

## **Perception and Meanings of Color among Netherlands College Students**

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### **Abstract**

*This study will examine the importance of color when making decisions about purchasing products; color choice for a variety of different products used on a daily basis; and meanings associated with ten different colors in the Netherlands. The author will carry out a review of literature, survey Netherlands College Students, analyze the collected data, and present the findings.*

**Keywords:** Marketing, Consumer Behavior, Importance of Color and Product Color Choice and Meanings of Color in Netherlands

### **1. Introduction**

Most consumers make a decision to buy within minutes of seeing a product. Color connects the consumer more quickly than any other identifying product characteristic. Color is an important tool for shaping consumers' feelings and responses (Clarke and Honeycutt, 2000). Color is also used to attract or draw a consumer's attention. Certain colors create a purchase intention and the desired atmosphere in retail stores (Bellizi et al. 1983 and Kerfoot, et al. 2003). According to the literature, marketers know that product color influences a consumer's decision to purchase a product by up to 62-90% (Singh, 2006 and Wagner, 1988). The color of a product increases brand recognition by 80% and can also differentiate a product and create positive or negative images about a product (Grossman and Wisenblit, 1999 and Singh, 2006). It is very important to explore meanings and perception of chosen colors in every target market before launching new products in global markets. Marketers should identify the right color for products in different countries and cultures (Aslam, 2006 and Jacobs, et al.1991).

### **2. Purpose of Study**

The purpose of this study is to analyze the importance of color when purchasing products, favorite color choices for nineteen (19) different products which are purchased on a regular basis by Netherlands College Students and the meanings ten (10) different colors for Netherlands College Students. Data was collected by a student at the university in Netherlands and the questionnaire was divided into four sections: The first section deals with how important color is for the respondent when making decisions about purchasing nineteen (19) different products. The second section is about favorite color choices for those products which are frequently purchased. The third section deals with the meanings of ten (10) different colors among Netherlands College Students. The last section covers demographic variables; such as age, gender, location and nationality.

### **3. Research Methodology**

Survey questionnaires were printed in English and 100 questionnaires were distributed by a Dutch student, who was a foreign student in my marketing class. All of the respondents sampled speak English. The response rate was 71% and the majority (97.2%) of respondents was between 17-27 years of age. More than half of the respondents (53.3%) were female and (46.5%) were male. Most of the respondents resided in urban areas (56.3%) and the rest of them lived in rural areas in the Netherlands. More than half of the respondents (53.5%) were in their third year at the university. Surveys were analyzed by using SPSS software

#### 4. Literature Review

Color affects our everyday life, is an important communication tool, a memorable visual element and carries key symbolic and associative information about the products we purchase (Garber, et al., 2000; Akcay and Sun, 2013). Many companies in the world hire color consultants to help identify the best color for their products. Color improves recognition and memory of, and increases attention paid to, a product. It is one of the most noticeable attributes when presenting a product (Singh, 2006; online, pcmag.com, 2002; Akcay and Sun, 2013). A product's color may play a significant role in consumer's purchasing decisions for many products, such as the clothes we wear, the handbags or backpacks we carry and the shoes we wear (Ogden et al., 2010; Akcay et al., 2011; Akcay and Sun, 2013). Product color has a strong influence in creating brand image, affecting the buyer's decision making process, and changing the mood of consumers. It can also contribute to differentiating a product and creating positive or negative images about consumer goods (Grossman and Wisenblit, 1999; Sing, 2006 and Akcay et al., 20012). Certain colors are preferred in different cultures and the meanings associated with a color might vary from country to country (Madden, et al., 2000; Sable and Akcay, 2010 and Akcay 2013). Promotion of same color products around the world may not be the best strategy because of the different meanings and perceptions of color in different cultures (Wagner, 1988; Madden, et al., 2000; Akcay, 2013). Although certain colors are preferred in different cultures, color choice and meanings are learned and can be changed over time (Wagner, 1988; Grossman and Wisenblits, 1999; Akcay, 2013). According to several studies in China red is an appealing and lucky color; in India it signifies purity. Blue is the most popular and safe color choice around the world (Akcay et al., 2011). The understanding of consumers color responses for various products has been very complicated because consumers have developed a wide range of color associations for various products (Ogden, et al., 2010; Akcay, et al., 2011). Many studies have shown that a consumer's color choice for products differs among genders, age, ethnic groups, geographic location and socio-economic factors (Boyatzis and Varghese, 1994; Silver, 1988, Paul, 2002; Krishna, 1972; Choungourian, 1968; Yang, 2001; Sable and Akcay, 2010). It is very important to understand consumer's color choices in different product categories and update or change colors regularly, especially for high risk purchases such as cars and furniture. Companies could create remarkably effective marketing communication messages and support the company's overall strategy with a well-planned color program (Gabo, 1996; Wagner, 1988; Clarke and Honeycutt, 2000).

#### 5. Research Findings

Following are the findings of the survey and a review of literature:

In the Netherlands, more than 50% of consumers surveyed think that color is a major consideration when making product purchase decisions. 45.1% believe that color is very important and 11.3% believe it is extremely important. 31% believe color is somewhat important, 9.9% believe it is not very important, and 1.4% believe it is not important at all (Please see detail in appendix; figure 1).

**Clothing:** Almost all consumers surveyed feel that color is an important consideration for clothing purchases. 59.2% rated it extremely important, 36.6% thought it was very important and 2.8% thought it was somewhat important. Favorite colors for clothing are black (45.1%), blue (16.9%), gray (9.9%), and brown (8.5%) and white (7%).

**Shoes and Sneakers:** The consumers surveyed also felt that color was an important feature when purchasing footwear. 52.1% felt it was very important, 39.4% felt it was very important, and 8.5% felt it was somewhat important. Favorite colors for footwear are black (45.1%), brown (22.5%), and white (14.1%).

**Cell Phones:** The majority of the surveyed consumers think that color is an important factor in the purchasing of a cell phone. 12.7% believe that it is extremely important, 26.8% said very important, and 35.2% said it was somewhat important, 23.9% thought that color was not very important. Favorite colors for cell phone were black (57.7%), white (12.7%), and gray (12.7%).

**Backpacks or Handbags:** Color seems to be important when purchasing a handbag or backpack. Color is extremely important for 22.5%, very important for 49.3%, and somewhat important for 16.9% of surveyed consumers. Favorite colors for these items are black (50.7%), brown (18.3%) and blue (11.3%).

**iPods or MP3 Players:** Color does not seem to be as important when purchasing these products. 39.4% said color is somewhat important and 25.4% said it is not very important. 14.1% of those surveyed thought color was extremely important or very important (9.9%). Black is the color of choice for (56.3%), white for (15.5%) and gray (7%).

**Computers (Laptop or Desktop):** Color does not appear to be an important factor when it comes to purchasing computers by the surveyed consumers. 36.6% thought it was somewhat important, 21.1% said very important, 18.3% thought it was not very important, and 14.1% thought it wasn't important at all. 9.9% thought color was extremely important. The favorite colors of the surveyed consumers are black (45.1%), gray (23.9%) and white (16.9%).

**Game Systems (Play Station, X-Box):** Color does not seem to be important when purchasing game systems. 35.2% of those surveyed thought it was not important and 31% thought it was not at all important. Only 2.8% thought color was extremely important, 9.9% said very important and 21.1% thought it was somewhat important. Favorite colors are black (60.6%), white (22.5%), and gray (4.2%).

**Watches:** As with other items worn on the body, color is an important factor when purchasing a watch. 33.8% of the consumers said color was extremely important, 52.1% said it was very important and 12.7% thought it was somewhat important. The top color choices for watches were black (39.4%), gray (9.9%) and white (8.5%).

**Digital Cameras:** Cameras are another purchase where color does not seem to be an important factor. Only 9.9% of consumers surveyed thought color was extremely important, and 16.9% thought it was very important. 39.4% thought color was somewhat important, 25.4% said not very important, and 8.5% said it was not at all important. Favorite colors for cameras are gray (36.6%), black (21.1%) and brown (7%).

**Hats:** Color seems to be important when it comes to buying hats. 29.6% of the consumers said it was extremely important, 35.2% said it was very important, and 16.9% said color was somewhat important. Favorite color choices for hats are black (42.3%), white (15.5%) and brown (7%).

**Umbrellas:** Color is not a major factor when buying umbrellas for about half of the consumers surveyed. 33.8% said it was not very important and 19% said it was not at all important. For 26.3% color was somewhat important, 8.5% said it was very important, and for 4.2% it was extremely important. Favorite colors for umbrellas are black (47.9%), blue (19.7%), purple (7%), and red (5.6%).

**House Paint:** The surveyed consumer were almost unanimous on the importance of paint color for their homes. 62% said it was extremely important, 19.7% said it was very important and 9.9% thought it was somewhat important. Only 1.4% thought it was not very important and the same number said not at all important. Favorite colors are white (31%), brown (15.5%), gray, black and red at (4.2%) each. Colors, other than those listed, were chosen 32% of the time.

**Candy:** For at least half of the respondents, color does not seem to be a major factor influencing candy purchase decisions. 38% of the consumers said it was not at all important, and 18.3% said it was not very important. 23.9% thought it was somewhat important, 15.5% said it was very important and only 4.2% said it was extremely important. Red is a favorite color for candy, chosen by (32.4%); followed by purple (11.3%), yellow (9.9%), green and black at (4.2%) each, and colors other than those listed made up (23.9%).

**School Supplies (Pens, pencils, file folders):** Color is not a major factor when making these purchasing decisions. Only 4.2% of respondents said it was extremely important and 5.6% said it was very important. 26% thought color is not very important for school supplies, 20% said not at all important and 18% said it was somewhat important. Favorite color choices in this category were colors other than those listed (23%), blue (15.5%), black (12.9%), orange (9.9%), green (8.5%), white (5.6%), gray and purple at (4.2%) each.

**Beverages:** For most respondents, the color of their beverages is important. 38% said it was somewhat important, 14.1% said very important, and for 2.8% it was extremely important. 16% said color was not very important and 16% said it was not at all important. Favorite colors for beverages were other than those listed (53.6%), white (11.3%), and orange (7%).

**Toothbrushes:** For the majority of respondents, color is not important for toothbrushes. 44.5% said not at all and 26.8% said it is not very important. 12.7% thought it was somewhat important, 8.5% said very important and 5.6% said extremely important. Favorite colors for toothbrushes were white (22.5%), blue (19.7%), purple (11.3%) and red (9.9%).

**Mouthwash:** The percentages for mouthwash were very similar to those of toothbrushes. 43.7% thought color is not at all important, 26.8% said not very important. 16.9% thought it was somewhat important, 11.3% said very important and 1.4% said extremely important. Favorite colors for mouthwash were blue (45.1%), colors other than those listed (28.2%), white (8.5%), green (7%), red, brown, black orange, purple and gray at (1.4%) each.

**Bathing Suits:** 26.8% of those surveyed feel that color is very important for bathing suits. 21.1% feel it is extremely important and 18.3% feel it is important, 19.7% said not very important and 19.7% feel color is not at all important for bathing suits. The top favorite colors for bathing suits were black (19.7%), white (16.9%), colors other than those listed (14.1%), green (12.7%), blue (11.3%), purple (9.9%) and red (4.2%).

**Sun Glasses:** For this group of consumers, color choice for sun glasses is extremely important for 29.6%, very important for 49.3% and somewhat important for 14.1%. Only 7% of consumers think that the color of sunglasses is not very important. The top favorite colors for sunglasses are black (49.3%), brown (28.2%), and white (5.6%) and gray (4.2%).

## **6. Meaning of Color for Netherlands College Students**

Following are the findings for the meanings and associations of ten different colors according to the surveyed Netherlands College Students. The meanings for colors vary across cultures and countries. Color is one of the most important characteristics of a product. Attractive colors in the USA are different from those in other countries. Following is a comparison of some colors and their effect on North American Shoppers as well as how the Netherlands College Students view the color (<http://Blog, Kissmetrics.com/color-psychology>).

**Red:** Stimulates energy level, appetite, and increases the heart rate. It creates urgency, draws attention and is often used for clearance sales. According to the research findings among Netherlands College Students the top meanings associated with the color red are; love, warmth, passion and danger (Please see detail in appendix; table 1 for all colors).

**Green:** It is associated with wealth and it is the easiest color for the eyes to process. It is used in stores for relaxation. Green is associated with nature, health and healing. The top meanings associated with the color green for Netherlands College Students are; nature, health, safety/go and money.

**Blue:** It is the most popular and safest global color. It creates the sensation of trust and security and is often used in banks and businesses. Blue is the safest color to use for most products. It implies honesty, trust and dependability (<http://www.empower-yourself-with-color-psychology.com>). In the research findings the top four meanings for the color blue are; calm, trust, cleanliness and security.

**Yellow:** It is associated with optimism and youth. Yellow is often used to grab attention to display products. According to the research findings the top meanings for yellow are; happiness, hope, optimism and success.

**Purple:** It is a trendy color used to target creative types. It is considered an exotic color and often seen in beauty anti-aging products. In the research findings the top meanings for purple are; mystery, royalty, spirituality and arrogance.

**Black:** It is a powerful and sleek color. It is often used to market luxury products. It is also the number one choice of color for business clothing. In the Netherlands research, the top meanings for black are; mystery, death, elegance and unhappiness.

**White:** Represents purity, cleanliness, joy, peace, innocence and simplicity for most cultures. White signifies death in Japan and coldness, sterility, purity and joy in Eastern cultures (Nicholson, 2002 and Akcay, 2014). In this research study, the top meanings for white are; neutrality, purity and joy.

**Gray:** Implies balance, formality, subtlety, neutrality, respect and calmness (<http://blog.pixelboxdesign.co.uk/psychology-colour-use-web-design-marketing/>). Gray is a staple color in men's attire and is growing in popularity with business women (Wagner, 1988). In this study, the top meanings associated with gray are; modesty, sadness, futurism and intellect.

**Brown:** It is a color with strong and positive food associations in the U.S. Varieties of brown toned, natural colors are highly utilized for furniture and floor coverings (Akcay, 2014). It also promotes down-to-earth and outdoor products. Brown is a strong, reassuring color that is comforting and reliable (<http://www.empower-yourself-with-color-psychology.com/color-meanings-in-business>). In the Netherlands College Students research, the top meanings for brown are; earth, nature, reliability and endurance.

**Orange:** It is a color of adventure which inspires and creates enthusiasm. Orange is a safe color but it is also used for attention grabbing purposes, such as on caution signs and for traffic cones. Orange symbolizes that a product is inexpensive and it should be avoided for luxury and elegant products.

It is a very popular color in Netherlands and in India (Paul, 2002 and Akcay, 2014). According to the research study, the top four meanings for orange are; warmth, energy, balance and inexpensive.

### **7. Conclusion**

The research shows that Netherlands college students think color is a very important feature when purchasing different types of products.

The responses of the majority of the students showed that color is a very important feature when purchasing products which are worn or used everyday such as clothing, shoes, backpacks, handbags, bathing suits, watches, cell phones, sun glasses, house paint and hats.

This research also shows that color is not a very important feature when purchasing products which are used on a daily basis such as, school supplies, umbrellas, candy, toothbrushes, mouthwash, digital cameras, iPods, computers and game systems.

Black is the most dominant color choice for most of the products in the survey except for beverages, toothbrushes and mouthwash.

White, gray, and brown were also very popular colors for the products listed in the survey.

Overall, this research indicates that color is an important product feature and that the meanings associated with colors are diverse across culture and countries. The favorite color choice of Netherlands college students varies with the type of product.

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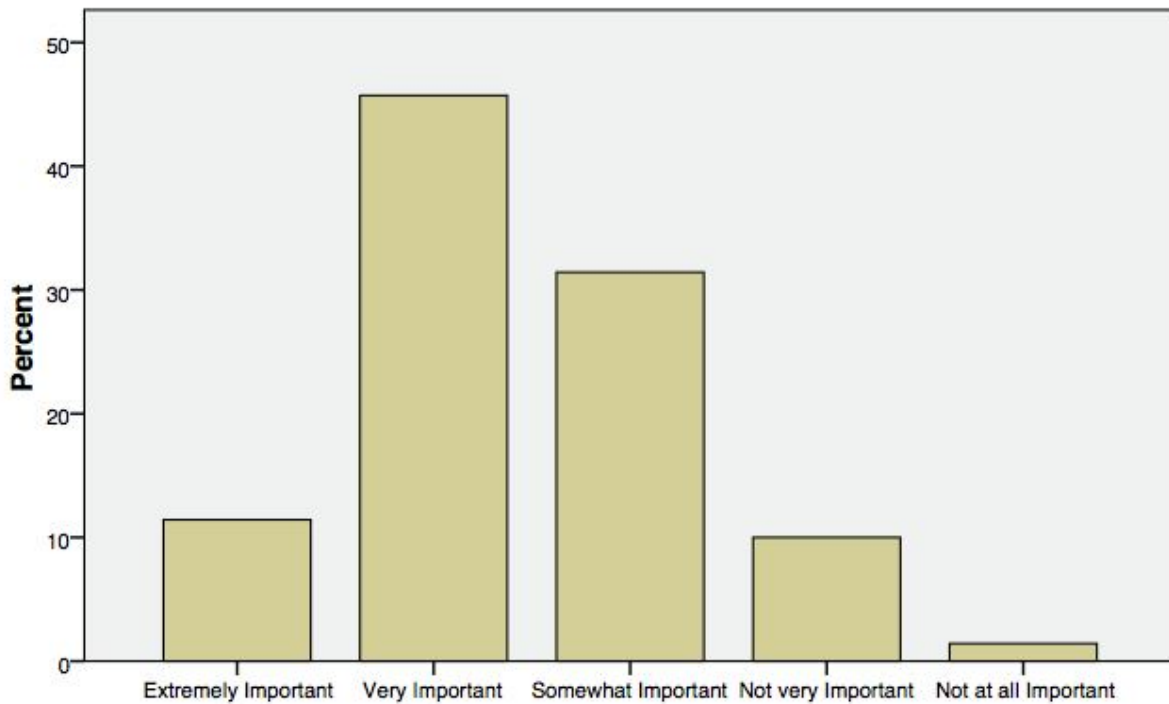
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**Appendix**



**Figure 1: How Important is Color for you when you Make a Decision about Purchasing Products?**

**Table1: Meanings and Associations of Ten Different Colors According to a Survey of Netherlands College Students**

<b>RED</b>	<b>%</b>	<b>GREEN</b>	<b>%</b>	<b>BLUE</b>	<b>%</b>	<b>YELLOW</b>	<b>%</b>
Love	<b>52.1</b>	Nature	<b>77.5</b>	Calm	<b>63.4</b>	Happiness	<b>47.9</b>
Warmth	<b>49.3</b>	Health	<b>40.8</b>	Trust	<b>33.8</b>	Hope	<b>31.0</b>
Passion	<b>40.8</b>	Safety/Go	<b>22.5</b>	Cleanliness	<b>32.4</b>	Optimism	<b>25.4</b>
Danger	<b>29.6</b>	Money	<b>19.7</b>	Security	<b>16.9</b>	Success	<b>16.9</b>
Power	<b>26.8</b>	Good Luck	<b>18.3</b>	Authority	<b>16.9</b>	Earth	<b>8.5</b>
Anger	<b>25.4</b>	Jealousy	<b>11.3</b>	Order	<b>12.7</b>	Caution	<b>7.0</b>
Aggression	<b>22.5</b>	Youth	<b>9.9</b>	Masculinity	<b>7.0</b>	Dishonesty	<b>5.6</b>
Christmas	<b>15.5</b>	Christmas	<b>9.9</b>	Conservative	<b>4.2</b>	Betrayal	<b>4.2</b>
		Fertility	<b>5.6</b>			Prosperity	<b>4.2</b>
		Sour	<b>4.2</b>			Coward	<b>2.8</b>
		Renewal	<b>1.4</b>				
<b>PURPLE</b>		<b>BLACK</b>		<b>WHITE</b>		<b>GRAY</b>	
Mystery	<b>39.4</b>	Mystery	<b>56.3</b>	Neutrality	<b>54.9</b>	Modesty	<b>35.2</b>
Royalty	<b>33.8</b>	Death	<b>38.0</b>	Purity	<b>49.3</b>	Sadness	<b>35.2</b>
Spirituality	<b>32.4</b>	Elegance	<b>29.6</b>	Joy	<b>26.8</b>	Futurism	<b>25.4</b>
Arrogance	<b>12.7</b>	Unhappiness	<b>23.9</b>			Intellect	<b>21.1</b>
Mourning	<b>8.5</b>	Power	<b>19.7</b>			Decay	<b>2.8</b>
Cruelty	<b>5.6</b>	Sexuality	<b>19.7</b>				
		Evil	<b>12.7</b>				
		Fear	<b>11.3</b>				
<b>BROWN</b>		<b>ORANGE</b>					
Earth	<b>63.4</b>	Warmth	<b>56.3</b>				
Nature	<b>40.8</b>	Energy	<b>50.7</b>				
Reliability	<b>15.5</b>	Balance	<b>23.9</b>				
Endurance	<b>9.9</b>	Inexpensive	<b>2.8</b>				

\*Percentage for each color does not add to 100%. Meanings of color is a “yes” or “no” choice, e.g., Love 52.1% Yes and 47.9 No.