The Psychology Behind Advertising and Marketing

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Abstract: Advertisements are what companies use to catch consumers’ interest and convince them to buy their products. Often companies have used Cialdini’s six principles of persuasion, as these are the basis of many advertising strategies. Based on previous research, the current investigator hypothesized that participants would see more healthy food ads than junk food ads; want to buy products advertised using gain framing more than loss framing; see most advertisements through social media, and notice products they have searched for recently, and most would purchase advertised products and remember advertisements. A Google forms survey containing multiple questions was sent out to 22 participants who responded anonymously. The survey contained multiple choice questions to determine participants’ behavior towards an array of brands and advertisement techniques. The results demonstrated that 13 out of 22 participants chose loss framing, as compared to gain framing. Seventeen out of twenty-two people responded that they bought a product after trying the free sample, conforming to Cialdini’s principle of reciprocity. Ninety percent of respondents said they were likely to change their opinion of a product after seeing reviews. Fifty-nine percent of respondents said they saw junk food advertisements more, indicating that junk food ads are highly effective. Predominantly, findings aligned with previous research and supported the investigator's hypotheses. Further research should measure an individual’s behavior toward more interactive advertisements and provide a comprehensive meta-analysis of the history of advertisements.

1. INTRODUCTION

Advertisements involve more than catchy phrases and comedic jokes. Advertisements are what companies use to catch consumers’ interest and convince them to buy their products. Behind the world of marketing and advertising, many psychologically-based strategies are used to achieve optimal sales results. Often companies employ Cialdini’s six principles of persuasion, as these underlie many advertising strategies. The first principle, reciprocity, is based on a person's tendency to return a favor. Indeed, many companies use free samples to advertise their product or give the consumer a "freebie", often causing a sense of reciprocity in the consumer and subsequent purchase of that item. The second principle is scarcity and urgency; many companies will say their product is in limited stock (even if it is not) and interested people could be willing to pay more for the last of it. Creating urgency is essentially a way to create deadlines so that consumers don’t delay their purchase of items. For example, salespeople can advertise their products and their prices on a limited offer (DeMers, n.d.), and consumers will tend to buy the item before the offer expires. The third principle is authority--authority builds trust and people tend to follow those individuals or companies they trust. For example, a toothpaste company may use a dentist in a white coat to sell their toothpaste or a food company might use a chef to advertise food (Cialdini's 6 Principles, n.d.). The fourth principle is commitment; commitment happens when companies start by asking the consumer for smaller things and then will increase their requests as consumers start to build commitment to the company. For example, companies might start by telling the customer to sign up for a free class to generate interest and as they continue in the class, they may ask them to start paying for the class--often the consumer will agree to pay because they have found enjoyment or interest in the offering. The fifth principle is liking, businesses would also want to know their audience as they can get more customers easier to like their company. Companies will identify their target audience's wants and will mirror them in their branding (Understanding the Psychology, 2020). The last principle is social proof, also known as consensus. This principle is based on a person's tendency to hop on the bandwagon and do what other people are doing. This is a reason why advertisements can contain celebrities or people everyone knows, to encourage the use of their product. In one experiment, actors tried to influence the people
around them by looking up at the sky and it resulted in all the bystanders also looking up. This influence became so strong that it, eventually, stopped traffic (Cialdini’s 6 Principles, n.d.).

During colonial times, advertisements came in the form of announcements about the goods people had. In the eighteenth and nineteenth centuries, advertisements were not only for consumer products, they were also used to advertise slaves or notices for escaped slaves. Newspapers rarely had ads and magazine ad styles were also restricted. During the late nineteenth century, medicine ads were the exception, manufacturers grabbed people’s attention with absurd promises and used dramatic colors (Brief History, n.d.). Advertisements today also use colors to promote different emotional reactions, as the colors are what people would notice immediately and potentially at a subconscious level. For instance, red is a symbol of energy, power, and passion–red is associated with emotions like love, desire, and anger. This color can bring texts and images forward; it is highly visible which is a reason why important road signs are in red. Advertisers associate red with energy and would use it to promote energy drinks, cars, or items that link to physical activity (Color Meaning, n.d.).

Perhaps the biggest difference current ads have from historical ads is that today’s marketing mostly occurs electronically or via social media. Social media utilizes algorithms that are an essential systemic and important basis of advertising. An algorithm is a set of rules through math that control how groups of data act. In social media, algorithms are used to help rank search results and order advertisements. The purpose of this is to filter out unwanted content–data from Youtube shows that videos that are not relevant to the user still receive millions of views just because they were recommended by the algorithm (O’Brien, 2022). Recently, an experiment was conducted to determine the effect of food advertisements via social media/the internet. The experiment had teenage participants identify whether an ad was from Instagram or a traditional source. The results demonstrated that the adolescents could not correctly identify Instagram posts as ads; this might indicate that the artistic design of advertisements on social media may not be thought of as marketing. However, teens who saw the Instagram features of an ad tended to rate the food higher than the ads without the social media designs (Bragg et al., 2021). At some level, then, the teens seem to be internalizing the basic purpose of the Instagram ads, with improved recall and rating of these food items.

Another study researched adolescents’ memory, focus, and social responses to posts of ads that include interactions with the product type and where the post originated. The researchers predicted that adolescents would respond more positively to ads for unhealthy foods than to healthy or non-food ads. They also predicted participants would be more engaged if the ads are shared by a brand, a celebrity, or a peer. The results showed that it was more common for adolescents to want to share unhealthy posts and peers would rate them more positively, and they viewed them for longer. Even the interactions with celebrities, peers, and known brands showed that they still liked unhealthy food ads more. In terms of effectiveness, the research suggests that unhealthy food advertisements should also be targeted toward adolescents through the use of social/digital media (Murphy et al., 2020).

In a related study, researchers found that television is one of the biggest sources of food advertising for Australian children. Data indicated that 97% of children watch television for 8.5 hours per week on average, and it could contribute to encouraging them to eat unhealthy foods. Other data indicated that 11% of all advertisements were for drinks or food and unhealthy food ads comprised the majority of all food advertising. To track the advertisements in this study, a distal tuner that is attached to a computer and software was used to sense advertisements on television. When the advertisements are tracked, the system then determines whether it was food-related and then further categorizes them as healthy, discretionary, or other. According to the Australian Guide to Healthy Eating, the food ads were coded by two members of the team with differences resolved throughout the discussion. These coded ads are shown on Nine Network’s four channels from Adelaide during 2017. The ads are then randomly sampled for 84 days from 2017 and thus got information to determine if a company was a “signatory to the industry code.” The results showed that 25,980 from 304,241 ads were for food and 64% of them were discretionary foods, 27% were healthy foods, and 8% were other foods. Unhealthy foods are shown to have a rate of 2.1 timers per hour (Smithers et al., n.d., p. 1).

In some countries distinct categories of ads are regulated; in Canada, the marketing of caffeinated energy drinks (CEDs), alcohol, or sports drinks for children is regulated. Drinks are only allowed to contain 400mg of caffeine per 1 liter of energy drink. Many health officials and researchers are
concerned about the effect of these types of advertisements on health and human behavior. Researchers employed an electronic survey that was distributed to people aged 12-24 years old that showed them different CED ads. There were different versions of these ads such as sports, parties, or "product information" ads, and participants were questioned what the target age group would be and if the ad promoted drinks with alcohol or sports drinks. The results demonstrated that the majority thought the ads from all different themes matched people their age. Advertisements from lead CED brands are thought to target younger people, promoting the drinks use with alcohol or unhealthy sports drinks, even with established Canadian restrictions banning these marketing methods (Wiggers et al., 2020, p. 1).

In Taiwan, the health costs of colorectal cancer have increased over the years. National health administrations have attempted to advocate for people to stop unhealthy behaviors yet the number of patients is still increasing yearly. Previous research was conducted to examine the effects of healthy advertisements using regulatory focus theory and message framing effects. These framing techniques in the advertisement were discussed for behavioral change in different areas in the consumer. Gain framing refers to positives while loss framing refers to negatives, for example, gain framing would be 90% fat-free milk and loss framing would be 10% fat milk. The experiment used different formats of public health advocacy ads which showed that the viewers were more positive when the motto or slogan of the advertisement is gain framing and not loss framing. The viewers found ads to be easily understood when they prompted the viewer's regulatory focus and had an appropriate message framing which also improves health-related advertising. After reviewing the results, the researchers suggested using health-related advertisements for Taiwan’s Ministry of Health and Welfare (Lin & Yeh, 2017).

Other than online advertisements, grocery stores, an interactive experience, utilize distinct marketing strategies. Stores often choose the location of their products carefully; for example, Costco switches the location of their products constantly to make their customers look for each item by walking to more places, therefore seeing other products (Jones, 2022). The ends of aisles, and eye-level shelves, are all locations that catch the consumer’s eye and manufacturers often pay more for their products to be placed there. Customers also tend to look for brighter colors, items with a unique theme, or labels that enhance the extent that a product looks healthy. There are also “buzzwords” like “fat-free” and “organic” that can also attract customers who are looking for a healthy alternative (Psychology of the Grocery, n.d.).

Consistent with previous research, the investigator expected that participants would notice more healthy food ads than junk food in the ads presented. Additionally, the researcher hypothesized that participants would want to buy products advertised using gain framing more often than loss framing. Aligned with recent research, the investigator hypothesized most participants would report that they consumed most advertisements through social media and would notice products they had searched for recently. Finally, the researcher hypothesized that consumers would purchase advertised products and remember advertisements due to Cialdini’s six principles of persuasion.

2. METHODS

Participants:

22 participants responded to a survey anonymously. No age, gender, or personal information has been collected.

Materials:

An electronic survey containing multiple questions was sent out. The survey contains multiple choice questions to see participants’ behavior towards advertisements. These questions include: “What type of advertisement do you see the most?”, “Do you see more ads about junk foods or healthy foods?” and slogans of Nike, McDonald’s, Skittles, Kentucky Fried Chicken, and Mastercard. Other “Yes or no” questions include: “Would you change your mind about a product after reading the negative or positive reviews?”, “Have you bought something because of trends? (Ex: popular merchandise, books, etc.)”, “Do you buy the premium/upgraded version of a program when the free version limits what you can do?”, “Have you ever noticed social media showing you ads for things that you talked about or searched for recently?”, “Have you ever tried a free sample and bought the product afterward?”, “Have you ever bought something because of its advertisement?”, and “Do you check the reviews of
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the product when you buy things online?”. Open-ended questions asked the participants what they remembered about the McDonald’s brand (if they know this brand), and what attracted them to an advertisement (if they said yes to “Have you ever bought something because of its advertisement?”). Lastly, the survey asked whether they would buy milk advertised as “10% fat milk” or “90% fat-free milk”.

Procedure:

The investigator sent this survey out to people and asked them to complete the survey to the best of their ability and asked them not to research for the answers and only use prior knowledge. There is no limit on the participant’s time to take the survey and the survey closes after 3 weeks of data collection.

3. RESULTS

The researcher received 22 responses after 3 weeks of collecting data. For the question “How much do you know about the McDonald’s brand?”, 59.1% know the jingle, 68.2% know the motto, 95.5% know the logo, and 0% do not know this brand. 100% of the respondents could finish the Nike slogan correctly, 15/22 know the Skittles slogan, 63.6% know the MasterCard slogan, and 13/22 know the KFC slogan. For the question “What grabs your attention most when seeing an advertisement?” 40.9% said celebrities, 63.6% said music, 77.3% said the use of colors, 31.8% said emotional response, and 13.6% said animals.

![Figure 1. What respondents said grabbed their attention the most.]

45.5% said they never bought something because of its advertisement, while 54.5% said they have. 77.3% said they bought the product after trying its free sample, while 22.7% said they never did. All 22 respondents said they noticed social media showing them ads they talked about or searched for recently.

![Have you ever noticed social media showing you ads of things that you talked about or searched recently?]

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Figure 2. All respondents answered “yes” to this type of advertisement on social media.

For the multiple choice question about what type of advertisement they see the most, 59.1% said social media posts and stories, 31.8% said Youtube commercials, 4.5% said TV commercials, also 4.5% said radio advertisements and 0 percent said poster advertisements including billboards. For the type of milk, 40.9% said they would rather buy milk advertised as “90% fat-free”, while 59.1% would rather “10% fat milk”.

![Pie chart showing milk preferences](image)

Figure 3. Chart of what type of milk labeling respondents would rather buy.

A question regarding whether participants see more junk foods or healthy foods, 22.7% said healthy foods, 59.1% said junk foods, and 18.2% said they do not receive ads about food. 50% of the 22 people said they would buy the premium/upgraded version of a program when the free version limits what they can do, while the other 50% said they would not. The question asking if they have bought something because of trends came back with 77.3% responding yes they have, and 22.7% saying they have not. 10 out of 22 people said they “sometimes” read the product reviews, 12 out of 22 people said they “always” read them, and 0 people said they “never” read them. Based on that previous response, 90.9% would change their mind after reading the negative or positive reviews of the product, while 9.1% said they would not change their mind.

![Pie chart showing review preferences](image)

Figure 4. Most respondents would change their minds after reading reviews

The open-ended question about McDonald’s came back with responses such as its commercials, obvious architecture like the golden arches when driving by, “insane repetition”, iconic and common jingle/motto, jingle related to happiness, hearing it in classrooms, advertisements everywhere, memorable colors, the clown, etc. The other open-ended question about what advertisements attracted them also received many detailed responses. One said: “The Wendy's strawberry frosty was the item I
purchased. I learned about it by seeing advertisements for it on signs and billboards across my city. The words on them never really caught my attention, but the image of the product was so large and obvious that I understood exactly what was being marketed. I was drawn to this because as a child, I always enjoyed Wendy's chocolate frosty and thought they tasted great. I was interested to see if the new flavor was equally as excellent. (Note: It didn't, it was awful, and I recommended everyone in my family and friends not to waste their time.)”; another said: “I’ve bought books be they were on my for you page, and then the description given of it on the advertisement had to be interesting enough.”; others said: “I think I’ve bought and downloaded many apps and games because I was attracted to the upbeat and catchy music and the bright and flashy colors in their ads.” etc.

4. DISCUSSION

The results of the survey supported the researcher’s hypotheses and were mostly consistent with the findings of previous investigations. The initial hypothesis of the study, surrounding whether or not participants would demonstrate and report knowledge about different modern ads and those used throughout the history of advertising. In response to the first survey question, regarding how well participants recognized the McDonald’s brand, all participants reported knowing what the company was and the majority of participants also recognized the jingle, motto, or logo with high certainty. Following this, for slogan recognition for Skittles, Mastercard, and KFC, over 50% recognized all three of the companies. Generally, companies with a high history of advertising were easily recognized by participants in this study and this is consistent with the idea that things that are frequently seen or heard become inherent to an individual's memory and are encoded at a high rate—a familiar tune or a bright image are recalled easily by individuals (Murphy et al., 2020). The survey question asking whether the respondent would rather buy “10% fat milk” or “90% fat-free milk” demonstrated gain framing versus loss framing–10% being loss framing and 90% fat-free milk being gain framing. Within these parameters, the researchers hypothesized that people would choose gain framing more often, but the data collected from the survey shows that 13 out of 22 participants chose loss framing. This contrasted with what the researchers had anticipated, and previous studies showed that viewers were more attentive to and had a higher recall of the motto or slogan of the advertisement when gain framing and not loss framing was used (Lin & Yeh, 2017). Further research would need to be conducted to determine why there was a slight preference among participants for loss framing, in the current study, for the question about milkfat of different percentages.

Further research predictions were supported by the data; the majority of participants reported that they consume most ads through social media, with 20 out of 22 people saying that social media is their most common source of advertisements. Additionally, 13 of the 20 said social media posts or stories were sources of ads and 7 of them said YouTube commercials were where they viewed most ads. This information was aligned with the prediction that most participants would view advertisements through social media. Progress has been made: newspaper and television viewership has decreased and social media has expanded, with technological and systematic updates over the past decades–so has followed the mechanisms of marketing (Brief History, n.d.).

To gather different perspectives and types of data, the researcher added an open-ended question about the aspects of McDonald’s advertising with which they were familiar or recalled. Many participants reported that they frequently see the brand’s logo everywhere and that they have seen many iterations of McDonald’s commercials. This behavioral response is likely due to the common advertising technique of repetition. Companies that use the repetition strategy want their consumers to see the ad from various and multiple points of view. For example, a commercial will be widespread on TV and the same ad will be placed on billboards in the area, with redundancy improving the memory of the advertised products. These repetition strategies can be used to raise consumer brand awareness; having too much repetition can also cause a negative impact when it becomes an annoyance and consumers stop viewing an ad (Velarde, 2019). In general, repetition is an effective way to encode information into an individual’s memory (Sommers et al., 2021), such as reading information and then taking notes on the same information or reading something and then listening to a spoken narrative of the information that was read–or any of similar strategies to promote recall.

Some of the current research results were consistent with longstanding principles. The use of Cialdini’s principles of persuasion has also proven to be effective in the current research—17 out of 22 people said they bought the product after trying the free sample and this is consistent with the
principle of reciprocity. An overwhelming number of study respondents said they were likely to change their opinion of a product after seeing reviews. The effect of product reviews on individuals’ behavior aligns well with Cialdini’s principle of social proof where one is more likely to do something that other people are also doing (Cialdini’s 6 Principles, n.d.).

Food advertising has been and is currently a prevalent form of information sharing. In the current survey, there was a question asking whether the participants see junk food advertisements more or healthy advertisements more frequently. According to the survey, 59.1% of respondents said they see junk food advertisements more than health food ads. People who watch television or are often online are prone to seeing more junk food as the probability of junk food advertisements is higher than that of healthy foods, research says these unhealthy ads could have a rate of 2.1 timers per hour (Smithers et al., n.d., p. 1).

Food and other products are being advertised through new channels at an increasingly high rate and as consumers move away from traditional sources like cable television and towards sources like streaming and social media. For the question on social media algorithms in the current survey, 100% of respondents said they noticed social media showing them ads they have recently searched for which supported the researcher’s hypothesis of social media advertising. With the increased usage and advancement of algorithms, clearing out unwanted products or posts, and recommending desired products to users has now become an important tactic in marketing. (O’Brien, 2022). Algorithms have automated the advertising process and are, likely, here to stay with the continued interest and participation on social media sites and the general web—they also have provided companies with low-priced options for marketing their products, further emphasizing they have staying power in modern ads.

Ads are powerful, affect behavior, and are becoming more frequent in various formats. The current research confirmed how advertising has many aspects of psychology that are innate to the creative process and that underlie the basic approach to ad development. Going forward, the researcher would like to develop a commercial or advertisement using some of the psychological techniques that have been less frequently used in previous studies, to gain a better understanding of the full scope of behavioral responses that might occur. Additionally, the investigator encourages comprehensive reviews and meta-analyses on the history of advertising and marketing; this area of the evolution of advertising strategies is limited to a small number of studies. Further research on interactive forms of advertising, such as strategies used in grocery stores, should also be investigated. Finally, many of the psychological tricks and strategies reviewed in this paper could be employed to advertise and bring awareness to important global issues including climate change, world food insecurity, racism, and pollution—it would be akin to selling important ideas and thoughts to a global audience, and may be very effective in that objective.

REFERENCES


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AUTHORS’ BIOGRAPHY

My name is Kailin Gao and I am in Episcopal Academy's Class of 2025. I love to dance ballet in my free time and I also play the flute. I took interest in this research topic through my school's public speaking contest in 8th grade. My public speaking topic was "How Companies Get You To Buy Their Products" and when I got the opportunity to do a new research project, I did not hesitate to continue my studies on the psychology of advertising and marketing beyond my previous 2-minute speech. More than just learning about this topic throughout this study, I grew as a writer and could not be happier with the results.