

THE IMPACT OF COLORS IN PRINT ADS ON PURCHASING DECISIONS:

LEBANESE CONSUMERS' PERSPECTIVE

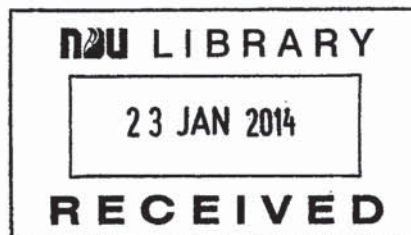
A Thesis  
Submitted in partial fulfillment  
of the requirements for the degree of  
Master of Arts in Media Studies/Advertising

by

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Fall, 2013



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## **Acknowledgements**

I would like to take this opportunity to acknowledge many people for their various contributions to my study. First, I am deeply grateful to my Thesis team: Dr. Joseph Ajami, my thesis advisor, Mr. Vatche Donerian, and Dr. Joe Ya'acoub, my two readers.

I would like to thank them for their patience, insights and valuable feedback on my work. Their international and cultural experiences have influenced my thinking in this thesis.

I particularly would like to convey my sincere gratitude to Dr. Joseph Ajami for his priceless guidance. Also, many thanks go to those who participated in the focus group discussions, to Nercese Armani for his useful advice on selecting the suitable statistical tests for some of the questionnaire data.

I am grateful to all participants in this research without whom the study would not have been possible. I gratefully thank my friends for their support and sense of humor over the period of my Master's studies.

Lastly but by no means least, this thesis is dedicated to my parents, husband, brother and sister. Their love and support in all that I have done are the key to all my achievements.

## **Abstract**

A consumer behavior is influenced by word-of-mouth, music, advertising and product (availability, price, range, quality, design; its features and the benefits it offers; size and packaging that gives information about the product inside). Although the new technology and the viral online media are becoming prevalent, the traditional print media such as newspapers, magazines and billboards are still thriving and still attractive to many people. The study explores understanding of variables such as colors in print ads, consumers' color preferences, gender, and age among others and discusses how these variables affect the decision making of consumers in five different product categories: food, fashion, interior furniture, cars, and cosmetics. The purpose of this study is to examine the use of colors and its significance in the Lebanese culture especially in advertisements and their impact on the Lebanese consumers' purchasing behavior. This research would help marketers to better reposition their branding and advertising strategy to capture the correct target market and hence to improve sales and increase profits. The study showed that colors in ads have an effect on purchasing behavior and shopping experience but they work in coordination with other aspects of advertising such as visual effects, illustrations, slogan, font used in the headline of an ad product price, quality, point of sale, promotion and word-of-mouth. From the quantitative study, one can deduce that color preferences have greater impact on consumers' buying behavior mostly for products related to fashion, cars and cosmetics. Also, harmonious to the concept of "buying high/low involvement products", consumers consider colors when buying high involvement products and thus results are being supported in this research.

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## **Chapter I: Introduction**

### **1.1. Introducing Colors**

There's more to colors than meets the eye; they are an inseparable dimension of our everyday experience. We love nature as much as we love the hues brought up. A child's first book is usually that which allows them to discover the world throughout colors. However, not only children are impressed by colors but also individuals belonging to different age groups may have the desire to know more about green, red, blue, purple, orange, yellow, pink, etc. possibly because different colors may symbolize different characteristics and moods. We live in a visual society in an era where pictures can be uploaded and downloaded in few seconds. Technology offers us means to introduce colors in ads that were not available 30 years ago. Colors are introduced in newspapers, magazines, and billboards among many other outlets. Due to my background in graphic design, and to my experience in selecting the appropriate colors in designing commercials that match the concept of the brand or the product, colors have become a part of my professional life. Thus, the decision to study colors in depth is very crucial to my career, which would enrich my academic insight along with my technical skills. Graphic design deals with layouts, shapes, color combination, typography, and products as much it is related to advertising and understanding consumer behavior. Brands or companies are represented by their visual identities such as their logos. But, could the colors you see actually influence the way you feel and the decisions you make in your life?

When colors are used in companies' logos, people can easily recall the products at any time like Mc Donald's logo in red and yellow. The power of colors is illustrated on packages of different product categories, which may play a major role in decision-making while purchasing since the use of colors is considered as a source of information when it comes to any buying behavior.

A consumer behavior is influenced by many factors such as the layout of a store, word-of-mouth, music, availability of products, price, and advertising (Tanner, Jr., Raymond, 2012). Other significant things to consider include the product range; quality and design of the product; its features and the benefits it offers; size and packaging that give information about the product inside. Of all the aspects of the marketing mix, the price may reflect the quality of the product; the place is concerned with various methods of transporting and storing goods, and then making them available for the customer. Getting the right product to the right place at the right time involves the distribution system (Wall & Rees, 2001). Promotion is the business of communicating with customers since it provides them with information that will assist them in making a decision to purchase a product or service (Lauterborn, 1990). Despite the fact that increased promotional activity indicates a response to a problem such as competition; it permits a business to communicate messages that can be extremely cost-effective (Frey, 1961). However, the impact that people can have on marketing through word-of-mouth cannot be underestimated. Mangold's (1987) concluded that WOM has a more strong influence on the purchasing decision than other sources. This is perhaps because personal sources are viewed as trustworthier which means consumers prefer to seek information from family, friends and peers rather than sponsored promotional sources (Buttle, 1998).

The purpose of this study is to gain better insights into consumers' attitudes in the Lebanese culture. The goal of advertising is to attract consumers to buy products. Colors are displayed on flags, billboards, t-shirts, stickers, even caps of bottled water. When we drive, the billboards we see on the highway might excite us. What gets our attention in these advertising campaigns? It does not have to be an extra ordinary piece of art; sometimes it is just a simple change of colors. It's essential to use colors that project an image of the product i.e. warmth, innovation, freshness,

and much more. All of these features are portrayed by the color schemes of the advertisement to impress humans. For instance, fresh color schemes in an ad such as white, green, and orange taglines or slogans, background effects, and a product's color/s, can reflect the fresh spirit to astonish the viewership. Therefore, colors in advertising can either effectively communicate the message to the target audience or lessen the design effectiveness of the ad when used poorly or inefficiently. This would affect the consumers' perception to the ad and their purchasing behavior. For example, Heinz changed the color of their signature ketchup from red to green and sold over 10 million bottles in the first 7 months, resulting in \$23 million in sales, the highest sales' increase in the brand's history (Morton, 2010).

## **1.2. Significance of Colors**

The aim of this study is to examine the use of colors and its significance in the Lebanese culture especially in advertisements and their impact on the consumers' purchasing behavior. It will explore key terms that are connected to colors and to human response to colors. Colors have always held a fascinating attraction for us because they address emotions, feelings, and values affecting consumers' purchasing decision. Many research questions are asked: 'Which colors sell the best?' 'Are products associated with specific colors?' 'Do consumers look at colors as a determining factor in their buying decisions?' Designers have always used colors to convey different moods and underline messages to clients. Different colors convey different emotions or attributes. The choice of colors in advertisements and promotional campaigns can influence consumers' feelings about products or services and can play just as large a role in generating sales as any slogan. Colors have the distinctive feature to attract specific types of shoppers and potentially change their shopping behavior.

Studying the impact of colors in ads on purchasing decisions is important, because the results of this study will provide a new insight to the local marketers regarding the impact of visuals in ads as well as products' attributes like colors on consumers' purchasing decisions of packaged food, clothes, walls of a store, and others. This involves a deep understanding of the colors and the product and eventually studying the impact of colors on consumers' purchasing behavior especially in the following items: food, fashion, cosmetics, cars and interior decoration, can undoubtedly benefit advertisers, marketers, designers, architects, and others who are involved in the entire business process.

As mentioned earlier, colors carry different meanings: for example, in the American culture, the combination of orange pumpkin color with black during Halloween is widely spread in U.S product advertisements. Worldwide, specific colors are depicted during particular seasons and occasions, especially in Valentine and Christmas, during which red is the dominant color used in advertisements. To reflect Christmas Spirit and Valentine, red ribbons are tied on these packages with red color sofas that are displayed on window shops with red teddy bears. Red packages, labels, banners, flyers are everywhere during the holiday season to sell cosmetics, clothes, chocolate boxes, and so on. Moreover, some people prefer to wear black clothes while others enjoy bright patterns and abstract designs. Furthermore, if we apply the AIDA model of advertising, colors may also play a major role in attracting the consumers' attention, a necessary step to be followed by other steps. The well-known AIDA model of advertising specifies that effective advertising starts with Awareness (attention of shoppers which is the first step in the purchasing process of these products), leading to consumer Interest, then Desire, and finally resulting in Action (Colley, 1984). The model formed the basis for measuring the effect of advertising. It is the foundation by Lewis (1900) and Strong (1925) that generally attributed in

the marketing and advertising literature, in which the concept became known in consumer behavior research as the 'hierarchy of effects' model. (Wijaya B. S., 2012). AIDA model can be used in most advertisements to measure the effectiveness of any ad. Marketers know that their advertisements must grab the attention of their consumers, so they use colors, backgrounds, and themes in their campaigns. Colors can play a significant role in consumers' memory. Thus the use of various designs, lively colors, and the use of different advertising slogans in print advertising whether in newspapers, magazines, or billboards, might generate interest in consumers after getting their attention. The marketers find what their consumers desire. After evaluating the consumers' desires, marketers encourage consumers to take action by purchasing the product/service (AIDA Model, 2013).

### **1.3. Significance of the Study**

This study explores the relations between different variables that affect the buying decisions of consumers in different product categories. Understanding of variables such as colors in print ads, gender and age among others, will help further understand how these variables affect the decision making of consumers. This study would help marketers to better reposition their branding and advertising strategy in order to capture the correct target market and hence to improve sales and increase profits. Although the new technology and the viral online media are becoming prevalent, the traditional print media such as newspapers, magazines and billboards are still thriving and still attractive to many people. EMarketer, in its US newspaper ad, reflects the amount of advertising dollars spent on print and online media accounted for approximately 23 percent (\$35.8 billion) and 20 percent (\$32 billion) respectively of all media advertising expenditures (\$158.3 billion) in 2011. In 2013, the advertising expenditure has decreased by 8

percent representing 19 percent (\$32.9 billion) for print media, and increased by 32 percent indicating 25 percent (\$42.3 billion) of all media advertising expenditures (\$171 billion) (eMarketer, 2013). According to Stevenson (2004) the amount of advertising dollars spent on newspapers, consumer magazines, and business paper ads (including business magazines) accounted for approximately 40% of all media advertising expenditures in 2004 in the US market (Stevenson, 2004). Arab Ad magazine reported in its annual survey that newspaper and magazine advertising expenditures grew 5 percent. Lebanon's online advertising spending growth increased considerably about 29 percent growth rate while sustaining the smallest market share in 2012. The research corporation IPSOS-STAT study showed an increase in advertising expenditures in Lebanon to \$182 million in 2012 from \$174 million in 2011. In terms of market share, television advertisement estimated 39 percent of expenditures at \$71 million, followed by outdoor billboards with 23.6 percent at \$43 million, and newspapers with an 18 percent share at \$33 million. Magazines, radio and online portals attracted 8.8 percent, 7.4 percent and 2.5 percent respectively (The Daily Star, 2013).

Sorce and Dewitz (2007), broadcast and cable TV and radio represent an additional 44 percent of the media advertising dollars spent. People who were exposed to print newspaper advertising had a higher recognition of ad content than those who received an online version of the same advertising message. For individual product categories, print advertising was the most influential source of information for consumers who purchased personal / home care products, and the second most influential source for those purchasing consumer electronics and home improvement products. Print media advertising influenced the market behavior in terms of total sales than did television or Internet advertising (Sorce&Dewitz, 2007).

On the other hand, the importance of social networks for news consumption is growing. The use of social media and social networks is increasing rapidly worldwide, since people follow the news of companies and organizations on social networking sites and journalists distribute news online and share the stories with followers in which the print media wasn't facilitating the audience to share their stories with the journalists. The Pew Research Center study (2010) demonstrated that Internet has exceeded newspapers and radio in popularity as a news medium and ranks just behind television in the United States. Fifty nine percent of U.S. gets news from a combination of online and offline sources in a typical day. In the study, seventy five percent of U.S. online news consumers say they get news forwarded through e-mail or posts on social networking sites and fifty two percent say they share links to news with others via those means (Möller and Stone, 2013).

Although online marketing continues to gain popularity and demands so much of our attention, the print media won't lose its glory. PrintWeek has recently published an article that emphasizes the importance of print media. Statistics and interviews show some useful insights about the print's efficiency as a crucial marketing tool in 2012. Also, the print is essential to support/initiate an online campaign. Thus it is important to budget and plan all aspects of campaigns in the years ahead, and place equal value on both print and digital marketing tools (Cooke, 2011).

Even though many forms of electronic advertising exist today, print outdoor advertising still attracts consumers to a number of products and services. Outdoor advertising is efficient because these marketing tools are constant visual reminders for the people who see them every day. Outdoor advertising such as billboards is often placed in locations that are approximately close to the business. Many companies choose to include outdoor advertising as one of the important



elements of their overall public relations campaign, simply because it shows substantial results among other advertising tools (Tatum, 2013).

## **Chapter II: Literature Review**

Research has indicated that brand attributes are viewed as important elements in a consumer's decision-making. For example, Lau et al. (2006) mentioned that there were seven factors that influenced consumers' brand loyalty towards certain brands. The factors were brand name, product quality, price, design, store environment, promotion and service quality. (Lau, Chang, Moon & Liu, 2006). In another point of view, customers may also be loyal because they are satisfied with the brand, and thus want to continue the relationship (Fornell, 1992). One of the attributes of design, which is color, plays a part in our daily lives, whether we recognize it or not. For instance, most people are concerned with the color harmony when taking one of the first decisions of the day. What am I going to wear? This question is answered not only by choosing a style and fabric appropriate to the season, but also by making the right color choices and it goes on from there. Whether you're designing a new kitchen, wrapping a present or creating a bar chart, the colors you choose greatly affect your final results. Choosing colors is an important decision in any area of design. Selecting a color that will appear for years to come has influential consequences and may either encourage or damage sales in the future (Lambert, 2004). With a review of the literature in order to ascertain and identify the studies conducted about colors' significance, several issues are associated with this topic:

### **2.1. Colors and Culture**

Colors hold not only esthetic value, but are utilized to symbolize our deepest beliefs. Different cultures utilize colors differently and the combinations and complexities are as diverse as the visual spectrum itself. One example that illustrates cultural differences would be the use of the color red. In most countries red is used to signal danger, it is used in traffic lights, stop signs,

and warning signs. The same color decorated with some green and gold foil symbolizes the Christmas season in most Christian countries. Similarly, particular colors can have relatively neutral significance in most cultures like Green, Blue, or Orange; however, in a specific context (i.e. Lebanon) they can hold powerful meaning through being symbolic of various political parties. However, in many Eastern countries, red symbolizes good fortune, prosperity and clarity. Likewise, in the West, black indicates death. However, in the East, white is often used to denote mourning. That being said, it becomes evident that the use of colors is not determined primarily by the colors themselves, nor is their meaning universal (Ambrose, Gavin Harris, Paul, 2005, p.105).

Color meanings are also very important in guiding consumers in consumption situations. For example, Pharmavite's Nature Made vitamins were packaged in a black container with white lettering. A series of interviews with consumers revealed that they were mistaking the vitamins for poison because black is often associated with poison in Western culture. Subsequently, the company changed the packaging to beige and brown to avoid this association. For other product categories, these colors may be highly appropriate. In order to create meaning for color combinations, many advertising companies use association. Association is done by pairing a stimulus that holds a clear and significant message to the consumers with one that is neutral. For example, in order to make its product more attractive for male, Drakkar Noir perfume associated its logo with images of highly masculine men. The logo reflects the name of the product in black and white. If the association is successful, the colors of the logo will now represent desired masculinity for the male consumers (Lane, 1991). Moreover, in rituals and festivals, like birth and death, specific colors are associated. Bodies are painted and magic colors are displayed in traditional dresses (Birren,1978).

Thus the usage of colors in advertising campaigns can express the attitudes and the moods that the advertisers would like consumers to connect with their products. Association can also be used in the reverse order in the case where the color itself already holds its own meaning. For example, many articles suggest that the use of the color blue can be used to generate calmness and serenity. It has also been associated with purity and cleanliness; hence, advertising companies can use this color to make their products more appealing when purity becomes a concern, like with bottled water. The consumers see the product and associate the feelings generated by the colors used with the product itself. By making these types of associations, companies can increase their sales and generate more revenue.

## **2.2. Colors As a Source of Information**

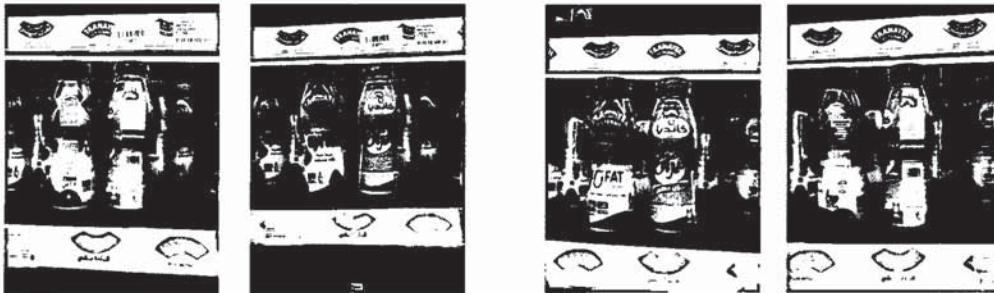
Colors can also provide a powerful impact, even when used in a very simple way. Color can be used as a source of information (Ambrose, Harris, Paul, 2005). For centuries artists have explored the use of color in their compositions. Believing that colors have natural symbolic, expressive, and visual qualities, Faber Birren in 1978 found that selecting proper colors for manufactured environments is very essential. Thus human responses are to be deeply affected. Birren also stated in his book 'Color and Human Response', that in flags, signs, traditions and symbolism, color takes place as a major part in educational uniforms. It is illustrated when the color yellow is designated for science faculties, orange for engineering and so on (Birren,1978). On the other hand, the attitudes toward the colors may occur, depending on the cognitive character of the individual. For example green may evoke nature, mountains, lakes; red may recall the sunset, the fireplace (Biren,1978). In 2000, Tutssel noticed that many companies were already using the effect of colors on the emotional state of the consumers and was able to

demonstrate how certain colors gave the products an advantage over others on the market. Heineken, Tutssel noted, had a huge advantage due to its unique green label. Coca cola's red was also a carefully planned out due to its ability to convey warmth. Cadbury used purple to boost its product's desirability, the color of royalty. He proceeded to note that colors can have a stronger effect on consumer behavior equal to, if not greater than, both the effect of the imagery of the product or its written work combined (Tutssel, 2000). This illustrates that consumers buying the products may also recall the brands by their colors of their packages, advertisements, and logos.

Unique colors have become strongly associated with a particular product or brand. Today the color competition of products is exploding and the use of colors is bringing about exceptional demands. The precise use of colors can also play a role in classifying products from competitors. Paul A. Bottomley and John R. Doyle published an article in 2006 titled 'The interactive effects of colors and products on perceptions of brand logo appropriateness' narrowing their study on the colors blue and red specifically. They demonstrated in their experiment that color has a catalytic effect on a brand's desired image. They noted that it could be used to improve the brand logo's ability to portray the manufacturer's desired message to the consumers. Furthermore, they found that there is an interactive effect between the colors of the brand and their positioning demonstrating that the effect of colors is highly significant and just as complex (Bottomley & Doyle, 2006).

On the other hand, generic products and competitive products use the same colors used by the brand name products. It means that marketers are associating certain products with certain colors in the minds of consumers. For instance, through personal observation, some brands are likely to transfer the same colors of others because colors got stuck in consumers' minds. When two competing brands for dairy products such as Candia and Taanayel promote their product of

Ayran yogurt using same colors on similar bottles may lead the consumers to buy any of these brands; they may not recognize the differences if there are any. This is because both bottles of Candia and Taanayel full fat yogurt are designed in blue and white colors with blue bottle caps; whereas zero fat yogurt bottles use the same colors as the full fat yogurt bottles but with red bottle caps.



According to Dawn Iacobucci (2009), the customers are verbally connected to the brand name and visually to the logos and the packaging colors. Through the only clues that are colors and fonts, consumers can readily recognize the brand and the product category, yet these brands and product categories are distinguished merely because consumers are familiar with the brand's packaging.

In other words, colors convey information and/or provide the users with some other operational benefits. The use of distinctive colors to identify products can be seen everywhere. The actual design of the container or label may be quite different, even though the colors are the same. On the other hand, another situation may confuse consumers. Right next to your favourite brand of cough syrup, sits another brand in similar colors. Even the labels are extremely similar, so much that you might even confuse the two and pick up the wrong one by mistake.

### 2.3. Emotional Reactions to Colors

Colors are not only a source of information but also influence moods and feelings positively or negatively. Given that our moods and feelings are unstable and that colors play roles in forming attitude, advertisers can use colors to increase or decrease viewership, and persuade consumers, enhance likelihood to the commercial and thus grab attention causing action of purchase among consumers (Kido, 2000).

There have been several studies that examined affective or evaluative reactions to various colors. Emotional reactions to color may have a physiological as well as a psychological basis. Patricia Valdez and Albert Mehrabian investigated the emotional reactions to color hue, saturation, and brightness using the Pleasure-Arousal-Dominance emotion model. Blue, blue-green, green, red-purple, purple, and purple-blue were the most pleasant hues, whereas yellow and green-yellow were the least pleasant. Green-yellow, blue-green, and green were the most arousing, whereas purple-blue and yellow-red were the least arousing. Green-yellow induced greater dominance than red-purple (Valdez & Mehrabian, 1994).

Felix Deutsch's (1937) groundbreaking research project explored in depth the effect colors have on our emotional reactions. His findings were integrated into the medical field and are still practiced today. He also provided the necessary backbone for color psychology to develop by studying the effects of various environmental factors on men. It revealed that the weather in particular had a very influential mood altering effect such that sunnier weather was associated with more positive moods and rainy weather had the potential to trigger more negative moods. His study also demonstrated that the presence of attractive and unattractive imagery had a similar respective effect on mood.

Reactions to colors are similarly depressing or inspiring, but they are not specific for any hues. Warm as red and cool colors like blue may calm one person and excite another. Henner Ertel, director of an institute for rational psychology at Munich, found the orange to improve social behavior, to cheer the spirit, and reduce aggression and bad temper (Biren, 1978). This means that when people see certain colors they may display different emotions.

Other studies have combined these approaches to demonstrate that some colors cannot only have a psychological effect but also a strong physiological effect as well. Nakshian (1964) studied the effect of colors on hand tremors. What he found was that the color red in particular was significantly associated with an increase in hand tremors especially when compared to the color green. A more in-depth study measuring brain electrical responses revealed that when comparing the brain's psychological reaction to colors of equal intensity the color red has a much more stimulating effect (Clynes & Kohn, 1968).

#### **2.4. Color Preferences**

Many tests about the color-preference have been conducted over the years and have sometimes divided colors into a warm group (red, orange, yellow) and a cool group (green, blue, violet) (Sharpe, 1979). Cool colors (especially blue) are consistently preferred over warm colors (Silver and McCulley, 1988). In a consumer behavior context, Middelstadt (1990) found that respondents shown the slide of a pen against a blue background exhibited a more positive attitude toward buying the pen than those shown the same pen against a red background (Middelstadt, 1990). Bellizi et al (1983) explored how colors can shape people's perceptions of how pleasant and attractive the environment they are in is. They were able to demonstrate that



warm colors are significantly less appealing than cool colors. The color blue in particular had the strongest effect on subjects' perception.

As infants mature, their color preferences begin to change in a predictable fashion. In contrast with their previous fascination with very bright colors like yellow they begin to prefer more universal favorites like red and blue. Red can signify simplicity; If used bravely, red may indicate violence and aggression or a desire for love (Birren,1978). This is obvious in Valentine advertisements in which red covers most of the visuals to make it look romantic to the viewers. Faber (1978) observed that there is a link between color preferences and the extroversion sub-scale from the Big Five scale. He noticed that there was a significant correlation between extroversion and preference for warm colors, whereas with introverts he noticed a significant correlation with cold colors. He also noticed that age had an effect on color preferences as well; he observed that the older the participant was, the more he had a preference for shorter wavelength hues (red, orange, yellow). Blue denotes achievement, fidelity, respect and royalty. Green portrays nature, stability, and preference. Violet is considered an elegant color that stands for sensitivity, dignity, and dominance. Orange represents happiness, brightness, tenderness and sociability. Whereas yellow indicates evolution, uniqueness, wisdom, discrimination, prejudgment, and weakness. Pink evokes infancy, politeness, and care. Color preferences are almost identical in human beings of both sexes and in persons of all nationalities. Birren's color analysis is purely for entertainment and relates to people who consider themselves happy or sad. His study in 1940 has been examined under normal social and qualified situations. He stated that color preferences might vary over the years between cool colors and warm colors. Color has also been used to identify personality patterns. Attitudes towards color specifically have been linked to emotional stability. Individuals that hold the belief that colors are sterile and hold no

emotional effect tend to be unhappy individuals that are significantly stressed, while overexcited ones tend to be extremely moody and have trouble controlling their emotions in general (Birren, 1978).

Also, the knowledge of color preferences is useful for planning colors of consumer products, but color preferences may be product specific. Two studies, one of university students and one of non-students described the similarities between color preferences as an abstract concept and color preferences for clothing. Blue and purple-blue were most desired hues for any use. Colors of favorite clothes and dominant colors in the wardrobe were similar to stated color preferences. Findings support the importance of both biological and social factors' influence on color preferences. Just because you like a color does not necessarily make it appropriate for presenting a product or brand (Lind, 1993).

Color preference is highly subjective and cannot be predicted though trends have been noticed. For example, the directions in the Luscher and Scott (1969) color test state to look at the eight colors and decide which color one would like most without associating the colors with something else, such as dress materials, furnishings, automobiles, etc. Then people would choose the color for which they feel the most sympathy out of the eight colors in front of them (Luscher and Scott, 1969). This seems to indicate that Luscher and Scott (1969) believed there was a connection between color preference and objects.

According to Davidoff (1991), the mind doesn't separate the color of a particular object from the object itself; the perception of the object and its color is dependent on an interaction of the two and neither functions independently. In other words, one cannot study the effect of the color red for example. That's too abstract. One must always note the object and the context of the colored

object, and in order to determine a color palette for a product line, they need to explore the consumers' specific preferences for that product line (Davidoff, 1991).

### **2.5. Colors and Visual Communication**

Visual communication which relies on vision, and is primarily presented or expressed with images includes: signs, typography, drawing, graphic design, illustration, color and electronic resources. Usually, visual merchandising or visual presentation is one means to communicate a store's fashion, value, and quality message to potential customers. Gini Stephens Frings (2005) had a very clear and precise idea about what the purpose of visual merchandise is: To catch the viewer's attention and attract them sufficiently such that they will desire to enter the store, once inside will become quickly familiar and attracted to the merchandise presented, and of his own free will act as a marketing tool for the specific merchandise by advertising it to his/her acquaintances (Frings, 2005).

Denton (1984) in his paper 'Supercharged Color: Its Arresting Place in Visual Communication', examined the crucial effect of the color when it is placed within a frame; they are inherently advantageous or disadvantageous. This phenomenon could be linked to television news delivery, publication, and photography composition or packaging design (Craig, 1984).

As Stone (2001) sees it, the study of colors is much more challenging than what much of the research attempting to study it has given it credit for. He believes that colors are subjective, as interpreted by our visual system and our brain. Colors are fundamental attribute of an object: Grass is green, the sky is blue, the paint on your living room wall is peach, and so on. However, colors are actually sensation, just like touch. Thus to bundle people's opinions and preferences

in means and averages is purely a superficial view of how color affects us as human beings, especially as individuals (Stone, 2001).

Monitors can show colors that printers can't print, and printers can print colors that monitors can't show. Cameras and scanner sensors can record colors that neither monitors nor printers can produce, but these can bring in unpleasant effects of inaccurate color representation to the consumers. They badly affect not only online shopping sites, but also shopping for fashion products, such as retail stores and printed catalogs. This is why it is entirely possible that two items viewed in a retail store under fluorescent lighting, may appear to be the same color yet when viewed outside, under natural sunlight, may appear to be different colors. Printed catalogs introduce yet another set of lighting factors that impact the consumers' perception of a fashion product's colors. Even though the image may be carefully color corrected to match the original item, the catalog producer has no control over the lighting conditions under which that image will ultimately be viewed. An additional problem associated with catalogs is that the colors represented in the printing process are a close approximation produced by color composites. Most printers utilize the CMYK color model, which approximates colors in terms of the amounts of each color of ink – cyan, magenta, yellow, and black. Images of fashion products presented on the Web are subject to the same lighting issues as catalog images during their creation and viewing. Personal computers owned by consumers vary in image presentation due to differences in graphics cards and monitor resolution capabilities (Imation, 2001; Business Wire, 1999).

## **2.6. Colors Versus Black-and-White**

According to Thomas McCain (1980), the relationship between using colors vs black and white is not hierarchical; It depends on the purpose for which you intend to use it: for instance, if

you intend to improve memory performance on a lecture you are giving, black and white works better than color as some of the research suggested, however, the presence of color leads to having the student rate the presentation in a more favorable manner. At the same time, the mood of the student will interact with other aspects of their learning such as their attention span and their internal motivation to learn the material. So the decision is in fact complex and the right decision is dependent on the goal of the presentation (McCain, 1980).

Similarly, Verletta (1967) also explored the effect of color VS black and white except this time the population of interest was primary school children. Verdetta was exploring this effect as part of a project to determine whether color should be used in instructional materials; in order to consider whether it was worth the extra cost, which would have to then be adopted. It revealed that children aged 2 to 5 react very spontaneously to strong vibrant colors and were more likely to engage brightly colored items than they were to engage neutral colors. With maturity the effect diminishes; however, the effect remains prevalent with certain populations, particularly uneducated adults, deaf children and older boys. Colors are most effective in this context with working on learning mostly non-verbal material imagery. She concluded that in addition to the purpose of the instructional material, the age of the student is essential in determining whether the instructional material should be in color or in black and white (Verletta, 1967).

### **2.7. Use of Colors in Advertising**

Many mass communication tools such as packages, products, advertisements, and store environments, are presented to consumers in colors. Since colors have an immediate impact on consumer behavior, advertising agencies all around the world are investing considerably in

imagery when marketing their products. They set up websites with high definition images with colors tailored to the product's consumers (Machin, 2004).

One of the decisions the advertiser must make in designing print ads is using color(s) as exceptional cues in the ads. In most cases, color decisions are based on perception. Linking the hue, chroma, and value of the colors in an ad helps better understand consumers' feelings and attitudes. (Gorn, Chattopadhyay, Yi, and Dahl, 1997). Value (lightness) is defined as the relative lightness or darkness of a color. Hue is the term for the pure range colors commonly referred to by the "color names" - red, orange, yellow, blue, green violet - which appear in the hue circle or rainbow. Theoretically all hues can be mixed from three basic hues, known as primaries: red, blue, yellow (Jirousek, 1995). Whereas, chroma (saturation) may be defined as the strength or dominance of the hue.

In an experimental study, the three dimensions of colors used in an ad are manipulated using a between-subjects design. The results support the hypotheses that ads containing colors with a higher level of value lead to greater liking for the ads. Greater feelings of relaxation are revealed by the higher value color. Consistent with the hypotheses, higher levels of chroma elicit greater feelings of excitement, which in turn increase ad likeability. A follow-up study found that although managers often select higher value and higher chroma colors, in a large number of cases they do not (Gorn, Chattopadhyay, Yi, and Dahl, 1997).

Furthermore, Veronika Koller has investigated color pink functions as an indicator of gender and sexuality in cultural models. An experimental survey was conducted on color associations that are outlined in a number of visual texts such as leaflets, advertisements, websites and magazines, where pink asserts to attract female readers' attention. Colors guide both sexuality and sexual

identity. Thus this reveals the pink as post-feminist femininity having feminine characteristics or gayness (Koller, 2008).

When used in advertising, colors can not only affect the attractiveness of the product but also convey a strong message about both the product and the advertiser. Lohse and Rosen (2001) were able to demonstrate this effect by observing how different people rated different ads in the Yellow Pages. Some of the ads were in color format (colorful texts or/and pictures) while others were in non-color format (black and white texts or/and pictures). The results clearly show that when the ad was in color the rater was more likely to view the ad as more credible, reliable, trust worthier, as well as more professional. Furthermore, these rating increased even more in cases where more details were present in the ad such as when provided with a picture as opposed to line art. All in all, it seems that we are more likely to trust something if we can examine it thoroughly with our eyes, and the more we can examine, the more we generally trust what we see (Lohse and Rosen, 2001).

Colors are influential in attracting consumers' attention to media advertisements. Rossiter and Bellman (2004) went a step further and stated that not only is the use of color in newspaper ads effective at grabbing the consumers' attention and influencing consumers' behavior, it is as influential as a 30- second television commercial at maintaining the consumers' attention. Lee and Barnes (1989) found that the product and color of print advertisements and the product and type of magazine were related and that there were differences in the use of colors in culturally oriented magazine advertising but not so between gender-sensitive magazines (Lee&Barnes, 1989).

## **2.8. Advertising and Publicity**

One effective method fashion advertising companies use to impress and influence their target audience is by making themselves familiar to the consumers through all sorts of media. Everything from newspapers to magazines to television and online emails, once the brand becomes familiar it becomes persuasive and trustworthy. Outdoor signing such as outdoor panels, train platforms, city or mall kiosks, buses, and bus shelters are successful vehicles for fashion advertising which means will reach the appropriate customer for the specific market (Frings, 2005). The goal of advertising is to make consumers aware of the brands. It involves design, artwork, photography, copy for print media or scripting, casting, rehearsals, and filming for television. Selecting colors is a major part of the design and the artwork.

To promote sales, fiber producers make an active effort to provide services to their customers. This is done on the level of manufacturing as well as on the level of retailing to promote sales. Extensive research is always being conducted in order to study different factors such as color cycles, economy, arts and international fashion trends in order to make decisions concerning which color/s to produce and which to market and advertise. Print design ideas come from outside influences including wallpapers, old fabrics, architecture, nature, cartoons, and people's hobbies and interest. Print designers must consider the essential elements of colors, texture, line, shape, and space (Ibid).

## **2.9. Colors and Decision Making**

It seems that the presence of colors in an ad is an essential element. Some researchers found that colors deal with perceptual knowledge. The influence of colors is associated with cognition and behavior. The psychological implementation needs a severe scientific work on color



psychology to develop a general model color (Elliot and Maier, 2007). Decision making is highly dependent on the level of involvement between the person and the item such that the level of involvement refers to how significant the item is to the individual i.e. enough to induce careful planning before deciding to buy the product. In other words, the individual's attitude will interact differently with items the individual is highly involved with than with individuals he is not highly involved with (Zaichkowsky, 1986). Involvement has received a considerable amount of attention in the consumer behavior literature because decision-making is believed to differ for low versus high involvement products (Beatty and Kahle, 1988). Specifically, Zaichkowsky (1986) suggests that involvement may lead a consumer to believe the product class is important, prefer a particular brand and spend more time evaluating alternatives. High involvement products involve more cognitive processing than low involvement items for several reasons most notably that there is usually a risk involved when purchasing a high involvement product such that the effects are irreversible. Buying a car for example involves a high level of economic risk in addition to its functional significance. Furthermore, it may hold a social risk, such as when celebrities make fashion choices; their choices may have a powerful effect on their public image. For these reasons, high involvement items must be treated differently than low involvement items, which can be made without much reflection since they do not come with any significant risk. The brand of water you buy on your way to the gym for example is an example of a low involvement item although ultimately involvement is highly subjective. Often in low involvement decision making, simple factors may influence a decision in the absence of more important criteria and consumers form attitudes based on very little information (Kardes, 1988). For these reasons, something that may seem to play no important functional role such as the color of the car you purchase, can have a significant effect on the purchasing behavior of an

individual since a lot of cognitive processing is being directed into every detail of the high involvement item especially when two items match in functionality and differ only in color. Here, colors may play a potential role when buying a car; consumers would be more likely to buy cars of their color choice.

A few studies indicate that colors may affect consumer behavior for low involvement products more than for high involvement products. Specifically, Middlestadt (1990) found that consumers who were exposed to a picture of a pen, a low involvement product, illuminated with blue light preferred it more than those who saw the pen illuminated with red light (Middlestadt, 1990).

## 2.10. Use of Colors

### 2.10.1. Cars

On the first of October 1908 cars were made affordable for the very first time. The first ever affordable car was Henry Ford's **Ford Model T**. This was largely possible through the use of assembly line production as opposed to the use of hand crafting which was much more costly as time consuming. The Ford Model T was named the world's most influential car of the 20th century in an international sample. By 1918, half of all the cars in the US were Model T's. There was, however, a strong limitation when it came the color: people did not have the freedom to choose the type of color the car could be. The prospects for the future were that customers can have their cars painted any color that they want so long as they are black as Ford addressed in a written note to his management team in 1909 (McCalley,1994). However, in the first years of production from 1908 to 1914, the Model T was not available in black but rather only grey, green, blue, and red. Green was available for the touring cars, town cars, coupes, and Landaulets. Grey was only available for the town cars, and red only for the touring cars. Four years after the

first affordable car was implemented in the market all cars were painted midnight blue and after 1914 that the customer choice was introduced concerning the colors and according to Ford's policy that any customer can have a car painted any color that he wants so long as it is black. For over a decade all customers had the choice of painting their cars thirty different shades of black. The color black was chosen due to its relatively cheap cost and durability. These were formulated to satisfy the different means of applying the paint to the various parts, and had distinct drying times, depending on the part, paint, and method of drying (Ibid).

It is here that cultural values began to merge with color preferences in the automobile industry: At this time Volkswagen utilized a black sheep, the symbol of independence and confidence in Italy. This symbol in other cultures symbolizes deviance and estrangement and thus was intelligently implemented to targeting the Italian audience specifically (Schiffman et al., 2001).

### **2.10.2. Interior Furniture**

Faber Birren (1978), in his book *Color and Human Response*, indicated that white and off-white are popular varnishes for walls in homes. Different colors have different effects in different environments. The use of white for example, popular in use among offices and hospitals gives the appearance of professionalism; however, when used excessively, can have an adverse effect. Since it has generally no emotional appeal when overused, can make the environment seem cold in a hostile manner or can decrease productivity by inducing boredom into the employees. It is for this reason that color is an essential part of architecture and interior design and why professionals such as designers are quite popular. Thus a bright environment like yellow, coral, and orange is suggested. The warmer colors may be used for recreation areas and food service whereas the cooler colors may be used for work spaces (Ibid).

As for store design, colors play an important role to attract shoppers. Bellizzi and Hite (1992) studied the effect of colors in retail store design. They discovered that colors have very significant effect on whether or not customers are lured into the store. The colors alone can determine how likely a customer is of entering the store and making a purchase as well as enhancing their shopping experience (Bellizzi & Hite, 1992). If consumers are satisfied during their shopping trip with the store's variety and services, these consumers may become loyal afterwards. The image of the store is comprised of a multitude of factors each of which plays a role in enhancing or decreasing its potential to attract sales and affect customer decision-making. The characteristic of other shoppers and salespeople, store layout, noises, smells, temperature, shelf space and displays, sign, colors, and merchandise all play a role in how the product on display is received by the customer (Lovelock, 2010).

Thus, a store's atmosphere is one of the factors that could influence consumer's decision-making. Besides, colors influence the objects; they seem larger and heavier under a red light. On the contrary, objects seem smaller and lighter under blue light. Therefore, casinos use red color lighting to get their customers excited while making them feel that they are not wasting a lot of time in the casino (Tutssel, 2000). Nonetheless, it is suggested that the use of a saturated red for its interiors led McDonald's customers to complain of headaches (Von Bergen, 1995). Colors create a fundamental component of impressive and spatial orientation (Kotler, 1973). Grossman and Wisenblit (1999) found that colors also play a role in special orientation. For this reason sports good stores generally adopt the colors green and blue. They also found that colors could affect how customers perceive time. They discovered that the color red, when used excessively, could distort the customers' perception to miscalculate how much time they had past. It is, for this reason, red is used in casinos in addition to the absence of clocks, to make

the customer lose track of time and spend more time than they otherwise would have (Grossman and Wisenblit, 1999).

### **2.10.3. Fashion**

At least twice a year the fashion industry and textile companies attempt to influence the purchasing decision of their consumers based on the colors alone. They do this in order to boost sales of the particular color fabrics (Frings, 2005). With time, people change preferences for colors and various segments of the population vary their color preference. The colors of the products' packaging are adjusted to the color trends in fashion (Tutssel, 2000).

In the Holmes and Buchanan (1984) study, no correlation was found between favorite color and color choices for various products such as automobiles, carpets, sofas, suits, shirts, slacks, chairs and walls. These products may be high involvement products which are not believed to be directly affected by color preference (Holmes and Buchanan, 1984). For example, some people may buy cars with "ugly" colors for cheaper prices, up to one thousand dollars less.

In order to improve the consumers' attitudes towards a brand, advertising companies attempt to select colors that increase the customers' attention, make the brand more realistic and desirable by associating it with positive mood, and improve the consumer's purchasing experience (Wells et al. 1992). Doing this is usually a challenge due to the subjectivity of the way different individuals perceive colors (Bellizzi and Hite, 1992).

### **2.10.4. Cosmetics**

When it comes to judging the quality of a cosmetic product, several factors come to play. First of all, the product needs to be functional and practical; for example, it is advantageous for the product to be lightweight, waterproof, and durable. Second, the product has to be esthetically

pleasing, it needs to look, feel, and function in an attractive manner. Third, the product needs to fulfill the specific needs of the consumer. These details become important because cosmetics fall in the high involvement items category, thus involve a lot of cognitive engagement by the consumer. By fulfilling these criteria the cosmetic brand gain an edge over other products that overlooked these details (Sproles and Kendall, 1986). When it comes to perfume for instance, colors don't make that much of a difference precisely because it is a low involvement item (Lee and Barnes, 1990). This indicates that quality characteristics are also related to performance.

Design is a visual appearance, which includes line, shape and details affecting consumer perception towards a brand (Frings, 2005). As product advertisement becomes more popular and sophisticated, it ceases to be a main advantage in the market and instead becomes a requirement to stay up-to-date. Everyday consumers are bombarded with a barrage on advertisements such that they become accustomed to highly tailored images such that they judge products by the quality of its advertising department. In other words, consumers all over the world are becoming more fashion conscious (Duff, 2007). As a result, there is a demand for higher quality products with more attractive designs (Neal et al., 2002). For instance, Berg-Weitzel and Laar (2001) found that packages for deodorants for women used greater contrast and brighter colors in Hofstede's (1991) feminine cultures, whereas they used soft harmonious colors and low contrast in masculine societies. It seems that colors mostly work as grabbing the attention of consumers buying cosmetics more than anything else. Colors may prove to be a dominant factor if not the only factor in catching the eyes of the potential customers.

### 2.10.5. Food

It's easy to accept that colors play a role in our appetite. As Kido (2000) debated, colors have been in use in restaurants to persuade customers by increasing their level of appetite for quite some time, and different colors suit different restaurant styles. For example, McDonald's uses a red interior along with yellow. The red is meant to increase appetite while the yellow increases appetite and captures the customers' attention. So in the colors alone McDonald's has the means to capture the customer's attention and persuade them to enter their store and purchase a meal. Other more classy restaurants, however, tend to use the color blue instead. The reason for this, Kido argues, is because blue is calming and relaxing and will persuade the customers to spend more time in the restaurant ordering several courses during their stay (Kido, 2000). However, many other elements enter into the decision to go to a McDonald's restaurant, e.g. (playground, family, atmosphere, price, etc.) and definitely it's not only the colors or the quality of food. Walsh, Toma, Tuveson, and Sondhi (1990) found that color significantly affected children's preferences for candies. Although candy is a low involvement product, it is clear that children react strongly to colors even for low involvement products. Also, they are generally less likely to put much cognitive thought even on high involvement products and will instead go for what may give them a positive emotion. Conversely, since an evaluation of attributes is less important in low involvement decision-making, a highly noticeable, yet relatively unimportant, factor such as color preference may be more important in choosing a low involvement product (Walsh et al., 1990).

What M&M's did was turn their product into a high involvement product by increasing customizability through their introduction of 21 different colors. M&M's started by asking their customers to vote for a new color to be added at which point Blue won. As such, more than two

thousand orders of different color combinations have been requested every day of every year since 2005 (Benko & Weisberg, 2007). Whereas in 1995, M&M's asked faithful consumers to vote for an additional color in which blue was ranked the first among pink and purple (Kimmerle, 2003).

Thus many studies have suggested the effects of colors in advertising on purchasing behavior, which mainly relate it to the psychology of colors. These studies have focused mainly on feelings and human response in general and consumer decision in particular. Therefore, a conceptual framework will be presented to recognize the theories noted previously about colors and relate them to the present study that features many questions to be investigated such as:

'Which colors please women and men the most?' 'What are the best colors to use in print advertising and which ads can consumers recall the most?' 'Is it the color, the message, or/and the visual that makes the ad memorable?' 'Do the existing colors in the ads have an effect on the consumers' purchasing behavior?' 'What are the best colors to use to help increase sales?'



### Chapter III: Theoretical Framework

Introducing a comprehensive framework explains the hypotheses paradigm. It demonstrates an understanding of theories and concepts that are relevant to the role of colors in ads influencing the consumer purchasing behavior for many product categories such as fashion, food, cars, cosmetics and interior design. To start with the perception of color, several studies have been investigated, mainly related to color preference in the context of cognition and behavioral studies.

#### 3.1. Color Theory

At first, **Color Theory** is a wide topic, which has interested artists and scientists similarly for centuries and has been researched in different perspectives. Color is an essential part of how we experience the world, both biologically and culturally.

#### 3.2. Goethe's Theory of Colors

One of the earliest formal explorations of color theory is **Goethe's Theory of Colors**, which stands as an interesting explanation of the philosophy and artistic experience of colors. The German poet, artist, and politician Johann Wolfgang von Goethe, (1810), who published *Theory of Colors* provided the first systematic study of the physiological effects of colors. His research is about the nature, function, and psychology of colors. Goethe suggests that colors may have moral associations and tend to produce extreme emotional states such as blue that generates tranquility and red that creates aroused emotional states. His observations characterize colors as arising from the energetic chemistry of darkness and light. He suggests instead that darkness is active rather than the regular passive absence of light; he also states that light and darkness relate

to each other like the north and south pole of a magnet, and colors are degrees of darkness. The darkness can weaken the light in its working power. Conversely, the light can limit the energy of the darkness. In both cases colors arise. For Goethe, Yellow is a light which has been faded by darkness; Blue is a darkness reduced by the light. Goethe's color wheel model predicts that when the eye sees a color, it is immediately excited to produce another. This comprehends the whole chromatic scale. Thus, yellow demands violet; orange, blue; red, green; and vice versa (Goethe, Theory of Colors, 1810). According to David Seamon, the bottom line of Goethe's Theory of Colors is a more experiential source than a theoretical statement (Seamon, 1998). Thus the theory of colors link the physics of light, the physiology of vision and our psychological perceptions. Goethe, in his theory of colors, explores the relationship between colors and correlation to light and shape encompassing wide range explanation of colors in the sciences, the arts such as painting and in the physiological field. Goethe ideas are still relevant today and are a great starting point for the field of visual communication that deals with images, colors, illustrations and light as well as in the mass communication (advertising and media).

### **3.3. Color Preference Theory**

Next, **Color Preference Theory** is related to human behavior and demonstrates the reason people have preferences on some colors to others. Several color preference models, including **Color-Emotion** associations, **Palmer and Schloss's Biological Adaptation Theory** and **Ecological Valence Theory** lie under this conceptual framework.

### 3.3.1. Emotional Theory

Initially, the **Emotional Theory** explores the idea that certain colors recall certain emotions, like activity, passivity, strength, or warmth. When people see certain colors they feel different emotions. Bright colors portray happiness and excitement, dark colors are more serious and sad, and those in between initiate all kinds of activity within a person's mind and body. Colors act upon the body as well as the mind. Red has been shown to stimulate the senses and raise the blood pressure, while blue has the opposite effect and calms the mind. Colors can arouse, excite, depress, tranquilize, increase appetite and create a feeling of warmth or coolness. Colors are expansive and a source of information. People usually develop their first impression of a person or product within the first 90 seconds. Since mood is fluid and suggestible through colors, the use of colors starts to play a central role in our emotional states and long lasting impressions (Singh, 2006). Thus colors do not serve the sole purpose of making products more attractive on the market, they can be used as tools in order to influence mood and mold the viewers' experience. Consumers will be likely to change their attitudes towards a certain product in an ad that has bright/pale/dark colors; either purchase the product or just move on to another one because the colors in these ads can stimulate senses.

### 3.3.2. Biological Adaptation Theory

The **Biological Adaptation Theory** explains that choosing a certain color is related in a way or another to biological factors. And our personal and cultural associations affect our experience of colors. According to Yazhu Ling and Anya Hurlbert, biological factors, which are sex differences as well as age, influence, color preference between individuals across culture. This predicts the behavior of the consumers (males/females), (children/teenagers/adults). Women like

red more because they were doing all the gathering early in our society and had to be able to pick out red berries very readily, and therefore they prefer red (Hurlbert & Ling, 2007). So, different colors do cause different actions, affecting behavior, feelings, and thoughts. For example, red can raise blood pressure or cause a romantic mood; blue can lower blood pressure or give a calm mood. Each color can influence certain reactions and processes within the body that are later expressed through health and emotion. Men and women tend to have different color preferences and although some may choose to attribute this difference to biological sex differences, it is clear today that gender-based attitudes are generally learned rather than built in. Each culture has its own script for gender appropriate and inappropriate behavior, and it is these learnt differences along with the need to conform that explains these attitude differences most effectively. For example, it is generally accepted that pink is a feminine color while blue is a masculine color. Growing up with these values, males will be much less likely to choose pink as a favorite color (Ibid). Simultaneously, consumers exposed to a certain ad will not be affected in the same way and that is due to differences in biological factors such as age, sex, and cultural differences among the audience. As a result, diverse attitudes towards the ads and the products can be deducted. For example, some men would not admire a certain ad, however, some women would be affected by the visuals and make a purchase. This is due to biological and sex differences between men and women.

### 3.3.3. Ecological Valence Theory

Stephen E. Palmer and Karen B. Schloss' study (January 2010), propose **Ecological Valence Theory**. This theory correlates color preference with objects that were judged favorable or unfavorable by the test subjects. Humans prefer colors like blues and greens because those colors

are ecologically healthy (blue skies, clean water, healthy vegetation), and do not prefer colors like brown because it's related to stuff that is ecologically unhealthy (e.g., brown with feces and rotten food). Ecological Valence Theory provides a more straight forward explanation to how colors play such an active role in attracting consumers that is more practical and testable (Palmer & Schloss, 2010). Eco-cognitive valence model states that the attractiveness of a color depends on what the color reminds the person of. So the reason colors like green are used in advertising food products is because it reminds the consumers of something healthy like vegetables. The likability of a certain ad in this model is related to each object that comes to the mind of the consumers exposed to these ads and later the consumers evaluate the feeling towards each object. Here, the consumers make their own decisions whether to buy the product or not. This is somewhat like the biological theory in that they are both adaptive relating color preference to survival. It relates slightly to the emotional theory as well where certain colors "look good" while others "look bad" for example bright colors portray happiness and excitement; dark colors are more serious and sad. In advertising, the total color differences between magazines targeted toward men and women can be interpreted in terms of emotional, ecological and biological bases.

#### **3.4. Cognitive Behavioral Theory**

This theory came out of a well-established psychological concept called **Cognitive Behavioral Theory**. Cognitive behavioral theory is basically a learning theory and highlights that we make associations in our minds without being conscious of them and then react to these associations when we are confronted with similar stimuli. This is basically how learning takes place (Reed, 2007). The cognitive psychology is about cognitive tasks that people face in their

daily lives: reading magazines, judging advertising campaigns, buying a new product, etc. (Reed, 2007). These judgments, evaluations, or thoughts, are necessary for emotions to occur. Ulric Neisser's study (1976) states that cognition and reality are practiced every time we interact with the environment. It involves a many aspects of mental life such as perception, attention, memory, retention, and recall, decision making, reasoning, problem solving, imaging, planning and executing actions. According to Reed, cognition deals not only with attaining information but its effect on the perceiving individual that implies that behavior can be predicted and to some extent controlled (Reed, 2007).

Richard Lazarus (1998) described the process by which the cognitive network works. He stated that first there is always an underlying emotional and cognitive reaction to any environmental stimuli. If the stimulus is powerful enough on its own or through association it proceeds to be processed consciously. Then the conscious processing may stimulate physiological arousal in turn creates a new perspective on the stimulus and the cycle continues until a decision is made and the individual makes an action or no decision is made and the individual performs no action. For example: Nada sees a colorful shoe. Nada cognitively measures the colorful shoe, which triggers happiness. She desires to buy the item. Nada buys and wears the shoe on. Also, Lazarus emphasized that at every step it is the type of thinking that determines the type and intensity of the emotion that follows; hence, if one is aware of his cognition he can control his emotions. This is used in cognitive-behavioral therapy to try to correct maladaptive behavior. (Lazarus, 1998). The behavioral patterns of a person develop when a person observes an interesting incident and gives his full attention and then retains it in his memory.

### 3.5. Feature Integration Theory of Attention

Subsequently, Anne M. Treisman & Garry Gelade on January 1980 focused the **Feature Integration Theory of Attention**. It suggests that attention must be directed consecutively to each stimulus in a display that characterizes or distinguishes the possible objects presented. Many features can grab the attention to a task such as visual search, texture segregation, identification and localization, and using both separable dimensions (shape and color) and local elements or parts of figures (lines, curves, etc. in letters) (Treisman & Gelade, 1980).

Do features like colors in an ad merely increase our attention to product information in a message, or can they directly influence our attitudes? This question of many other queries to be tested in the research process. Therefore, these branches of color psychology should be included not only as a theoretical framework in the study of the psychology of colors but also as a practical framework for applying color psychology in advertisements, products and services. Colors, as cue can help people further understand the things they come in contact with. For instance, in the Lebanese culture, Lebanese campaigns come up with sparking flashy color billboards, which may lead the consumers to take an action to purchase the advertised products. On Valentine's occasion, the products advertised whether on highways (billboards, unipoles), magazines, flyers, banners, concern all product categories in the market and are designed in red to reflect romance and love. Here the red color is not only used as a cue to reflect the spirit of Valentine's, but red color items are being displayed in interior decorations such as a couch, red-packaged fragrances, red packaged chocolate, sexy red dress or red necktie and other red heart shaped accessories.

As a result, colors, from a cognitive perspective, explain many of life's occurrences and can further help researchers explore the processes of learning, decision making, reasoning, judgment,

interpretations and many other mind processes. We live in times when the visual medium has attained considerable significance with advertisements of products and messages featured on the Internet, television, newspapers, billboards, etc.

### 3.6. Uses and Gratifications Theory of Media

**Uses and Gratifications Theory of Media** is often applied to modern media issues. An approach to understanding the relationship between consumers' needs and advertising value is to take the Uses and Gratification perspective. In this model, the consumers are considered active participants in the media as opposed to being a passive receiver (Williams, Phillips, and Lum, 1997). This approach states that the audience actively seeks advertisement in order to gratify some needs and even to an extent integrates it within itself such that it becomes an integral part of its own identity; and this process is made consciously and with intention. Bulmer (1979) said that people use media consciously to satisfy cognitive (obtaining information, advice) or affective needs (personal identity), or psychological motives, such as social interaction, companionship and escape. However, people make use of the media for their specific needs. This explains people choose to attend to particular media or types of content/messages for specific gratifications, satisfaction they expect and get (McGuire, 1974).

Donald Norman (2004) acknowledged the ability of colors to influence the market and boost the sale of the product not simply by attracting the customers but by making them more satisfied with their purchase making the experience of buying the product more gratifying. Thus a successful advertisement makes the consumers aware of their needs, and persuades them into believing that buying the product will fulfill that need bringing forth satisfaction. For example, a certain ad of a product, the title illustrates the ad, the colors used whether red, pink, blue, etc.





provoke certain state of mind (danger, excitement, hope, peace) in the head of the audiences and enlighten them to take an action and want to do something (buy the advertised product). In this case, wants have become needs.

In order for an ad to be effective it must be capable of persuading its audience to take action. In order to accomplish this task, the product must be able not just to appear relevant, but it also has to satisfy their needs. If the product is capable of accomplishing this task as well as acquire an identity for itself by acquiring unique properties, it begins its journey to becoming a brand. Once that step is complete, it becomes easy for the ad to persuade the consumers into purchasing the product (Wang et al, 2002). Also, the more the ad holds information that holds personal significance for the audience, the stronger the ad's influence overall, the wants would become needs. Hence, learning more about colors and color preferences will allow marketers and advertisers to tailor their products and messages to the purchasers' needs boosting sales dramatically and specifically: By acting as a tool for aiding advertising companies to target specific audiences and by appealing to their needs. Fernandez and Rosen (2000) suggest that advertising with more specific information that matches consumers purchase situations is more likely to be processed and will result in a positive response. Furthermore, colors in ads which portray emotions can contribute to advertising effectiveness because selecting appropriate emotional adjectives can help measure audience reactions to the ads. Today we look at different poster ads and analyze them, using the Uses and Gratification Theory and relating it to the audience and how it affects them: font, image, color, layout, language etc.

Wherever we go, we are bombarded with visual information. Visual media have become the fastest growing industries to date: online newspapers, electronic billboards, television, and Internet; these are the main means of communication today which extensively utilize tons of

visuals including attributes such as colors. Colors can aid audiences to select the messages that they retrieve from media and advertising. For example, ads of contrast colors will attract viewers to read the ad and to elicit actions (buying/selling product).

The world of colors is promising and exciting. As piles on information and studies become diverse and more specified, we come closer and closer to attaining some understanding of one of the most influential elements of our conscious existence. It also helps better understand how colors and other elements of a composition work together. Color theory and the likely impact of colors have been widely recognized and applied in all aspects of life from advertisements to interior designs.

These theories will help clarify this thesis' hypothesis paradigm to prove that colors do have a crucial impact on purchasing behavior of the consumers. With a little understanding of good color choice of food, fashion, cars, cosmetics and interior decoration, and taking the right marketing decisions, we can make colors work better for businesses. This enhances the shopping behavior among individuals and increase sales accordingly.

### Chapter IV: Research Questions

On the basis of this empirical study of colors and within the umbrella of the theoretical framework discussed above, this experiment attempts to answer certain research questions and to test the hypothesis.

A number of questions will be researched:

Which colors please women and men the most?

Colors are presented on flags, billboards, t-shirts, stickers, even caps of bottled water. What are the best colors to use in print advertising and which ads can consumers recall the most?

Is it the color, the message or/and the visual that makes the ad memorable?

Do the existing colors in the ads have an effect on the consumers' purchasing behavior?

What are the best colors to use to help increase sales?

**Hypothesis 1:** Colors in advertising can have potential impact on an individual's consumption behavior for products such as cars, food, fashion, cosmetics and furniture.

**Hypothesis 2:** Color preferences can have potential effect on the choice consumers make in their purchasing decision.

**Hypothesis 3:** Consumers' purchasing decision is not only related to their color preferences, but also to other features of the product such as the texture, smell, price, quality and to the design of the ad: typography, visual, size of the ad and package.

**Hypothesis 4:** When buying products, consumers' choice of colors can vary with differences in age and gender.

**Hypothesis 5:** Consumers associate certain colors with certain products when buying high/low involvement products; for instance, associating black with cars.

## **Chapter V: Research Methodology and Operational Variables**

### **5.1. Quantitative Approach: Conducting a Questionnaire**

Different approaches have been applied in this research to achieve the desirable results. The foundation of the overall research design of the present study is exploratory. This means that the study has attempted to provide insight and in-depth understanding of a purchasing behavior. It is designed to evaluate the effects of colors in advertising on the purchasing behavior of the consumers. With the help of the audience response, it is possible to evaluate the role of colors in ads on sales. In other words, the study aims primarily at exploring the potential impact of colors in advertisements on those behaviors. As the aim is to explore a phenomenon in depth, the explorative nature of the study means that the study uses both quantitative as well as qualitative techniques.

In order to fulfill the tasks, a Conjoint study were conducted. Conjoint analysis is a technique that involves and relates issues like design, estimation, and interpretation more than statistical assumptions (Hair et al. 1998). As said, this indicates that a conjoint analysis should rather be regarded as a technique having exploratory aims than as a technique for testing causal relationships. A number of different techniques and methods can be used in Conjoint study. Conjoint is used to measure consumers' tradeoffs among brands and services that constitute many attributes (Hair et al. 1998; Green and Srinivasan 1990). This means that that brands and services are evaluated as a 'bundle of attributes' (Hair et al. 1998). Conjoint studies are conducted in order to find out what features or attributes consumers value in brands. In addition, it is used to find the most preferred combinations of levels of attributes that contribute to the experimented overall effectiveness, and which then can be operated in brand and service

development (Marshall and Bradlow, 2002). Moreover, a feature of a brand or a product such as a color is referred to as an attribute, the variety of an attribute, such as different colors, are levels, and the incentives, i.e. the combination of attribute levels that the subject evaluates in a conjoint task, are called stimuli which is the next stage of the conjoint study. By using a verbal description or a visual approach, conjoint studies can be performed. Verbal approach means that the stimulus is written, for example, on a profile card. In a visual approach, the attributes and the levels of attributes are illustrated as pictures. Lately, there has been some discussion regarding the impact of pictorial representation of stimuli in conjoint studies. In a product design context, Vriens et al. (1998) found that design elements were understood better when they were illustrated, although verbal descriptions made it easier to judge the stimuli. In the present work Conjoint study will be applied using the visual approach by exposing the participants to different advertising visuals which may elicit their attention and predict the potential effect of colors in ads on purchasing behavior.

A qualitative and quantitative research method was conducted in the study of colors in print ads and their effects on purchasing behavior. Collecting data was completed in two phases, an exploratory qualitative phase with a number of participants from the industries related to the visual communication field as well as to other fields, and a quantitative phase through a systematic, scientifically designed questionnaire which was conducted with 150 consumers.

Naturally, the sample size, the design and the content of the questionnaire will affect the generalization of the findings. Since the focus is on exploring whether the impact of colors varies according to the product categories, five product categories are considered in this study: food, cars, fashion, cosmetics and interior decoration industry.

To investigate colors' effects on the consumer behavior in Lebanon, the study originates with a scientific method of inquiry that relies on collecting data through a scientific and systematic survey and measurable evidence to formulate the hypothesis and test it. At first, this study includes examining the specific colors in print ads related to the following items: cars, cosmetics, fashion, food, and interior decoration. It focuses on testing and deducing the effects of colors in ads on consumers' responses. After that, this study links consumers' likability for and effectiveness of the ads to the color preferences of individuals and to their age and gender. It also clarifies whether certain colors are associated with particular products.

The quantitative investigation involves a survey structured to explore consumers' behavior with respect to advertising, and to be carried out as one aspect of a thesis designed to collect data about respondents' evaluation. The scientific process is an exploratory study based on the quantitative aspect to collect data and to better understand the human response to colors and the potential effects of colors on shopping behavior. It is conducted through a direct questionnaire made up of thirty-one questions, designed to collect information about consumers' color choices in ads and the potential impact of their preferred colors on their consumption behavior.

The qualitative aspect aims to explain and describe a certain experience, it is essential to interact with the respondents in order to obtain the maximum explanation and description of their life experiences. This section of the inquiry is based on a focus group and observational data, where the participants were encountered with a series of closed as well as open-ended questions. Choosing a focus group as a method of collecting data for this research can provide a potential opportunity to acquire valid information related to life's experiences and analyzing opinions of the participants through interaction on a personal level. It represents the consumers' ideas on the consumption of fashion, food, cosmetics, cars and interior items in general and portrays their

views of persuasive advertising campaigns in particular. Information gathered in qualitative research was used for the development of questionnaire in quantitative research.

The aim was to explore and better understand the numerous contradictory points of views about advertising effects on consumer behavior in general and the colors in print ads in particular within the Lebanese community. The primary purpose of this study was to examine the impact of one type of non-verbal effect cue in print advertisements (e.g., background color, font color, product color) on brand image/personality and brand preferences (e.g., brand attitudes). For example, it is expected that viewer's perceptions of a brand's image and personality will reflect the image associated with the ad's background color (e.g., a brand will be judged to be more vibrant and exciting when it is advertised with a red background versus a more calming blue background) (Luz M. Gonzalez, May 2005). Measuring advertisements' effectiveness, and post-campaign surveys, is a subjective technique that depends on one's personal experiences and perceptions.

## **5.2. Significance and Rationale of the Focus Groups**

According to Jenny Kitzinger (1994), a focus group is a form of group interview that allows communication between individuals to generate information. This is clearly achieved by the participants' various interactions including joking, arguing, teasing and recalling past events, commenting on each others' experiences and points of view. Such variety of communication is useful because it shows more insights about the subjects to be studied with deep understanding more than other traditional data collection techniques. In this way, focus group methodology encourages the researchers to better understand the knowledge and the attitudes of the participants when exploring and examining what people think, how they think, and why they

think the way they do about the issues under investigation, without insisting on them to take any action. Here, the focus group technique will help analyze the attitudes of the Lebanese respondents when examining the significance of colors in advertisements and their potential effects on consumers' behavior. Through the interaction of the group members and their discussion about the topic, many key points would be highlighted. This will contribute to answer the research questions, test the hypotheses and portray many viewpoints, which will make the study more effective and more realistic. Moreover, some researchers have also noted that group discussions can generate more critical comments than interviews (Watts & Ebbutt, 1987)

A focus group could be used to find out how consumers perceive colors in print ads, both in terms of their own opinions and in relation to others. For example, how female participants would see the effects of colors in comparison with men. The focus group method is highly recognized in the academic research especially in the health and social sciences. It is recognized that this method can provide results quickly at low cost with a broad array of people in diverse settings (Kroll et al. 2007).

Wilkinson (2004) suggests that a focus group is simply defined as a relaxed conversation between individuals selected in a group about a particular topic. Also, in social science research, the focus group aims to understand the participants' connotations and explanations. In reference to Hennink research, a focus group method is a research tool that can permit the participants to share freely their opinions and experiences without being attacked by others in the group. It is a technique that is similar to a natural social interaction among participants (Hennink 2007).

### **5.3. Approach of the Focus Group**

It was quite difficult to gather fourteen participants in one setting. The group was formed by calling participants asking if they would like to join the group (See Appendix III). The focus



group session lasted for approximately three hours; it took place one evening at the garden of a restaurant located in Metn, Beirut. The setting was likely to accommodate the participants and to encourage conversation where they would feel comfortable expressing their opinions. The participants were seated around a table where viewing and communicating with each other was easy; they were served appetizers and refreshments.

The focus group discussions were tape-recorded and later transcribed literally. The members of the focus group were briefed on the study, its purpose and the importance of their contribution. The purpose of the focus group was to provide input into the design and development of a comprehensive understanding of the participants' experiences. Participants were encouraged to speak one at a time for easier analysis of the transcripts.

The group involved a total of fourteen respondents, who belonged to different age groups ranging from eighteen to sixty-four years old and may have represented the purchasing power bulk in Lebanon. The majority of the participants are employees of private companies and organizations. The greater part of the participants primarily have more than ten years of experience in their current profession. Most of the respondents had attained college degrees, whereas the rest had obtained high school diplomas. Five women out of seven were between eighteen and thirty-five and represented various professions in the Lebanese culture: one is a financial controller in a company, another is a bank teller, two are graphic designers and one architect; whereas the other two are full-time moms over forty years old. Men were between twenty-four and sixty-four years old. They come from different occupational fields: a civil engineer, three architects, two business owners in their sixties, and one retired employee.

The focus group agenda was structured to cover several key areas of discussion. Subjects were asked to identify their color preferences and if these colors would affect the choice they make

when purchasing a product. This included free presentation and expression of their views on current fashion, food, cosmetics, cars and interior items and on their buying behavior. The selected consumers were shown twelve experimental print ads. They looked at different advertisements containing one of five product categories (cosmetics, cars, food, fashion and interior furniture) and evaluated them. It was useful to gain insights on what they think about advertising fashion, food, cosmetics, cars and interior items and the colors used in these advertisements on flyers, billboards, posters, magazines, and newspapers. Each set of ads presents contents from famous products to less known.

Although the focus group was limited in number and the findings might not be generalized to the whole population, they undoubtedly reflect a sample of diverse views evaluating the impact of colors on their shopping behavior. Getting the respondent to react freely, was essential to 'surfacing' their true feelings and opinions. The focus group approach provided means for members to exchange ideas about the effects of colors in general and on their consumption behavior in particular. It had also encouraged cooperation amongst its members who were welcomed to share any other comments they have. This included discussion of previous ads that they had seen. Suggested improvements and modifications of previous and current ads shown to them were presented throughout the interaction between research participants including changing fonts, changing colors, changing visuals, and others.

The selected ads are likely to grab the attention of readers/recipients. To understand the effectiveness of the ads, six aspects were evaluated: attention, emotional engagement, memory retention, persuasion, awareness and uniqueness. The respondents were asked to recall and describe correctly at least one feature in the advertisements. They were asked which of the ads attracted them the most. A copy of each ad was given to the respondents. They were asked

whether they had seen the advertisement before or not. Then the respondents were requested to discern the most appealing visual they find in the ads. In addition, they were asked if they think that elements like colors, the message, and/or the visual make them recall the advertisements. The information on age, gender, education, occupation, may establish a relationship between the demographics of the participants and their attraction to the commercials. This part aimed at answering the research questions, "Do the existing colors in the ads have an effect on the consumer's purchasing behavior?" If colors have an impact on decision-making in purchasing, what are the best colors to use to help increase sales? "Is it the color, the message or/and the visual that make the ad memorable?". Thus, the main objective of this section was to report if colors are likely the most significant elements in print ads and if the potential power of colors that are present in print advertising campaigns might affect consumer behavior. For instance, one of the ads was a magazine ad for Mercedes Benz car in different colors (APPENDIX VI - A). Insights about people and understanding consumer feelings towards the ad and towards the product itself 'Mercedes Benz' can be deducted.

#### 5.4. Survey

The data collected from the focus group was utilized in the making of the **quantitative** analysis of the survey. The aim of the quantitative study is to examine the response of consumers to colors in ads, their preferences, their attention drawn from the advertised products and to elicit responses that will make the study reliable and valid by its accurate and consistent collected data. In general, the questions deal with consumers' feelings and opinions. The data in the quantitative process should be reliable and valid. Reliability refers to the consistency or stability of the tested variables (Lewis, 2009). Validity is referred to the accuracy of the assumptions based on the

quantitative data (Winter, 2000). In this study, consumer reaction has greater validity than the reactions of non-consumers. Consumers can provide true information on reaction to an advertising campaign. In quantitative research, measures must be reliable in order to assert the validity of the findings. All measures contain errors, so the less errors in the data, the more valid for generalization. Moreover, the reason for the need to have a large sample size is related to the validity and generalization of the findings.

There are several different question types, which were presented in this study. One type is made up of a series of multiple-choice questions with five or more possible answers. Various different constructs are to be measured on the questionnaire including colors in ads and consumers being attracted to these advertised ads, and color preferences among individuals. Also, questions like demographics or personal information (gender, age, education, and occupation) are included to better link the variables in this survey. They serve the best as introductory questions in the survey. This way, respondents are likely to have already developed confidence in the survey's objective (Iraossi, 2006).

Since this study concerns investigating the variables of consumers' attitudes towards the colors found in advertised products, Likert scale questionnaire was used. It measures the degree or the frequency of intensity. These scales range from a group of categories—least to most—asking people to indicate how much they agree or disagree, approve or disapprove, or believe to be true or false (Likert, 1932).

The Likert scale is used to measure audience attitude towards advertisements. A series of statements are described to measure the attributes of the advertisement. Each statement is measured on a five-point scale. Measuring the constructs through Likert scales not only can add value and variability to the data, but can also have potential impact on the results (Edmonson,

2005). Likert Scale Response Categories are: Never, Seldom, Sometimes, Often, Always, Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree, Most Important, Important, Neutral, Unimportant, Not important at all (Nunnally, 1978).

To be more objective, the data to be obtained from the quantitative aspect can enhance the understanding of colorful ads' potential effectiveness. First of all, to investigate the importance of colors in the ads towards shopping behavior and to analyze the Lebanese consumers' color preferences, a survey of purposive sampling was conducted and distributed in malls. The sample included 150 participants half males, half females across three audience segments: eighteen to twenty-four years old, twenty-five to thirty-nine years old and forty to sixty-five years old, since they collectively constitute the most important purchasing power bulk.

For the sake of better representation, the questionnaire was spread among different malls in different regions including Citymall Dora, ABC Dbayeh, Saida Mall Saida, and Fashion Mall Kaslik. For security reasons, malls in places like Tripoli, the second largest city in Lebanon, were not included. This survey is made up of thirty-one close-ended questions to measure specific operational variables such as age, gender, color preferences, product (price, place, packaging, promotion).

They were asked to complete a survey in order to provide some demographic information such as age, gender, educational level and relationship status. The demographic data would help to recognize and distinguish the color preferences of Lebanese consumers of different age groups and gender and to reveal insights about their shopping experiences. Does age or gender influence the shopping habits and the feelings of the consumers? Are these relevant for marketing purposes?

The participants were also asked a few questions about their shopping experiences, such as how often they purchase advertised products? They were also asked about the print advertisements that may play a role in their shopping experiences and whether or not they think the effects of colors in certain products such as food, cars, cosmetics, fashion, interior furniture play an important role in their shopping decision. These topics were all discussed in the survey, and the focus group allowed for the quantitative data of the survey to be compared against the qualitative results of the focus groups.

As a result, this study may denote the effects of colors in ads on the shopping behavior. This can aid in identifying what colors utilized in advertising and media contribute to making purchasing decisions. The findings of both quantitative and qualitative methods, will undoubtedly contribute to our recognition of perception of colors in the Lebanese market.

## VI. Findings and Discussions

### 6.1. Findings: Focus Group

Several key findings were identified from the information extracted of the focus group members' discussions regarding the core colors' impact on their consumption behavior. The major findings of the focus group are divided into two sections: first part identifies the consumers' favorite colors. The purpose of gathering the information was to determine how consumers relate their favorite colors to their choices of buying the products and whether the potential influence of the colors in the ads is linked to age and gender. The second section of the study revealed a wide variety of responses to each of the displayed ads. There were certain similarities in responses per group. This is because most participants might have been influenced by others' comments and expressions.

With regard to their favorite color, five out of fourteen participants chose blue as their favorite color, four males and one female. Four consumers: two females and two males voted for black as their preferred color because they found it to be classy and mature; others pointed out that black symbolized strength and power. Two males and one female selected Brown. As for green, pink and red, two participants selected these colors: one female and one male. Two ladies preferred white because it is a very clear and hygienic color, one lady liked violet and only one man preferred grey.

When participants were asked if their color preferences would affected the choices they make when buying a certain product, more than half of the participants (nine out of fourteen): five men and four women, stated that their favorite colors played a very important role when buying a certain product.

On the question 'Where do you find your favorite colors applied in your lifestyle?' only one male and one female participant stated that they don't go buy products according to their color preferences, whereas twelve out of fourteen: six males and six females found their favorite colors did play an important role especially in fashion clothes and shoes. Six male and two female consumers pointed out that their favorite colors were important when buying cars. Less than half indicated that their favorite colors were used in furniture items at home (two male and four female respondents). Two ladies indicated that their favorite colors also played a role when they purchase cosmetics. One male and one female affirmed that they also favored using their best colors when buying watches. One female mentioned that she would buy a mobile just because it had her favorite color. This means that color preferences do influence the choice that consumers make when purchasing products.

Women varied in their responses when looking for colors they liked in clothes for work, shoes, watches, accessories, cars, cosmetics, wallpapers, interior home furniture and mobile phones.

After half an hour of conversation, the female participants shared their shopping experiences as well as their thoughts during their shopping decisions in stores and malls. It turned out that a couple of older female participants shopped during sales periods looking for deals and when they shopped at malls or suburban shopping centers, they went to the brand stores that they like.

When the selected consumers were exposed to twelve experimental print ads belonging to one of the five product categories: cosmetics, cars, food, fashion and interior furniture, three questions were asked: Evaluate each ad, indicate which feature in the ad makes it memorable: the color, the message, or/and the visual and point out if the existing colors in the ads may affect their buying decisions. Respondents were shown the same products with different colors. The researcher, for the purpose of the study, designed some of these ads.



**Mercedes Benz**

With regard to Mercedes Benz ad, the majority (Eleven out of Fourteen) of the participants were interested in the ad, they found it attractive, impressive and successful. The rest of the group, however, found it ordinary. Seven respondents explained that the color of the product in the ad and the visual were what grabbed their attention and made the ad memorable. Three women out of seven responded that they found the color of the car and the background to be very appealing. Two men out of seven stated that the combination of color, background, and visual made the ad attractive. One man believed this ad to be successful because of its visual and background. Finally, a woman explained she found the ad attractive because of the nice visual with the contrast effect in the background. The majority indicated that the existing colors in the ad influenced their purchasing behavior, only two female consumers found the ad ordinary and insisted that the existing colors in the ad may not influence their shopping behavior.

**Thea**

The participants were not interested in the ad; six out of fourteen didn't find it attractive, two female participants said they would never buy the product after seeing this ad adding that it was badly executed. On the other hand, four out of six men mentioned that the colors of the drink

were attractive and might make them consider buying it; one man said that the colors, visual and background attracted him to make his purchase decision. Three participants found it uninteresting because it lacked creativity. One female referred to the ad as weak and said it could fit better in a magazine because she found it very cluttered as a billboard ad: " it contained so many details that one might endanger his life if they wanted to catch them all." Only two participants found the ad attractive and memorable and it was because of the visual, the colors of the drinks, the background that conveyed freshness with a summer background and they pointed out that these colors would influence them to go and buy since green reminded them of fresh minted lemonade, whereas the red drink reminded them of strawberry juice.

This means in most cases colorful drinks were associated with fresh juices in the consumers' minds. Thus when people associate colors with certain objects, Ecological Valence Theory is applied. In this Thea ad, the attractiveness of the drink depends on what the color reminds the consumer of, meaning, colors like green for a drink product reminds the consumer of something fresh like fruits. In this case, green, red and orange generate reactions (buying) based on associations of the objects (minted lemonade, strawberry, orange).

### Reef



With respect to Reef slippers, six out of fourteen consumers (three males, three females) found the ad affective mainly due to the variety of colors of the product and would certainly consider buying these slippers if the price is affordable. Half (all males) consider buying them

because of the visual and colors. It seems that colors are attractive and appealing when compared to black and white with no particular significance of any color. Four out of fourteen found the ad unattractive because they found it uncreative, messy and cluttered; the slippers were "badly displayed" especially the reverse slipper in the middle of the ad (a bad implication in the Lebanese culture) which can offend people. However, half of those who found it attractive said they liked it due to colors and the other half due to the product itself and most of them said they would purchase the slippers. Four out of fourteen perceived the ad as ordinary. Two males found that neither the color nor the message or visual made the ad memorable, but would consider buying the product for practical reasons. The other two said the visual and the color made the ad memorable because: "the slipper (product) looked like a functional and safe product". In this case, it's not only the colors that affected their consumption but also the safety and the functionality of the product.

### Swatch



For the Swatch ad, eight participants (five females, three males) were impressed by the ad and found it interesting and attractive and would buy the watch mainly due to the variety of colors available in the watches. Colors grabbed the participants' attention and made the ad memorable in addition to other features such as the visual, the background and the popularity of the brand

which attracted consumers to see the product. Conversely, three males didn't like the ad because it wasn't interesting, but one male added that the only feature that would make the ad memorable was the color. As for those who weren't affected by the colors in the ad, three participants found the ad ordinary, one said that the ad was memorable due to the brand name which was the only feature that attracted him but affirmed that it wasn't the colors that made him want to purchase the product. Another one replied that colors in the ads caught her attention and made the ad impressive. A further response by another participant was that the combination of the brand along with the colors was the reason that she may consider purchasing the product.

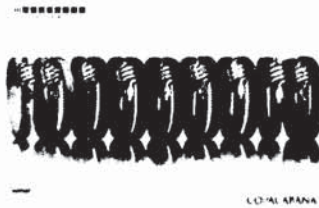
### Nike



Relevant to the designed questions conducted for the focus group, ten consumers (five males, five females) were fascinated by Nike ad; they found it interesting, clear, strong, successful and cute. Three out of fourteen attendees were ambivalent towards this ad and one participant didn't like the ad and found it unattractive. The majority of the focus group, eleven out of fourteen (six males, five females) mentioned attributes like colors, background, the visual (product), and the brand name combined to make the ad brilliant. Only one participant stated that Nike by itself is a popular brand that caught her attention, another participant didn't find any feature in the ad that drew her attention. When debating the matter about the existing colors in the ads and their effect on consumption, half of the participants agreed that colors of the product attracted them in the ad

whereas the other half argued that colors of Nike didn't affect them because there were other aspects such as style of the product which is more suitable for younger audiences.

### Copacabana



Concerning Copacabana's visual ad, ten consumers (four males, six females) admired the ad and indicated that the advertised product was "attractive", "fashionable", and "sportive". The ad looked catchy and flashy and even denoted that the brand name Copacabana sounded leisurely, dreamy, festive and musical. Only two men found the ad unattractive whereas one man and a woman evaluated the ad as ordinary. Many considered colors as one of the features that contributed to the strength of the ad (four male and five female participants), in addition to other elements such as product (seven participants: four females, three males), reflection effects on the white background of the bracelets (three participants), and brand name (two females). However, only two male participants didn't indicate any feature that showed the success of the ad. Regarding the existing colors in the ad, nine participants highlighted the significance of colors on their shopping behavior, whereas four consumers pointed out that the colors found wouldn't affect their consumption, and only one said that she might consider buying a bracelet based on the colors found in the ad.

### Rochebobois



Nearly all participants were attracted to Rochebobois ad, an interior furniture product. Eight out of fourteen participants (four males, four females) were impressed by the ad because of its content: "the furniture reflected a modern look with interesting colors". Three members liked the colors of the furniture in the ad, one female participant admired the ad because of the very well known brand Rochebobois, the furniture style (product), and the colors. Whereas another female voted for the ad because of its colors and the background. Eleven out of fourteen thought that the colors available in the ad would affect their shopping behavior.

### Dior Addict



Dior Addict lipstick grabbed the attention of consumers in the group. Eleven out of fourteen participants found the ad attractive due to its creativity; others stated that they appreciated its clarity and directness. Ten participants out of fourteen stated that colorful lipsticks attracted them, whereas the rest always prefer skin or neutral colors for the lipstick since they come with light and skin color tones. Seven participants were attracted by the slogan of the ad "Choose your shade", which made the ad clear and impressive; seven members noted that they were interested in the visual that showed shades of the lipsticks. Others described Dior as an important brand of

good quality, which automatically makes the ad appealing and attractive. At Least ten participants believed that colors had a potential effect when buying Dior Addict lipstick.

### Nina Ricci



The Nina Ricci ad appealed to the majority of the participants. All seven males were keen on it, whereas only four females felt attracted to it. Nine individuals attributed the magnificence of the ad to the colors, eight participants to the design of the jewelry (visual), and six persons to the brand itself. These six consumers considered Nina Ricci to be a very famous brand, which definitely caused them to be involved in the ad. With respect to colors' efficiency in ads, ten participants were likely to buy this product because of the existing colors.

### Chanel



When members of the group were asked to express their views toward Chanel ad, all of the fourteen consumers found it very impressive, clear, and strong. Half the participants were inspired by the ad due to the brand's popularity. More than half considered that it's the colors in

the ad that made it remarkable. In contrast, some participants (four males, one female) added it was due to the visual of the ad (lipstick) that they found it appealing and sexy, and five participants said that the effects in the background made the ad affective. The entire group affirmed that colors in ads would persuade them to buy the product.

### **Diesel**



Ten participants out of fourteen (five females, five males) indicated an interest in the ad. Some found it attractive, fresh, and vibrant; others ranked it as clear and useful. However, according to four participants, the ad was unattractive and unclear. Ten participants (five females, five males) out of fourteen were excited about the ad because of the background color; nine were excited because of the visual including the model in the ad, and two participants (one male, one female) voted for the ad due to the brand name. Impact of colors on purchasing behavior was noted among eight participants; whereas five participants didn't consider colors important enough for their purchasing behavior for this specific product.

### **Rexona**





Ten persons out of fourteen (five males and five females) were "excited" about Rexona ad. Areas of interest in the ad noted by groups were primarily the colors (eleven out of fourteen); the visual of Rexona bottle (Eight out of fourteen); the usage of green light effects in the background of one of the visuals of Rexona ad illustrates energy or freshness, creates space and shows virtual reality (Eight out of fourteen). Two of the participants mentioned the significance of the brand in addition to colors in the ad. Only one male participant emphasized the message "freshness" that Rexona had portrayed in the ad and described it as memorable. The majority highlighted the role of the existing colors on their shopping behavior.

On the last question 'Which ads can you recall the most (attract you the most)?' Mercedes Benz, Nina Ricci, Nike shoes, and CopaCabana ads turned out to be the most memorable in consumers' minds. The participants noted that colors influenced their purchasing behavior but many other factors affected them to recall these ads such as style of the product, layout of the ad, the brand name, and the benefits the product offers such as price, quality, packaging and location. It seems although consumers can recall ads due to many features, but that doesn't always result with the consumption of the product, which means recalling an ad the most doesn't necessarily mean to affect the most. Sometimes, the ugliest ad can be recalled the most but not necessarily contribute in purchasing decisions.

## **6.2. Survey's Results**

To measure colors' influence in advertising on consumers' purchasing behavior, the research work has to be more scientific and reliable. In this context, SPSS (Statistical Package for the Social Sciences) is one of the most preferred tools adopted by different researchers to present data in their research work (Johnson, 2011). SPSS can help clarify relationships between

variables, formulate hypotheses for testing different types of quantitative market research - such as academic research, consumer market research, product marketing research, and more; SPSS helps interpret and analyze data retrieved from surveys (SPSS Ireland, 2011). With the help of SPSS software, a number of different statistical tools like ANOVA, paired t-test, chi square test, exploratory factor analysis (EFA), and so on can be applied. Besides, with the help of the SPSS application, different graphs based on different complex data can be drawn easily and effectively (Johnson, 2011).

As for the questionnaire that was delivered among individuals, the following points were revealed.

#### **6.2.1. Demographics**

The total sample was 150 individuals. Of these 150, three were omitted because they left more than 50% of the survey incomplete. The gender distribution of the sample was made up of 45.6% males and 53.1% females, 1.4% did not mention their gender. 40.1% were between the ages 18-23, 42.9% 24-39, and 17% 40-65. 27.8% were students, 63.9% employed, and 8.3% unemployed. Of those employed, 3% were entrepreneurs, 7% free traders, 81% professionals, 2% suppliers, 4% amateurs, and 3% trainees. 26.4% have completed only high school, 48.6% hold a BA, 17.4% hold an MA and 7.6% hold another type of degree.

#### **Research Question 1: Does gender affect color preference?**

A Pearson correlation was calculated to check for the relationship between favorite color and gender. A correlation is a measure of how two variables move in relation to one another. A correlation is known as a correlation coefficient that ranges between +1 and -1. +1 is a perfect positive correlation meaning as one variable increases the other also increases and vice versa, -1

is a perfect negative correlation such that if one variable increases the other decreases and 0 is no correlation. Chi-square test is a measurement of how expectations compare to results. In Chi-square, an expected value is compared to the real value and a significance score is calculated to represent the probability of how well the expected results match the real data.

Results showed a significant correlation with the color purple  $r=0.278$ ,  $p<0.01$ . This means there is a positive correlation  $r= 0.278$ . And this relationship is very significant  $p<0.01$  (meaning there is less than a 1 per hundred probability to receive this correlation by chance).

Another correlation was calculated between gender and best color for advertising food. The results revealed no significant correlation between gender and opinion on which colors sell best for food products. A correlation was also calculated between gender and best color for advertising cars. The results showed no significant correlations. A correlation was then calculated between gender and best color for fashion. The results showed a significant correlation for black and pink with  $r=0.186$ ,  $p<0.05$  and  $r=0.264$ ,  $p<0.01$  respectively.

A correlation between gender and best color for cosmetics was also calculated. The results revealed a significant correlation for the color pink  $r=0.224$ ,  $p<0.01$ .

Finally, a correlation was calculated for the variables gender and best color for advertising furniture. The results revealed no significant correlations.

### **Research Question 2: Which aspect of the product has the most effects on sales?**

For the question "Which type of print ads influence you in choosing a product?" 4% chose the newspaper, 12.8% chose magazines, 32% chose billboards, 2.4% chose unipoles, 7.2% chose posters, and 29.6% chose all of the above.

For the question "What kinds of ads can stop you and catch your attention?" 15.9% chose food, 27.1% chose cars, 17.8% chose fashion, 7.5% chose cosmetics, 11.2% chose interior furniture, 16.8 chose all of the above, 0.9% chose other products, and 2.8% chose none of the above.

For the question "What visuals appeal to you the most?" 6.2% chose black and white, 51.7% chose colorful, 40% chose both, and 2.1% chose none.

Non-parametric Chi-square test for independence was performed revealing significant results for which ads are most influential, which ads catch your attention, and which visuals appeal the most. The results were significant  $p < 0.001$  with the highest scoring answers being billboards, cars, and colorful respectively. P, here is less than 0.001 which means there is less than one per thousand chance to get these results randomly. Hence, it makes the results more significant.

### **Research Question 3: Is it the color, the message, or/and the visual makes the ad memorable?**

Upon visual inspection of the frequency distribution which design elements make you buy a product in an ad, 56% believe that is all four elements (the font, size, color, and visual) of the ad that plays an influential role. Whereas the font and size of the ad each constituted 2.4% of the answer, the visual 25.2%, and the color only 6.8% while the "other" element constituted 5.7% of all valid answers.

### **Research Question 4: Do the existing colors in the ads have an effect on the consumers' purchasing behavior?**

For Question 20 of the survey "Colors in the ad make the ad more:" 6.8% chose "memorable",

4.5% chose "persuasive", 63.9% chose "attractive", 21.8% chose "all of the above" and 3% chose "none of the above".

A non-parametric Chi-square test of independence was performed on the effect of color on the ad and the results revealed a significant difference between categories  $p < 0.001$  with the highest effect for the option "attractive".

Chi-square tests are also performed on questions 21 and 23, which asked if they found colors in the ads appealing and whether they believe colors affect their shopping experience.

For question 21 (Do you think colors make the ad appealing?) 31% chose strongly agree, 57.7% chose agree, 9.9% chose neutral, and 1.4% chose disagree.

For question 23 (Do you think the effects of colors in certain products (food, cars, cosmetics, fashion, interior furniture, etc.) play an important role in consumer's shopping decision?) 24.8% chose Strongly agree, 63.8% chose agree, 8.5% chose neutral, 1.4% chose disagree, and 1.4% chose strongly disagree.

In both cases the results of the Chi-square were significant  $p < 0.001$  with the "agree" option having the highest number of answers with 55.8% and 62.1% of the votes respectively.

Another Chi-square test was performed on the "To what extent do/does your favorite color(s) influence your choice of brand when buying products?" question; 16.5% chose extremely, 43.2% chose very much, 31.7% chose fairly, 3.6% chose slightly, and 5% chose not at all. The results revealed a significant effect of  $p < 0.001$  with the category "Very much" had a significantly higher number of responses than the other options.

#### **Research question 5: Do different colors affect products differently?**

A regression is a statistical measure that attempts to determine the strength of the relationship

between one variable and a series of other variables in order to find a causal relationship by attempting to predict the values.

A regression equation was run to determine which color preference was predictive of being more persuaded in your favorite color to buy a certain brand. Results showed that favorite color purple significantly predicted the influence of color when buying products:

**ANOVA<sup>a</sup>**

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	16.324	9	1.814	2.048	.039 <sup>b</sup>
Residual	114.223	129	.885		
Total	130.547	138			

a. Dependent Variable: Q31

b. Predictors: (Constant), Q19White, Q19Blue, Q19Yellow, Q19Grey, Q19Red, Q19Green, Q19Purple, Q19Black, Q19Orange

This table shows whether the regression was successful and it found that the study had significant answers since  $P = 0.039 < 0.05$ ; it means that there is 39 per thousand chances to get these results randomly. Hence, it makes the results more significant.

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	2.457	.139		17.673	.000
Q19Red	-.146	.186	-.066	-.783	.435
Q19Blue	.294	.174	.144	1.691	.093
Q19Purple	-.446	.214	-.179	-2.086	.039
Q19Green	.077	.200	.033	.384	.702
Q19Yellow	-.522	.319	-.151	-1.635	.105
Q19Orange	-.070	.283	-.022	-.247	.805
Q19Black	-.015	.205	-.006	-.071	.943
Q19Grey	-.589	.321	-.157	-1.836	.069
Q19White	.125	.237	.046	.526	.600

a. Dependent Variable: Q31

This table shows that purple showed negative significant results. It illustrates that consumers who like purple are less sensitive to the color of the product when purchasing; they won't necessarily buy a product in their favorite color/s.

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.523	.137		18.391	.000
Q27Red	-.288	.175	-.139	-1.642	.103
Q27Blue	-.156	.228	-.060	-.685	.495
Q27Orange	.366	.343	.098	1.069	.287
Q27Yellow	.163	.378	.039	.431	.667
Q27Green	.081	.286	.025	.283	.778
Q27Black	.409	.184	.194	2.228	.028
Q27Pink	-.481	.170	-.245	-2.822	.006
Q27Purple	-.142	.252	-.051	-.563	.575
Q27White	.352	.222	.137	1.582	.116
Q27Grey	-.404	.345	-.108	-1.170	.244
Q27Brown	-.063	.255	-.022	-.248	.805

a. Dependent Variable: Q31

The study showed significant results for pink and black. For pink,  $B=-0.481$  is a negative value; it means that the more consumers like pink for cosmetics, the less likely they are to buy products in their favorite colors. For black,  $B=0.409$  which is a positive value. It means that the more consumers like black for cosmetics, the more likely they are to buy products in their favorite colors; thus consumers are sensible to black.

### 6.3. Discussions

Colors in ads have an effect on purchasing behavior and shopping experience but they work in coordination with other aspects of advertising such as visual effects, illustrations, slogan, product price, quality, point of sale, promotion, and word of mouth.

The focus group was arranged as a research method in order to better understand what consumers are experiencing on a personal level when they are exposed to print ads for clothing, furniture, cars, food, and cosmetics and then make their buying choices. This eased the analysis of the results extracted from the conducted focus group. When participants were asked to discuss freely the feelings and experiences regarding shopping for clothes, accessories, cars, food, cosmetics and interior items, they were comparing advertisements of other brands to the present ones as well as critiquing them in terms of creativity, clarity, image, package colors, etc. It was obvious that each of the participants was likely to be affected by others' opinions. Group members can impact upon individuals in ways that distort their judgments and that lead to damaging decision-making. This means participants depended not only on their own actions and convictions, but also on the actions, feelings and experiences of others in the group. The use of focus groups is an exploratory research method. Here comes word-of-mouth marketing tool, which some researchers have considered it as a key success for organizations. In fact, buying products doesn't exclusively depend on marketing efforts of the producer but also on conversations between consumers. The satisfied customer can attract new customers through word-of-mouth (Zamil, 2011).

One last thing in this section is that the focus groups offer people the opportunity to work together on joint projects and tasks. The method is designed to gain insight into a particular research problem through open discussion among a limited number of people. The discussion is



mainly unstructured and spontaneous with the moderator providing guidance throughout the process. The responses and interactions of the participants can point to basic consumer needs and attitudes in reference to the research problem under exploration (Burns & Bush, 2008). Here comes the author's background as graphic design "came in handy" in this part of the thesis. Another point is that color perception is not only dependent on attention drawing properties of colors but also the association of colors with certain attributes due to our social or cultural knowledge.

As a result, although colors play essential role in people's attitudes towards products, they are not the only variable to measure the effectiveness of an ad. There are many other variables such as the visual, the font used in the headline of an ad, and other attributes as well.

### **Hypotheses Testing**

**H1:** Colors in advertising can have potential impact on individual's purchasing behavior for products of cars, food, fashion, cosmetics and furniture along with other factors such as word of mouth, effects in the background, the visual itself and price. Therefore, this study supports the hypothesis, which states "colors in advertising can have potential impact on individual's consumption behavior for products of cars, food, fashion, cosmetics, and furniture".

**H2:** There is an important association between the buying decision of the consumers and their color preferences. The results showed that color preferences have greater impact on consumers' buying behavior mostly for products related to fashion, cars and cosmetics. This approves the hypothesis that states "Color preferences can have potential effect on the choice consumers make in their purchasing decision".

**H3:** There is a significant relationship between the purchasing decision of the consumers, their color preferences and other features of the product such as the texture, smell, price and quality and the design of the ad: typography, visual, size of the ad and package. This definitely supports the hypothesis which states "Consumers' purchase decision is not only related to their color preferences, but also to other features of the product such as the texture, smell, price and quality and the design of the ad: typography, visual, size of the ad and package."

**H4:** Consumers with differences in age and gender were choosing the same colors for the advertised products, thus the results from the focus group didn't support the hypothesis that states "consumers' choices of colors can vary with age and gender." The variation in age and gender didn't show many differences towards the advertised products. All colors were loved by different generations; even the old people were selecting flashy colors just as young generation did.

**H5:** Consumers consider colors when buying high involvement products because it's hard to buy something that will last forever, especially cars. Most of the participants would go for black when buying a car for self satisfaction (personal image). As the hypothesis states "Consumers associate certain colors with certain products when buying high/low involvement products; for instance, associating black with cars." is supported in this research. Here the uses and gratifications theory is being applied when consumers make use of the media for their specific needs (personal satisfaction).

### **Chapter VII: Conclusion**

This research provides an important empirical foundation for examining Lebanese buyers' behaviors and the impact of colors in print ads on these behaviors. There are several key areas related to the study; colors constitute huge part of our experience in life. Colors are one of life's greatest attractions - they are inspiring to work with, and extremely satisfying to be surrounded by. When colors are researched and studied, the first concept noticed is how they each portray their own feeling or emotion. The way people use colors in their home says a lot about them. For example, their choice of painting and decorating colors reveals their sense of aesthetics, gives a glimpse into their personality, spirit and lifestyle. Also, colors classify the store from competitors, catch the attention of new customers, get customers into stores, initiate sales, and increase market share by inspiring new and current customers (Bellizzi et al., 1983). Most of us express ourselves through clothing, accessories, etc. why not put a mark on the colors' significance in the media as well? When consumers being exposed to advertisements whether related to fashion, food, interior, cars and cosmetics, they might typically make up their mind within the first few seconds and become fascinated with the colors depicted in the magazine ads or billboards or to the darkness/lightness of the visuals in the ads.

It seems that colors are attractive and appealing when compared to black and white with no particular significance of any color. People decide to buy the product because of its utility and usefulness and then they will select the color that they like. Colors grab attention and evoke feelings but they don't make you buy the product if you don't need it. Attributes like colors, background, the visual (product), the brand name, and the style of the product combined would affect the consumers' purchasing decision.

The purpose of this research was to investigate how the consumers are influenced by factors of branding strategy of a product such as cosmetics, fashion, food, car, and interior decoration.

As discussed in the literature review, colors have their deep meaning in every culture, but don't always elicit same reactions in every culture, country or region. When it comes to advertising, colors are used heavily in ads to grasp customers' attention to purchase the product. Having a range in colors varies from an individual to another, and highlights the perception of using the right colors in a business to make more sales. Therefore, selecting a color or a combination of colors for companies' product lines might be one of other factors to either: sustain a business leading to an increase in sales or causing break up in sales thus deteriorating a business.

On the other hand, colors are not the only factor for a successful advertising campaign. Many other elements contribute to achieve the goal and increase the purchasing behavior among attitudes. Colors in advertisements may not exactly sell the product but they definitely grab attention and drive the consumers to stop and look at the product closer. This section attempted to draw some conclusions about the Lebanese market research. Focus group offered the respondents the possibility for connecting with others and the continuous establishment of opinions during the group session. Thus a focus group can be an important place for socialization and education that enable people to intensify knowledge, skills and values and attitudes. It is an opportunity where relationships can be formed and grow, and where people can find help and support.

However, the insights gained from the responses and discussions of the focus groups have provided some information to encourage further investigation.

### **7.1. Limitations**

Several limitations are recognized in relation to this research. This study examined only colors in ads related to five product categories, which can't be generalized to other product categories. Due to the limitations of focus group and the small sample size of the participants' survey, the data collected for this research study is applicable among Lebanese culture but can't be generalized to other cultures. As for the survey, the study was limited because the sampling didn't include malls in different regions across Lebanon such as Tripoli due to security reasons. Also, this survey might have bias in the answers of the consumers since few questions were arbitrarily replied; out of 150 participants, three participants didn't complete the questionnaire. With respect to the qualitative study, although there are certain advantages to using focus groups, there are major disadvantages too as a research method: Uncertainty about accuracy of what members say and results might be biased by presence of dominant participants taking over the whole discussion with light involvement of others in the group. Less control over the group may produce relatively chaotic data thus making data analysis more difficult. Also, because focus groups are usually made up of a very small number of people who voluntarily participate, their views and perceptions don't certainly represent those of other groups that might have different characteristics. Additionally, focus group research cannot predict outcomes, and therefore it would not be wise for corporations to make major financial decisions based on the information gathered from focus groups.

### **7.2. Recommendations**

Because all the findings can't be generalized to all product categories, a deeper research of colors' effects can be studied and analyzed on different products items for each category. For

instance, studying the category of food can include packaged vegetables, juices, cornflakes, milk, etc. The same is applied for other categories as in cosmetics including shampoos, perfumes, lipsticks, eyeliners, shower gels, etc.

Just as this research has implemented a systematic approach and analyzed data across different dimensions, there are opportunities to examine other contexts beyond this research, for example considering the colors' effects on marketing decisions. Even within consumer behavior, there are several areas that can be further explored. This includes whether consumers present any differences in buying behavior towards different types of brands, for example, between local and foreign brands, as less known and well-known brands.

Future studies could also consider studying the effects of colors in electronic ads on consumers' purchasing behaviors that may provide further insights into Lebanese buying behavior. This is due to fact that electronic media unquestionably have huge impact on sales and on consumers.

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**Chapter IX: Appendix****APPENDIX I**

I am doing my Masters degree in the field of advertising and marketing. As I am doing research work on "Effects of colors in ads on consumer's shopping behavior ", I need few minutes of your valuable time to fill out the following questionnaire.

**Questionnaire**

Kindly help me with your response to complete my research work.

1. Gender : a. Male b. Female
2. Age : a. 18 - 24 yrs b. 25-39 yrs c. 40-65 yrs
3. What is your occupation?
  - a. Student b. Employed c. Unemployed
4. If employed, what type of employment?
  - a. Entrepreneur b. Free trader c. Professional d. Supplier e. Amateur
  - f. Trainee
5. What is your income per annum (USD Dollars)?
  - a. 0-10000 b. 10000-18000 c. 18000-25000 d. 25000-40000
  - e. 40000 or above
6. What is the highest level of education you have completed?
  - a. High School b. Bachelor's degree c. Master's degree d. Others
7. Does advertisement influence you when buying a product?
  - a. Strongly Agree b. Agree c. Neutral d. Disagree e. Strongly Disagree

8. In general, do you think ads influence the choices you make when you buy products (clothes, cars, shampoos, computers, etc.) ?

- a. Strongly Agree      b. Agree      c. Neutral      d. Disagree      e. Strongly Disagree

9. Which type of the following print ads influence you in choosing a product?

- a. Newspaper      b. Magazines      c. Billboards      d. Unipoles      e. Posters  
f. All of the above      g. None of the above

10. What kinds of ads can stop you and catch your attention?

- a. Food      b. Cars      c. Fashion      d. Cosmetics      e. Interior furniture  
f. All of the above      g. Other products      h. None of the above

11. For you, advertisement is a source of:

- a. Information      b. Entertainment      c. Persuasion      d. Creative outlet  
e. Socialization      f. All of the above      g. None of the above

12. Does an entertaining advertisement influence your opinion about the product?

- a. Strongly Agree      b. Agree      c. Neutral      d. Disagree      e. Strongly Disagree

13. Does information provided in advertisement affect your opinion about the product?

- a. Strongly Agree      b. Agree      c. Neutral      d. Disagree      e. Strongly Disagree

14. Do you think advertisement helps in increasing sales of any product?

- a. Strongly Agree      b. Agree      c. Neutral      d. Disagree      e. Strongly Disagree

15. How often do you purchase advertised products?

- a. Once a day      b. Once a week      c. More than once a month  
d. Once a month      e. Once in two months      f. Once in more than three months

16. How important is the brand image in choosing a product?

- a. Very Important      b. Important      c. Neutral      d. Not Important  
e. Not at all Important

17. Which visuals appeal to you the most?

- a. Black and White      b. Colorful      c. Both a&b (You may circle more than one answer)  
d. None

18. Which one of the following design elements might make you buy a product in this ad?

- a. The font of the ad      b. The size of the ad      c. The color of the ad  
d. The visual in the ad      e. All of the above  
f. Others (You may circle more than one answer)

19. What is your favorite color?

- a. Red      b. Blue      c. Purple      d. Green      e. Yellow      f. Orange  
g. Black      h. Grey      i. White      j. Others (You may circle more than one answer)

20. Colors in an ad make the ad:

- a. Memorable      b. Persuasive      c. Attractive      d. All of the above  
e. None of the above

21. Do you think colors make the ad appealing?

- a. Strongly Agree      b. Agree      c. Neutral      d. Disagree      e. Strongly Disagree

22. Why do you think Colors make the ad appealing?

- a. Colors show details of the product in an ad      b. Grabs the attention of the viewers  
c. Makes the ad look interesting and attractive for consumers      d. All of the Above  
e. None of the above      f. Others (You may circle more than one answer)

23. Do you think the effects of colors in certain products (food, cars, cosmetics, fashion, interior furniture, etc.) play an important role in consumer's shopping decision?

- a. Strongly Agree      b. Agree      c. Neutral      d. Disagree      e. Strongly Disagree

24. In general, when purchasing products related to food, which colors sell the best?

- a. Red      b. Blue      c. Orange      d. Yellow      e. Green      f. Black  
g. Pink      h. Purple      i. White      j. Gray      k. Brown

l. Others (You may circle more than one answer)

25. In general, when purchasing products related to cars, which colors sell the best?

- a. Red      b. Blue      c. Orange      d. Yellow      e. Green      f. Black  
g. Pink      h. Purple      i. White      j. Gray      k. Brown

l. Others (You may circle more than one answer)

26. In general, when purchasing products related to fashion, which colors sell the best?

- a. Red      b. Blue      c. Orange      d. Yellow      e. Green      f. Black  
g. Pink      h. Purple      i. White      j. Gray      k. Brown

l. Others (You may circle more than one answer)

27. In general, when purchasing products related to cosmetics, which colors sell the best?

- a. Red      b. Blue      c. Orange      d. Yellow      e. Green      f. Black  
g. Pink      h. Purple      i. White      j. Gray      k. Brown

l. Others (You may circle more than one answer)

28. In general, when purchasing products related to interior furniture which colors you think sell the best?

- a. Red      b. Blue      c. Orange      d. Yellow      e. Green      f. Black  
g. Pink      h. Purple      i. White      j. Gray      k. Brown

l. Others (You may circle more than one answer)

29. When buying a product from a magazine, you look mostly at:

- a. Colors in the ad      b. Color of the product      c. Both a&b      d. Price  
e. Quality      f. Quantity      g. Package      h. Texture of the product  
i. Ingredients      j. Size      k. Availability (location)      l. All of the Above  
m. None of the above      n. Others (You may circle more than one answer)

30. Please rate the importance of attractive package & stylish design in choosing a product?

- a. Very Important      b. Important      c. Neutral      d. Not Important  
e. Not at all Important

31. To what extent do/does your favorite color(s) influence your choice of brand when buying products?

- a. Extremely      b. Very much      c. Fairly      d. Slightly      e. Not at all

Additional Comment. (Optional)

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Thank you for taking the time to complete this survey.

## **APPENDIX II**

### **Focus Group Questions**

1. What is/are your favorite color(s)?
2. Does your color preference affect the choice you make when buying a certain product?  
Why?
3. Where do u find your favorite colors applied in your lifestyle?
4. How do u evaluate this ad?
5. Which feature in the ad makes it memorable, the color, the message, or/and the visual?
6. Do the existing colors in the ads affect your consumption?
7. Which ads can you recall the most (attract you the most)?

### **APPENDIX III: Phone Script for Calls to Focus Group Invitees**

I am Arpi Kizirian. I am contacting you because I am working on colors' effects in ads on consumers' shopping behavior research project for Master's degree in the Department of Media Studies at NDU University Louaize.

In July, I will be conducting a focus group in Beirut region. I'd like to ask you to be a part of my focus group in the coming month. I am interested in contacting decision-makers (administrators, officers, designers, engineers, etc.) who are actively involved in issues like consumers' shopping attitudes, colors and ads of products related to five product categories: food, fashion, cosmetics, cars, interior furniture. I received your name from my contacts.

The purpose of the focus group is to help us evaluate what makes a printed ad really effective, which colors sell the best in advertising, and how these colors in advertising can have a potential role on consumer shopping performance when buying items related to cars, fashion, food,

cosmetics, and interior furniture. The focus group session will last around two hours or so. You will have an opportunity to be a part of a broad group of elected and appointed officials from different regions in Lebanon to help extract different views.

Would you be available to participate in the focus group that will be held on July 30, 2013 at Gilgamesh restaurant? We would like to confirm your attendance.

Please Contact me : +961 3 606 345

Thank you for your time.

#### **APPENDIX IV: Focus Group Protocol for Participant Groups**

Thank you for participating today. The purpose of this focus group is to cover several key areas of discussion and to determine your color preferences in order to best understand the association of your preferred colors with your purchased product categories especially in fashion, cosmetics, cars, food and interior furniture items. This method would help us identify how the specific factors might trigger awareness in each ad, and how your color preferences you may have would influence you to take an action for purchasing this advertised product. This would portray the effect of your favorite colors in your lifestyle.

We will explore some advertisements that have appeared on magazines, billboards, brochures. (billboards, magazines, brochure, etc.) containing each one of the five product categories (fashion, cosmetics, cars, food and interior furniture items), the content of the ad. After we see each ad, I'd like you to evaluate it and tell us about your thoughts if the ad really affected you and you would think about it again and even discuss it with your friends, or didn't affect you at all and you probably wouldn't give it a second thought.



The focus group will last no more than two hours or so, and I am counting on everyone's participation. .... You were asked to join this group as a decision maker; let's define what that means. A decision-maker, for our purposes, is anyone in the local area who may represent the purchasing power bulk in Lebanon, which includes public and elected officials, householders, college students, designers, engineers, business owners. This would also include both working professionals as well as active volunteers.

Let's begin by briefly discussing your views on current fashion, food, cosmetics, cars and interior items and on your buying behavior. And if you can please list the ads that attracted you the most and specify which ads you recall the most. We will also analyze if the colors, the message, and/or the visual would make these ads impressive. If colors have an impact on decision-making in purchasing, what are the best colors to use to help increase sales?

Would you say your knowledge base about colors' effects in printed ads on consumer behavior has been increased as a result of our discussion today?

Thank you for your participation.



APPENDIX V: Focus Group Results

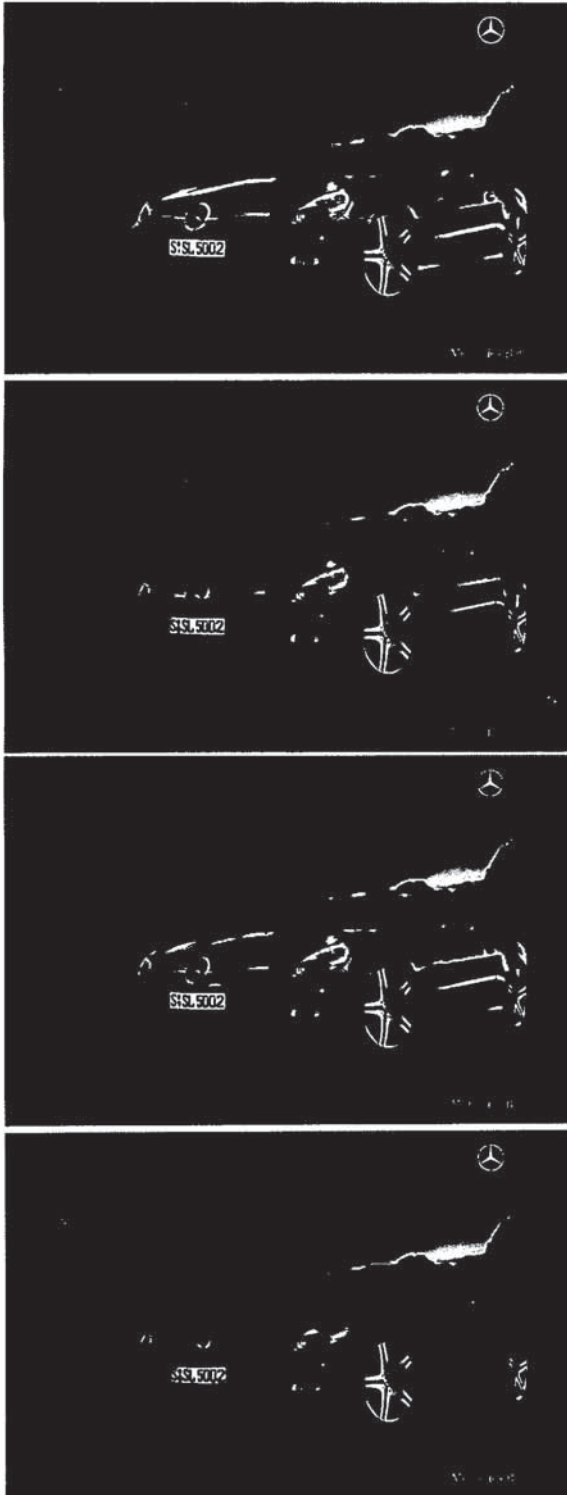
	Chadi	Mohamad	Fayyad	Emile	Toni	Samo	Alfred
1. What is/are your favorite color(s)?	Black	Black	Blue	Blue, Brown	Grey, Blue	Blue, Brown, Green	Light Colors
2. Does your color preference affect the choice you make when buying a certain product? Why?	Yes	Yes	No	Yes	Yes	No	Yes
3. Where do you find your favorite colors applied in your lifestyle?	Clothes, Cars	Clothes, Cars, Shoes, Watches	Clothes, Cars	Clothes, Cars, Furniture	Clothes, Cars	Clothes, Cars, Furniture, Accessories	Depends on the product
4. How do you evaluate this ad?	Nice	Nice	Successful	Normal	Attractive	Attractive	Attractive, Impressive
5. Which feature in the ad makes it memorable, the color, the message, or/and the visual?	Visual, Background, Color of the product (black)	Color, Visual (black)	Visual, Background (red)	Color, Visual (blue)	Color, Brand & Type of the car, (Blue car)	Color, Visual, (Black car)	Color, Background, Brand of the car, (Blue car)
6. Do the existing colors in the ads affect your consumption?	No	Yes	Yes	Yes	Yes	Yes	Yes
4. How do u evaluate this ad?	Ambiguous	Uncreative	Attractive	Unattractive	Unattractive	Unattractive	Unattractive
5. Which feature in the ad makes it memorable, the color, the message, or/and the visual?	none	none	visual + color (green)	visual, background, colors (green)	color (orange and green)+ new brand	color (orange)	color (green)
6. Do the existing colors in the ads affect your consumption?	maybe	never	yes	yes	yes	yes	yes
4. How do u evaluate this ad?	attractive, interesting	attractive, interesting	Unattractive	neutral	neutral	nice	neutral
5. Which feature in the ad makes it memorable, the color, the message, or/and the visual?	visual, color (black)	visual (product), color (black)	visual	none	visual (safe product)	visual, color (blue)	none
6. Do the existing colors in the ads affect your consumption?	yes	yes	never	maybe	yes	yes	yes
4. How do u evaluate this ad?	weak	undear, uninteresting	attractive	uncreative, uninteresting	attractive	attractive	neutral
5. Which feature in the ad makes it memorable, the color, the message, or/and the visual?	color (black)	none	colors (green)	None	brand, product, visual, colors (red, green, black)	product, color (red)	brand
6. Do the existing colors in the ads affect your consumption?	never	never	maybe	never	yes	yes	never
4. How do u evaluate this ad?	dear and attractive	dear and attractive	Unattractive	strong, cute, successful	interesting	interesting	neutral
5. Which feature in the ad makes it memorable, the color, the message, or/and the visual?	background, visual, colors	background, visual, colors	brand	product, colors (bordeau with yellow, green with orange)	brand, product, colors (orange with blue)	brand, product, colors (orange with blue)	brand, product quality, color (green, red, yellow)
6. Do the existing colors in the ads affect your consumption?	never	never	never	yes	yes	yes	yes
4. How do u evaluate this ad?	attractive, fashionable	dear	attractive, fashionable	attractive, sportive fashionable	Unattractive, undear	neutral	Unattractive, undear
5. Which feature in the ad makes it memorable, the color, the message, or/and the visual?	product	color (black)	product, colors (black & beige), effect	product, colors (bordeau, beige)	None	colors (green, brown)	None
6. Do the existing colors in the ads affect your consumption?	yes	yes	yes	yes	never	yes	never

	Chadi	Mohamad	Fayyad	Emile	Toni	Samo	Alfred
4. How do u evaluate this ad?	attractive	attractive	attractive	unattractive	neutral	attractive	neutral
5. Which feature in the ad makes it memorable, the color, the message, or/and the visual?	product, colors (off white)	product, colors (yellow, green)	product, colors (off white)	none	color (offwhite, green)	color (yellow), product design	color (offwhite, green, blue)
6. Do the existing colors in the ads affect your consumption?	yes	yes	yes	never	Never	yes	maybe
4. How do u evaluate this ad?	attractive	creative, attractive	dear, attractive	creative, attractive	neutral	attractive, awesome	creative, attractive
5. Which feature in the ad makes it memorable, the color, the message, or/and the visual?	slogan, product	slogan, visual	slogan	slogan, colors (light brown, cherry red)	brand,	colors (red, fushia)	color, visual
6. Do the existing colors in the ads affect your consumption?	yes	yes	yes	yes	never	yes	never
4. How do u evaluate this ad?	attractive	attractive	attractive	nice, attractive	attractive	attractive	attractive
5. Which feature in the ad makes it memorable, the color, the message, or/and the visual?	colors, design	brand, product	brand	product, colors (purple, red, pink, brown, dark brown, yellow)	brand, color (purple), visual	brand, product, color (green)	color (pink)
6. Do the existing colors in the ads affect your consumption?	yes	yes	yes	yes	yes	yes	yes
4. How do u evaluate this ad?	attractive	attractive	impressive	attractive	attractive	attractive	attractive
5. Which feature in the ad makes it memorable, the color, the message, or/and the visual?	visual, color (red)	visual, color (red), background	color (red, orange), background, brand, visual	colors (orange, red), background, visual,	brand	brand	brand
6. Do the existing colors in the ads affect your consumption?	yes	yes	yes	yes	yes	yes	yes
4. How do u evaluate this ad?	attractive	unattractive	interesting, dear	clear and attractive	undear	attractive	dear
5. Which feature in the ad makes it memorable, the color, the message, or/and the visual?	visual, model	none	model, color (olive green), message, product	background, colors (olive green),	colors(olive green)	brand, product, colors(olive green, black	brand, color, product, (red)
6. Do the existing colors in the ads affect your consumption?	never	never	yes	yes	yes	yes	yes
4. How do u evaluate this ad?	attractive	undear	attractive	interesting	undear	attractive	dear
5. Which feature in the ad makes it memorable, the color, the message, or/and the visual?	color (blue and green), product, background	color (red, green), product, background	color (blue), background,	product, colors (blue), background effect,	effect background, color (blue), visual	color (red), product	color (green), message (freshness)
6. Do the existing colors in the ads affect your consumption?	yes	yes	yes	yes	yes	yes	yes
7. Which ads can you recall the most (attract you the most)?	Mercedes Benz, Nina ricci, Nike shoes, copa cabana,						

	Lina	Hiba	Miray	Nisrine	Darine	Marie	Arline
1. What is/are your favorite color(s)?	Pink	Black, Red, Brown	Blue	Purple	White	Green	Black, White
2. Does your color preference affect the choice you make when buying a certain product? Why?	No	No	Yes	Yes	Yes	Yes	No
3. Where do u find your favorite colors applied in your lifestyle?	Clothes, Cosmetics, Furniture	Depends on the product	Clothes, Fashion, Cosmetics	Clothes, Wallpaper, My Logo, Slogan	Clothes, Watches, Sports Car, Furniture, Mobile phone	Furniture, Fashion	Clothes, Cars
Mercedes Benz							
4. How do u evaluate this ad?	Nice	Attractive	Attractive	Attractive	Attractive	Normal	Normal
5. Which feature in the ad makes it memorable, the color, the message, or/and the visual?	Color, Visual (orange)	Color, Visual with (red car)	Visual, Background (red)	Color, Background (orange)	Color, Background, size (orange)	Color (Black), Brand of the car,	Color, Background (none)
6. Do the existing colors in the ads affect your consumption?	Yes	Yes	Yes	Yes	Yes	No	No
Thea (iced tea)							
4. How do u evaluate this ad?	Uncreative	Weak	Ambiguous	Unattractive	Uncreative	Unattractive	Attractive
5. Which feature in the ad makes it memorable, the color, the message, or/and the visual?	colors	None	None	background	slogan	none	colors, background, visual(red)
6. Do the existing colors in the ads affect your consumption?	maybe	never	never	never	never	never	yes
Reef (slippers)							
4. How do u evaluate this ad?	Unattractive, messy,weak	badly displayed	dear, attractive	uncreative, uninteresting	dear, attractive	neutral	attractive, informative
5. Which feature in the ad makes it memorable, the color, the message, or/and the visual?	visual (product)	color(pink)	product, colors (all)	colors, product (blue)	color	visual (safe product), color (black+green)	colors (pink)
6. Do the existing colors in the ads affect your consumption?	yes	yes	yes	maybe	maybe	yes	yes
Swatch							
4. How do u evaluate this ad?	attractive	neutral	attractive	attractive	interesting	neutral	attractive
5. Which feature in the ad makes it memorable, the color, the message, or/and the visual?	visual,background, color (bordeau)	brand, colors (green, orange, red, all)	brand, colors (blue)	brand, colors (bordeau)	background, visual, color (green)	colors	product, color (bordeau)
6. Do the existing colors in the ads affect your consumption?	yes	yes	yes	never	yes	never	yes
Nike							
4. How do u evaluate this ad?	attractive	attractive, strong, clear	tempting, sexy	neutral	none	attractive	attractive
5. Which feature in the ad makes it memorable, the color, the message, or/and the visual?	colors (bordeau)	background, visual not product, slogan,	colors(blue)	none	color (green)	visual, brand, color (green)	colors (orange with blue)
6. Do the existing colors in the ads affect your consumption?	never	never	yes	never	never	yes	yes
CopaCabana							
4. How do u evaluate this ad?	attractive	nice and simple	fresh, simple	nice, leisure, dreamy, festive	catchy, flashy, fashionable	neutral	attractive
5. Which feature in the ad makes it memorable, the color, the message, or/and the visual?	effect	brand, colors (beige, brown)	product, colors(all), background	brand, colors	colors, product, visual	product	product, colors( pink, red, bordeau, beige, dark brown, turquoise, effect
6. Do the existing colors in the ads affect your consumption?	never	yes	yes	never	yes	maybe	yes

	Lina	Hiba	Miray	Nisrine	Darine	Marie	Arline
4. How do u evaluate this ad?	attractive	attractive	stylish	attractive	attractive	clear and attractive	attractive
5. Which feature in the ad makes it memorable, the color, the message, or/and the visual?	product, colors (off white)	product, colors (off white)	color ( fushia)	brand, visual, colors ( yellow)	background, colors (magenta)	product, colors (beige, green, orange)	product style, color ( fushia, yellow)
6. Do the existing colors in the ads affect your consumption?	yes	yes	yes	yes	yes	yes	yes
4. How do u evaluate this ad?	attractive	attractive	attractive	neutral	unattractive	attractive	attractive
5. Which feature in the ad makes it memorable, the color, the message, or/and the visual?	product, colors (pink, red, fushia)	brand, colors (red, pink)	visual, colors (all)	product, slogan, colors	none	brand, slogan, colors (light brown, dark brown)	background, product, visual, colos (orange, bronze), slogan,
6. Do the existing colors in the ads affect your consumption?	yes	yes	yes	maybe	never	yes	yes
4. How do u evaluate this ad?	attractive	unattractive, ugly,	neutral	nice, elegant	unattractive	nice, elegant, attractive	attractive
5. Which feature in the ad makes it memorable, the color, the message, or/and the visual?	product, colors (pink)	none	brand, product	brand, product, colors ( purple, orange, yellowish orange), visual ( layout)	none	product, colors ( brown)	color (brown)
6. Do the existing colors in the ads affect your consumption?	yes	never	never	yes	never	yes	never
4. How do u evaluate this ad?	attractive	attractive, original	powerful	attractive	interesting	dear	interesting
5. Which feature in the ad makes it memorable, the color, the message, or/and the visual?	brand, color (red)	color (fushia)	color (dark brown, fushia), background,	color (red)	background effect, colors ( orange), visual,	brand	color (fushia), brand
6. Do the existing colors in the ads affect your consumption?	yes	yes	yes	yes	yes	yes	yes
4. How do u evaluate this ad?	interesting	attractive	neutral	attractive	fresh, vibrant, useful	dear, attractive	unattractive
5. Which feature in the ad makes it memorable, the color, the message, or/and the visual?	brand	background, colors( olive green, yellow), model	visual(rope). color ( yellow)	colors(yellow, fushia), visual,	colors (yellow)	colors ( yellow, green)	product
6. Do the existing colors in the ads affect your consumption?	yes	never	maybe	never	yes	yes	never
4. How do u evaluate this ad?	attractive	attractive	unclear	interesting	unattractive	dear	attractive
5. Which feature in the ad makes it memorable, the color, the message, or/and the visual?	color(blue), background	product, colors	brand, color(green)	color(green), effects, visual	none	backgorund, visual, colors(blue)	brand, color(blue), background effect,
6. Do the existing colors in the ads affect your consumption?	yes	yes	never	yes	never	yes	yes
7. Which ads can you recall the most (attract you the most)?							

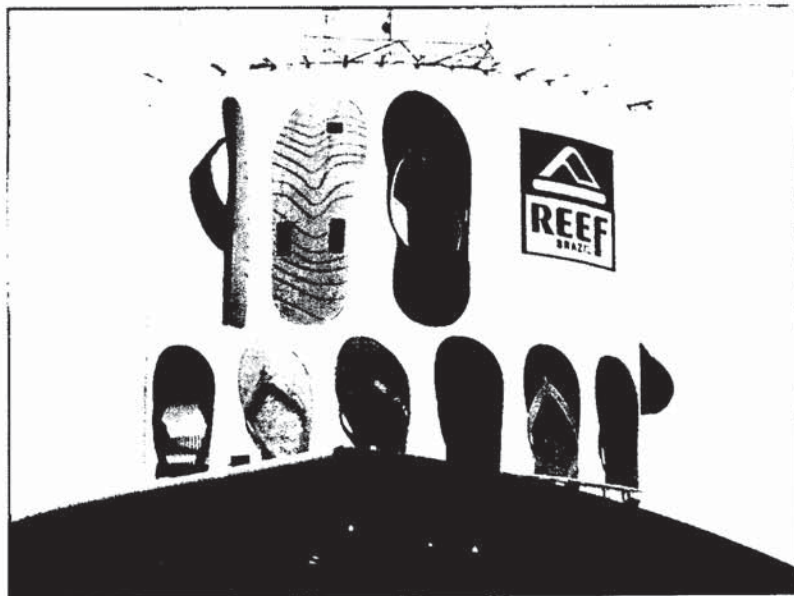
APPENDIX V1 - A



APPENDIX V1 - B



APPENDIX V1 - C



APPENDIX V1 - D



سواتش سواٹش  
سواتش سواٹش  
swatch SCUBA 1994



سواتش سواٹش  
سواتش سواٹش  
swatch SCUBA 1994



سواتش سواٹش  
سواتش سواٹش  
swatch SCUBA 1994



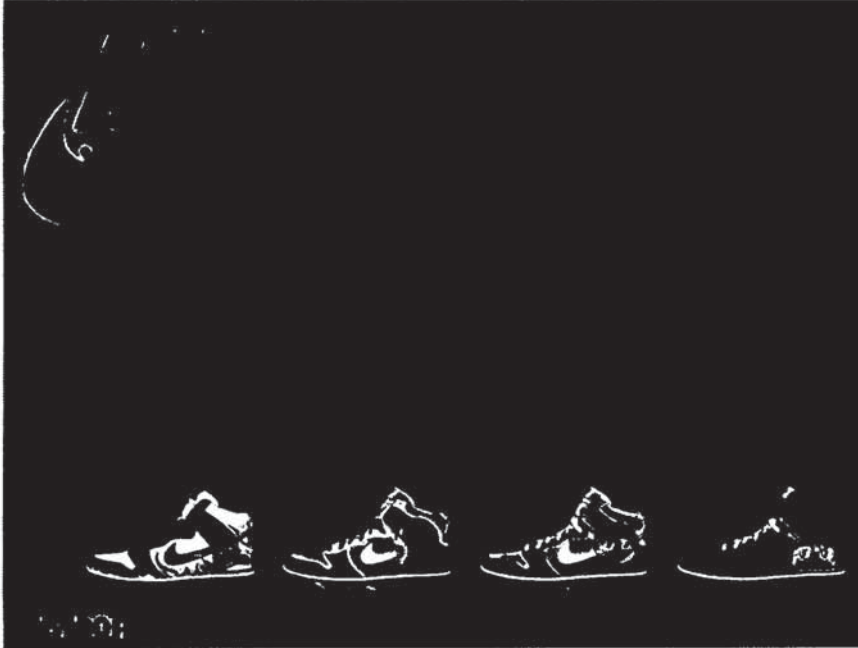
سواتش سواٹش  
سواتش سواٹش  
swatch SCUBA 1994



سواتش سواٹش  
سواتش سواٹش  
swatch SCUBA 1994

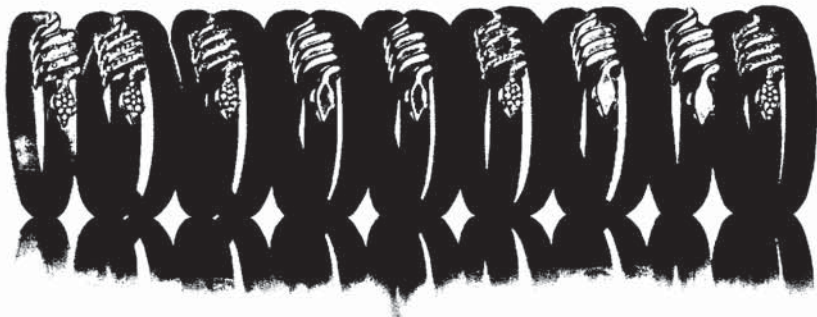


APPENDIX V1 - E



APPENDIX V1 - F

COPACABANA BRACELETS  
INFINITE COLOURS



*Cabbah*  
WWW.LIBRERIASTAMPARONA.COM

COPACABANA  
DIVINE SERPENT

APPENDIX VI - G



APPENDIX V1 - H

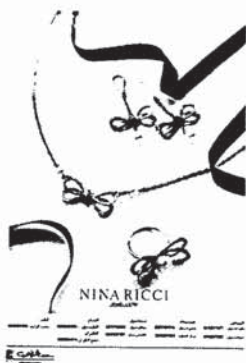
Dior Addict  
*be iconic*

Next

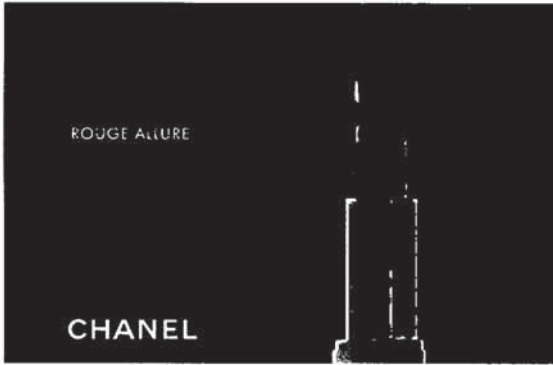
*Choose your shade*



APPENDIX V1 - I



APPENDIX V1 - J



APPENDIX VI – K



APPENDIX VI - L



## APPENDIX VII

**US Total Media Ad Spending, by Media, 2011-2017***billions*

	2011	2012	2013	2014	2015	2016	2017
<b>TV</b>	<b>\$60.7</b>	<b>\$64.5</b>	<b>\$66.4</b>	<b>\$68.5</b>	<b>\$70.0</b>	<b>\$73.1</b>	<b>\$75.3</b>
<b>Digital</b>	<b>\$32.0</b>	<b>\$36.8</b>	<b>\$42.3</b>	<b>\$47.6</b>	<b>\$52.5</b>	<b>\$57.3</b>	<b>\$61.4</b>
-Mobile	\$1.6	\$4.4	\$8.5	\$13.1	\$18.6	\$24.7	\$31.1
<b>Print</b>	<b>\$35.8</b>	<b>\$34.1</b>	<b>\$32.9</b>	<b>\$32.2</b>	<b>\$31.6</b>	<b>\$31.3</b>	<b>\$31.2</b>
-Newspapers*	\$20.7	\$18.9	\$17.8	\$17.1	\$16.6	\$16.2	\$16.1
-Magazines*	\$15.2	\$15.2	\$15.1	\$15.1	\$15.1	\$15.1	\$15.2
<b>Radio**</b>	<b>\$15.2</b>	<b>\$15.4</b>	<b>\$15.6</b>	<b>\$15.9</b>	<b>\$16.0</b>	<b>\$16.0</b>	<b>\$16.1</b>
<b>Outdoor</b>	<b>\$6.4</b>	<b>\$6.7</b>	<b>\$7.0</b>	<b>\$7.2</b>	<b>\$7.4</b>	<b>\$7.6</b>	<b>\$7.8</b>
<b>Directories*</b>	<b>\$8.2</b>	<b>\$7.5</b>	<b>\$6.9</b>	<b>\$6.4</b>	<b>\$5.9</b>	<b>\$5.5</b>	<b>\$5.3</b>
<b>Total</b>	<b>\$158.3</b>	<b>\$165.0</b>	<b>\$171.1</b>	<b>\$177.8</b>	<b>\$183.4</b>	<b>\$190.9</b>	<b>\$197.0</b>

*Note: eMarketer benchmarks its US newspaper ad spending projections against the NAA, for which the last full year measured was 2012, and its US outdoor ad spending projections against the OAAA, for which the last full year measured was 2011; numbers may not add up to total due to rounding; \*print only; \*\*excludes off-air radio & digital*

*Source: eMarketer, Aug 2013*