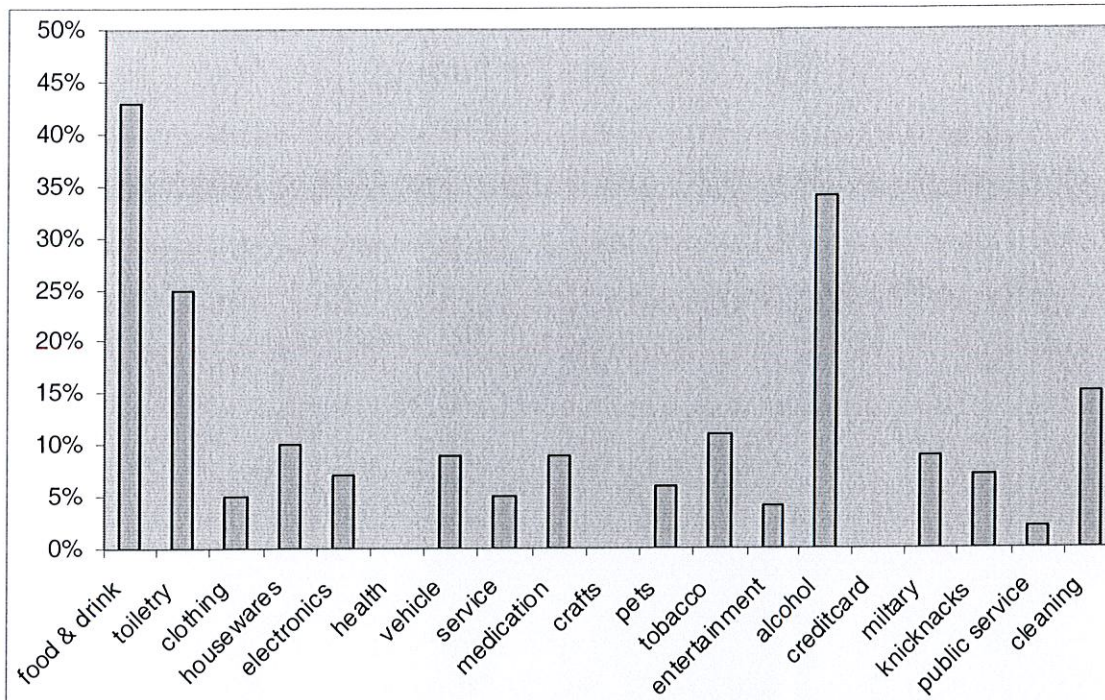
Content Analysis:

Number of ads using sensory appeals:



Out of the over 2,000 ads coded only 373 or 19% appealed to the basic senses. For this graph, the two magazines coded for each reader category were collapsed into one group, as to represent the entire reader category with one single bar. Out of the ads that used a sensory appeal, touch was used often throughout all of the reader categories and was especially utilized in the women's magazines. Appeals to the sense of taste were also especially prevalent in the women's category.

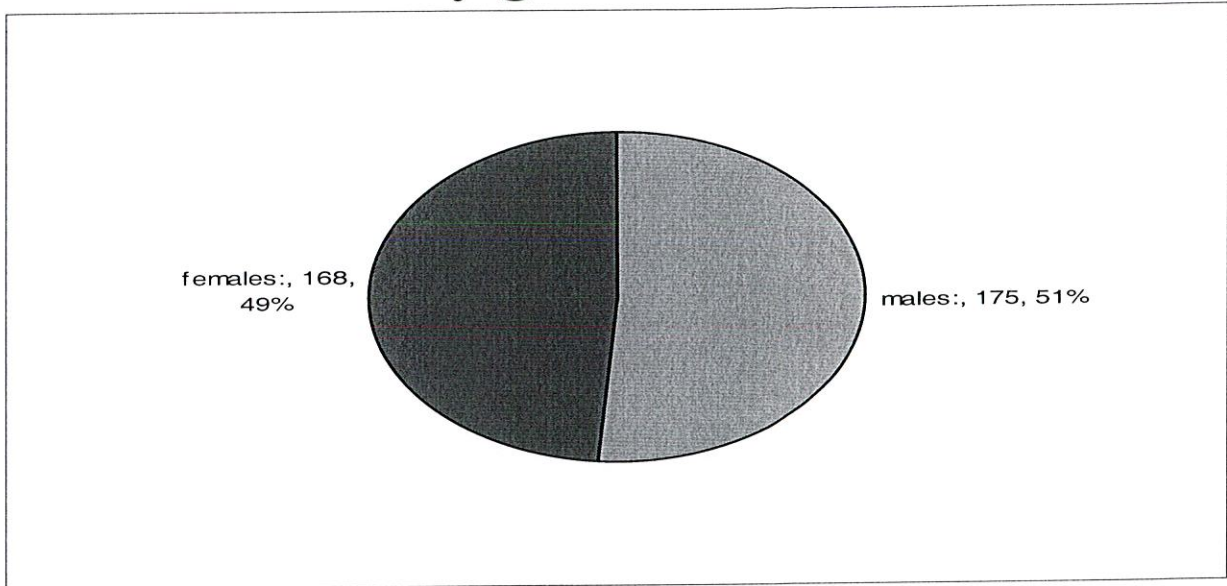
Percentage of ads using sensory appeals in each product category:



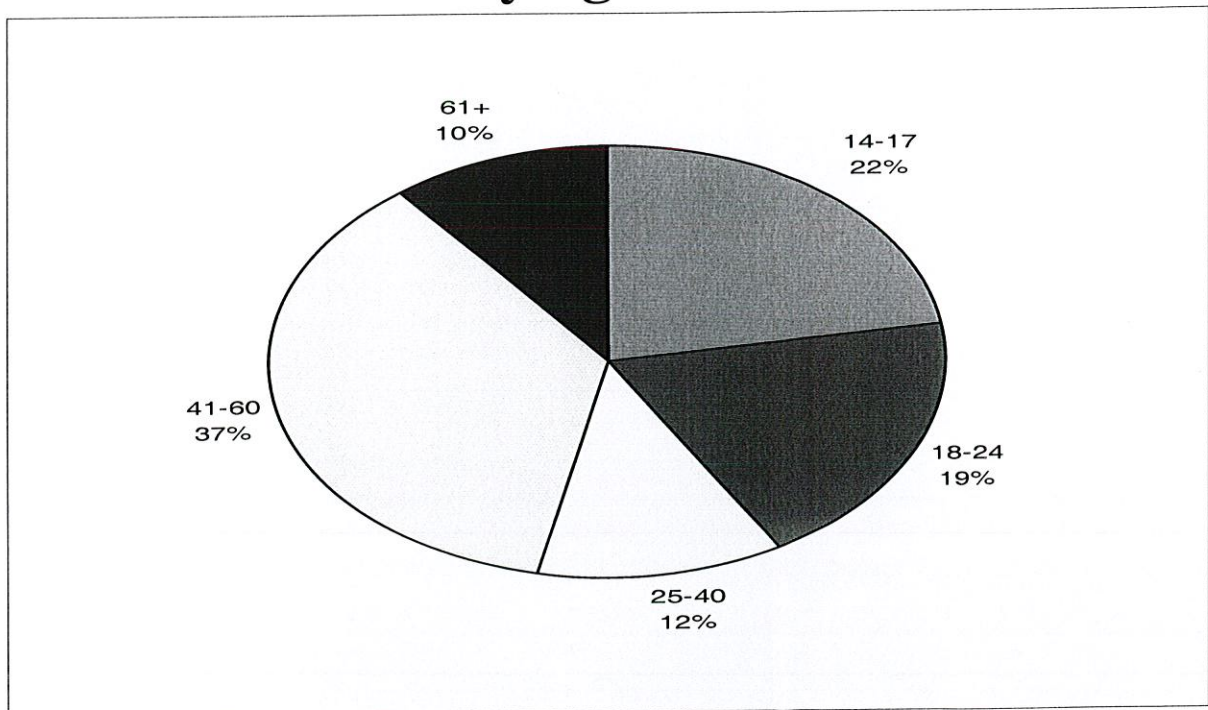
Although sensory ads were not used often, some product categories did use them more often than others. The food and drink ads used appeals to the basic senses the most often, with alcohol second and toiletry products close behind. The categories of crafts, health and credit cards did not use any sensory appeals in any of the magazines that I looked at.

Demographics of survey responders:

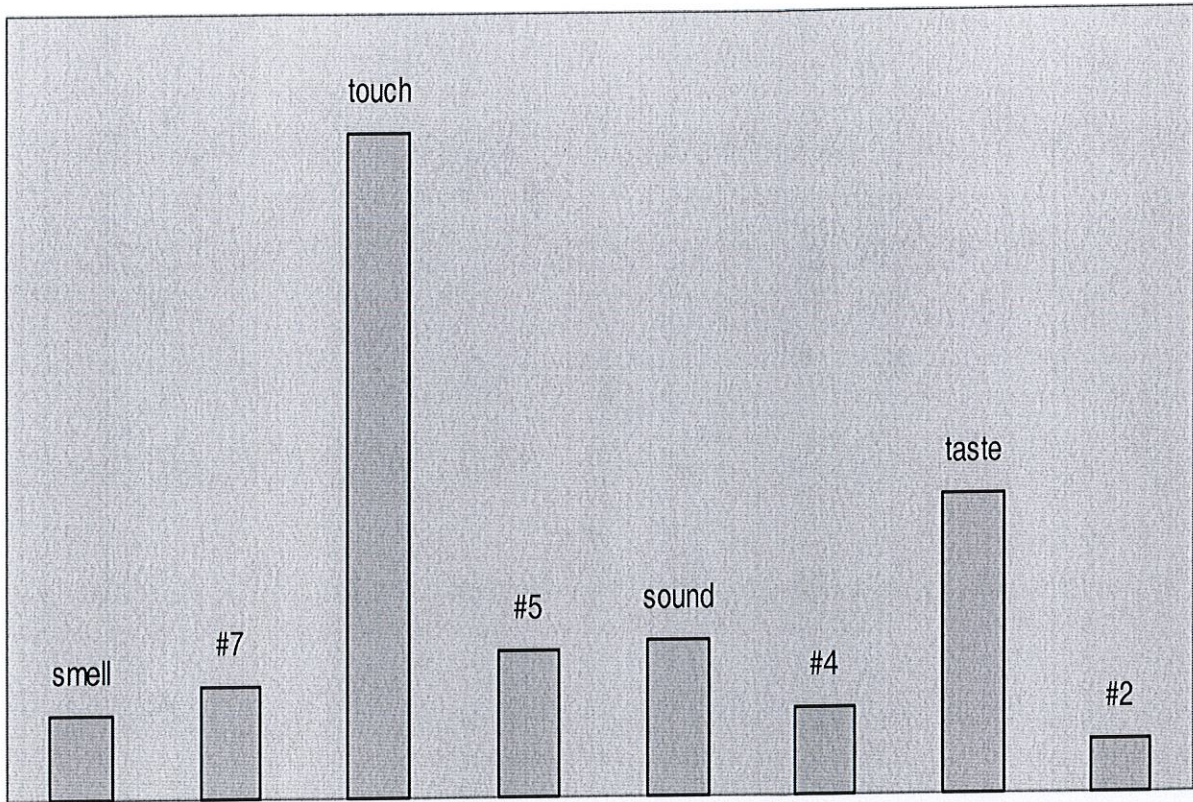
By gender:



By age:



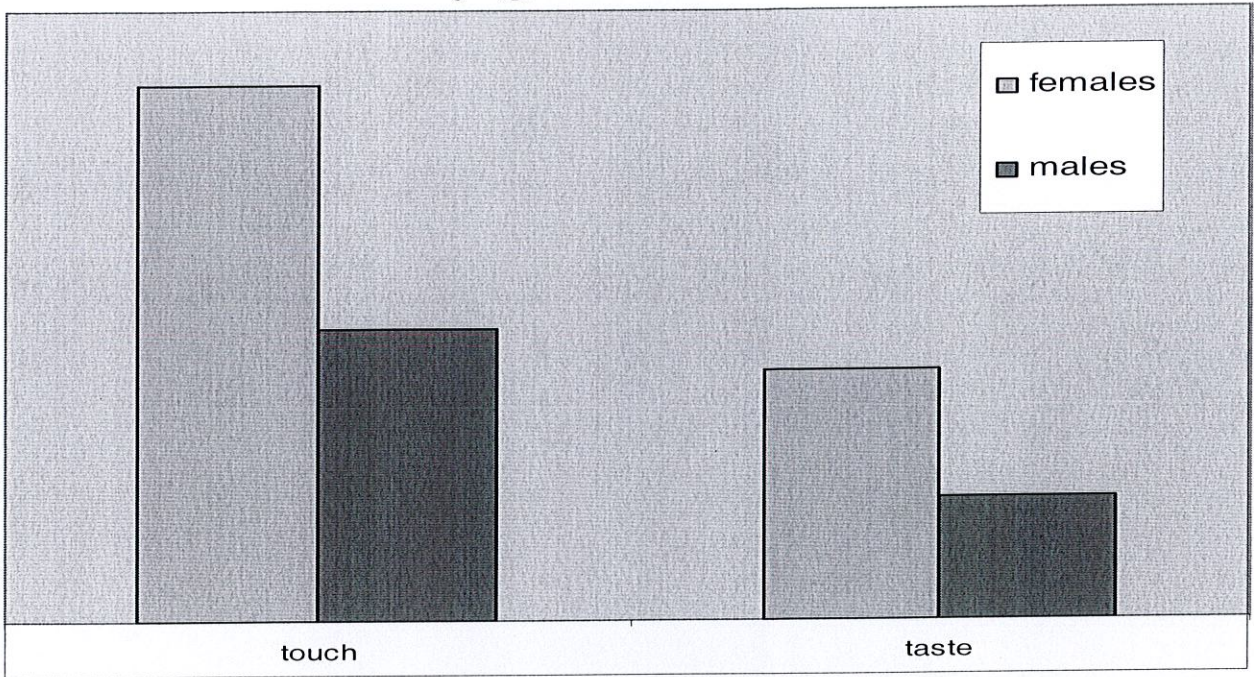
Which ad people liked best:



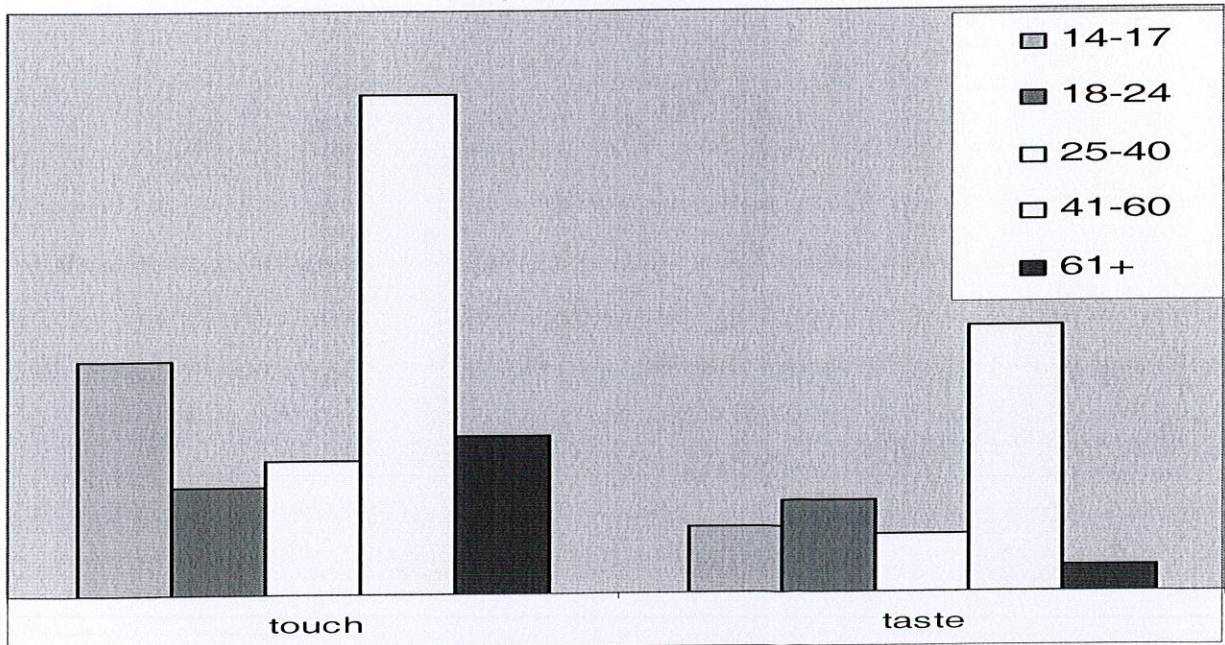
This graph is designed with the bar for each of the ads appealing to a basic sense next to the bar for the advertisement that was for the non-sensory but similar product ad. This makes it easy to compare how the sensory ad was liked as compared to its non-sensory competitor. The smell ad was liked less than its non-sensory competitor. While the touch ad was liked the most out of all the ads and much more than its non-sensory competitor. The sound ad was liked a bit more than its competitor. The ad appealing to taste was liked the second most, and much more than its competitor.

Who liked these ads the best:

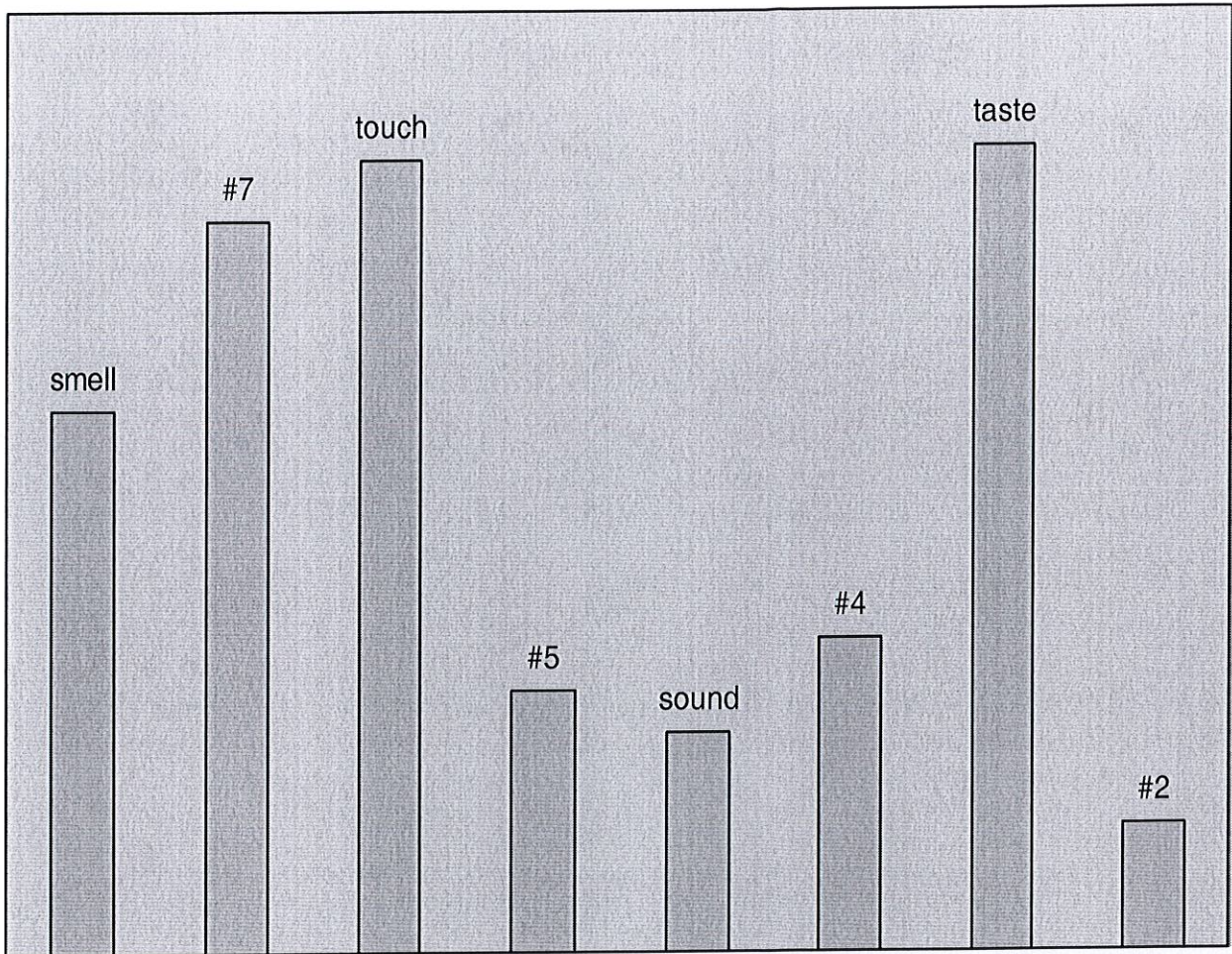
By gender:



By age:



Which ads people would buy from:

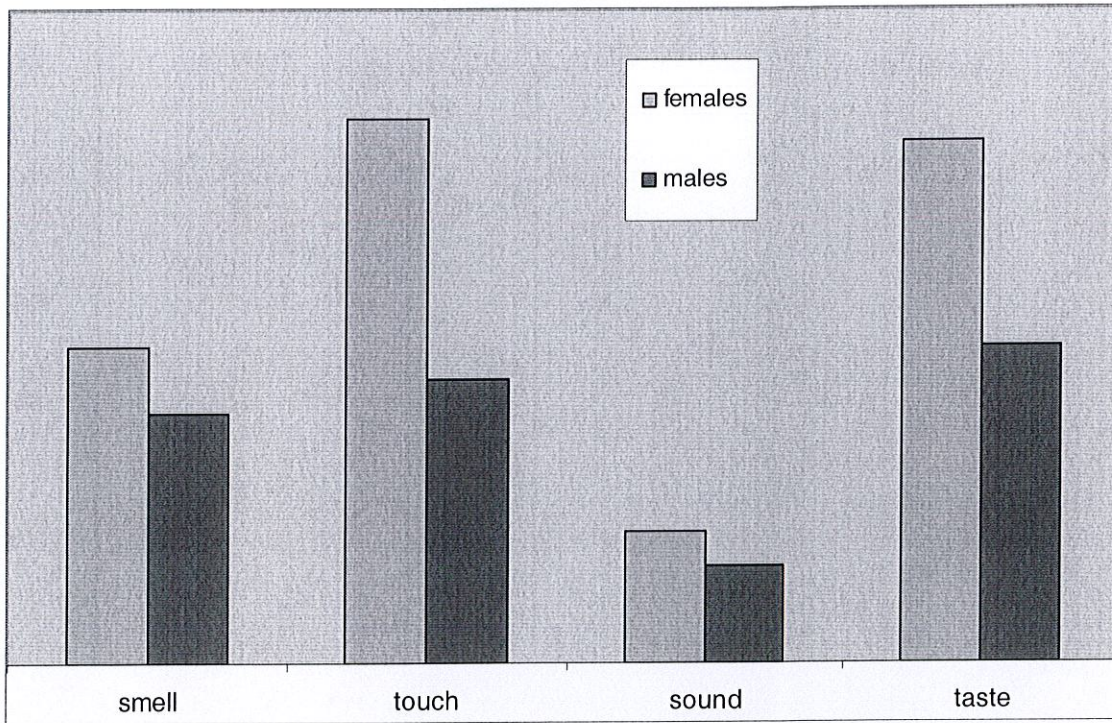


The question of which ads would persuade people to purchase is particularly important because gaining action from the viewer is the purpose of advertising, and it is also the measure of how persuasive the ad is. Because of the similar products used in the ads for the survey, this question was also used to compare if the ads were liked because of their product or because of their sensory appeal.

This graph places the sensory ad next to its non-sensory competitor for easy comparison on their responses to this question. The smell and sound ads were less persuasive than their non-sensory counterparts. But the touch and taste ads were more persuasive than their counterpart ads which were for the same products.

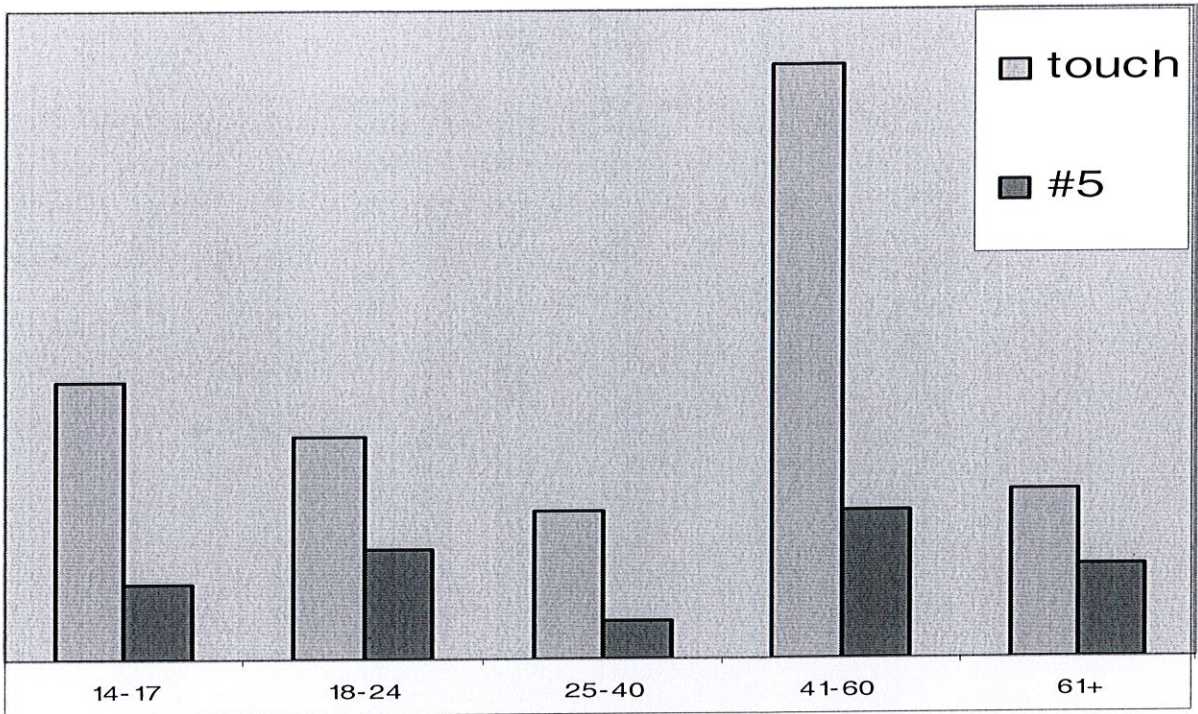
Who would buy these products:

By gender

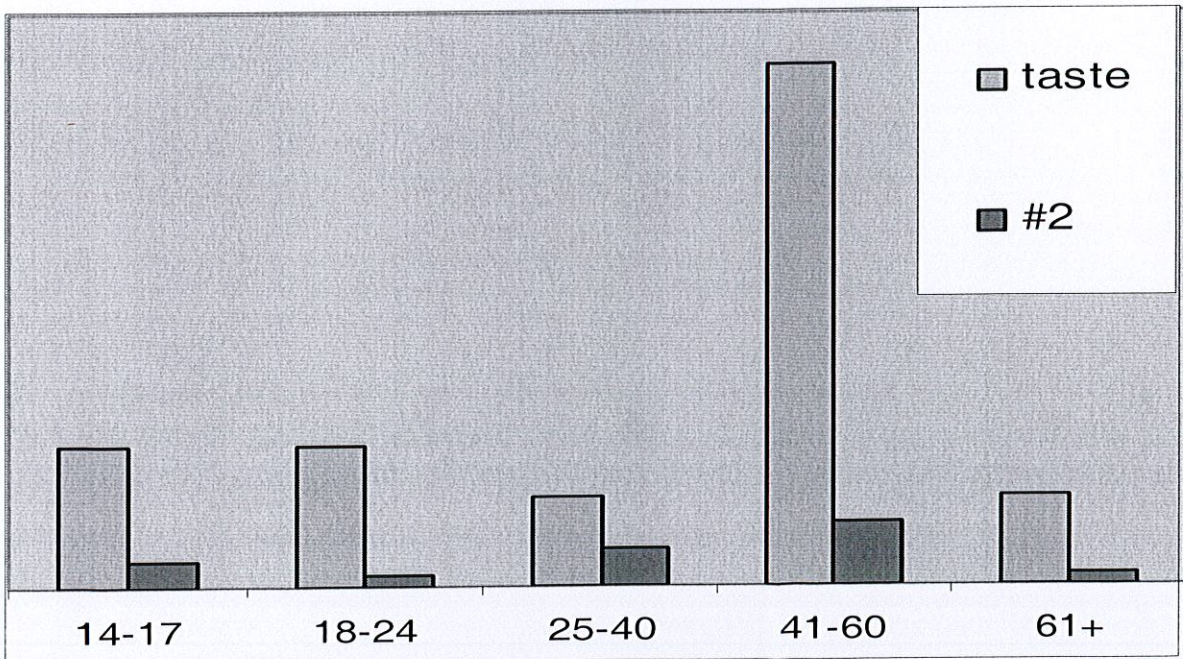


Females were more persuaded by the sensory ads than males for all four of the basic senses tested. They were the most persuaded to purchase with appeals to the senses of touch and taste.

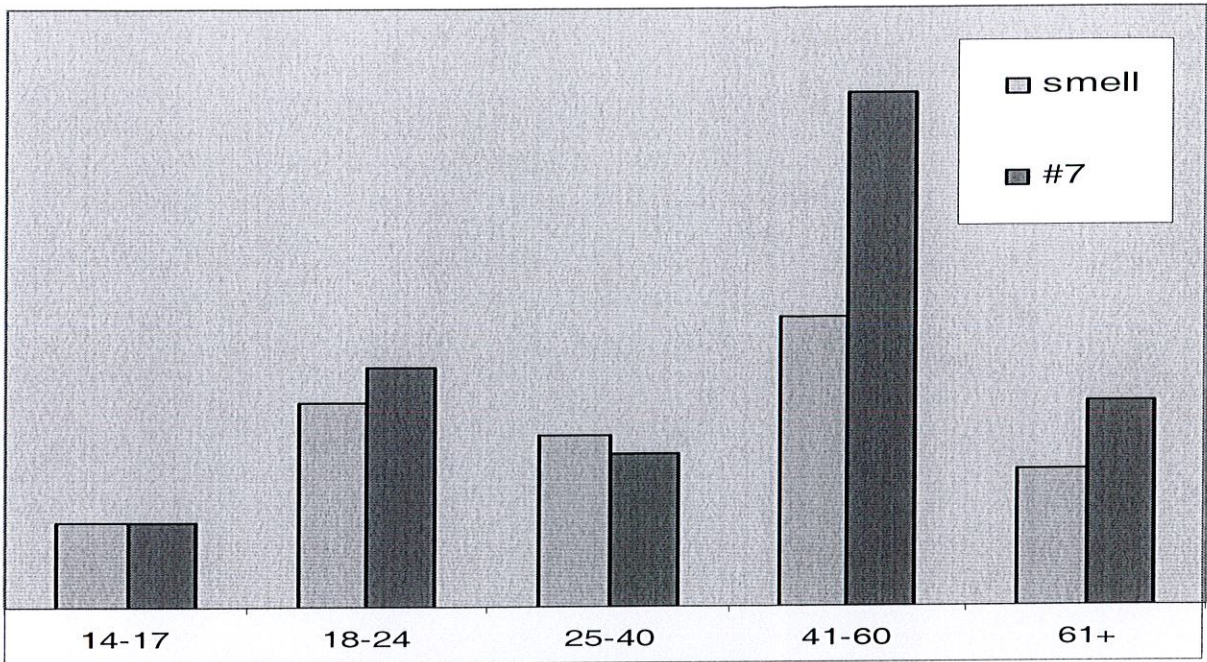
Who would purchase: Touch:



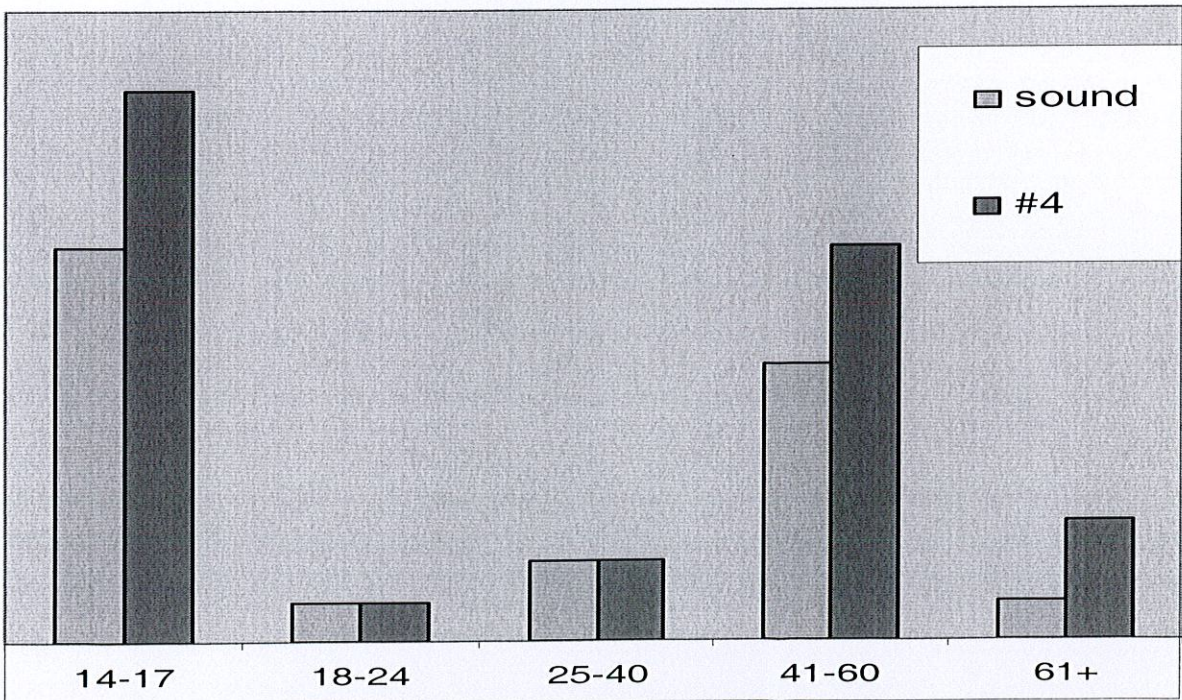
Taste:



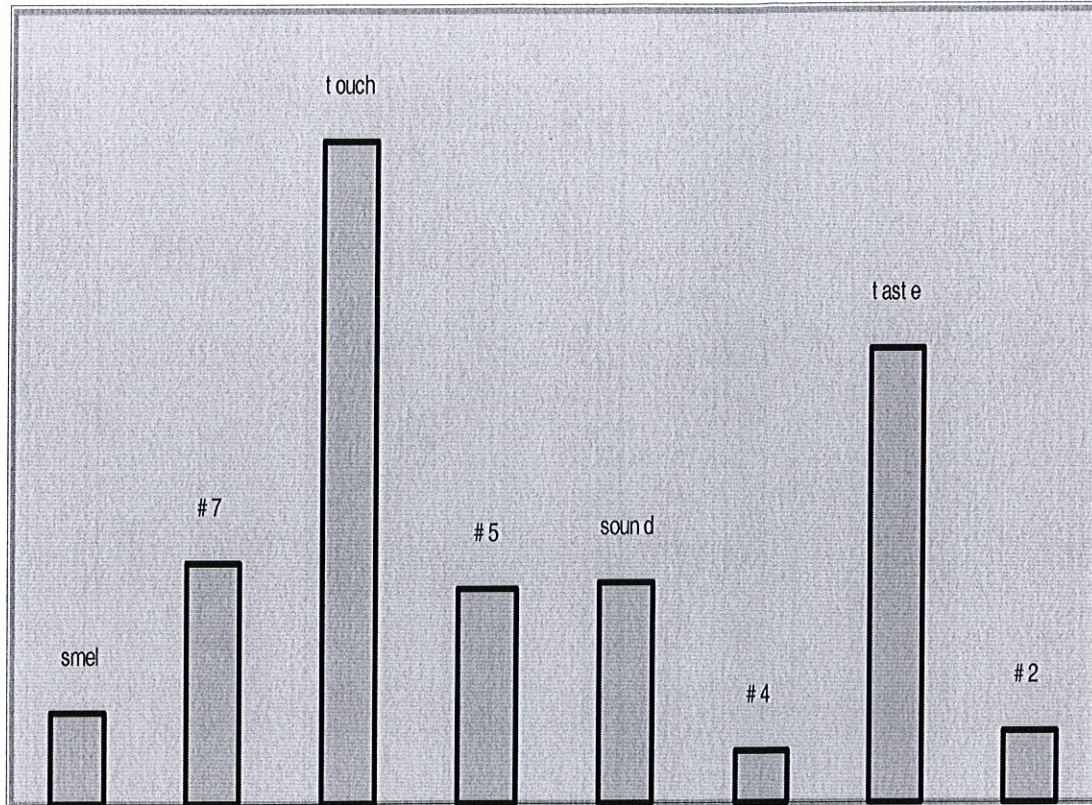
Who would purchase: Smell:



Sound:



Which ads were the most memorable:



Because remembering an advertisement increases the likelihood that it will affect and persuade a viewer later, this question is important. The ads appealing to the senses of touch and taste were the most memorable, both showing to be much more memorable than their non-sensory counterparts. The sound ad also was more memorable than its non-sensory counterpart, but it was not very memorable overall. The ad appealing to the sense of smell was actually less memorable than its non-sensory counterpart.

Findings

To find out if the numbers in my findings were statistically significant, I performed both chi-square and cross-tabulation tests on the results. All of the tests were performed with a probability level of .05, meaning that the results are 95% sure and only 5% up to chance coincidence.

I performed a cross-tabulation test on my content analysis data to find out which magazine categories used advertisements that appealed to each of the basic senses. Out of over 2,000 ads that I evaluated, there were 373 that used sensory appeals, thus $n=373$. The degree of freedom for this test was 12 and the x-square value was 82.53, meaning that the results are very significant. The most significant differences that I found were that men's magazines used advertisements that appealed to the sense of sound more than expected. Whereas women's magazines used ads appealing to the sense of taste more than expected. Also, ads in teen girls magazines appealed to the sense of touch more than expected, while women's magazines used this appeal less than expected.

A chi-square test on the results from the survey also showed to be very statistically significant with chi-square values ranging from 126-329 for the four main questions about the respondent's preferences and level of persuasiveness; (the second page of the survey in Appendix B). The biggest significant differences in this chi-square test was that the touch ad was liked much more than expected, it would get people to stop and look at it more than expected, and it was more memorable than expected. The taste ad would also get people to stop and look at it more than expected. In contrast, less people than expected would purchase from ad #2.

Each of these survey questions was also put through a cross-tabulation test by both age and by gender to see if there were significant differences based along these variable differences. All of these tests showed to be statistically significant, with the x-square values ranging from 32 to 66. The biggest significant differences in these cross-tabulation tests were that females liked the touch ad more than expected, they would stop and look at it more than expected, they would purchase it more than expected, and they found it more memorable than expected. The age group 41-60 liked the taste ad more

than expected, would purchase from this ad more than expected, and found this ad more memorable than expected. Males on the other hand liked ad #5 more than expected, and found it more memorable than expected. The age group 18-24 liked ad #5 more than expected. Also significant was that the age group 14-17 would stop and look at the smell ad more than expected.

Discussion

Results from my research indicate that appeals to the basic senses make up just a small portion of magazine advertisements, but within ads that do use these appeals the basic senses are separate and distinct in their use and effectiveness. Results showed that the senses of taste and touch are generally similar in their use and receptivity, while the sound and smell senses are similar in theirs.

Magazine advertisements that use a sensory appeal are more likely to be appealing to the senses of taste and touch, and are more likely focused towards women in women's magazines. Not only were the appeals of taste and touch more persuasive than their non-sensory counterparts for audiences across the board, but they were especially effective with women and ages 41-60.

It was important to see which ads were the most persuasive, but it is also relevant why people responded to the ads as they did. Through the focus group discussion and coding of the open ended survey responses (Appendix C) answers to this question can be derived. Survey results showed that the most common reasons people were drawn to and affected by the touch ad was because it was cute, pleasant, comfortable, and because it looked soft. Although some of these responses obviously show that people were affected by the appeal to their sense of touch, thinking that the puppy was cute and comfortable does not at first glance support that people liked this ad because of its appeal to the sense of touch. However, focus group respondents related that if it was not literally stated that the ad looked soft, saying that it was cute or comfortable related to the sense of touch as well because toilet paper that is comfortable, cuddly, and made people feel safe at home is saying in an indirect way that it is tactually soft.

Reasons why people were drawn to and affected by the ad appealing to the sense of taste were mostly because they thought it looked tasty, they liked chocolate, they wanted to eat the cake, or they were presently hungry. These responses clearly show that this ad appealed to people's sense of taste, and it can be generalized that this is predominantly why this ad was so effective.

Advertisements appealing to the senses of smell and sound were not used very often in any of the magazine categories, and these ads were actually less effective in general than the counterpart ads that did not appeal to these senses. One reason that these results could have occurred is that the ads chosen for the survey appealed to the negative side of the sense as opposed to the positive side of the sense. For example, the smell ad appealed to an unpleasant odor as opposed to a pleasantly fragrant one, which may have actually turned respondents away from liking and being persuaded by the ad instead of drawing them in. Along the same lines, the ad appealing to the sound sense utilized the “BURP” sound, which is a socially negative sound and thus could have caused viewers to have distaste for the ad simply because of this negative social connotation. The ads appealing to these senses would perhaps have been more effective and persuasive if they had appealed to the positive side of the senses instead of deterring viewers away from being affected by the ad because of their negative appeals.

The reasons why people were affected by the ads appealing to the senses of smell and sound were more scattered and less cohesive than for the reasons why people were affected by the senses of taste and touch. A lot of the respondents in the surveys and in the focus group stated that they liked these ads not because of their appeal to the basic senses, but rather because they liked the humor or they liked or used the product featured in the ad. Only a few respondents in both research methods said that they were affected by the advertisement’s appeals to the sense of smell or the sense of sound utilized.

My hypothesis was supported in part because the advertisements appealing to the senses of taste and touch were found to be more persuasive than ads that did not use these appeals, and these ads did affect viewers on a sensual level. However, my hypothesis was not supported by the advertisements appealing to the senses of smell and sound because these ads were actually less persuasive in general than ads that did not use these appeals, and they did not effectively reach viewers on the level of basic senses.

Future Research

To build upon the understanding of how sensory appeals work in magazine advertisements, I would focus future research on making more correlation between who these appeals work well for, and why. Specifically, I would look at any differences between ethnic groups and if they respond differently to advertisements appealing to the senses. Also, I would be curious to find out if the level of household income, or buying power of the consumer viewing the ad influenced what kinds of appeals they were more or less receptive to. In addition, I think that the frequency a person reads magazines and views the advertisements would greatly affect how they respond to different advertising appeals, thus I would like to see if the different magazine readerships levels showed a difference in which appeals worked effectively.

Also, because I saw differences in how people responded to the positive and negative appeals to the basic senses, I would like to conduct future research to distinguish these differences. By conducting a survey made entirely of ads appealing to the positive sides of the basic senses, and a survey with ads appealing to the negative sides of the basic senses would likely show different and interesting results as to what pulled readers in and what pushed them away. This would grant more information as to if the senses of taste and touch are really more effective than smell and sound as advertising appeals, or if the differences were the result of the appeal to the negative side of the sense, whereby a negative touch or negative taste would deter viewers just as the negative sound and negative smell advertisements did in my research.

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Appendix A

Magazine content analysis coding sheet

Magazine:

- 1- Good Housekeeping
- 2- Family Circle
- 3- Playboy
- 4- Maxim
- 5- Teen
- 6- CosmoGirl
- 7- Game Informer
- 8- Game Pro
- 9- TV Guide
- 10- Time

Month:

- 1- January
- 2- April
- 3- July
- 4- October

Ad appeal:

- C- Smell
- D- Taste
- E- Touch
- F- Sound
- G- None

Product category:

- | | |
|----------------------|-----------------------|
| 1- Food or drink | 10- Craft |
| 2- Toiletry | 11- Pet supplies |
| 3- Clothing, jewelry | 12- Tobacco |
| 4- Housewares | 13- Entertainment |
| 5- Electronics | 14- Alcohol |
| 6- Health / fitness | 15- Credit Card |
| 7- Vehicle | 16- Military |
| 8- Service | 17- Knickknack |
| 9- Drugs, medicine | 18- Public Service |
| | 19- Cleaning supplies |

Size:

- | | |
|-------------------|---------------------------|
| 1- full page | 5- half page |
| 2- two pages | 6- less than quarter page |
| 3- third of page | 7- larger than 2 pages |
| 4- fourth of page | |

Appendix B

Survey

Age:

- 14-17
- 18-24
- 25-40
- 41-60
- 61+

Gender:

- Female
- Male

Ethnicity: **(Check all that apply)**

- African American
- Asian
- Native American
- Caucasian
- Hispanic
- Middle Eastern
- Other: _____

Total household yearly income: **(Check only one)**

- under \$10,000
- \$10,001-\$25,000
- \$25,001-\$50,000
- \$50,001-\$75,000
- \$75,001-\$100,000
- \$100,001-\$150,000
- \$150,001+

How many magazines do you read? **(Check only one)**

- 5 or more per month
- 3-4 per month
- 1-2 per month
- once in a while
- never

Do you look at the advertisements in magazines? **(Check only one)**

- very often
- often
- sometimes / occasionally
- rarely
- never

1. Which ad do you like the best? **(Check only one)**

ad #1 ad #2 ad #3 ad #4
 ad #5 ad #6 ad #7 ad #8 I don't like any of them

Why?

2. Would you stop and look at any of these ads in a magazine? **(Check all that apply)**

ad #1 ad #2 ad #3 ad #4 I don't know
 ad #5 ad #6 ad #7 ad #8 No, I wouldn't

If you marked any ad, indicate WHY you would stop and look at it next to the ad # below:

ad #1 _____
ad #2 _____
ad #3 _____
ad #4 _____
ad #5 _____
ad #6 _____
ad #7 _____
ad #8 _____

If you did not mark any ads, indicate WHY:

3. Would you consider buying any of the products in these ads? **(Check all that apply)**

ad #1 ad #2 ad #3 ad #4 I don't know
 ad #5 ad #6 ad #7 ad #8 No, I wouldn't

If you marked any ad, indicate WHY you would consider a purchase next to the ad # below:

ad #1 _____
ad #2 _____
ad #3 _____
ad #4 _____
ad #5 _____
ad #6 _____
ad #7 _____
ad #8 _____

If you did not mark any ads, indicate WHY:

4. Which ad is the most memorable to you? **(Check only one)**

ad #1 ad #2 ad #3 ad #4
 ad #5 ad #6 ad #7 ad #8 None of them

Why?

Appendix C

Survey coding sheet

- 1-like animals, like dogs
- 2-eye catching
- 3-humorous
- 4-pleasant, comfortable
- 5-thought-provoking, interesting
- 6-cute animal, cute puppy
- 7-tastes good, like chocolate, hungry, want to eat it
- 8-like product
- 9-use product
- 10-need product
- 11-looks soft
- 12-active
- 13-simple
- 14-like colors
- 15-dislike product
- 16-dislike brand
- 17-dislike ads, don't buy because of ads
- 18-don't need, don't purchase this
- 19-headline, text
- 20-looks happy, looks fun
- 21-informative
- 22-dislike these ads
- 23-like baseball, like sports
- 24-confusing
- 25-novel ad, original idea
- 26-like brand, use brand
- 27-fix problem
- 28-like ads
- 29-makes smell better, avoid stink
- 30-sexually suggestive
- 31-sleek, sophisticated
- 32-smells good
- 33-looks like Michael Jackson
- 34-bold

