GENDER DIFFERENCES IN APPAREL CONSUMER’S COLOR SELECTIONS

A thesis submitted in partial fulfillment of the requirements for the degree of Master of Science in Family and Consumer Sciences

By

Rebekah Lewis

May 2012
The thesis of Rebekah Lewis is approved:

_________________________________________  
Wei Cao, Ph.D.  Date

_________________________________________  
Anu Thakur, Ph.D  Date

_________________________________________  
Shirley Warren, MS  Date

_________________________________________  
Hira Cho, Ph.D., Chair  Date

California State University, Northridge
DEDICATION

This thesis is dedicated to my husband and to my beautiful family. Thank you for believing in me more than I believed in myself. Your presence was motivation and kept me going. Thank you for your incredible patience, encouragement, love, and support.
ACKNOWLEDGEMENT

Dr. Hira Cho, thank you for all of your guidance and support. Your commitment and patience encouraged me throughout this journey. I appreciate you challenging me; it truly motivated me to work harder. The amount of time you were able to dedicate in assisting me allowed me to meet all of my important deadlines. Thank you!

Dr. Cao, thank you for your valuable time, advice, and commitment.

Dr. Thakur, thank you for your enthusiasm and creative advice, your advice truly encouraged me.

Professor Warren, thank you for your kind words and opening your door to me.
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signature</td>
<td>ii</td>
</tr>
<tr>
<td>Dedication</td>
<td>iii</td>
</tr>
<tr>
<td>Acknowledgement</td>
<td>iv</td>
</tr>
<tr>
<td>List of Tables</td>
<td>vi</td>
</tr>
<tr>
<td>List of Figures</td>
<td>vii</td>
</tr>
<tr>
<td>Abstract</td>
<td>viii</td>
</tr>
<tr>
<td>Chapter I Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Chapter II Review of Literature</td>
<td>7</td>
</tr>
<tr>
<td>Chapter III Methodology</td>
<td>27</td>
</tr>
<tr>
<td>Chapter IV Findings/Discussion</td>
<td>34</td>
</tr>
<tr>
<td>Chapter V Implications/Limitations</td>
<td>46</td>
</tr>
<tr>
<td>References</td>
<td>50</td>
</tr>
<tr>
<td>Appendix A Approval Planning Form</td>
<td>54</td>
</tr>
<tr>
<td>Appendix B Focus Group Flyer</td>
<td>55</td>
</tr>
<tr>
<td>Appendix C Focus Group Format</td>
<td>56</td>
</tr>
<tr>
<td>Appendix D Adult Consent Form</td>
<td>59</td>
</tr>
<tr>
<td>Appendix E Indication of No Influence/Impact</td>
<td>62</td>
</tr>
</tbody>
</table>
## LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 1</td>
<td>Influence of Personality on Color Selection</td>
<td>35</td>
</tr>
<tr>
<td>Table 2</td>
<td>Influence of Emotion on Color Selection</td>
<td>37</td>
</tr>
<tr>
<td>Table 3</td>
<td>Impact of Color Selection on Personal Image</td>
<td>41</td>
</tr>
<tr>
<td>Figure</td>
<td>Description</td>
<td>Page</td>
</tr>
<tr>
<td>--------</td>
<td>------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Figure 1</td>
<td>Research Model Development</td>
<td>24</td>
</tr>
</tbody>
</table>
ABSTRACT

GENERIC DIFFERENCES IN APPAREL CONSUMER’S COLOR SELECTIONS

By

Rebekah Lewis

Master of Science in Family and Consumer Sciences

The purpose of this study is to identify gender differences in apparel consumer’s color selections amongst personality and emotion and to examine if color selection impacts personal image differently according to gender. Literature relates the consumer’s apparel color selections to different factors such as gender, age, personality, time place and occasion, associations, emotion, and culture. However, we still do not have a clear explanation of whether or not there are gender differences in color selection according to these factors or if color selection impacts individuals differently according to their gender (Palmer & Schloss, 2009).

A research model was developed, proposing that personality and emotion influence color selection and color selection influence personal image. This research model was also used to determine if there were any gender differences in the proposed relationships between the variables (emotion, personality, and personal image). Six different hypotheses were developed based on the literature review and the research
model. Hypothesis 1 proposed that personality influences apparel consumer’s color selections. Hypothesis 2 suggests that emotion influences apparel consumer’s color selection and hypothesis 3 assumes that apparel consumer’s color selection impacts their personal image. Hypothesis 4 proposed that the influence of personality on color selection is different by gender. Hypothesis 5 suggested that the influence of emotion on color selection is different by gender and hypothesis 6 indicates that the influence of color selection on the impact of personal image is different by gender.

Two focus group interviews were conducted; one male focus group and one female. A qualitative approach was used for the study. Interviews were conducted to test the proposed hypotheses by asking participants questions pertaining to color selection. The results were in support of hypothesis 1-3. There was a significant influence of personality and emotion on color selection and that color selection impacted participants’ personal image. For hypothesis 4, the results did not indicate a significant difference amongst genders personalities influencing their color selections. However, the results did support hypothesis 5-6, indicating that there was a difference amongst genders emotions influencing their color selections and there was a gender difference in their color selections impacting their personal image. Women were more influenced by their emotions when selecting colors in apparel (H5) and there was a much greater level of impact from their color selections on their personal image (H6).

The academic significance of this study was to utilize an existing theory to build knowledge upon it. Application of the hunter-gatherer theory was appropriate for this study because prior studies have related the hunter-gatherer theory to gender differences within color selection. Additional qualitative research can explore the validity of the
Ecological Valence Theory (EVT) in relation to gender differences in color selection. The information gathered from this study can also be utilized by providing image consulting services to examine individual’s personality types and in order to come up with a color palette that is specifically provided to them according to their personality type. The ambiance inside of clothing stores should not be overlooked when results from this study indicate consumers are influenced by their emotion when selecting apparel colors. Furthermore, the interior design and music are both very important details that can be used to enhance sales. If the influence and impacts are there for male consumers, however, they are just not aware or conscious of them, and then marketers should strategize how to make male consumers more aware in order to increase sales.
CHAPTER I

INTRODUCTION

Color is arguably the most significant factor determining a person’s wardrobe decisions (Thompson, 1984). Apparel selection impacts how individuals are perceived and how they perceive themselves. For this reason, consumers can be extremely sensitive when making apparel color selections (Wilson et al. 2001). In fact, color is what typically grabs our attention first when shopping for clothing (Singh, 2006). Likewise, the first thing noticed when a person approaches is the color of their clothes (Wilson et al. 2001). According to the Institute of Color Research (ICR), people make up their minds within 90 seconds of their original interaction with an individual or product. Approximately 62-90 percent of this assessment is from color itself (Mantua, 2007; Singh, 2009; Wilson, Benson, Bruce, Hogg, Oulton, 2001). The brain recognizes color before shapes or words (Mantua, 2007). Therefore, it is vital that marketing managers understand the importance of color in marketing, because colors play a role in forming mind-set (Singh, 2006).

Selection of color can contribute to differentiating a product from its competitors and also influencing feelings and moods, either positively or negatively (Singh, 2009). Color forecasters predict and select color trends by taking into account various characteristics of different segments of the population. The International Color Authority (ICA), one of the leading color forecasters for the apparel and textile industry, develops annual color forecasts two years in advance of the retail season, so marketing managers can use the forecasted colors accordingly. Apparel manufacturers often produce their color selections based upon the forecasted colors for the current season. These color predictions are more an art than a science. However, fashion forecasters have strong
authority on the up-and-coming color assortment of products (Singh, 2006; Wilson et al. 2001). However, not all consumers want to have dictated what colors they should wear (Thompson, 1984). The apparel industry develops color trends in each season, but some consumers may not find the colors they are looking for within a particular season. The availability of color range in a particular season is often what restricts the consumers color choices (Wilson et al. 2001).

Singh (2006) stated that colors are controversial according to the consumer’s preferences. The consumers’ responses and preferences to colors can be determined based on sociological and psychological factors such as gender, age, and culture (Singh, 2006; Wilson et al. 2001). Therefore, it is critical that color forecasters are globally aware and consistently absorbing the world around them (Benson et al. 1999). Marketing managers should also be conscious of the perceived meanings of colors and their interpretation in a particular geographic area. In addition, managers, who promote the country-of-origin of their product, may profit by using the color association of particulars for specific countries. For example, red and purple are used extensively for marketing products in China and France due to the significant cultural value attached to theses colors (Singh, 2006).

Throughout time, people change preferences for colors (Singh, 2006). Fashion and change are synonymous; each season color palettes must be changed for fashion to continue evolving. Consumers’ eyes need the refreshing change that fashion has to offer. This change gives consumers the opportunity to wear new color that may not have been offered in the previous season (Wilson et al. 2001).

The importance of marketers being aware of the consumers color preferences
cannot be underestimated. With this awareness, they make progress in tailoring their product line more specifically to the consumers’ wants. Lacking the proper awareness can be catastrophic, resulting in a significant loss of sales and revenue (Benson et al. 1999; Trent, 1993). Therefore, research relating to choice of colors should be conducted and concluded before the launch of any product, as the wrong color choice can have a negative influence on the image of the product and the productivity of the company (Singh, 2006).

**Statement of Problem**

Researchers have suggested to marketers the importance of exploring the factors that influence the consumers’ color selections (Wilson et al. 2001). There is a sufficient amount of literature that link the consumers apparel color selections to related factors such as age, personality, time, place, occasion, experience, emotion, and culture. However, Lang and Rentfrow (2007) mentioned that past research regarding consumer color preference has been inconclusive. These researchers acknowledge the great importance of color but state little is known about why people like or dislike colors.

Furthermore, researchers have not given marketers enough information regarding gender differences considering different factors (Steckler & Cooper, 1980). The lack of information is due to the complicated nature of determining the effects of various factors (such as, emotional reactions, personality, and cultural influences) that can influence the individual’s response to color (Colt, 2003). Therefore, we still do not have a clear explanation about gender differences in color selection according to each of these factors or if color selection impacts individuals differently according to their gender (Palmer & Schloss, 2009). Literature also indicates that one in every twelve men are color blind or
suffer from some degree of color vision deficiency (Rigden, 1999), not indicating if the higher percentage of male color vision disorders is what results to gender differences in apparel color selection (Bimler, Kirkland, Jameson, 2003; Dubois, 1939; Ligon, 1932; Rich, 1977; Steckler, Cooper, 1980).

**Research Purpose**

The purpose of this project was to examine gender differences in apparel consumer’s color selections. Extensive literature review was conducted to identify sociological and psychological factors influencing apparel consumers’ color selection. A research model was developed and proposed that personality and emotion influence color selection and color selection impacts’ personal image. This research model was also used to determine if there were any gender differences in color selection according to the variables (emotion, personality, and personal image). The results of this study will provide fashion professionals with practical implications.

**Objectives**

The objectives of this project are to:

1. To determine if personality influences apparel consumer’s color selection.
2. To determine if emotion influences apparel consumer’s color selection.
3. To determine if the impact of color selection influences personal image.
4. To determine if personality influences apparel consumers’ color selections differently according to gender.
5. To determine if emotion influences apparel consumers’ color selections differently according to gender.
6. To determine if the impact of apparel consumers’ color selections on personal
image differs according to gender.

**Hypotheses**

Hypothesis 1: Personality influences apparel consumers color selection.

Hypothesis 2: Emotion influences apparel consumers color selection.

Hypothesis 3: Apparel consumers color selection impacts their personal image.

Hypothesis 4: The influence of personality on color selection is different by gender.

Hypothesis 5: The influence of emotion on color selection is different by gender.

Hypothesis 6: The impact of color selection on personal image is different by gender.

**Definitions**

1. Color: “Light carried on wavelengths absorbed by the eyes that the brain converts into colors that we see” (Singh, 2006, p. 783).

2. Color Association: A connection or link that are made with an individual and color (Kopec, 2006).

3. Color Consultants: “Color consultants predict and set color trends by taking into account the idiosyncrasies of various segments of the population” (Singh, 2006, p. 786).

4. Color Forecasting: “The selection of ranges of colours that are deemed as those that will be wanted for a particular product/market at a particular time in the future” (Wilson, Benson, Bruce, Hogg, Oulton, 2001, p. 18).


7. Emotions: Feelings people endure from experience, mood, or relationships. (Palmer & Schloss, 2010).
8. Personal Image: A representation of how an individual perceives himself and/or how others perceive them externally (Hemphill, 1996; Wilson et al. 2001).

9. Personality: “Represents an interaction of the individual with the environment (for example, the stimuli that a person is aware of and responds to) and is a relatively stable framework for responding to situations in a practical way” (Kopec, 2006, p. 19)

**Limitations**

1. Participants of the focus groups were all students who major in Family and Consumer Sciences at the same University. This may cause a limitation of the results due to their similar backgrounds.

2. This study focused on apparel consumers’ intended color selection only. The actual purchasing behavior can be different from their intention of color selection.

3. This study focused on personality, emotion, and personal image and did not examine other influential variables on color selection such as occasion, culture, and association/experience.

4. This study just focused on qualitative research. A future researcher may need to support this study by conducting quantitative research.
CHAPTER II

REVIEW OF LITERATURE

This chapter begins with a discussion of the color predictions and selections within the fashion industry. This is followed by a discussion of the various demographic, sociological and psychological factors that influence consumer color preferences. This chapter concludes with an identification of the impact that the preferred color selections for apparel can have on the individual.

Color Predictions and Selections within the Fashion Industry

*International Color Authority (ICA)*

The International Color Authority (ICA) is a commercial organization that offers color forecasting globally for the apparel and textile industry. The ICA is the earliest color predictive service, launched in 1968. A panel of 30 of the world’s most experienced designers and colorists develops the predictions that are forecasted. The influences for their predictions can come from anywhere such as society, society’s mood, media trends, politics, or street culture. The panel of 30 members is intentionally selected form all around the world in order to capture global validity.

The panel produces color palettes for menswear, womens wear, and furnishing. The forecasts contain mood boards, palettes, styling tips, and swatches. Main colors, accent colors, images and collages are offered in order to highlight the feeling and atmosphere for the specific season. Subscribers to the ICA publications pay a fee in order to obtain the predictions. The ICA is highly respected within the apparel and textile industry.

*Color Consultancies*
Color consultancies are organizations that provide their clients with trend guides and color forecasts. The consultancies objectives are to interpret information that is previously offered by color forecasting publishers and then tailor that information into more applicable color stories for their client’s specific market area. Color consultancies are often used as the middleman; assisting manufacturers’ in house design teams in making better color selections. Their objectives in assisting manufacturers are to help enhance the perceived value of product and to ultimately help increase potential sales (Benson et al. 1999; Wilson et al. 2001).

**Color selections within the Fashion Industry**

*Textile Industry*

Color is known to dominate the textile industry. Several different color forecasting publications are available to textile companies. Together with other similar publications, the ICA helps assist the textile industry in making it easier for them to make proper color selections for each season. There are also several textile trade shows and seminars held annually that attract representatives from the textile industry. These trade shows and seminars offer detailed information regarding styling and color trends, providing a reliable source for each season’s range (Wilson et al. 2001).

*Manufacturers*

The color selections made by manufacturers are very significant. Their color selections entail more decision making than retailer’s consumers. The manufacturers must consider colors selections for yarns, fabrics, garments, and any other applied designs. Each one of these selections is crucial to the production of a successful end product that will attract retailers and, ultimately, consumers. Manufacturers are aware of
the importance of making the best color selections, so they often hire consultants or color forecasting publishers in order to assure that any initial in-house color selections were made correctly (Wilson et al. 2001).

Retail Industry

Retailers hire buyers who are responsible for the color assortment in their apparel selections for each season. Retail buyers are responsible for purchasing finished goods for resale to the consumer. Retail buyers must make the proper evaluations in order to select the proper vendor to purchase merchandise from. The selections buyers make pertain to evaluating selling history, merchandise fashionability, merchandise marketability, and merchandise quality (Wagner, Ettenson, Parrish, 1989).

The Consumer

The final link in color selection is the consumer. The consumer’s wants and needs are what drive the fashion industry: therefore, the consumer is the most important consideration. The importance of the consumer’s color preferences in color selection indicate the vital need to develop a formal strategy for understanding the consumer’s actual wants, rather than basing decisions on prediction alone. The power of the consumer increases the more they are able to voice their specific color preferences (Benson et al. 1999; Wilson et al. 2001).

Consumer Color Preferences by Demographics

Color and Gender

Color vision is often different according to gender. In fact, one in every twelve men suffers from either color blindness or a color vision deficiency (Rigden, 1999). Studies have also proven that women are more proficient with color vocabulary than
males. However, the studies are not conclusive as to whether the higher number of males with color vision disorders is what result in females having a higher color vocabulary (Bimler, Kirkland, Jameson, 2003; Dubois, 1939; Ligon, 1932; Rich, 1977; Steckler, Cooper, 1980).

Color preference is different according to gender (Singh, 2006). The desire to conform to society’s standards often leads individuals to make color selections based upon gender associations. Differences in color preference stem from the differences in the way people perceive color based on their associations and experiences with gender (Manav, 2006). The Hunter-Gatherer Theory (Hulbert & Ling, 2007) proposes that females form a preference for warmer colors because their traditional duties and tasks involved gathering red and purple berries, yellow fruits, and reddish edible leaves. While men, on the other hand, prefer cool colors because their work involved being in an outdoor environment surrounded by the blue skies, the greenery, and the darker cool colored animals being hunted (Hulbert & Ling, 2007; He et al., 2011). In addition, children interviewed in a Boyatzis and Varghese (1994) study demonstrated a strong tendency to make color selection based upon their gender associations and experiences. For example, one girl mentioned pink making her happy because she had pink bedding and a lot of pink attire. Another girl stated that brown made her sad because “Girls don’t wear brown”. Boys liked the color black because they associated it with their karate uniforms. These cases reveal that child color associations can arise from a single concrete experience with a color. In the US, pink is considered a feminine color associated with females while blue is masculine and associated with males (Grossman & Wisenblit, 1999). This type of color-gender association may stem from the habit of dressing baby
Another common difference in the color selections of males and females has been observed in children five to six and a half years old. Girls were found to have a more positive response to bright colors than boys, while the boys were found to have a more positive response to dark colors than the girls. This gender-based inclination towards bright versus dark colors is most likely due to the distinction of bright and dark as a means of marking gender-appropriate materials and images. For example, items such as toys, home accessories, lunch boxes, and sports objects all come in different colors that influence children’s perception. Other studies show that both male and female children tend to associate dark colors with negative experiences. For instance, black made children of both genders think of fighting and death. However, overall, boys had a more positive association with fighting than the girls (Boyatzis & Varghese, 1994).

Although color preferences can be considered a deeply engrained social construct, marketers have been able to make new color associations as a sales strategy. For instance, in 1994 sales of pink trucks increased due to male buyers. Marketers were able to associate pink with speed and excitement rather than girlishness or femininity. With effective marketing strategies, even pink can become a popular color selected by men. The cultural norm that explains how color is associated with masculinity or femininity can be altered through intentional conditioning (Grossman & Wisenblit, 1999).

*Color and age*

At a very young age children begin to form different feelings and preferences for colors (Boyatzis and Varghese, 1994). The preferences in these children (5-6 ½ years old) are fairly global and typically simplistic. These color preferences are formed from
different associations they have had with various colors. Children in the Boyatzis and Varghese (1994) study mentioned that their preferences towards colors were related to specific associations and experiences they had with those colors. Therefore, the emotional responses that lead to preferences and selections are a reflection of each individual’s personal experiences with each color. Overall, these children had a positive response toward colors. Both the Hemphill (1996) and the Boyatzis and Varghese’s (1994) study have shown that children and adults respond positively toward colors, with adult’s positive response at 49% and children at 69%.

As people get older, their color associations become more elaborate. Studies have shown that the sophistication of feeling toward color increases as individuals encounter more social experiences with age (Boyatzis and Varghese’s, 1994; Manav 2006; Terwogt et al 1995). In Manav’s (2006) study, people aged 63 and older actually preferred black, as opposed to brighter colors that are often preferred by younger individuals. Likewise, after interviewing older women between ages 70 and 90 years old, Clarke (2009) found that older women felt bright colors were “too young” and inappropriate for them. The study also found that older women are more careful in their color selection. In addition, Clarke (2009) suggested that the majority of older women deliberately avoided bright colors because they felt that the colors were inappropriate at their age. They expressed that they gravitated toward more subtle soft-spoken colors such as navy, beige, and soft pastels. Very few of the women felt bright colors were appropriate or suitable for them at their age since they did not like attracting attention by wearing the bright colors.

The psychological symbolism of color becomes increasingly relevant as people grow older. According to Pett and Wilson (1996), as young people mature they become
more familiar with color temperature, associating colors according to their temperature. For instance, eighteen year old subjects made the association between the color red and hot, yellow and warm, green and cool, and lastly blue and cold. Twelve year olds associated only red with hot, while six year olds made their associations by chance.

**Consumer Color Preferences by Sociological and Psychological differences**

*Color and personality*

Personality characteristics are an influential factor in color preferences (Eysenck, 1941; Wilson et al. 2001). Scholars have shown that color preference displays the irrational unconscious trait of one’s personality (He et al, 2011; Rorschach, 1951). However, Stern (1955) later proposed that both unconscious and conscious personality traits could influence one’s preferences. Luscher (1971) argued that those with similar color preferences should hold similar personality characteristics. Eysenck (1981) also indicated that introverts might prefer cooler calm colors such as blue to reduce their higher level of internal arousal, whereas extraverts may prefer more warm and exciting colors like red to increase their low level of internal arousal. Stern (1955) also proposed that introverts resort to more calm colors such as blue and green while extroverts would prefer arousing colors such as yellow and red (Eysenck, 1981 & Luscher & Scott, 1969).

In a study using the Dewey Color System Test, Lange and Rentfrow (2007) provided valuable information about the relationship between color preference and personality. The major task of the Dewey Color System Test requires subjects to organize 15 colors that they are given, according to their preferences. Lange and Rentfrow (2007) also used The Sixteen Personality Factor Questionnaire (16PF), which is a 185-item instrument known to comprise 16 different personality primary factor scales, originally
identified by Raymond Cattell (1970). This study is a questionnaire that involves 16 different factors, and is actually combined with the use of the Dewey Color System Test for the proper results. It was found that respondents’ color preferences provided powerful indicators of their personalities, as these findings reinforce the conception that color preferences as assessed by the Dewey Color System Test are compelling indicators of personality.

*Color and T.P.O (Time, place, and occasion)*

Experts have found that people often wear colors that relate to time, place, and occasion, as they associate certain colors with various traditions and cultural norms. Grossman and Wisenblit (1999) proposed that color preferences stem from associations that have been made. Mantua (2007) mentions colors selected for TPO are selected as a result of tradition, or according to specific standards that are internationally known. Likewise, Scherbaum and Shepherd (1987) mentioned that there are color selection standards according to more specific TPO, such as professional attire.

The symbolism of colors often dictate the appropriate time, place, and occasion (TPO) they should be worn (Kaya & Epp, 2004). For instance, bankers often wear dark grey suits because they want to be viewed as serious and grey is perceived as just that. If they chose to select bright colors to wear professionally to work they would be perceived as frivolous, jeopardizing their business. Colors tend to symbolize values (Wilson et al. 2001). For apparel, darker colors such as grey, blue, and black are desirable for most career attire and formal occasions (Scherbaum & Shepher, 1987; Grossman & Wisenblit, 1999; Mantua, 2007), because they have professional symbolism. Dark colors symbolize power and authority (Damhorst & Reed, 1986) whereas lighter colors are more
playful and fun, and thus not as suitable for most professional settings (Thompson, 1984). Cool and dull colors are great for more reserved and conservative environments, such as business, ceremonies, and quiet occasions (Thompson, 1984). Black was noted as the traditional color for mourning, commonly worn to funerals in the US (Mantua, 2007; Grossman & Wisenblit, 1999).

Rasband (1996) suggested that informal casual wear is worn in warmer hues such as melon, yellow, coral, and salmon, which can be great when worn in a more casual business setting. These warm and bright colors have friendly and inviting tones, and can deliver a more personal touch. They are great choices for occasions where people would like to be noticed, such as parties, recreational activities, and other social gatherings (Thompson, 1984). Trinkaus (1991) stated that color choice could change according to season. For example, dark colors are commonly worn during the wintertime.

A 1987 study by Scherbaum and Shepherd resulted in some interesting findings related to business attire and gender. The findings appear to contradict the traditional color choices for this TPO. Their research identified that women were more favored in nontraditional colored career suits (such as red). The traditional suit colors were not considered significant for women to maintain their authority, as is the case with males. Even though darker colored suits are the norm for business attire, women may be given more flexibility due to the fact that darker colors are also associated with masculinity. The allowance for more color options for women gives them a chance to display femininity in the workplace (Forsythe, 1985; cited in Scherbaum & Shepherd, 1987).

*Color and association/experience*

Color is often used in making powerful product associations (Aslam, 2006). It is
used as a tool in marketing for the branding of a product or company. For example, more than 50 percent of Americans associated the color red with soft drinks in a past study. (Jacobs, et al., 1991; cited in Grossman and Wisenblit, 1999). Color has also been used in making products stand out from their competition. For instance, since red is commonly associated with soft drinks, Pepsi chose to use blue in order to stand out amongst their competitors (Heath, 1997; cited in Grossman and Wisenblit, 1999). Another competitive strategy was made in the past by different companies to eliminate color from their product, in order to have a competitive advantage. For instance, Palmolive created sensitive skin liquid washing detergent, Pepsi created Crystal Pepsi, and Coca-Cola created Tab clear. However, none of them were successful without the use of color (Stanton et al., 1994; cited in Aslam, 2006).

The perception and appropriateness of colors are learned through associations and experience. Color has very strong effects on our socialization. Holidays and festivals often have colors that are associated with them. To illustrate, blue is associated with Hanukkah and the New Year, red is associated with Christmas, orange is associated with Halloween and Thanksgiving, and pink and red are associated with Valentines Day (Cheskin & Masten Inc., 1987; Kaufman-Scarborough, 2001; cited in Aslam, 2006). Other general perceptions include blue-green which is associated with the sky, ocean, cool mints, and toothpaste, red-purple which are associated with red-wine, plums, and brides-maid dresses. Kaya and Epps (2004) found participants in their study associated yellow-red with autumn and Halloween, while it was also associated with happiness, because it reminded one participant of school buses and childhood.

Since the meaning of colors can be altered, they are often used for branding a
product or company (Aslam, 2006). Marketers can create new color associations as an alternative strategy for purposes of consumer control. Researchers believe classic conditioning can be used in order to develop new associations in the consumer’s mind (Grossman & Wisenblit, 1999). Prior associations with a color are what often draw the consumer to that color. Therefore, it is suggested that when marketers make associations that condition the consumer to purchase a product, they should use very clear rather than subtle color statements. Using clear color statements will capture the consumer’s attention and alter their initial associations effectively (Grossman & Wisenblit, 1999).

One of the largest fiberglass manufacturers, Owens Corning, uses the color pink to represent their brand. They later began to incorporate the movie character Pink Panther to market their pink as hip, creating their own associations with the color. Creating a symbolic color for a company can bring long-term benefits for the company’s success (Grossman & Wisenblit, 1999).

**Color and emotion/mood**

The connection between color and emotion relates closely to color preference. More specifically, colors of preference are tied to whether the color evokes positive or negative emotional response (Kaya & Epps, 2004). Emotional responses to colors are feelings that arise when viewing colors. Viewing colors can elicit memories, fantasies, or wishful thoughts. Roscharch (1951) regarded emotion as a primary reason for individual’s color selections. For instance, he proposed that a person who is emotionally depressed and feeling isolated would typically avoid colors as a whole. On the other hand, an individual who is more impulsive would have an uncontrollable gravitation toward colors.
Boyatzis and Varaghese (1994) found that children were more likely to select bright colors to use in their drawings after they were shown pictures displaying happy scenes. Whereas, when the children were shown unhappy scenes they were more likely to select brown, black, and red to use in their illustrations. Similarly, Hemphill (1996) found that adults have more positive emotional responses toward bright colors as opposed to darker colors. Kaya and Epps (2004) found that college students had the most positive emotional responses toward the five principle colors (red, yellow, green, blue, purple), a less positive response to intermediate colors (yellow-red, green-yellow, blue-green, purple-blue, and red-purple) and the least positive response to achromatic colors (white, gray, and black). Consistent with the investigations of previous researchers, they also found that prior experiences and knowledge of colors influenced these college students color preferences.

Color and culture

Once Kommonen (2011) discovered color meanings vary globally, he coined the phrase “Colour Culture”, to refer to as a set of meanings invested in color by a culture. Color meanings that may appear apparent to one culture may be very different in another (Mantua, 2007). There are different meanings, associations, and experiences with color amongst cultures (Grossman & Wisenblit, 1999). Some color associations are similar among consumers globally, while others are very different. For instance, green is often associated with vegetable products globally. It makes intuitive sense that consumers would make the green association, given that vegetables are commonly green. There is less agreement on products like cigarettes and soap as these items aren’t typically associated with one specific color (Grossman & Wisenblit, 1999).
Aesthetic expressions vary globally, as colors symbolize different meanings and have different visual appeal in different cultures. For example, white symbolizes purity and happiness in Australia, New Zealand, and the US but mourning and death in East Asia. Blue is America’s corporate color, representing high quality, trustworthiness, and dependability. Japan, Korea, and China also associate these positive qualities with the color blue, yet in East Asia, blue is perceived as cold and evil. In South-East Asia light blue symbolizes mourning and death. When Pepsi-Cola changed their vending equipment and coolers from a darker blue to a lighter ice blue, they lost significant profit, and their competitor Coca Cola financially benefited from this (Wilson et al. 2001). Sweden associates blue with coldness but in the Netherlands blue stands for warmth and femininity, while the same color represents masculinity in the US and Sweden. Blue symbolizes death in Iran and purity in India. These examples show how great differences are in the way color is perceived globally (Aslam, 2006). Fully understanding the different cultural meanings of color is extremely important in order to make efficient business decisions (Mantua, 2007).

**Impact of Color Selection for Apparel Products**

According to the review of literature, color selection in apparel can make a huge impact. These selections can impact the confidence of an individual, one’s personal image, and the mood or emotion of an individual. Therefore the clothing colors choices often significantly affect a person’s level of confidence, comfort, personal image, and overall sense of well being. Here are some ways that color selections make an impact.

**Confidence**

Colors can be worn in order to exalt the ego and enhance confidence (Wilson et
al. 2001). Previous studies have suggested that people have emotional responses toward color. Some of these emotional responses can create more confidence and stability, while others create less confidence and more anxiety. For example, Spielberger, Gorsuch, and Lushene’s (1970) state-anxiety study indicated that warm colors such as yellow and red are associated with higher levels of anxiety than cooler colors such as blue and green. Anxiety involves discomfort and high levels of arousal while the cooler more relaxing colors were associated with comfort and security (Valdez & Mehrabian, 1994). In another color study, researchers found that red actually enhanced the performance on more detail-oriented tasks, while blue improved the results of creative tasks (Elkan, 2009).

**Personal Image**

Colors play a huge role in creating or altering self-image and perceived image. People select clothing colors according to how they see themselves and how they hope to be perceived (Hemphill, 1996; Wilson et al. 2001). In Elkans (2009) study, men were shown a set of photographs of women wearing red or green, and another set of photographs of women wearing red or blue. The men found women in red more attractive, stating that they would be more likely to ask the women wearing red out on a date (Elkan, 2009). Another study involved male subjects rating the qualifications of female job applicants. The male subjects had a more positive visual perception of the females who wore darker jackets, rating them as more competent and powerful than the subjects who wore lighter jackets (Valdez & Mehrabian, 1994).

**Emotion**

Colors stir up specific emotional associations in people. Emotional responses or “Color-emotions” are feelings people experience when viewing specific colors (Palmer &
Schloss, 2010). For instance, Stone (2001) found that people’s moods were more positive when working in a blue carrel compared to the people working in a red carrel (Lange & Rentfrow, 2007). Boyatzis and Wisenblit (1994) found that children’s moods were impacted by color. For example, one child mentioned that the color yellow made her feel bright and happy. Other children stated that gray made them feel sleepy. Although there are some cases when colors seem to cause no emotional reactions the majority of consumers are known to have emotional responses to color. Therefore marketers utilize this as a valuable tool. Marketers should carefully select colors that fit their image strategy, which is to say they should use color to make emotional connections with the consumer (Madden, Hewett, & Roth, 2000).

Researchers have found that there are some common emotional responses to specific colors. For example, red is typically associated with aggression, high energy, arousal, passion, and expressiveness. The use of black is commonly associated with more negative feelings, dark thoughts, threats, and fear. Colors can be used to heighten positive mood, but they also can counteract mood (Thompson, 1984). As a result, therapists have used some of the more common responses to color as a means to conduct business (Lev-Wiesel & Daphna, 2000).

Manav’s (2006) findings indicate that color responses rely on the individual’s prior experience and knowledge. Children subjects also indicate that their emotional responses to color have to do with previous experience and knowledge of that specific color. For instance, one girl mentioned that pink made her happy. She also had some rather comforting positive experiences with the color pink. She mentioned her bedding was all pink and that she had a lot of pink dresses at home. While another child
mentioned that yellow made her sad because her mother told her yellow didn’t look good on her. These are all emotional responses these children had to previous experiences (Boyatzis & Reenu, 1994). When testing color-emotional responses on adults, Hemphill (1996) confirmed many of the same results as Boyatzis and Varghese (1994). However, he found that emotional responses to color increase and become more complex with age. With increase in age, experiences and knowledge also increase, resulting in complexity of emotional response to color.

**Review of Hunter-Gatherer Theory**

Previous literature has related the hunter-gatherer theory to the color selection differences amongst genders. The hunter-gatherer theory of human spatial differences introduced by Silverman and Eals (1992) proposed that the gender differences in spatial abilities are based upon the survival duties of males (hunters) and females (gatherers) facing different adaptive issues (Eals & Silverman, 1994; Silverman, Choi, Mackem, Fisher, Moro, Olshansky, 2000; Silverman, Choi, Peters, 2007). Silverman and Eals (1992) theory was found the most accurately explained in regards to qualitatively different abilities between genders as opposed to quantitatively different skill levels (Silverman, Choi, Peters, 2007). Several studies have focused on how this theory may hold true. The Hunter-Gatherer theory was tested in relation to differences in gender color preference because it proposes that females form a preference for warmer colors because their traditional duties and tasks involved gathering red and purple berries, yellow fruits, and reddish edible leaves. While men on the other hand, prefer cool colors because their work involved being in an outdoor environment surrounded by the blue skies, the greenery, and the darker cool colored animals being hunted. As gatherers,
women had to be more alert and aware of color than male hunters. When gathering foods, awareness of color could mean life or death. When gathering foods to eat awareness of color was often the determining factor of what was edible versus what was poison. This obligation of discernment is believed to have given women greater certainty and stability in color preference (Hurlbert & Ling, 2007). In this way, The Hunter-Gatherer Theory accounts for the difference in color preference that developed between the genders (He, Zhang, Zhu, Xu, Yu, Chen, Liu, Wang, 2011).

In He’s et al (2011) study, their purpose was to obtain a clearer picture of the gender differences in color preference. They discovered male participants preferred blue and green significantly more than the female participants. The females preferred “reddish” colors such as purple and pink more than males. These results are compatible with the Hunter-Gatherer theory.

Research Model Development

The structure of the research model was developed from the review of literature. The model Figure 1 presents two factors of influence on an individual’s color selection: personality and emotion. According to Kopec (2006), personality signifies the interaction a person has with the environment, and is a relatively stable framework for responding to situations in a sensible manner. Emotion refers to feelings people experience from their surroundings (Palmer & Schloss, 2010). Color selection in this model is limited to the choice of color for apparel (Wilson et al. 2001). Next, the model shows that color selection influences personal image. Personal image was given less attention by the previous researchers mentioned in the literature review. Personal image is a representation of how an individual perceives himself and/or how others perceive them.
externally (Hemphill, 1996; Wilson et al. 2001). Additionally, the research model displays gender, to determine if there are any differences amongst each variable.

**Figure 1. Research Model Development**

**Hypotheses**

The hypotheses were developed based on the literature review. Previous research indicates that personality is a factor that influences the consumers’ color selection (Colt, 2003; Eysenck, 1941; Wilson et al. 2001). Marzolf and Kirchner (1973) concluded that color selection is related to personality. Personality traits such as introversion and extroversion have a significant relationship to color preference (Eysenck, 1981; Luscher, 1971; Luscher & Scott, 1969; Stern; 1955). Extroverts would desire warm and arousing
colors such as yellow and red to boost their internal energy, while introverts would prefer calm colors such as blue and green to reduce or maintain their lower level of energy (Eysenck, 1981 & Luscher & Scott, 1969). Lang and Rentfrow (2007) also found that individuals provide significant information regarding their personalities according to their color selections. Therefore we propose the first hypothesis.

Hypothesis 1: Personality influences apparel consumers color selection.

Roscharch (1951) proposed that a person who is emotionally unhappy and feeling secluded would generally stay away from color as a whole. In addition, a person who is more spontaneous and outgoing would often gravitate toward colors compared with the individuals who are emotionally unhappy. Boyatzis and Varaghese (1994) discovered that when children were shown pictures displaying happy scenes they were more likely to choose bright colors to use afterward in their own drawings. Whereas, when children were shown unhappy scenes, they were more likely to select brown, black, and red to use in their drawings. Therefore the second hypothesis is:

Hypothesis 2: Emotion influences apparel consumers color selection.

Colors play a vast role in creating or changing personal image and perceived image. Individuals select their colors to wear according to how they view themselves and how they wish to be perceived (Hemphill, 1996; Wilson et al. 2001). This leads us to hypothesis three:

Hypothesis 3: Apparel consumers color selection impacts their personal image.

The preference of color varies by gender (Singh, 2006). The urge to fit into society’s standards frequently leads people to make color selections based upon gender relations. Differences in color preference branch from the differences of how people view color,
based on their own experiences and associations with gender (Manav, 2006).

More women are extroverts compared to men. Men are on the other hand more commonly introverts. This leads us to hypothesis 4; the influence of personality on color selection is different according to gender. Women are more emotional than men, resulting in them having a more advanced and intricate color selection than males. Therefore, the fifth hypothesis is; the influence of emotion on color selection is different by gender. Women are known to be more concerned with their personal image than males. Also, society has higher expectation toward females’ personal image and much less toward that of males. Therefore, we propose hypothesis 6; the influence of color selection on the impact of personal image is different by gender.
CHAPTER III

METHODOLOGY

This chapter introduces the methods of the qualitative approach used for this study. The first part explains the significance of conducting a focus group interview for this particular study. The second part discusses the procedure of the focus group interview. The third part presents the sampling and the instrument. Lastly, data analysis is discussed.

Focus group study

The existing literature did not provide elaborate information that compares gender differences in apparel color selections according to factors such as gender, age, personality, TPO, association/experience, emotion/mood, and culture. Therefore, conducting a focus group interview was essential. The intent of the qualitative research was to gain an in-depth knowledge of the participants’ behavior, and their own understanding of their behavior on a face-to-face basis (Rossman & Rallis, 2003). The technique of focus group interviews come mostly from marketing research. The interaction and conversation amongst participants is the defining characteristic of a focus group interview. The goal of this focus group was to interview participants about their apparel color selection comparing male responses with female responses, examining gender based differences in the influence of personality and emotion, and in the impact of color choices upon personal image.

Procedure

Interview questions were developed along with a flyer (See Appendix A) to advertise the focus group that would be held on California State University Northridge’s
(CSUN) campus. The selection of candidates was based on a student recruitment conducted by the researcher. The researcher visited a number of classes in order to explain the project and secure participants. There were no deceptions pertaining to this study; subjects were told exactly what was being tested. Participants were required to be 18 years or older and enrolled at CSUN. The flyer that was handed out to students during class recruitments stated the purpose and importance of the focus group. Participants were given a consent and bill of rights form to review and sign verifying their consent. The format of the interview questions was developed as being the most constructive way of capturing the proper information from apparel consumers. More specifically, it was made in order to capture the influence sociological and psychological factors have on their color selections in apparel, then to unfold if color selection has a different impact amongst the genders.

The proposed seven-question focus group was a semi-structured interview. The semi-structure was designed to allow participants the opportunity to listen to one another, in order to help assist them to elaborate in more detail with the open flow of discussion (Rossman & Rallis, 2003). This style of interaction allows individuals to hear one another’s opinions in order to fully understand and communicate their own effectively. In addition, the flow of the semi-structure helped direct the moderator to add other prompt questions. The researcher was the moderator during each of the two focus groups. The moderator/researcher had an assistant helping her during each interview. The assistant helped the moderator with equipment set up (audio-recorders, notes, and nickname tags), refreshments, welcoming participants upon arrival, seating participants, taking thorough notes throughout the discussion, operating the audio-recorder, and a debrief with the
moderator. The focus group will go accordingly (See Appendix B):

1. Welcome: Subjects will be introduced to Moderators/Researcher and assistants. 1min.

2. Topic: Subjects will be introduced to the topic of the study, what the results will be used for, and why they were selected for the focus group. 1min

3. Guidelines: Subjects will be given detailed guidelines. 3min

4. Questions & Discussion: The questions and discussion will begin 50min

5. Debriefing: Wrap up and closing remarks/comments 5min

_sample_

A total of 11 participants were interviewed in a total of two focus groups. One focus group had a total of 5 male participants and the other had a total of 6 females. Each focus group interview was scheduled for approximately one hour long. Focus groups generally consist of seven to ten participants. In this focus group interview anything higher than 6 participants could have become too difficult to moderate within the hour time frame and anything under the number of participants selected may not have provided the researcher with enough data (Rossman & Rallis, 2003). The genders in these focus groups were interviewed separately in order to properly establish the differences between male and female responses without interfered thoughts/responses amongst the two genders.

_instruments_

The focus group interview consisted of seven main questions, with prompt to questions following some of the main questions when necessary. Questions 1-3 were developed from the literature review and to see if there were any new indications found or if the results supported the previous literature. Questions 4-7 were developed to
examine gender differences. The discussion began with question number one and the researcher moderates the rest of the questions and discussion accordingly. The focus group interview was approximately 60 minutes long.

Questions:

Personality->Color Selection (H1; H4)
1. Selecting only one, would you label yourself an introvert or an extrovert?
2. Do you feel like you gravitate towards warm or cool colors?
3. Do you feel that your personality is related to the colors that you gravitate toward most often?

Emotion->Color Selection (H2; H5)
4. If you are in a good mood will your color selected to wear reflect your feelings?
5. If you are in a bad mood do you usually wear clothing to match or counteract your feelings?

The influence of color selection on Personal-image (H3; H6)
6. When you select the right color(s) to wear how does it impact your personal image?
7. When you select the wrong color(s) to wear how does it impact your personal image?

This study involved no more than minimal risks. There were no known harms or discomforts associated with this study beyond those encountered in normal daily life. The interview was recorded via audio-recorder and notes were taken on paper. Both the notes and the audio-recorder were later transcribed onto computer. All instruments were stored and locked in a secure place and will be discarded after five years when the study is completed.

Data Analysis
Wolcott (1994) referred to immersion, organization, and interpretation, which were used as the foundation for data analysis for this study. Immersion is getting familiar with the data you collected, in other words, knowing your data. Organizing includes transcribing and sub-grouping data in order to get a clearer understanding. Last, interpretation is bringing meaning to all the data after organizing it properly (Wolcott, 1994).

Data from the collected responses was transcribed from an audio-recorder to the researchers’ computer after all of the focus group interviews were conducted. Then all the transcribed data was organized according to the proper hypothesis number it belonged to, always keeping male and female data separated. After the data was transcribed onto computer and organized according to hypothesis, the researcher sent a copy of the data to the research assistant. Then, the researcher and the research assistant began working separately on analyzing the transcribed data.

Each of the researchers started by placing participants’ responses into the following hypothesis categories: color selections influenced by personality (questions 1-3; H1), color selections influenced by emotion (questions 4-5; H2), and color selections impacting personal image (questions 6-7; H3). For each hypothesis, there were multiple questions asked in order to capture the results most accurately. Question 1 was used in order to capture the participant’s personality type (Q1). Question 2 (Q2) was used in order to capture their most frequent color selections. Then participants were asked directly if their personality influenced their color selection (Q3). Question 3 was used in order to capture content/statements used that were in positive support of hypothesis 1 and 4.
This process was then continued for questions 4 and 5, which were used to test hypotheses 2 and 5. The researchers examined whether the answers from question 4 regarding color selection while in a good mood (Q4) and answers from question 5 regarding color selection while in a bad mood (Q5) were in positive support of hypothesis 2. Content/statements were captured from both questions in order to determine if the data indicated that emotion influenced the participant’s apparel color selections. For questions 6 and 7, which were developed to examine hypothesis 3 and 6, the researchers examined how selecting the right color (Q6) to wear impacted the participant’s personal image and how selecting the wrong color (Q7) impacted their personal image. The content/statements were analyzed from both questions in order to determine if the data indicated that color selection impacted the participant’s personal image.

The researchers analyzed the contents of the statements provided by the interviewees by gender for hypothesis 1-3 and then compared the analyzed results from male and female groups for hypothesis 4-6. Each of the participants’ statements were listed and evaluated based on the degree of positive support they gave to the corresponding hypothesis. The level of influence indicated was either significant or mild. For example, a strong level of influence was determined by responses like, “of course”, “definitely”, “for sure”, or “absolutely”. A mild level of influence was determined from answers such as, “maybe”, “sometimes”, “a little”, or “kind of”. After the two researchers analyzed each proposed hypotheses, they compared their analyses with one another. They began with cross-referencing the female focus group tables that were made to analyze the data, then the male tables, and last, they compared the results they each gathered of the gender comparisons. During the researchers cross-referencing of data they found a few
inconsistencies. When inconsistencies were found both researches had to explain how they each came up with their results for the tables that were made. After explaining how they each established results the inconsistencies were discussed and resolved. The inconsistencies found were a result of error when referring to the participant’s statements. So in order to properly resolve each inconsistency both researchers reviewed the transcribed data from the interviews again in order to capture the accurate yet cohesive results to properly plug into their tables/findings. The comparison was done in order to discuss any inconsistencies, and to ultimately gather one cohesive analysis.
CHAPTER IV

FINDINGS/DISCUSSION

The purpose of this project was to examine gender differences in apparel consumers’ color selections. Extensive literature review was conducted to identify social and psychological factors influencing color selection. A research model was developed which proposed that personality and emotion influence color selection, and color selection impacts personal image. This research model was also used to determine if there were any gender differences in color selection according to the variables (emotion, personality, and personal image). The results of this study will have practical implications for fashion professionals.

Influence of Personality on Color Selection (H1)

For the first hypothesis, this study proposed that personality influences apparel consumers’ color selection. The data suggested that there is indeed an influence of personality on apparel color selection. Table 1 displays the data that was gathered from focus group question number 3, which was used to support hypothesis 1. The table displays the statements from both male and female participants that positively supported the hypothesis. The table also displays the influence level that was analyzed according to the statements/content gathered from their responses. For example, one participant used the word “slightly” in response to question 3. According to the participant’s response, this word indicates a mild level of influence. The term “definitely” was also used and displayed under statements in table 1; this word suggested a significant level of influence.
Table 1. *Influence of Personality on Color Selection*

<table>
<thead>
<tr>
<th>Gender</th>
<th>Statement</th>
<th>Influence Level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I would say yes, slightly</td>
<td>Mild</td>
</tr>
<tr>
<td></td>
<td>I think it alternates with me.</td>
<td>Mild</td>
</tr>
<tr>
<td>MALES</td>
<td>Well maybe a little bit but it alternates, it’s not just personality.</td>
<td>Mild</td>
</tr>
<tr>
<td></td>
<td>I say definitely, it has a lot to do with it</td>
<td>Significant</td>
</tr>
<tr>
<td></td>
<td>I say yes too. I flop back and forth</td>
<td>Significant</td>
</tr>
<tr>
<td></td>
<td>Mine do match up; I am more relaxing, and I gravitate towards cool colors</td>
<td>Significant</td>
</tr>
<tr>
<td>FEMALES</td>
<td>Mine is, yes</td>
<td>Significant</td>
</tr>
<tr>
<td></td>
<td>I think my personality gravitates more towards the warm colors instead of the cool ones.</td>
<td>Mild</td>
</tr>
<tr>
<td></td>
<td>I chose cool and my personality goes with warm colors</td>
<td>Significant</td>
</tr>
</tbody>
</table>

Note: The major question related to this table: Do you feel that your personality is related to the colors that you gravitate toward most often?

Prior research suggested that personality influences the consumers color selection (Colt, 2003; Eysenck, 1941; Wilson et al. 2001). Marzolf and Kirchner (1973) found that color selection is related to personality. Lang and Rentfrow (2007) also concluded that people provide significant information regarding their personalities according to their selection of color. Personality characteristics such as introversion and extroversion have an important relationship to color preference (Eysenck, 1981; Luscher, 1971; Luscher &
Scott, 1969; Stern, 1955). Extroverts would gravitate toward warm arousing colors such as yellow and red to boost their internal energy, while introverts would prefer calm colors such as blue and green to reduce or maintain their lower level of energy (Eysenck, 1981 & Luscher & Scott, 1969). Similar to the previous studies, the results of this study indicate a connection between personality and color selection. Question 1 and 2 were asked during the focus group to identify the participants’ personality types and their preference of color to select within apparel. These two questions were used to gather data but not in order to determine the support of hypothesis 1. Several male and female respondents that identified themselves as being an “introvert”, later said that they preferred “cool” colors. Likewise, many of the male and female respondents that labeled themselves “extrovert” later said that they preferred “warm” colors. We found statements that were in support of the previous findings from researchers regarding personality and color selection and we also found differences in our results as well.

Influence of Personality on Color Selection by Gender (H4)

Hypothesis 4 proposed that the influence of personality on color selection is different according to gender. In table 1, when comparing the responses gathered from question number 3, there was no significant difference between male and female. The results did not support the significant difference amongst genders in terms of the influence of personality on color selection. Overall, both male and female participants selected color according to their personality types. However, personality type wasn’t always related to color selection, in any case of gender.

Prior research indicated that the preference of color could differ by gender (Singh, 2006). The urge to fit into society’s standards often causes people to make color
selections based on gender relations. Color preferences stem from the differences in the way individuals view color, based on their personal experiences and associations with gender (Manav, 2006). Women are more commonly extroverts while men are more often introverts (He et al. 2011). This was not found in the results of this study. Personality type wasn’t always related to color selection for both male and females, in any case of gender.

**Influence of Emotion on Color Selection (H2)**

Hypothesis 2 proposed that emotion influences apparel consumers’ color selection. Table 2 displays the results from male and female participants from questions 4 and 5, which were in positive support of hypothesis 2. Then it shows the influence level that was determined according to the information gathered from their responses. The first statement from a male respondent includes the word “sometimes”, which indicates a mild level of influence. The next statement includes the terms, “I think”, “sometimes”, and “unconscious”, which further indicates a mild level of influence.

**Table 2. Influence of Emotion on Color Selection**

<table>
<thead>
<tr>
<th>Gender</th>
<th>Statement</th>
<th>Influence Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>MALES</td>
<td>I think sometimes I will</td>
<td>Mild</td>
</tr>
<tr>
<td></td>
<td>I think sometimes its just an unconscious decision</td>
<td>Mild</td>
</tr>
<tr>
<td></td>
<td>Like I guess, if I’m like excited to go somewhere I would probably wear something bright like red or something like that just because I’m in a good mood</td>
<td>Mild</td>
</tr>
<tr>
<td></td>
<td>I feel like sometimes I wear color because it makes me feel good</td>
<td>Mild</td>
</tr>
<tr>
<td></td>
<td>I think subconsciously</td>
<td>Mild</td>
</tr>
</tbody>
</table>
You know you got me to brainstorm and I begin to see that colors and how you feel about yourself are related. They are definitely related.

<table>
<thead>
<tr>
<th>FEMALES</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, I tend to pick clothes according to my mood, matching how I am feeling.</td>
<td>Significant</td>
</tr>
<tr>
<td>I feel like a lot of the times when I am in a bad mood I try to pick colors that are happy and cheerful just so that I can counteract with my mood. Because I don’t want to be in a bad mood all day.</td>
<td>Significant</td>
</tr>
<tr>
<td>I mostly match with how I feel. So if I feel sad I kind of wear like blue color, kind of like gray and neutral. Yes, I think I match what I wear when I am not in a good mood like blacks.</td>
<td>Significant</td>
</tr>
<tr>
<td>I would say counteract, sometimes I get sad over guys and I want to look good you know, I want to go out but I am heart broken but I just want to look like I am fine. So I will wear color to pick me up.</td>
<td>Significant</td>
</tr>
</tbody>
</table>

Note: The major questions related to this table: If you are in a good mood will your color selected to wear reflect your feelings? If you are in a bad mood do you usually wear clothing to match or counteract your feelings?

As anticipated the data shows emotion influences color selection. Whether
respondents mentioned selecting color to match their mood or to counteract how they felt, they were clearly influenced by their emotion when making their selections. For example, when asked about emotion influencing color selection one participant responded, “If I am in a great mood or happy I tend to wear brighter colors than when I am not so happy”. So she pairs her color selection according to how she feels. Whatever colors symbolize “happy” are what she selects when she is feeling happy. Another participant mentioned that she selects colors to counteract her current mood. For example, “Okay, sometimes I get sad over guys and I want to look good you know, I want to go out but I am heart broken but I just want to look like I am fine.” Then she agreed that she would wear colors that will pick her mood up and give her a boost of energy. Boyatzis and Varaghese (1994) discovered that after children participants were shown pictures that displayed happy scenes, they most often selected bright colors to use afterward in their own drawings. However, children who were shown unhappy scenes in pictures were more likely to select brown, black, and red to use in their drawings. Previous studies indicate children have a direct relationship with color selection. However, adults were more complex with their selections.

*Influence of Emotion on Color Selection by Gender (H5)*

Hypothesis 5 proposed that the influence of emotion on color selection is different by gender. The research results clearly confirmed this hypothesis. Women were more significantly influenced by their emotion when selecting colors to wear than males. For example, one female participant mentioned, “I feel like a lot of times when I am in a bad mood I try to pick colors that are happy and cheerful just so that I can counteract my mood, because I don’t want to be in a bad mood all day.” One female stated, “I mostly
match with how I feel. So if I feel sad I kind of wear like blue color, kind of like gray and neutral.” Another female agreed and said, “Yes, I think I match what I wear when I am not in a good mood, like blacks.” Women participants were very clear as to how their emotion was related to their selection of color.

On the other hand, responses from men were unsure and vague (e.g., I think sometimes I will). Females are more emotional than males, resulting in the selection of a more intricate assortment of colors according to their mood than males. However, a further discussion indicated men also might be influenced by mood in their color selection. During the analysis, some male respondents mentioned their emotion might have unconscious influence on their color selections. One male participant said, “I think sometimes, it’s just an unconscious decision” when asked about emotion impacting his color selection within apparel. Another male participant agreed with the previous participant by saying, “I agree with him, I think sometimes, it’s just an unconscious decision.” One male participant denied any influence with his emotion with his color selections by initially stating, “I think in terms of gender, I think with females mood may set the choice for them but with males I don’t think they do that so often. I think females may think this looks cheerful or I want to wear this because as you know this really picks me up, but I don’t think males are prone to go in that direction. I think its situation with us.” However, later he stated, “You know you got me to brainstorming and I begin to see that colors and how you feel about yourself are related. They are definitely related.” Then he was asked if his emotion has been a subconscious influence on his color selection up until the focus group discussion. In return he replied, “Yes, I would have to agree with you, yea there is more to it then I have ever given thought to, but yeah it affects how you
feel about yourself.”

Furthermore, the study suggests that there is a connection between our findings and the hunter-gatherer theory. According to the theory, women had to be more emotionally connected in terms of their duties as gatherers. Awareness and connection with color could determine their family’s survival, given that a lot of the fruits gathered could be poisonous. This obligation of discernment is believed to have endowed women with greater certainty and stability in color preference (Hurlbert & Ling, 2007).

**Influence of Color Selection on Personal Image (H3)**

In its third hypothesis, this study proposed that apparel consumer’s color selection impacts their personal image, and the findings support this hypothesis. Table 3 displays the results of the participants’ replies to question 6 about what selecting the “right” color does to personal image, and their replies to question 7, which was about what selecting the “wrong” colors, does to personal image. The table lists the statements from participants that were in support of the hypothesis. Then it shows their influence level that was determined according to their responses.

**Table 3. Impact of Color Selection on Personal Image**

<table>
<thead>
<tr>
<th>Gender</th>
<th>Statement</th>
<th>Influence Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>MALES</td>
<td>If you were to walk into a business meeting and you are the only one wearing a bright suit I think it would affect you</td>
<td>Significant</td>
</tr>
<tr>
<td></td>
<td>I would probably only feel that way if I threw on like pink</td>
<td>Mild</td>
</tr>
<tr>
<td></td>
<td>I feel like the way that I feel people can perceive that so they can, it just ties all</td>
<td>Significant</td>
</tr>
</tbody>
</table>
together. If I feel confident I think that people can notice that and it counters into the way I act and I portray myself to others.

I agree with her I feel like a lot of the times I try to go with bold colors because that is just how I want people to see me really bold when it comes to like making a statement with my clothes or my personality.

I feel like people sometimes do view it as the right color, you know, they are always, especially girls they are always checking how you dress and everything. I think they look at colors.

I have experience with that, like I choose cool colors, which I never really wear because I really like the style and that color was in the season and then when I wear it I am just like ugh this is just not me and I never wear that shirt again even though I really like it, I just don’t wear it again.

Usually I just stay away from bright colors maybe because I don’t want to like stand out too much so I kind of stay away from them.

I feel like for me I feel like bright colors as far as yellow or maybe a lime green or maybe orange I don’t know what to do with those colors especially too much of them even on other people I have never like I don’t know if that looks right so stay far away from those colors but pretty much everything else you can find somewhere to put it but I don’t know about really bright colors.

---

**Note:** The major questions related to this table: When you select the right color(s) to wear how does it impact your personal image? When you select the wrong color(s) to wear how does it impact your personal image?

Previous literature indicated that colors play a significant role in creating or altering personal image and perceived image. Individuals select their colors to wear according to how they view themselves and how they wish to be perceived (Hemphill,
1996; Wilson et al. 2001). In this study, the right color selection is related to individual’s confidence and feelings, in turn, to the contribution or enhancement of a positive personal image.

Influence of Color Selection on Personal Image by Gender (H6)

Hypothesis 6 proposed that the impact of color selection on personal image is different according to gender. Our results confirm this hypothesis. The female participants’ statements were much more elaborate, indicating a higher level of influence than with males. For example, one female respondent stated, “Usually I just stay away from bright colors, maybe because I don’t want to like stand out too much so I kind of stay away from them.” Another female respondent said, “The way that I feel, people can perceive that, it just ties all together. If I feel confident I think that people can notice that and it counters into the way I act and I portray myself to others.” She elaborated on the fact that when she feels good then she looks good, or when she feels confident about the colors she is wearing, then she will be perceived as a confident person. Female participants were very clear as to how their color selections influenced their personal image. On the other hand, responses from men were more vague and less descriptive than females. For example, one male responded, “I would probably only feel that way if I threw on like pink,” and another male said, “If you were to walk into a business meeting and you are the only one wearing a bright suit I think it would affect you.” Men used hypothetical examples of color selection influencing personal image that they hadn’t necessarily experienced. On the other hand, women used examples of color selection influencing their personal image from personal experience.

Previous research indicates that women are typically more concerned with their
personal image than males. Females are known to have a more extensive interest in color variety within apparel, which results in a more extensive color palette offered every season in women’s fashion. This indicates women’s intention to use color to create her personal image (He et al. 2011). Society also has higher expectation toward females’ personal image and much less toward males (Bimler, Kirkland & Jameson, 2003; DuBois, 1939; Ligon, 1932; Steckler & Cooper, 1980).

Addisonal Findings

Several males mentioned that their selections were based more on the occasion and/or situation than on emotion/mood. For instance, “I think I dress according to the situation, if I’m going to a dinner or something of that nature of course I’m going to dress a little bit more conservative. I am not one to break the rules and dress loud and wild, and if it were a basketball game and everybody was going to be dressed in kind of a loose manner, my attitude towards dress would change in that situation. So for me it’s the situation that I am attending and going to that would dictate it.” Then another male participant responded to the previous participant saying, “I agree with him, its more or less the situation I am going into or the place I am going to be which kind of judges the colors I’m going to choose.”

It also appeared that the male participants were less aware of what influenced their color selection. However, later within the male focus group they were able to come to see how they were impacted or influenced more than they initially realized. For example, a male respondent said, “You know you got me to brainstorm and I begin to see that colors and how you feel about yourself are related. They are definitely related.” It was much later in the interview, after the emotion questions, when the participant
reflected and was able to see the influence emotion has on color selection. Another male stated, “I agree, it’s mostly subconscious. Talking about it now has made me realize more that the colors and what you are wearing affect your mood”.
CHAPTER V
IMPLICATIONS/LIMITATIONS

Academic Implications

The academic significance of this study was to utilize an existing theory to build knowledge upon it. Application of the hunter-gatherer theory was appropriate for this study because prior studies have related the hunter-gatherer theory to gender differences within color selection. The Hunter-Gatherer theory was introduced by Silverman and Eals (1992). They proposed that the gender differences in spatial abilities are based on the duties of males (hunters) and females (gatherers) facing dissimilar adaptive issues. Many studies have used this theory in different research context (Eals & Silverman, 1994; Silverman, Choi, Mackem, Fisher, Moro, Olshansky, 2000; Silverman, Choi, Peters, 2007). Utilizing the Hunter-Gatherer theory, researchers proposed the differences in gender color preference and the influence of environment. In accordance with the theory, the results of this study suggest that apparel consumers’ color selection is different by gender because of different influences of sociological and psychological factors. Results from this study indicate that females have a greater emotional influence behind their color selections than males.

Additional qualitative research can explore this topic based on the Ecological Valence Theory (EVT). The Ecological Valence Theory (EVT) was formulated in 2010 by Palmer and Schloss (Schloss, Poggesi, & Palmer 2011). According to the EVT, human color preferences are primarily adaptive. People prefer colors that are associated with objects they like and they tend to dislike colors that are associated with objects they don’t like. Therefore, people are more likely to survive and reproduce productively if they are
drawn to objects whose colors are pleasant to them and avoid objects whose colors are unattractive to them (Palmer & Schloss, 2010). Palmer and Schloss’ (2010) tested the EVT by trying to determine how well it can account for average preference across individuals for a wide range of colors. They found the average of an individual’s preference for a specific color could be predicted from its weighted affective valence estimate (WAVE). The WAVE is the average of the liking/disliking ratings of anything linked with that specific color, weighted by the similarity of the specific color to the color of each associate. Scholars may want to examine if the theory suggests that genders differ in color preference because they typically like different objects. For example, if women love flowers more than males, would this explain why they prefer the color pink? Conducting this type of study may help scholars understand the reason for the difference in gender color selections.

Managerial Implications

Marketing managers can make progress in tailoring their product line more specifically to the consumers’ wants with the results from this study. Lacking the proper awareness of consumer needs and wants can be detrimental, resulting in a significant loss of sales and revenue (Benson el al. 1999; Trent, 1993). Therefore, this type of information gained relating to choice of colors should be considered before the launch of any product, as the wrong color choice can have a negative influence on the image of the product and the productivity of the company (Singh, 2006).

First, this study suggests that apparel consumers’ tend to choose colors that relate to their personalities. This information can be utilized by providing image consulting services to examine individual personality types and in order to come up with a color
palette that is compatible with each personality. Next, the type of ambiance within apparel stores should not be overlooked; since the results of this study indicate consumers are influenced by their emotion when selecting apparel colors. Interior design and music are both very important details that can be used to enhance sales in retail stores, since these two variables can be used to alter the emotion or mood of the consumer when shopping (Mahnke & Mahnke, 1987).

Finally, gender differences are important to apparel marketers and color specialists, as the information can be used for further implications in creating color guide websites or color guidebooks that are better tailored for the apparel consumer and or fashion professionals. Men’s color options within apparel are typically much smaller and limited in comparison to women’s apparel color selections. The results from this study indicate that males are not aware but they are influenced by emotion and personality in their color selection. Women are more aware of emotion and personal image and this may explain why they shop more than males and tend to wear more color in apparel, rather than wearing black white and neutrals.

Limitations and Future Study

One of the limitations of this study is that the sample was recruited from one university. Future studies may consider conducting focus group interviews with participants in other universities. This would help to avoid the limitation of participant’s who have similar backgrounds. Another limitation of this study is the primary focus on apparel consumers’ intended color selection only. Future researchers may need to consider incorporating consumers’ actual purchasing behavior since this can be different from their intention of color selection. This study identified personality, emotion, and
personal image. However, it would also be useful to conduct a study that focuses on other variables that may influence color selection, such as culture, occasion, and association. Future researchers may conduct a quantitative approach such as a survey method to support the findings of this study.
REFERENCES


layering on perceptions of women in business. *Sex Roles, 16*, 391-399.


November 29, 2011

Rebekah Lewis
4455 Colbath Ave #306
Sherman Oaks, CA 91423

Re: “Apparel Consumer’s Color Selection Strategies: Male vs. Female” Research Protocol

Dear Ms. Lewis:

Enclosed for your records is a copy of the cover sheet of your approved Human Subjects Protocol Form. Please note that approval for this project will expire on 10/25/12. If your project will extend beyond this date, you must contact the Office of Research and Sponsored Projects at least one month prior to the expiration.

If you have any questions, call this office at 818/677-2901.

Sincerely,

Suzanne Blanding (Selken), Compliance Officer
On Behalf of
The Committee for the Protection of Human Subjects

enclosure
APPENDIX B

FOCUS GROUP
SPRING 2012

Project Title: Apparel Consumer’s Color Selection Strategies: Male vs. Female

Researcher Name: Rebekah Lewis
CSUN FCS:
Apparel Design and Merchandising Graduate Student
Email: RebekahL333@hotmail.com

When:

Tuesday February 28th:
8:20-9:30am-MALES ONLY
9:50-11:00am-FEMALES ONLY

Where: CSUN Sequoia Hall (SQ) Room 210

Purpose:
The purpose of this project is to identify gender differences in apparel consumer’s color selections amongst personality and emotion and to examine if the influence of color selection on the impact of personal image is different by gender. The result of this study may provide fashion professionals practical implications.

Contact: Rebekah Lewis via email (RebekahL333@hotmail.com) if you are interested in participating in this study.

Note: You must be a CSUN student and 18 years or older
Focus Group Format

Each participant will be greeted and asked to sign both a consent and bill of rights form. Participants may partake in refreshments that are provided at this time.

1. **Welcome**: Subjects will be introduced to Moderator/Researcher and assistant. 1min.

   Hello, Thank you all for coming and volunteering your time to participate in this study. I truly appreciate you coming. I am Rebekah and I will be the moderator of our group interview today. This is Ellen and she will be assisting me during the focus group.

2. **Topic**: Subjects will be introduced to the topic of the study, what the results will be used for, and why they were selected for the focus group. 1min

   The interview discussion is about color selection within apparel and how it pertains to your personality, emotion, and personal image. I am interviewing male and female groups separately to conclude whether or not there are gender differences amongst these variables in relation to apparel color selection.

   The information gathered from the interviews will be used to provide practical implications to apparel marketers regarding color selection. These gender differences are not only important to apparel marketers but should also be considered valuable to university fashion professors who incorporate color into their lectures. This information can also be used for further implications in creating color guide websites or color guidebooks for the apparel consumer and or fashion professionals.

3. **Guidelines**: Subjects will be given detailed guidelines. 3min

   The interview is being audio recorded today for my research, you all should have signed a consent form in regards to this, correct? Please keep in mind that you must speak up clearly so the recorder can pick up everything.

   Note: Each of you has a card at your chair that has your nickname that you will use on it. It is very important that you announce your nickname before each answer you will give today. This way I will know who each answer belongs to when transcribing data.

   As the moderator it is my job to ask the questions. I am also responsible in directing the discussion. Keep in mind we have an hour window. Therefore, I may have to
move us along to the next question if we are off track. Any questions before we begin?

4. **Questions & Discussion**: The questions and discussion will begin 50min

Questions:

**Personality->Color Selection (H1; H4)**

1. Selecting only one, would you label yourself an introvert or an extrovert?
   
   *Introvert: Process life from the inside out. Peaceful, slower to take action, more reserved.
   
   *Extrovert: Process life from the outside in. Creative, spontaneous, wear your heart on your sleeve.

2. Do you feel like you gravitate towards warm or cool colors?
   
   *Warm: Colors like yellow resembling the sun, orange resembling fire, and red.
   
   *Cool: Blue resembling the sky and water, purple resembling the mountains, and green resembling grass.

3. Do you feel that your personality is related to the colors that you gravitate toward most often?
   
   * For example, warm colors such as yellow, orange, and red are considered more arousing, and often reflect a lot of energy. While cool colors are known to be more calming and less arousing compared to warm colors.

**Emotion/Mood->Color Selection (H2; H5)**

4. If you are in a good mood will your color selected to wear reflect your good mood/feeling? Will your color selections pair/match with how you feel?

5. If you are in a bad mood do you usually wear clothing to match or counteract your feelings?
The Influence of Color Selection on Personal-Image (H3; H6)

6. When you select the right color(s) to wear how does it impact your personal image/appearance?

7. When you select the wrong color(s) to wear how does it impact your personal image/appearance?

5. Debriefing: Wrap up and closing remarks/comments 5min
APPENDIX D

California State University, Northridge
CONSENT TO ACT AS A HUMAN RESEARCH SUBJECT

Apparel Consumer’s Color Selection Strategies: Male vs. Female

You are being asked to participate in a research study. Participation in this study is completely voluntary. Please read the information below and ask questions about anything that you do not understand before deciding if you want to participate. A researcher listed below will be available to answer your questions.

RESEARCH TEAM
Researcher:
Rebekah Lewis
Family and Consumer Sciences
818 677-3051

Faculty Advisor:
Dr. Hira Cho
Family and Consumer Sciences
18111 Nordhoff St.
Northridge, CA 91330-8308
818 677-3440
hira.cho@csun.edu

PURPOSE OF STUDY
The purpose of this research study is to identify consumers color selection strategies in purchasing apparel.

SUBJECTS
Inclusion Requirements
You are eligible to participate in this study if you are at least 18 years of age or older and attend Cal State University Northridge.

Exclusion Requirements
You are not eligible to participate in this study if you are not enrolled at CSUN, are not at least 18 years of age, suffer from color blindness, do not speak English.

Time Commitment
This study will involve approximately 1 hour of your time.

PROCEDURES
The following procedures will occur: You will participate in a small 1 hour focus group interview about the factors in your color selections within apparel and what may cause these factors to be relevant in your selection patterns. Welcome, review of the topic, and guidelines=approx 5min
Discussion Interview: Will be approx 50min
Debriefing: Will be approx 5min

RISKS AND DISCOMFORTS This study involves no more than minimal risk. There are no known harms or discomforts associated with this study beyond those encountered in normal daily life.
BENEFITS

Subject Benefits
Students will benefit from extra credit in their course taken.

Benefits to Others or Society
The results of this study will provide practical implications to apparel marketers.

ALTERNATIVES TO PARTICIPATION
The only alternative to participation in this study is not to participate.

COMPENSATION, COSTS AND REIMBURSEMENT

Compensation for Participation
You will be offered extra credit for your participation in this project

Costs
There is no cost to you for participation in this study.

Reimbursement
There will not be any costs involved in this project. You will not be reimbursed for any out of pocket expenses, such as parking or transportation fees.

WITHDRAWAL OR TERMINATION FROM THE STUDY AND CONSEQUENCES

You are free to withdraw from this study at any time. If you decide to withdraw from this study you should notify the research team immediately. The research team may also end your participation in this study if you do not follow instructions, miss scheduled visits, or if your safety and welfare are at risk.

CONFIDENTIALITY

Subject Identifiable Data
- Data will be collected anonymously the subjects will be given and identified by anonymous names (i.e. animal nicknames or numbers)
- After five years the data via audio recorder will be destroyed, along with any notes taken in the data’s regards.

Data Storage
- We will use audio recorder and note taking on paper to record the interview. They will be transcribed and saved as an electronic file. The transcription will be only assessed by the personals that will be directly working on this project.
- Data will be collected anonymously; the subjects will be given and identified by anonymous names (i.e. animal nicknames or numbers)
- Both notes and audio recording will be stored and locked in a secure place and discarded after five years when the study is completed.

Data Access
The researchers and the researcher assistant will have access to your study records. Any information derived from this research project that personally identifies you will not be
voluntarily released or disclosed without your separate consent, except as specifically required by law. Publications and/or presentations that result from this study will not include identifiable information about you.

**Data Retention**
- The researchers intend to keep the research data for approximately _5_ years and then it will be destroyed.

**IF YOU HAVE QUESTIONS**
If you have any comments, concerns, or questions regarding the conduct of this research please contact the research team listed on the first page of this form.

If you are unable to reach a member of the research team listed on the first page of the form and have general questions, or you have concerns or complaints about the research study, research team, or questions about your rights as a research subject, please contact Research and Sponsored Projects, 18111 Nordhoff Street, California State University, Northridge, Northridge, CA 91330-8232, or phone 818-677-2901.

**VOLUNTARY PARTICIPATION STATEMENT**
You should not sign this form unless you have read it and been given a copy of it to keep. **Participation in this study is voluntary.** You may refuse to answer any question or discontinue your involvement at any time without penalty or loss of benefits to which you might otherwise be entitled. Your decision will not affect your future relationship with California State University, Northridge. Your signature below indicates that you have read the information in this consent form and have had a chance to ask any questions that you have about the study.

*I agree to participate in the study.*

____________________________________   __________________
Subject Signature   Date

______________________________________________   __________________
Printed Name of Subject   Date

_______________________________________________   __________________
Researcher Signature   Date

_______________________________________________   __________________
Printed Name of Researcher   Date
APPENDIX E

INDICATION OF NO INFLUENCE/IMPACT

Table 1. No Influence of Personality on Color Selection

<table>
<thead>
<tr>
<th>Gender</th>
<th>Statement</th>
<th>Influence Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>MALES</td>
<td>I would say probably not</td>
<td>NONE</td>
</tr>
<tr>
<td></td>
<td>No, Because as you described the more cooler colors my personality and characteristics is more geared towards the cool colors.</td>
<td>NONE</td>
</tr>
<tr>
<td>FEMALES</td>
<td>No, I guess it depends more on the style, like if it comes to clothes it would be the style not the color.</td>
<td>NONE</td>
</tr>
</tbody>
</table>

Note: The major question related to this table: Do you feel that your personality is related to the colors that you gravitate toward most often?

Table 2. No Influence of Emotion on Color Selection

<table>
<thead>
<tr>
<th>Gender</th>
<th>Statement</th>
<th>Influence Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>MALES</td>
<td>I think I dress according to the situation, Its more of the occasion with me</td>
<td>NONE</td>
</tr>
<tr>
<td></td>
<td>I think in terms of gender I think with females mood may set the choice for them but with males I don’t think they do that so often</td>
<td>NONE</td>
</tr>
<tr>
<td></td>
<td>No, because one of my favorite colors is like black and I like to wear black and grey. So not necessarily, I can be in a good mood and I just like to wear those colors</td>
<td>NONE</td>
</tr>
</tbody>
</table>
FEMALES  | I feel like it doesn’t, I will do the same colors any way. So it doesn’t matter how I feel.
         | I don’t think the colors goes with my mood its more of what I want to wear.
         | NONE

Note: The major questions related to this table: If you are in a good mood will your color selected to wear reflect your feelings? If you are in a bad mood do you usually wear clothing to match or counteract your feelings?

Table 3. No Impact of Color Selection on Personal Image

<table>
<thead>
<tr>
<th>Gender</th>
<th>Statement</th>
<th>Influence Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>MALES</td>
<td>I don’t give it much thought, I make a selection off of if its nice looking and that’s pretty much it.</td>
<td>NONE</td>
</tr>
<tr>
<td></td>
<td>I never do a deep analysis of color that way. Wow this is the right green I’m going to feel really good today when I put this on, yea I don’t have that kind of attitude.</td>
<td></td>
</tr>
<tr>
<td>FEMALES</td>
<td>I feel like for me I have not really felt like there is such thing as wrong colors because for me I like cool colors and I like warm colors</td>
<td>NONE</td>
</tr>
</tbody>
</table>

Note: The major questions related to this table: When you select the right color(s) to wear how does it impact your personal image? When you select the wrong color(s) to wear how does it impact your personal image?