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Perception and Psychology of Color and its Attractiveness in Fashion

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Master's Degree in Marketing

Supervisor

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BUSINESS
SCHOOL

Department of Marketing, Operations and General Management

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Writing this dissertation represents not only the closing of another academic chapter in my life, but also the culmination of many successful academic years that would not have been possible without the help and support from the people closest to me and my heart.

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Abstract

The theme of this master's dissertation analyzes the "Perception and Psychology of Color and its Attractiveness in Fashion".

In the fashion industry, where visual identity and emotional connection are central to consumer engagement, color stands out as a powerful psychological and strategic element. This study explores the perception and psychology of color in fashion marketing, analyzing how individual hues influence emotions and purchasing behavior.

Color can be one of the most important characteristics to impulse customers to buy certain products. This research investigates how demographic factors (mainly gender and age) shape color preferences and emotional associations. To assess these variables, a structured questionnaire was developed to evaluate over a hundred participants' perceptions and psychological responses to specific colors in fashion-related contexts. The goal was to uncover how different demographic groups interpret and react to colors, and how these insights can inform more effective brand communication and visual identity strategies.

Key words: Color Psychology, Fashion Marketing, Consumer Behavior, Emotional Response, Color Preferences, Demographics

JEL Classification: M31 – Marketing; D12 – Consumer Economics: Empirical Analysis

Resumo

O tema desta dissertação de mestrado analisa a "Percepção e Psicologia da Cor e a sua Atratividade na Indústria da Moda".

Na indústria da moda, onde a identidade visual e a conexão emocional são fundamentais para o envolvimento do consumidor, a cor destaca-se como um elemento psicológico e estratégico poderoso. Este estudo explora a percepção e a psicologia da cor no marketing da moda, analisando como as cores influenciam as emoções e o comportamento de compra.

A cor pode ser uma das características mais importantes para impulsionar os clientes a comprar determinados produtos. Esta pesquisa investiga como os fatores demográficos (principalmente género e idade) moldam as preferências de cor e as associações emocionais. Para avaliar essas variáveis, foi desenvolvido um questionário estruturado para avaliar as percepções e respostas psicológicas de mais de cem participantes a cores específicas em contextos relacionados com a moda. O objetivo era descobrir como diferentes grupos demográficos interpretam e reagem às cores e como esses insights podem informar estratégias mais eficazes de comunicação da marca e identidade visual.

Palavras-chave: Psicologia da cor, Marketing da moda, Comportamento do consumidor, Resposta Emocional, Preferências de Cor, Demografia

Classificação JEL: M31 – Marketing; D12 – Economia do Consumidor: Análise Empírica

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1. Introduction

The development of this master's thesis represents the natural culmination of my academic journey in the master's in marketing. Beyond contributing to the attainment of an advanced academic qualification, this research offers a valuable opportunity to deepen and apply the knowledge acquired throughout the degree, with a specific focus on a topic of personal interest.

The main objective of this study is to explore the influence of color on consumer behavior within the fashion industry, through the lens of color psychology, emotional response, and demographic influence. By investigating how consumers perceive and emotionally respond to specific colors in fashion contexts, and relating it based on their demographics, this research aims to contribute to the growing field of consumer insight in visual brand communication.

To achieve this, the study is guided by the following research questions:

1. Are there significant differences in color preferences in fashion between genders and across age groups?

2. Do cultural and social perceptions still reinforce the traditional color stereotypes?

3. How do individuals perceive and associate specific colors with different emotional states?

4. Do trends influence consumer's color choices, even when the trending color doesn't align with the personal preference?

Accordingly, the specific objectives of the study are:

• To explore gender and age-related differences in color sensitivity and preference in fashion consumption.

• To evaluate the persistence or decline of color-related stereotypes in fashion and understand how cultural backgrounds may shape color perception.

• To analyze the emotional meanings that individuals attribute to different colors and how they influence their feelings, attitudes and behaviors.

• To examine how current fashion trends affect consumer behavior regarding color, and whether trends outweighs personal taste.

The structure of this dissertation is as follows:

· Chapter 1 – Introduction: Presentation of the topic, research context, and relevance of the study.

· Chapter 2 – Literature Review: Theoretical framework covering the meaning of color, it's importance, color psychology, consumer behavior and emotion, and color trends.

· Chapter 3 – Methodology: Description of the research model, questionnaire design, sample characterization, and data collection process.

· Chapter 4 – Hypothesis: Presentation of all the hypothesis that are going to be tested based on the answers of the questionnaire.

· Chapter 5 – Data Analysis: Analysis of survey responses, interpretation of findings in relation to the research questions, and discussion considering existing literature.

· Chapter 6 – Conclusions and Recommendations: Summary of key findings, theoretical and managerial implications, study limitations, and suggestions for future research.

2 Literature Review

2.1. Consumer Behavior

Understanding of consumer behavior is a success key to the business organizations. Consumer behavior is a broad study field. It is the study for explaining the consumer why, what, when and how buy a product or a brand (Kumar, John, & Senith, 2014). Consumer behavior is also the study of how a customer, or a group of customers select, buy, use, and dispose of ideas towards the products or services to satisfy their needs and wants (Chand, 2014).



Figure 1- Consumer Buying Decision Process

Recognition of need

This represents the initial stage of the consumer buying decision process, also referred to as "Problem Recognition." It begins with fundamental needs such as air, water, food, and shelter, but can also extend to needs beyond the basics (Kotler & Keller, 2016). Problem recognition occurs when a consumer perceives a noticeable gap between their current level of satisfaction regarding a need and the level of satisfaction they desire (Munthiu, 2009).

Information Search

This is the second stage of the consumer decision-making process. Information plays a crucial role in shaping future purchase decisions, and both its amount and accuracy depend on the consumer as well as the specific product or service being considered (Kotler & Keller, 2016).

Evaluation of alternatives

This represents the third stage of the consumer buying decision process. After gathering information about a product or brand, the consumer ranks the options and proceeds to evaluate them (Munthiu, 2009).

Purchase decision

This is the fourth stage of the consumer buying decision-making process. At this point, all the previous stages translate into concrete actions. The consumer, having gathered information from multiple sources and evaluated the options, decides both what to buy and where to buy it. The purchase is typically made for the brand or product ranked highest during the evaluation stage. Additionally, the decision is influenced by the surrounding environment (Kotler & Keller, 2016).

Post-purchase behavior

The buying decision process extends beyond the purchase itself, concluding with the post-purchase evaluation. This fifth and final stage of the consumer decision-making process assesses the consumer's experience with the product. After using the product, the consumer may feel either satisfied or dissatisfied. Satisfaction increases the likelihood of repeat purchases and may also encourage the consumer to influence others to buy the product (Munthiu, 2009).

2.2. What is color?

Humans encounter the world as a colorful place. Color is perceived on essentially every object that we view in daily life, that it is even present in our dreams (Rechtschaffen & Buchignani, 2013). The color is the main sensation produced in the retina by the visible light rays that is the electromagnetic irradiation of 380-760nm wavelength. According to this definition, color is a feature of neither the sensation-producing light nor the light emitting object, but it is a psychic experience produced by electromagnetic irradiation (Smederevac, Mitrovic, Colovic, & Nikolasevic, 2025).

Ferreira Júnior (2015) divides color into four dimensions of observation, comprising the areas: physiological, psychological, physical, and chemical. Each field contributes to particular aspects of color, ranging from pigment research to its sociocultural meanings. Farina et al.

(2011) say they have specific vibrations in our senses, producing sensations and sensory reflexes of great importance and operating as a stimulant in our emotions.

Color preferences are often determined through lived experiences; at times, one prefers one color over another because it causes memories of a past moment. Color can influence consumers' purchase decisions, how they see things, their emotions, and thus it is integral to marketing. Color photographs are commonly used in advertisements because they are thought to have superior attention getting properties (Meyers-Levy & Peracchio, 1995). Farina et al. (2011) state that colors constitute stimuli that influence individuals to like or not something.

According to Romeh et al. (2024), color is divided into several types:

- Primary: The fundamental hues that serve as the base for all other color mixtures. Traditionally, these are red, yellow, and blue, which cannot be produced by blending other colors.
- Secondary: Shades formed by combining two primary colors in equal amounts, resulting in green, violet, and orange.
- Intermediate (Tertiary): Tones produced by mixing a primary color with the neighboring secondary color, such as red-orange, yellow-orange, yellow-green, blue-green, blue-violet, and red-violet.
- Complementary: Opposing hues positioned directly across from each other on the color wheel, including pairs like yellow with violet, blue with orange, and red with green.
- Cool: Colors linked with a sense of freshness or distance, such as blues, greens, and violets. In visual compositions, cool tones tend to recede into the background.
- Warm: Colors associated with energy and warmth, including reds, yellows, and oranges. In artworks, warm hues usually appear to come forward toward the observer.

As Rossotti (1983) stated, color is a sensation created by one's own brain, which is triggered by external sources. During the conversion process of wavelengths into colors, various factors such as psychological and physiological inclinations, age, personality, gender, income level, etc. might influence the perception of the results (Singh & Srivastava, 2011).

2.3. Importance of Color

Color is one of the most influential visual elements in fashion, with the power to shape consumer attitudes, evoke emotions, and carry brand identity. This influence becomes evident in consumer behavior; people make up their minds within 90 seconds of their initial interactions with either people or products, with 62-90 percent of these assessments based on colors alone (Singh, 2006). Therefore, color is an element of fundamental importance for the development of any product (Baxter, 2021).

Color is part of our daily lives. People use colors in fashion to express themselves and their emotions, to adapt to weather conditions (dark colors are used in winter to absorb the heat better while light colors are used in the summer to stay fresh), and to simply help themselves feel confident with their bodies and appearance (Obeng et al., 2018). In the fashion industry, color preferences are particularly dynamic. Research indicates that over 80% of visual information is related to color: that is, color conveys information. It identifies a product or a company, as well as the quality of the merchandise and much more (Pride & Ferrell, 2006).

Colors are understood at different levels of awareness depending on how and where they are seen and how and why they are used. Color alone can communicate ideas and emotions, manipulate perception, motivate, and influence actions. Can draw attention, inform, delight, or warn, even frighten (Holtzschue, 2025). Color considerations emerge regularly in our decision making and conversation, as we choose which color clothes to wear, pick a color for our new car or computer, and comment on the color of our friend's skin, hair, or makeup (Elliot & Maier, 2014). Their language is broad and usually acts in the subconscious, making connections with other moments or objects whose memory has already been stored in the brain (Guimarães, 2000). The human mind, often without conscious awareness, responds either favorably or unfavorably when exposed to particular color pairings. To this end, color can be defined as a perceived and sensory sensation resulting from the action of light on the eyes (Silveira, 2015; Ribeiro, 2011). Colors play a vital role in human life because they have the power to trigger diverse responses.

People use color to express their social identity, hierarchy, emotions, political leanings, personal identity, self-image, and aesthetic tastes (Madden & Tanner, 2003). Clothing color sends values, attitudes, personalities, and tendencies towards conformity or individuality (Madden & Tanner, 2003). From a physical perspective, research on color is linked to the chromatic effects produced by the reflection and refraction of light on the retina. Thus, the relevance of studying color in physics lies in analyzing the trajectory of light between the object

and human vision, as well as in understanding the variations of hue, tone, and value. (Silveira, 2015).

Porter & Mikellides (1976) proposed that color preferences stem from the signals that colors convey to organisms in nature: Sometimes colors send an “approach” signal (e.g., the colors of a flower attracting pollinating insects), and sometimes they send an “avoid” signal (e.g., the colors of a poisonous toad deterring predators). Hurlbert and Ling (2007) reported findings that they interpreted as support for the kind of evolutionary/behaviorally adaptive theory of color preferences that Porter & Mikellides (1976) suggested would arise based on behavioral adaptations. They suggested that color preferences are wired into the human visual system as weightings on cone-opponent neural responses that arose from evolutionary selection.

Colors have been a majorly influential concept since the beginning of humanity. They have been linked to some of the most important aspects of our lives, from health to gender, from cultures to emotions. For instance, doctors from ancient Egypt used to bathe patients with different colors of light for specific issues; red for energizing the liver, purple for lowering blood pressure, orange for strengthening the lungs, etc. (Singh, 2006).

Starting in the Renaissance, clothing color gained greater significance. Certain colors were only to be worn by the upper classes and royals. Medieval Europeans developed sumptuary laws that allowed only the nobility to wear costly colors such as purple that was extracted from Mediterranean seashells (Eckstut, 2013). These defined those who could wear certain colors, the amount of color allowed and when the color could be worn (Kodzoman, 2019). The color developed deep symbolic meaning indicating the individuals’ cultural learning, place in the social hierarchy and economic status (Adomaitis, 2018).

2.4. Color Psychology and Emotions in Clothing

The relationship between color psychology and consumer behavior plays a central role in shaping marketing strategies, especially within the fashion industry, where color is not merely an aesthetic element but also a powerful emotional trigger (Casas & Chinoperekweyi, 2019). Color influences how consumers perceive brands and products, and these perceptions directly affect purchasing behavior.

Color is an inseparable part of our everyday lives, and its presence is evident in everything we perceive. It is widely recognized that colors have a strong impact on our emotions and

feelings (Hemphill, 1996). Studies have shown that colors consistently evoke specific emotional reactions. Red is associated with excitement, yellow with joy or playfulness, green with a sense of safety, purple with luxury and wealth, and blue with calmness, intellect, communication, and trust (Grimes & Doole, 1998; LaBrecque & Milne, 2012; Aslam, 2006). These associations are deeply ingrained in cultural and psychological frameworks, with colors often symbolizing specific attributes or emotional states.

Kandinsky et al. (1982), one of the first pioneers of color theory and a renowned Russian painter and art theorist, believed that the following colors communicate the following qualities:

- Yellow- warm, exciting, happy
- Blue- deep, peaceful, supernatural
- Green- peace, stillness, nature
- White- harmony, silence, cleanliness
- Black- grief, dark, unknown
- Red- glowing, confidence, alive
- Orange- radiant, healthy, serious

As Ndom, Elegbeleye, and Ademoroti (2011) add, "knowledge of perception helps understand humans better, and design systems appropriately." Because color has consistency in emotions, knowing what influences consumer behavior, attracts consumers, increases likability, and maintains brand loyalists could strongly position a brand against its competitors.

Various studies link color and consumer emotion and perception. Hemphill (1996) found that colors like blue, white, red and pink create positive reactions in people such as happiness and excitement, while colors like brown and black react oppositely. Labrecque and Milne (2012) argued that brands use red and orange colors for the purpose of conveying more excitement as compared to other cooler colors like blue.

Frank & Gilovich (1988) showed that an individual's behavior can be influenced by the color of their clothing. In their experiment they manipulated the color of the subjects' uniforms (black or white). The findings indicated that participants dressed in black uniforms exhibited higher levels of aggression compared to those wearing white. According to Adams & Osgood (1973), black is generally perceived across cultures as a color representing evil and death. Vrij (1997) also conducted two experiments to investigate the impact of black clothing on impression formation. Results revealed that black clothing evokes negative impressions.

Roberts, Owen & Havlicek (2010) analyzed attractiveness judgments of both genders by contrasting attributions based on six different colors. They took digital photographs of ten male

and ten female participants while wearing t-shirts of six different colors: red, black, blue, green, yellow and white. The analysis demonstrated notable effects of color in all comparisons. Observers gave the highest ratings to images where the subjects wore red or black, indicating that clothing color influences perceptions of attractiveness. Their results showed that females are influenced by clothing color in judgments of male attractiveness, and that they are thus sensitive to color cues in social contexts. It has been suggested that such functional responses to color, particularly to red, may also influence perception of individuals when they wear different colored clothing.

As Loureiro et al. (2012) stated, a long term and deep emotional relationship between the brand and consumers is needed for the company to survive in the long run. This is why using tools like color psychology is crucial to triggering the right emotions within the audience.

As a result of an experiment Wexner (1954) did with 94 students, found out that some colors are associated with specific emotions. For instance, red was voted the most for “exciting”, blue for “soothing”, black for “melancholy”, orange for “distressed”, yellow for “cheerful”, and purple for “dignified”. With proper placements of these colors, marketers can guide the emotional states of their consumers according to their strategies.

Fashion designers use color to convey specific messages and evoke desired emotional responses. The choice of color in fashion can influence how individuals perceive themselves and how they are perceived by others. Wearing certain colors can enhance confidence and assertiveness, a phenomenon known as enclothed cognition (Kariyeva, 2024). For instance, wearing a lab coat has been shown to improve cognitive performance, suggesting that attire can enhance focus and self-assurance (Adam & Galinsky, 2012).

2.5. Demographics in Color Preferences

Color perception in fashion is highly influenced by demographic factors such as gender and age (Wright and Black, 2013). In fashion products, colors are responsible for adding value through emotional and aesthetic aspects, with these preferences being essential points to build a marketable and attractive product. Understanding how color preferences are shaped by gender, age and other factors is a key factor in designing fashion collections that resonate with target audiences.

2.5.1. Gender On Color Preferences

According to Bonnardel et al. (2018), color preferences exhibit significant gender differences across various cultures. Their study, which included 81 young adult Indians and 80 young British students, revealed a collective preference for cool colors over warm colors among both genders. However, females showed an additional preference for pink colors, with Indian females displaying a warm bias and British females a cool bias. This pattern suggests an archetypal gender difference in color preference, modulated by cultural influences. The researchers administered the 35-item International Personality Item Pool (IPIP) and Bem Sex Role Inventory (BSRI) questionnaires to explore possible links between personality traits, gender schemata, and color preferences. The results confirmed a gender difference in both cultures, with participants collectively expressing a preference for cool over warm colors. The study extended the gender difference to Indian culture and supported the universality of an underlying pattern while revealing a culture-specific contribution essentially observed in females. The findings point to an archetypal pattern of gender difference in color preference with a remarkable cross-cultural similarity in men and a subtle but significant cultural difference in women whose origin is yet to be explained.

Dantas et al. (2021) further explored gender differences in color preferences within the context of fashion products. Their survey of 252 participants (176 females and 76 males) also found that females preferred pink and lilaceous hues, while males favored bluish hues and showed a strong aversion to pink and lilaceous colors. These findings align with the notion that gender plays a significant role in color preferences, influenced by socially constructed characteristics. The researchers created a thematic room on colors at a science fair where the questionnaire was applied to attract a greater number of respondents. The room was called "Know Your Colors" and was designed to analyze the color temperature and contrast of people's skin and relate these variables to the use of colors in clothes. The questionnaire's composition first sought demographic data, and in the second stage, respondents selected five of the colors they liked most when it came to fashion products. The results were compared among themselves, considering divergences and convergences as the central focus in perceptions between genders. The study concluded that genders play a certain role in color preferences in fashion products, identifying socially constructed characteristics through the history of colors as being responsible for those tendencies. It was possible to corroborate the social notion of the female gender preferring pink hues and the masculine gender presenting tendencies of

preferences to the bluish ones and a high refusal to the pinks and lilaceous – seen as women's colors.

Wong and Hines (2015) studied the development of gender-typed color preferences in toddlers. Their study of 126 toddlers found that gender differences in color preferences emerged between 2 and 3 years of age, with girls showing a stronger preference for pink and boys for blue. These preferences were less stable in toddlers compared to their parents, indicating that sociocognitive influences and play with gender-typed toys contribute to the development of these preferences. The researchers assessed preferences for gender-typed colors and compared them to gender-typed toy and activity preferences on two occasions separated by 6-8 months. Color preferences were assessed using color cards and neutral toys in gender-typed colors. Gender-typed toy and activity preferences were assessed using a parent-report questionnaire, the Preschool Activities Inventory (PSAI). The study found that a gender difference in color preferences was present between 2 and 3 years of age and strengthened near the third birthday, at which time it was large. In contrast to their parents, toddlers' gender-typed color preferences were stronger and unstable. Gender-typed color preferences also appeared to establish later and were less stable than gender-typed toy and activity preferences. The results suggest that the factors influencing gender-typed color preferences and gender-typed toy and activity preferences differ in some respects. The findings indicate that the sociocognitive influences and play with gender-typed toys that happen to be made in gender-typed colors contribute to toddlers' gender-typed color preferences.

2.5.2. Age in Color Preferences

Sengupta et al. (2020) examined the impact of age on color preferences. Their study involved two groups of participants aged 18-35 and 55-70 years. Results indicated that blue was the most preferred color across both age groups, although preferences varied with age. Younger participants favored blue, yellow, and purple, while older participants preferred blue and yellow, suggesting that color preferences can change with age. The researchers chose two groups of 20 people each, ranging from 18 to 35 years of age and 55 to 70 years of age, from both sexes. The color preference among the individuals was evaluated based on their response for the most and least preferred colors, and the results were analyzed according to the mean, median, standard deviation, and t-test. The study found that there lies a significant difference between one's age and color preference, although blue was the most preferred color among

both groups. The findings suggest that color preferences evolve with age, reflecting shifts in psychological and social factors over the lifespan. The study highlights the importance of considering age-specific color preferences in various contexts, such as fashion.

Dittmar (2001) also conducted a comprehensive study to explore how color preferences change with aging. The research aimed to understand the shifts in color preferences among different age groups and to identify any patterns or trends that could be associated with aging. The study involved a diverse sample of participants, ranging from young adults to elderly individuals, to capture a broad spectrum of age-related color preferences. One of the key findings of Dittmar's study was that color preferences do indeed change with age. The research revealed that younger individuals tend to prefer colors like blue, which is often associated with calmness, stability, and trust. This preference for blue among younger participants aligns with the findings of other studies, such as those by Sengupta et al. (2020), which also identified blue as a favored color among younger age groups. As individuals age, their color preferences shift towards different hues. Dittmar found that older individuals tend to prefer colors like green and red. The preference for these colors among older adults may reflect changes in their psychological and emotional needs as they age.

The impact of age on color preferences is also evident in the context of fashion. Dantas et al. (2021) found that younger participants showed a preference for vibrant and trendy colors, while older participants preferred classic and subdued hues. This highlights the importance of considering age-specific color preferences in the fashion industry to cater to different age groups.

2.5.3. Cultural Differences in Color Preferences

Color perceptions and preferences can vary significantly across different cultures and individual experiences. For example, in some cultures, red symbolizes good fortune and celebration, while in others, it may represent danger or warning (Casas & Chinoperekweyi, 2019).

Dittmar's (2001) also highlighted the role of cultural and social factors in shaping color preferences. The research suggested that cultural background and societal norms influence how individuals perceive and prefer certain colors. For example, in some cultures, green is associated with health and prosperity, which could explain its popularity among older adults. Similarly, red is often seen as a color of celebration and good fortune in many cultures, which

might contribute to its preference among the elderly. The study's methodology involved a combination of surveys and experiments to assess participants' color preferences. Participants were asked to rank their favorite colors from a set of predefined options and to provide reasons for their choices.

The study by Bonnardel et al. (2018) also aligns with previous research indicating that cultural background affects color associations and preferences. Indian females displayed a warm bias in their preference for pink, while British females showed a cool bias. This suggests that cultural factors, such as societal norms and traditions, influence individual color preferences.

Ou et al. (2004) conducted a study to explore how cultural influences affect color preferences, particularly in the context of fashion. The research involved participants from the United Kingdom, China, and Taiwan, who were asked to rate their emotional responses to various color samples. They associated with nature and harmony in the UK, but had both positive and negative connotations in China and Taiwan. The study also revealed that fashion color preferences varied across cultures. UK participants preferred neutral colors like black, white, and gray, while Chinese and Taiwanese participants favored brighter colors like red, yellow, and pink.

Dantas et al. (2021) found that participants from different cultural backgrounds showed varying preferences for fashion colors. For instance, participants from Western cultures preferred bold and vibrant colors, while those from Eastern cultures favored subtle and muted hues. These findings highlight the importance of considering cultural context in fashion design and marketing. By understanding cultural differences in color preferences, designers and marketers can create products and campaigns that resonate with their target audiences.

2.5.4. Biological Influences in Color Preferences

In addition to social and cultural factors, biological influences play a role in shaping color preferences. Hurlbert and Ling (2007) suggested that gender-typed color preferences may have an evolutionary basis. They hypothesized that the female preference for pink evolved from the role of females in gathering reddish fruits and caring for infants, while the male preference for blue evolved from the role of males in hunting and associating blue with clear skies and good water sources.

Wong and Hines (2015) found that gender differences in color preferences emerged between 2 and 3 years of age, suggesting that these preferences may be influenced by early

socialization and cognitive development. However, the possibility of inborn influences on color preferences cannot be ruled out. Some researchers have suggested that prenatal androgen exposure may influence gender-typed color preferences, like its effects on gender-typed toy and activity preferences (Hines, 2011).

Franklin et al. (2010) analyzed the biological components of color preference in infants to determine whether these preferences are innate or influenced by early experiences. The study involved 4- to 5-month-old infants who were presented with various color stimuli to assess their preferences using the "preferential looking" method. The study found no significant gender differences in color preferences among the infants, suggesting that color preferences are not strongly influenced by biological factors related to gender at this early age. Both male and female infants showed a general preference for certain colors, such as blue and red, over others, like brown and gray. This indicates that some aspects of color preference may be biologically innate, likely linked to the way the human visual system processes these colors. The findings suggest that while infants may have natural preferences for certain colors, gender differences in color preferences likely develop later in life due to social and cultural influences. This aligns with other research indicating that gender-typed color preferences, such as the association of pink with girls and blue with boys, emerge around the age of 2 to 3 years and are shaped by societal norms and expectations.

2.6. Color Trends Over Time

Fashion trends frequently revolve around colors and styles. These trends are highly dynamic and change over time, reflecting collective choices made by consumers and driven by their preferences. At the same time, it is also related to class differentiation. People often get bored with prevailing fashion and they constantly seek new modes, so fashion changes frequently (Blumer, 2017).

The term fashion trend refers to aspects of the appearance and construction of fashion products that relate to a particular season. Such trends are manifest in the appearance of fashion products, which are designed and manufactured prior to being delivered in a season (Jackson, 2012). In the recent past, a fashion garment would sell all things equal, if it were the ‘right’ color. By the same token, a fashion range would suffer if it did not contain colors that were the right shade for a season (Jackson, 2012).

While “color preferences are the tendency of an individual or group to prefer certain colors over others, these preferences vary widely,” in fashion, attractiveness lasts only briefly, influenced by rapidly changing trends, whereas color attractiveness in other contexts can remain stable for decades (Kodžoman et al., 2022).

Although trends in fashion are reflected through a variety of design elements, it is believed that customers respond to color first (Singh, 2006). There are several reasons for this, including strong social and cultural semiotic associations that are learned and, more simply, because a color is obviously noticeable as it covers the surface of the product (Creusen & Schoormans, 2005).

Brands rely on color trend forecasts to guide their collection development and stay relevant in a constantly evolving market (Han et al., 2022). These forecasts are based on thorough analysis of various factors, including media coverage of runway shows, changes in cultural and societal attitudes, and economic developments that influence consumer desires (Garcia, 2022).

As trends emerge, consumers tend to gravitate toward products that align with the current color palette, reinforcing the importance of color in driving sales. This constant shift in color preferences can also encourage brand loyalty, as consumers associate certain colors with specific brands (Romeh et al., 2024). For example, luxury brands with established color schemes may risk alienating their core customers if they stray too far from these expectations. Conversely, adapting to color trends can help brands attract new audiences while maintaining a modern, fashion-forward image (Han et al., 2022).

As a further matter, advancements in machine learning and data analytics are increasingly helping brands predict color trends with greater precision (Han et al., 2022). By analyzing vast amounts of market data and imagery from fashion collections, brands can anticipate shifts in consumer behavior, allowing them to make more informed decisions about which colors to incorporate into their designs. This data-driven approach not only helps brands optimize their product offerings but also provides insights that can enhance their marketing strategies, driving both engagement and sales. By leveraging these insights, brands can stay ahead of the curve, capitalizing on emerging trends and maintaining relevance in a rapidly changing market (Jackson, 2012).

3. Hypotheses

The main goal of this study is to examine how color perception and emotional associations influence consumer behavior in the context of fashion. Consequently, the variables identified include individuals' fashion-related color choices, as well as their emotional responses, and adherence to trends. On the other hand, the independent variables consist of demographic factors (such as gender and age), cultural and social perceptions, and exposure to fashion trends. These variables are expected to play a significant role in shaping how consumers interpret, use, and respond to color in their clothing choices.

Based on the literature reviewed and the theoretical framework established, the following hypotheses have been formulated to guide the quantitative analysis of the data collected.

H1: There are significant differences in color preferences based on gender.

As documented, women exhibit stronger preferences for warm colors, such as red, pink, and orange, compared to men. Bonnardel et al. (2018) found that females, particularly in certain cultural contexts, show a notable preference for pink hues, with Indian females displaying a warm bias. Dantas et al. (2021) further supported this by identifying that women favor pink and lilaceous tones, while men demonstrate aversion to these colors and prefer cooler hues like blue. These gender-based differences in color preferences are influenced by socially constructed characteristics and cultural norms, providing a solid foundation for the hypothesis that women have stronger inclinations toward warm colors in their choices.

H2: There are significant differences in color preferences based on age.

Age significantly influences color preferences, with studies highlighting distinct patterns across different age groups. Sengupta et al. (2020) found that younger individuals (18-35 years) prefer vibrant colors like blue, yellow, and purple, while older individuals (55-70 years) favor more subdued hues such as only blue and yellow. Also, Dantas et al. (2021) found that younger participants showed a preference for vibrant and trendy colors, while older participants preferred classic and subdued hues. These findings underscore the dynamic nature of color preferences as individuals age, providing a strong justification for the hypothesis that significant differences in color preferences based on age exist.

H3: Traditional color stereotypes (e.g., pink for women, blue for men) are influenced by cultural and social perceptions.

Color stereotypes (such as blue being masculine and pink being feminine) have long been embedded in Western cultural norms and socialization processes (Dantas et al., 2021).

Bonnardel et al. (2018) demonstrated that gender differences in color preferences are influenced by cultural norms, with females showing a preference for pink hues and males favoring blue tones. Dantas et al. (2021) further corroborated this by identifying socially constructed characteristics that drive these preferences, noting a strong aversion to pink among males and its association with femininity. Additionally, Wong and Hines (2015) found that gender-typed color preferences emerge in early childhood, shaped by societal expectations and exposure to gender-typed toys and activities. These studies highlight the persistence of traditional color stereotypes, providing a robust foundation for the hypothesis.

H4: Specific colors are associated with emotional states in fashion choices.

Colors often exert a strong influence over consumer feelings and emotions, even when they diverge from personal preferences. Hemphill (1996) recognized that colors have a strong impact on our emotions and feelings. LaBrecque & Milne (2012) found that red is linked to excitement, yellow to cheerfulness, green to feelings of security and blue to intelligence and trust. Similarly, Wexner (1954) demonstrated that red is associated with excitement, blue with soothing feelings, black with melancholy, and yellow with cheerfulness. Kandinsky et al. (1982) also attributed emotional qualities to colors, such as yellow being warm, red being confident and orange radiant. These consistent emotional associations highlight the psychological impact of color, supporting the hypothesis that specific colors are tied to particular emotional states in fashion choices.

H5: Fashion trends positively influence consumers' choices

Fashion trends play a significant role in influencing consumers' color choices, often overriding personal preferences. Han el al. (2022) emphasized that brands rely on color trends to guide their collections, as consumers tend to gravitate toward products aligned with current color trends. Jackson (2012) noted that the "right" color for a season can drive sales, while deviations from trending colors may negatively impact product attractiveness. Additionally, Romeh et al. (2024) highlighted that emerging trends encourage brand loyalty and influence

consumer behavior, even when the trending colors do not align with individual tastes. These findings provide strong justification for the hypothesis that fashion trends significantly shape consumer color choices, regardless of personal preference.

H6: Individuals who associate specific colors with positive emotions are more likely to use those colors in their clothing to influence their mood.

Individuals often use specific colors in their clothing to influence their mood based on emotional associations. Kariyeva (2024) reinforces the idea that wearing certain colors can enhance confidence and assertiveness, a phenomenon known as enclothed cognition. The questionnaire in the study asked if participants actively choose colors based on their mood, with statements such as “I feel better when I wear my favorite colors” supporting the idea that emotional associations with colors guide clothing choices to regulate or enhance mood.

4. Methodology

To address the objectives of this research, a quantitative methodology was employed. This approach was selected due to its efficiency in collecting a high volume of responses in a relatively short period of time, allowing for greater diversity and breadth in the data collected. Quantitative research also ensures a more objective and structured analysis, which is particularly useful when exploring behavioral patterns. (Lazaraton, 2005)

As part of this methodology, an online questionnaire was created and distributed using Google Forms. Participants were asked to answer a range of multiple-choice and Likert-scale questions related to their color preferences, emotional associations with color, and the influence of factors such as age, gender, culture, and social class on their color choices. Additionally, the questionnaire also explored whether participants use color in their clothing to express or influence their mood, as well as their perceptions of color stereotypes.

4.1. Questionnaire

The questionnaire created for this research was designed to collect data on individuals' color preferences, their emotional associations with colors, and the influence of external factors on color perception, particularly in the context of fashion and self-expression. The survey included a total of 31 questions and was structured into four sections.

The first section was about the influence of demographic factors on color perception in fashion. Participants were asked to reflect on whether elements such as age, gender, culture, and social class impact their preferences for certain colors. This section was made to explore how social identity and personal background may shape the way individuals perceive, interpret, and use color in their clothing choices. By examining responses across different demographic groups, this section seeks to uncover whether color associations and preferences are universally shared or socially constructed and variable across segments.

The second part of the questionnaire was dedicated to exploring the impact of color trends on consumer behavior, particularly in the context of fashion. Participants were asked whether their clothing choices are influenced by current color trends and if they feel pressure to follow popular colors seen in stores or on social media. These questions aimed to assess how external visual stimuli and industry-driven trends affect individual decision-making, potentially overriding personal color preferences.

Another section of the questionnaire focused on the digital influence on color perception, seeking to understand how online content and social media shape individuals' attitudes toward certain colors. Respondents were asked whether they feel influenced by what they see on platforms such as Instagram, TikTok, or online stores when choosing colors for clothing or accessories. This part of the survey sought to evaluate how digital exposure to curated aesthetics, influencers, and brand imagery can affect personal color choices, particularly in fashion-related decisions.

Lastly, the last and the key section of the questionnaire explored the emotional responses associated with colors in the context of fashion. Participants were asked to indicate how different colors make them feel and what they transmit, and whether they use specific colors in their clothing to express or regulate emotions. Statements such as "I feel better when I wear my favorite colors" and "I choose colors based on my mood" were used to assess the psychological relationship between color and emotional well-being. This section was targeted to understand how fashion serves not only as a form of self-expression, but also as a tool for emotional management through the strategic use of color.

The questionnaire combined both nominal and ordinal variables. Nominal questions involved predefined, mutually exclusive options (gender, age group, favorite color, color-emotion associations). Ordinal questions used a 5-point Likert scale, where participants indicated their level of agreement with statements such as "I feel better when I wear my favorite colors", with 1 meaning "Strongly Disagree" and 5 meaning "Strongly Agree" (Magalhães & Hill, 1998).

The questionnaire was distributed via Google Forms and shared through WhatsApp groups, reaching different people from across Portugal. The participants included individuals of different ages, social classes, and backgrounds. Data collection took place over a period of two weeks.

It will be made a statistical treatment to analyze all the data collected. The software used will be SPSS Program (Statistical Package for Social Sciences), and with the data will be extracted outputs like graphics, tables and others statistical methods.

5. Data Analysis

5.1. Population and Sample Characterization

The survey collected responses from a total of 115 participants, of which 68 (59%) identified as female and 47 (41%) as male. This gender distribution allowed for comparative insights into how color perception and emotional associations with color may differ between women and men, particularly in the context of fashion and personal expression.

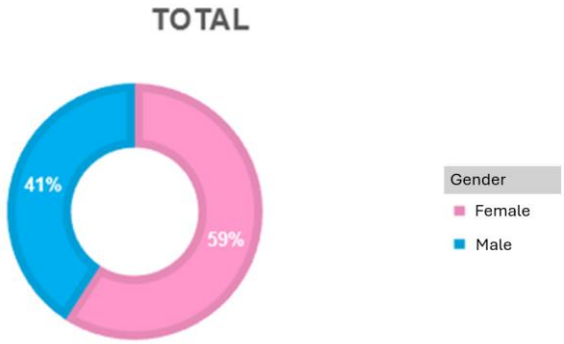


Figure 2- Participants' Gender

Regarding age, out of the 115 participants, 7 (6%) were under 18 years, 45 participants (39%) from 18-30, 13 participants (11%) from 30-45, 39 participants (34%) from 45-60 and 11 participants (10%) were over 60 years. This age distribution enabled a comparison of how perceptions of color and the emotions linked to it vary across age groups, especially within the realms of fashion and individual expression.

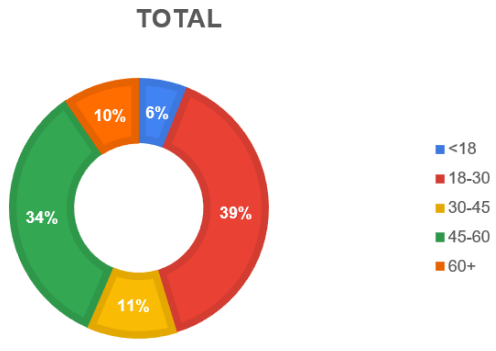


Figure 3- Participants' Age

5.2. H1: There are significant differences in favorite color preferences based on gender

5.2.1. Male Gender

To complement the insights gathered from the literature review, a questionnaire was conducted to explore color preferences among male respondents. The results revealed that blue was by far the most preferred color (26 responses), followed by green and black (7 responses each), while other colors like yellow, red, orange, and brown received minimal preference. These findings provide an empirical basis to compare with the existing body of research on gender-related differences in color preference.

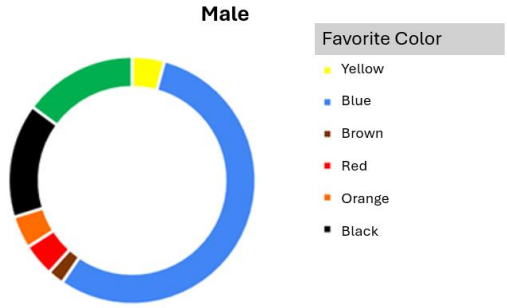


Figure 4- Male participants' favorite color

The results align closely with the conclusions drawn from the literature review. Studies such as Bonnardel et al. (2018), Dantas et al. (2021), and Wong and Hines (2015) consistently indicate that males exhibit a strong preference for bluish hues, alongside a general aversion to pink and lilaceous tones. The predominance of blue in the present questionnaire confirms this archetypal male tendency, while the secondary preferences for green and black further support the notion of a preference for cooler or neutral shades over warmer colors. Therefore, the questionnaire findings reinforce the established understanding that gender plays a significant role in shaping color preferences, with men showing a marked inclination towards blue tones across cultural and social contexts.

5.2.2. Female Gender

The questionnaire also investigated color preferences among female respondents. The results showed that blue remained the most frequently selected color (18 responses), followed closely by pink (15 responses). Green (9 responses) and white (6 responses) were also relatively popular, while other colors such as yellow, red, black, purple and orange received fewer mentions. These findings offer a valuable point of comparison with the literature on gender-specific color preferences.

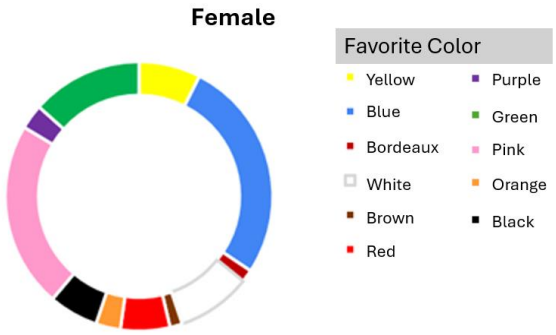


Figure 5- Female participants' favorite color

The results largely correspond with the patterns identified in the literature review. Prior studies, including Bonnardel et al. (2018), Dantas et al. (2021), and Wong and Hines (2015), highlight that females often show a marked preference for pink and lilaceous hues, while also maintaining an appreciation for cooler tones such as blue. The strong presence of both blue and pink among the female respondents in this questionnaire supports these findings, reflecting the dual inclination towards traditionally “feminine” hues (pink, purple) and universally favored cool tones (blue, green). Therefore, the questionnaire results reinforce the literature’s assertion that female color preferences are shaped by a combination of cultural and social associations with gender-typed colors and broader cross-cultural tendencies toward cooler shades.

5.2.3. Hypothesis verification

Test Used:

Chi-Square Test of Independence (Gender × Favorite Color).

Table 1- What's your favorite color results x gender

Gender * What's your favorite color Crosstabulation

			What's your favorite color											Total
			black	blue	Bordeaux	brown	green	orange	pink	purple	red	other	white	yellow	
Gender	female	Count	4	18	1	1	9	2	15	2	4	1	6	5	68
		% Within Gender	5.9%	26.5%	1.5%	1.5%	13.2%	2.9%	22.1%	2.9%	5.9%	1.5%	8.8%	7.4%	100.0%
	male	Count	7	26	0	1	7	2	0	0	2	0	0	2	47
		% Within Gender	14.9%	55.3%	0.0%	2.1%	14.9%	4.3%	0.0%	0.0%	4.3%	0.0%	0.0%	4.3%	100.0%
Total		Count	11	44	1	2	16	4	15	2	6	1	6	7	115
		% Within Gender	9.6%	38.3%	0.9%	1.7%	13.9%	3.5%	13.0%	1.7%	5.2%	0.9%	5.2%	6.1%	100.0%

Table 2- Chi-Square Test H1

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	26.525[a]	11	.005
Likelihood Ratio	35.351	11	.000
N of Valid Cases	115		

a. 17 cells (70.8%) have expected count less than 5. The minimum expected count is .41.

The Pearson Chi-Square = 26.53, df = 11, p = 0.005. Since $p < 0.05$, we reject the null hypothesis and conclude that gender is significantly associated with favorite color preferences. Thus, Female respondents showed higher preferences for pink (22.1%), blue (26.5%), and green (13.2%), while Male respondents showed very strong preference for blue (55.3%), followed by black (14.9%) and green (14.9%) and notably, no male respondents selected pink, whereas 22.1% of females did. Hence, we conclude that there is a statistically significant relationship between gender and favorite color. While both genders like blue, females tend to prefer pink more strongly, while males lean toward black and blue. The strength of the conclusion would improve if categories were consolidated to reduce low-frequency cells.

5.3. H2: There are significant differences in color preferences based on age

The questionnaire also examined color preferences across different age groups. Among participants younger than 18 years, blue was the most voted color (3 responses), with isolated mentions of white, pink, purple, and green. In the 18-30 group, blue again dominated (16 responses), followed by pink (11) and green (6), with smaller preferences for yellow, red, black, and orange. Among participants aged 30-45, preferences were more evenly distributed, with blue, black, and green (3 responses each) being the most frequent, alongside minor mentions of white, red, and pink. For those aged 45-60, blue was once more the leading color (18 responses), followed by green (5), white (4), yellow (3), black (3). Finally, in the over-60 group, blue (4 responses) remained the most selected color, but with much lower dominance, accompanied by red (2), black (2), yellow (1), green (1), and bordeaux (1).

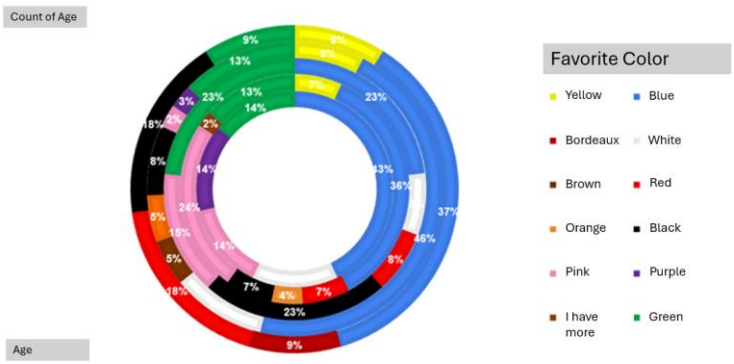


Figure 6- All ages color result

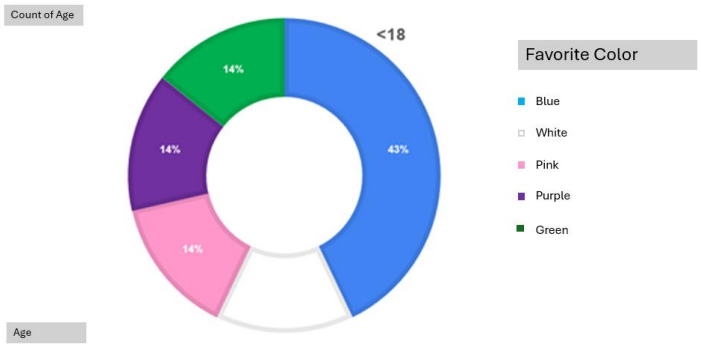


Figure 7- Under 18 color results

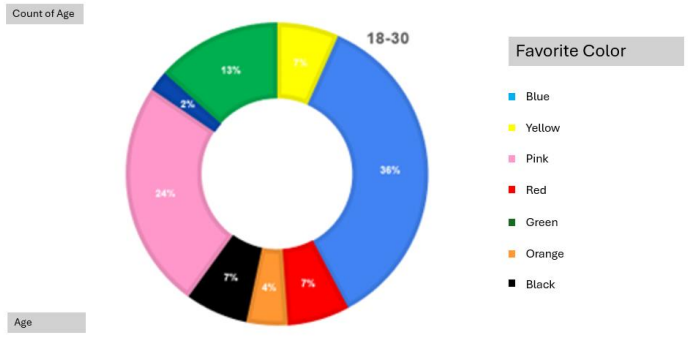


Figure 8- 18 to 30 color results

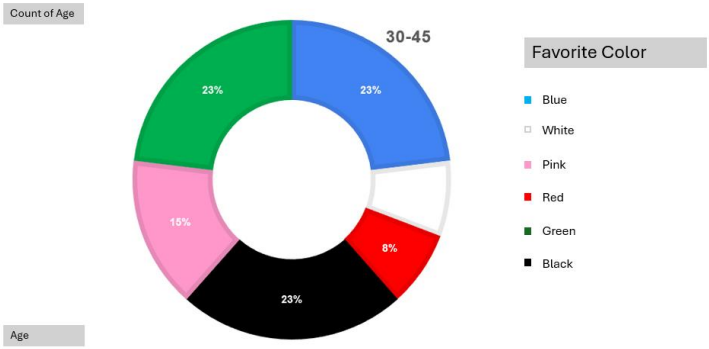


Figure 9- 30 to 45 color results

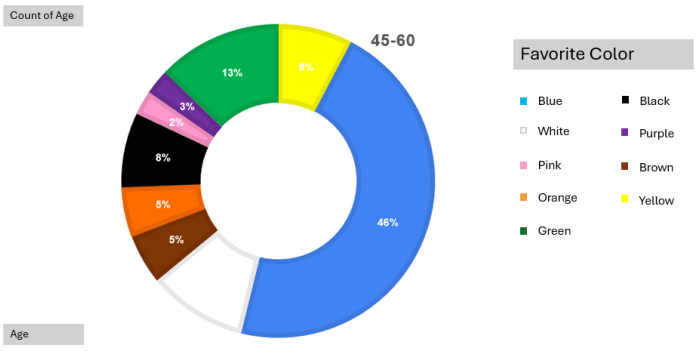


Figure 10- 45 to 60 color results

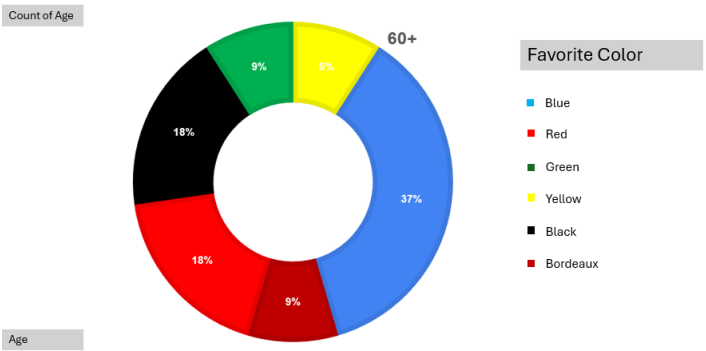


Figure 11- Over 60 color results

These results are broadly consistent with the literature reviewed. As in Sengupta et al. (2020) and Dittmar (2001), blue emerged as the most preferred color across all age groups, confirming its universal appeal. Younger participants, particularly those aged 18-30, demonstrated stronger preferences for expressive and trend-related hues such as pink and green, which aligns with Dantas et al. (2021), who observed that younger individuals are more likely to adopt vibrant or fashionable colors. By contrast, the 30-45 group showed a more balanced distribution of preferences, with less dominance of a single color, suggesting a transitional stage in color choices. Among older participants, especially those aged 45-60 and over 60, preferences shifted toward blue but also incorporated more subdued and classic tones such as white, black, and burgundy, echoing Dittmar's (2001) findings that older adults gravitate toward colors associated with tranquility, stability, and tradition. Overall, the questionnaire confirms the literature's view that while blue remains a universal favorite, color preferences evolve with age, reflecting broader psychological, cultural, and social influences.

5.3.1. Hypothesis verification

Test Used:

Chi-Square Test of Independence (Age × Favorite Color).

Table 3- What's your favorite color results x age

Age * What's your favorite color Crosstabulation

			What's your favorite color												Total
			black	blue	bordeaux	brown	green	orange	pink	purple	red	other	white	yellow	
Age	<18	Count	0	3	0	0	1	0	1	1	0	0	1	0	7
		% Within Age	0.0%	42.9%	0.0%	0.0%	14.3%	0.0%	14.3%	14.3%	0.0%	0.0%	14.3%	0.0%	100.0%
	18-30	Count	3	16	0	0	6	2	11	0	3	1	0	3	45
		% Within Age	6.7%	35.6%	0.0%	0.0%	13.3%	4.4%	24.4%	0.0%	6.7%	2.2%	0.0%	6.7%	100.0%
	30-45	Count	3	3	0	0	3	0	2	0	1	0	1	0	13
		% Within Age	23.1%	23.1%	0.0%	0.0%	23.1%	0.0%	15.4%	0.0%	7.7%	0.0%	7.7%	0.0%	100.0%
	45-60	Count	3	18	0	2	5	2	1	1	0	0	4	3	39
		% Within Age	7.7%	46.2%	0.0%	5.1%	12.8%	5.1%	2.6%	2.6%	0.0%	0.0%	10.3%	7.7%	100.0%
	60+	Count	2	4	1	0	1	0	0	0	2	0	0	1	11
		% Within Age	18.2%	36.4%	9.1%	0.0%	9.1%	0.0%	0.0%	0.0%	18.2%	0.0%	0.0%	9.1%	100.0%
Total		Count	11	44	1	2	16	4	15	2	6	1	6	7	115
		% Within Age	9.6%	38.3%	0.9%	1.7%	13.9%	3.5%	13.0%	1.7%	5.2%	0.9%	5.2%	6.1%	100.0%

Table 4- Chi-Square Test H2

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	54.399[a]	44	.135
Likelihood Ratio	54.951	44	.125
N of Valid Cases	115		

a. 54 cells (90.0%) have expected count less than 5. The minimum expected count is .06.

The Pearson Chi-Square = 54.40, df = 44, p = 0.135. Since p > 0.05, we fail to reject the null hypothesis which means there is no statistically significant association between age group and favorite color preference in this sample. All age groups showed a clear preference for blue (36–46% depending on group). Younger respondents (18–30) had higher preference for pink (24.4%) compared to older groups. Older groups (45–60, 60+) still leaned strongly toward blue, but also chose black and red more often. However, these differences are not strong enough to be statistically significant.

Based on the current categorization, there is no significant difference in color preferences by age group. Preferences appear broadly consistent across ages, with blue dominating across all groups.

5.4. H3: Traditional color stereotypes (e.g., pink for women and blue for men) are influenced by cultural and social perceptions

The questionnaire also investigated participants' perceptions of the influence of gender on color choices. Respondents rated their agreement on a five-point Likert scale, where 1 indicated "strongly disagree" and 5 indicated "strongly agree". Among female participants, the responses were distributed as follows: 11 rated 1, 6 rated 2, 15 rated 3, 28 rated 4, and 8 rated 5. Among male participants, 2 rated 1, 6 rated 2, 13 rated 3, 18 rated 4, and 8 rated 5.

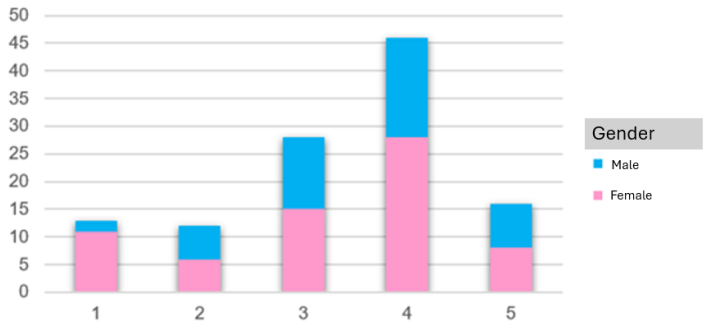


Figure 12- Does gender influence color choice?

The questionnaire also investigated participants' agreement with the traditional color stereotype that "pink is for girls and blue is for boys." Respondents rated their agreement on a five-point Likert scale, where 1 indicated "strongly disagree" and 5 indicated "strongly agree". Among female participants, 7 rated 1, 11 rated 2, 25 rated 3, 22 rated 4, and 3 rated 5. Among male participants, 2 rated 1, 9 rated 2, 18 rated 3, 16 rated 4, and 2 rated 5.

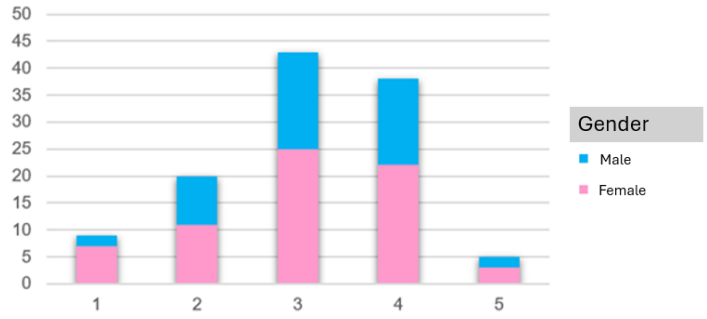


Figure 13- Is pink for girls and blue for boys?

The results from both questionnaires suggest that participants perceive gender as an influential factor in color preferences and recognize traditional color stereotypes, though not uniformly. Regarding the question on whether gender strongly influences color choice, most of both female and male respondents selected levels 4 and 5, indicating agreement that gender plays a significant role, with females showing slightly higher agreement. In the questionnaire on the pink-girl / blue-boy stereotype, most responses clustered around levels 3 and 4, demonstrating moderate acknowledgment of this traditional association, while few participants strongly agreed or strongly disagreed. These patterns align with the literature, which shows that gender differences in color preferences are influenced by culturally and socially constructed norms (Bonnardel et al., 2018; Dantas et al., 2021). Additionally, early emergence of gender-typed color preferences, as described by Wong and Hines (2015), helps explain why participants continue to perceive pink and blue as gendered colors. Overall, the data indicates that traditional gender-color associations persist in societal perception, supporting the literature, while also highlighting variability and a degree of questioning among participants, suggesting that cultural shifts and individual differences may moderate these stereotypes.

5.4.1. Hypothesis verification

Test Used:

Spearman's Rank Correlation (ρ) among three Likert-scale items.

Table 5- Spearman's Rank Correlation H3

Correlations

			Nowadays, the idea that "pink is for girls and blue is for boys" still persists quite a lot.	Social class influences color preference.	Culture influences color preferences.
Spearman's rho	Nowadays, the idea that "pink is for girls and blue is for boys" still persists quite a lot.	Correlation Coefficient	1.000	-.067	.093
		Sig. (2-tailed)	.	.484	.321
		N	115	113	115
	Social class influences color preference.	Correlation Coefficient	-.067	1.000	.391**
		Sig. (2-tailed)	.484	.	.000
		N	113	113	113
	Culture influences color preferences.	Correlation Coefficient	.093	.391**	1.000
		Sig. (2-tailed)	.321	.000	.
		N	115	113	115

**. Correlation is significant at the 0.01 level (2-tailed).

To examine whether traditional color stereotypes (e.g., "pink is for women and blue is for men") are influenced by cultural and social perceptions, a Spearman's rank-order correlation was conducted. The results indicated that endorsement of the traditional stereotype was not significantly correlated with perceptions of cultural influence ($\rho = 0.093$, $p = .321$) or social class influence ($\rho = –0.067$, $p = .484$). However, a moderate positive correlation was found between cultural and social class influence ($\rho = 0.391$, $p < .001$), suggesting that respondents who viewed culture as shaping color preferences were also more likely to perceive social class as influential. Overall, these findings suggest that traditional color stereotypes operate independently from cultural and social perceptions in this sample. While culture and social class are interrelated, neither appears to significantly explain persistence of the "pink for women, blue for men" stereotype.

5.5. H4: Specific colors are associated with emotional states in fashion choices.

When analyzing the associations between colors and emotions from the questionnaire, several results align with existing literature, while others reveal interesting divergences that highlight the subjective and contextual nature of color perception.

Happiness

Respondents most frequently associated happiness with orange (32) and green (23), followed by blue (16), pink (16), and white (15). Literature strongly links yellow with happiness and playfulness (Hemphill, 1996; Kandinsky et al., 1982; Wexner, 1954), yet yellow was not a tested option in the survey. The dominance of orange aligns with Kandinsky's suggestion that orange communicates radiance and health, while green being linked to happiness may be connected to nature and vitality (Kandinsky et al, 1982). The strong presence of blue and pink is also consistent with Hemphill's (1996) findings of positive emotional responses to these colors.

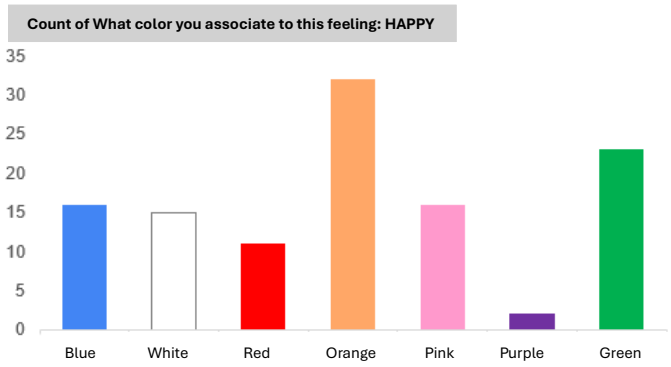


Figure 14- Color association to HAPPY

Confidence

Confidence was most often associated with red (34), followed by black (20), blue (19), and white (15). In prior studies, blue has been consistently connected to trust and reliability (Grimes & Doole, 1998; Labrecque & Milne, 2012), yet in this sample, red emerged as the dominant choice. This divergence may reflect cultural or social connotations of red as strong, assertive, and bold, qualities often linked to self-confidence. The presence of black as a confidence-associated color contrasts with its frequent association with negativity in literature (Vrij, 1997;

Adams & Osgood, 1973), but may also reflect perceptions of authority and power often attributed to black in fashion contexts.

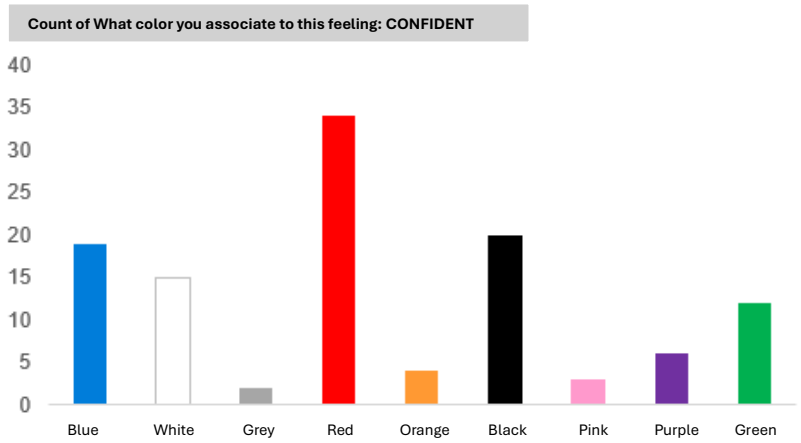


Figure 15- Color association to CONFIDENT

Sexy

The associations with sexiness were very clear: red (56) and black (39) dominated overwhelmingly. This is perfectly aligned with existing research, where red has been consistently linked to attractiveness and sexual appeal (Roberts et al., 2010; Frank & Gilovich, 1988), and black to sophistication and allure. This result confirms strong cross-study consistency.

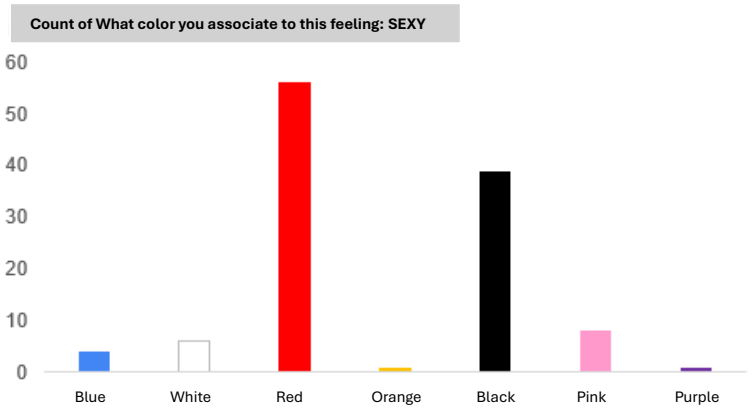


Figure 16- Color association to SEXY

Powerful

Power was most associated with black (44) and red (39), followed by purple (10). These findings are highly consistent with prior research: black is often connected to authority, control, and aggression (Vrij, 1997; Frank & Gilovich, 1988), while red is linked to confidence and dominance (Kandinsky et al., 1982; Labrecque & Milne, 2012). The role of purple also echoes literature, as purple has traditionally been associated with luxury, dignity, and status (Aslam, 2006; Wexner, 1954).

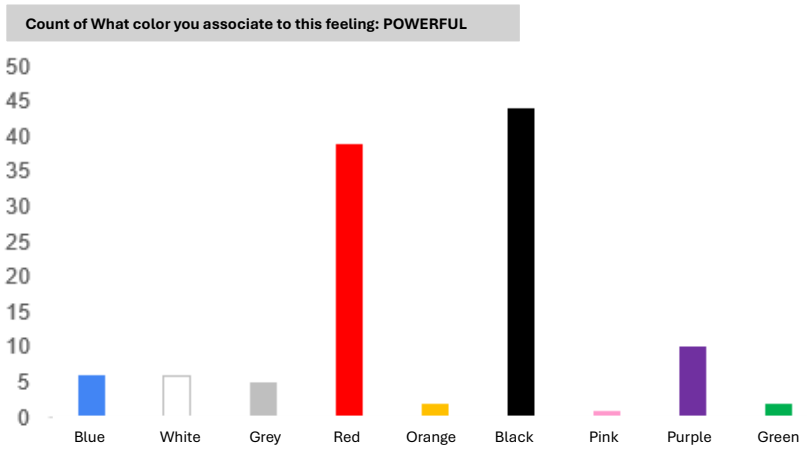


Figure 17- Color association to POWERFUL

Fun

Respondents associated fun most strongly with orange (37), pink (20), and blue (16). This is partially in line with the literature, which connects yellow to cheerfulness and playfulness (Wexner, 1954; Kandinsky et al., 1982). Since yellow was not included in the survey, orange may have taken on a similar role as a bright, energetic hue. Pink's association with fun also reflects its positive and lighthearted connotations noted by Hemphill (1996).

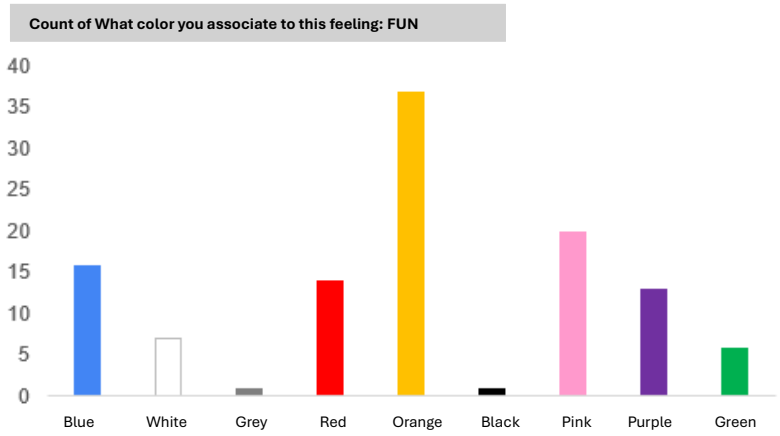


Figure 18- Color association to FUN

Calmness

The calm emotion was dominated by white (54) and blue (42), with minimal association to other colors. These results are strongly consistent with the literature: blue is repeatedly linked with tranquility, trust, and peacefulness (Grimes & Doole, 1998; Kandinsky et al., 1982), while white represents harmony, silence, and cleanliness (Kandinsky et al., 1982).

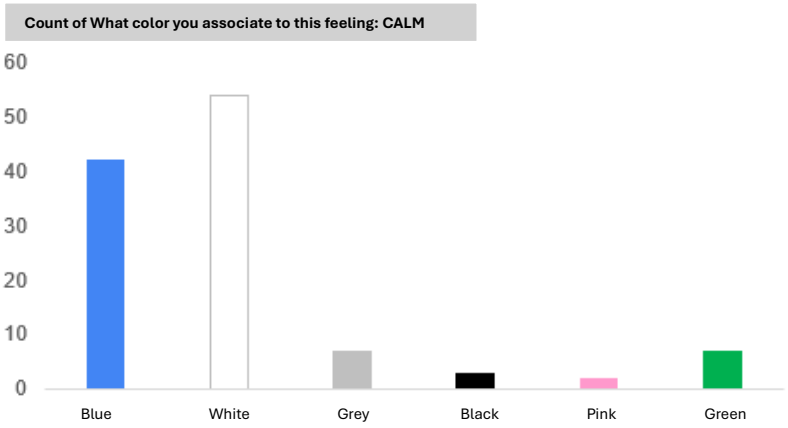


Figure 19- Color association to CALM

5.5.1. Hypothesis Verification

Test used:

Chi-Square Goodness-of-Fit

Table 6- Chi-Square Goodness-of-Fit POWERFUL

powerful

	Observed N	Expected N	Residual
1.00	44	13.8	30.3
2.00	6	13.8	-7.8
5.00	2	13.8	-11.8
6.00	2	13.8	-11.8
7.00	1	13.8	-12.8
8.00	10	13.8	-3.8
9.00	39	13.8	25.3
10.00	6	13.8	-7.8
Total	110		

Test Statistics

	powerful
Chi-Square	154.582[a]
df	7
Asymp. Sig.	.000

a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 13.8.

Table 7- Chi-Square Goodness-of-Fit SEXY

sexy

	Observed N	Expected N	Residual
1.00	39	16.4	22.6
2.00	4	16.4	-12.4
6.00	1	16.4	-15.4
7.00	8	16.4	-8.4
8.00	1	16.4	-15.4
9.00	56	16.4	39.6
10.00	6	16.4	-10.4
Total	115		

Test Statistics

	sexy
Chi-Square	175.652[a]
df	6
Asymp. Sig.	.000

a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 16.4.

Table 8- Chi-Square Goodness-of-Fit FUN

fun

	Observed N	Expected N	Residual
1	1	14.3	-13.3
2	16	14.3	1.8
5	6	14.3	-8.3
6	37	14.3	22.8
7	20	14.3	5.8
8	13	14.3	-1.3
9	14	14.3	-.3
10	7	14.3	-7.3
Total	114		

Test Statistics

	fun
Chi-Square	59.754[a]
df	7
Asymp. Sig.	.000

a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 14.3.

To test whether specific colors were significantly associated with different emotional states, Chi-Square Goodness-of-Fit tests were conducted for the emotions Powerful, Sexy, and Fun.

For Powerful, results revealed a significant difference in color associations, χ^2 (7, N = 110) = 154.58, $p < .001$. The most frequently selected colors were black (40%) and red (35%),

whereas other colors were chosen far less often. This suggests that participants strongly associate feelings of power with black and red.

For Sexy Similarly, the distribution of responses was significantly different from chance, χ^2 (6, N = 115) = 175.65, p < .001. Most respondents associated red (49%) and black (34%) with sexiness, while other colors were rarely selected. These findings reinforce the symbolic link between red, black, and perceptions of attractiveness or sensuality.

For Fun, A significant effect also emerged for fun-related associations, χ^2 (7, N = 114) = 59.75, p < .001. Orange (32%) was the most common choice, followed by pink (18%) and red (12%), suggesting that bright and warm colors are more strongly tied to feelings of fun and playfulness.

Thus, conclude that across all three emotions, participants showed clear, non-random patterns in their color-emotion associations. Black and red were strongly tied to feelings of power and sexiness, whereas orange and pink were more commonly linked to fun. These results support H4, indicating that specific colors are consistently associated with particular emotional states in fashion contexts.

5.6. H5: Fashion trends positively influence consumers' choices

The questionnaire results provide valuable insights into how fashion trends influence consumer behavior, particularly in terms of color choices and seasonal preferences. When asked whether they had ever purchased or worn clothing of a certain color simply because it was trendy, results revealed a clear gender difference. Among women, 45 responded "yes" and 23 "no," while among men, only 19 said "yes" compared to 28 who said "no." These findings suggest that female consumers are more likely to adopt trending colors regardless of their personal preferences, aligning with Han et al. (2022), who emphasized that brands rely on color trends to guide collections because consumers are drawn to products that align with prevailing palettes.

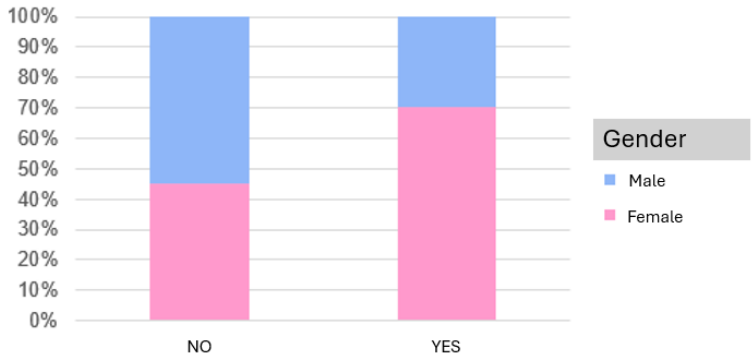


Figure 20- Do you buy clothes because they're trending?

However, when participants were asked whether they wear colors they dislike just because they are trendy, the Likert scale responses revealed a strong tendency toward disagreement. For both men and women, the majority selected "1" (strongly disagree) - 49 females and 29 males - with very few choosing higher levels of agreement. This nuance partially contrasts with Jackson's (2012) assertion that the "right" seasonal color drives sales even when personal preference is secondary. The data indicates that while consumers may adopt certain trends, they are less willing to compromise on strong personal dislikes, highlighting the boundaries of trend influence.

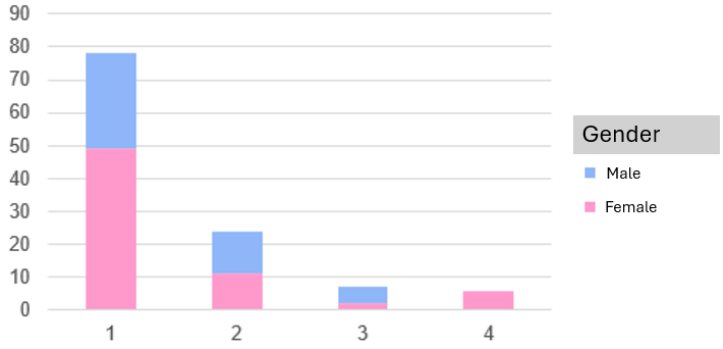


Figure 21- Even if I don't like the color, I buy it.

Taken together, the results demonstrate that fashion trends do play a significant role in shaping consumer choices, particularly among women, but not to the extent of completely overriding personal color preferences. These findings both confirm and qualify the literature - while trends influence purchase decisions and seasonal alignment, consumers still maintain agency by resisting colors they strongly dislike. This suggests that while brands can leverage trend forecasts to capture attention and remain relevant (Han et al., 2022; Jackson, 2012), they must also respect underlying consumer preferences to avoid alienation.

5.6.1. Hypothesis Verification

Test used:

One-Sample t-test

Table 9- One-Sample Statistics H5

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Even if I don't like it much, I wear a color if it's in fashion.	115	1.49	.831	.077

Table 10- One-Sample Test H5

One-Sample Test

	Test Value = 0					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Even if I don't like it much, I wear a color if it's in fashion.	19.188	114	.000	1.487	1.33	1.64

To assess whether consumers are influenced by fashion trends even when the colors do not align with personal preference, a one-sample t-test was conducted on the item "Even if I don't like it much, I wear a color if it's in fashion".

Results showed that the mean response (M = 1.49, SD = 0.83, N = 115) was significantly greater than zero, t (114) = 19.19, p < .001. However, because the mean lies well below the neutral midpoint of 3 on the Likert scale, the results indicate that respondents largely disagreed with the statement.

We conclude that although the statistical test was significant, the low mean score demonstrates that participants generally do not wear colors simply because they are fashionable if those colors conflict with their personal preferences. Thus, H5 is not supported—fashion trends do not appear to strongly override individual color preferences in this sample.

5.7. H6: Individuals who associate specific colors with positive emotions are more likely to use those colors in their clothing to influence their mood.

The hypothesis that individuals who associate specific colors with positive emotions are more likely to use those colors in their clothing to influence or regulate their mood is strongly supported by both the literature and the questionnaire results. According to Kariyeva (2024), the phenomenon of enclothed cognition suggests that wearing certain colors can enhance confidence, assertiveness, and self-perception, demonstrating that color choices in clothing have direct psychological effects.

The data collected in this study provide empirical support for this theoretical framework. When participants were asked whether wearing their favorite colors makes them feel better, most of both women and men selected higher values on the Likert scale (females: 28 + 29 = 57 at levels 4 and 5; males: 13 + 19 = 32 at levels 4 and 5). Similarly, responses regarding whether wearing certain colors makes them feel more like themselves showed a strong concentration at higher values (females: 33 + 26 = 59; males: 18 + 11 = 29). These results indicate that individuals actively use clothing colors to express identity and enhance their emotional state.

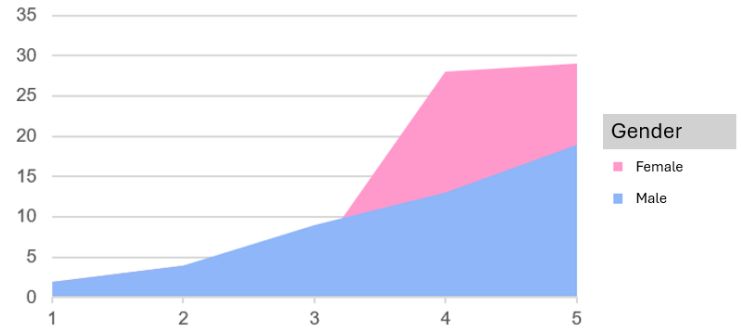


Figure 22- I feel better when I use my favorite colors

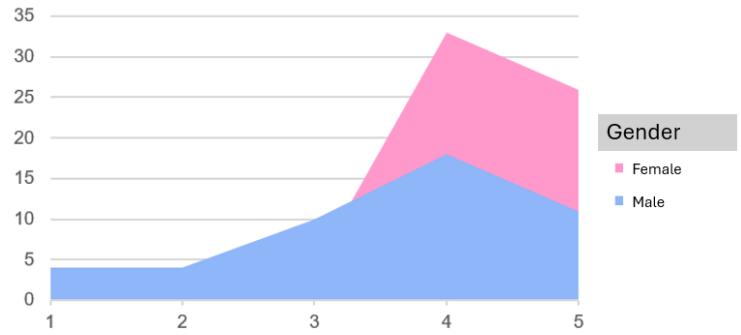


Figure 23- Certain colors make me feel more like myself

Furthermore, participants' perceptions of how colors influence their mood more generally also align with the literature. Most responses fell in the moderate-to-high range (females: 3, 4, 5 = 51; males: 3, 4, 5 = 33), demonstrating that clothing colors are recognized as an important tool for emotional regulation. These findings correspond with prior research showing consistent associations between colors and emotions, such as blue and white with calmness, red and black with power or sexiness, and orange, pink, and green with positive affect and happiness (Hemphill, 1996; Kandinsky et al., 1982; Wexner, 1954; Roberts et al., 2010).

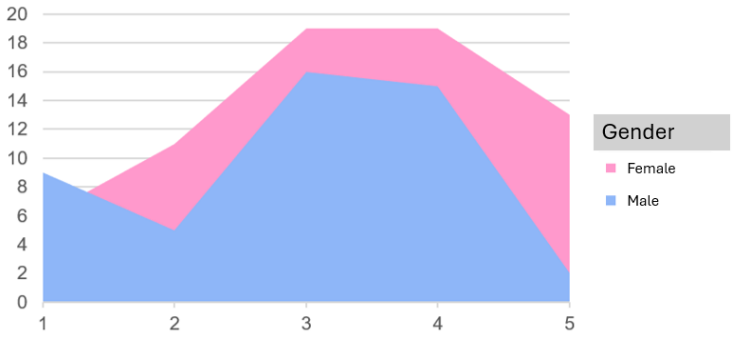


Figure 24- The colors I use influence my mood

5.7.1. Hypothesis Verification

Test used:

Spearman's rho Correlation

Table 11- Spearman's rho Correlation H6

Correlations

			I wear different colors to convey certain emotions.	The colors I wear directly influence my mood.	I feel better when I wear my favorite colors.	I avoid overly bright colors because they make me feel uncomfortable.
Spearman's rho	I wear different colors to convey certain emotions.	Correlation Coefficient	1.000	.503**	.349**	-.042
		Sig. (2-tailed)	.	.000	.000	.652
		N	115	115	115	115
	The colors I wear directly influence my mood.	Correlation Coefficient	.503**	1.000	.488**	-.022
		Sig. (2-tailed)	.000	.	.000	.815
		N	115	115	115	115
	I feel better when I wear my favorite colors.	Correlation Coefficient	.349**	.488**	1.000	.147
		Sig. (2-tailed)	.000	.000	.	.116
		N	115	115	115	115
	I avoid overly bright colors because they make me feel uncomfortable.	Correlation Coefficient	-.042	-.022	.147	1.000
		Sig. (2-tailed)	.652	.815	.116	.
		N	115	115	115	115

**. Correlation is significant at the 0.01 level (2-tailed).

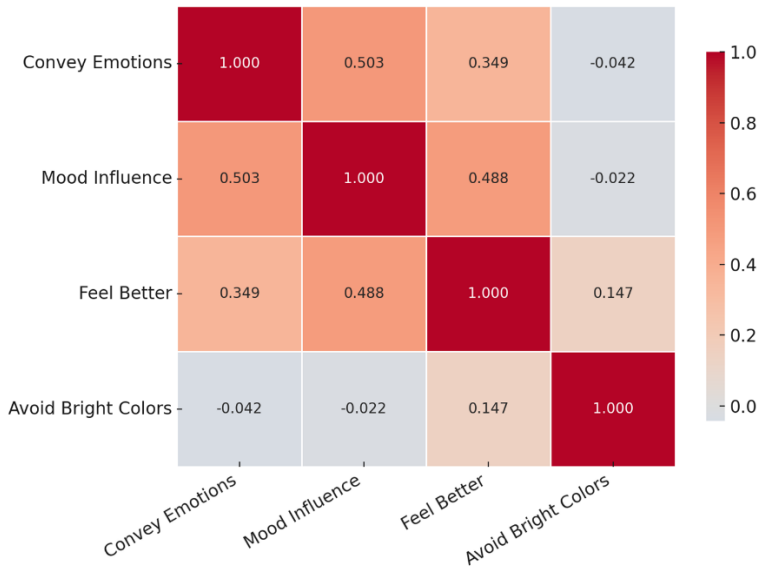


Figure 25- Spearman Correlation Heatmap

A Spearman's rho correlation was conducted to examine the relationship between color-emotion associations and the use of clothing colors to influence mood.

Results showed a strong positive correlation between "I wear different colors to convey certain emotions" and "The colors I wear directly influence my mood" ($\rho = .503$, $p < .001$). Similarly, "I wear different colors to convey certain emotions" was positively correlated with "I feel better when I wear my favorite colors" ($\rho = .349$, $p < .001$). Additionally, "The colors I wear directly influence my mood" was positively associated with "I feel better when I wear my favorite colors" ($\rho = .488$, $p < .001$). In contrast, no significant relationships were found with the item "I avoid overly bright colors because they make me feel uncomfortable" (all $p > .05$).

Thus, these findings provide strong support for H6: individuals who associate colors with emotions are significantly more likely to use those colors in their clothing to influence their mood and emotional state.

Table 12- Hypothesis Validation

Hypothesis Statement	Test Used	Result	Conclusion
H1. Are there significant differences in color preferences based on gender?	Chi-Square Crosstab	$\chi^2 = 26.53$, $p = .005$ (significant)	**Do Not Reject H1** (Supported)
H2. Are there significant differences in color preferences based on age?	Chi-Square Crosstab	$\chi^2 = 54.40$, $p = .135$ (not significant)	**Reject H2** (Not Supported)
H3. Traditional color stereotypes (e.g., pink for women and blue for men) are influenced by cultural and social perceptions.	Spearman's rho Correlation	Weak correlations, no strong evidence	**Reject H3** (Weak / Not Supported)
H4. Specific colors are associated with emotional states in fashion choices.	Chi-Square Goodness-of-Fit	All χ^2 significant at $p < .001$	**Do Not Reject H4** (Supported)
H5. Fashion trends positively influence consumers' choices	One-Sample t-test	$M = 1.49$, $t = 19.19$, $p < .001$ (mean below midpoint)	**Reject H5** (Not Supported)
H6. Individuals who associate specific colors with positive emotions are more likely to use those colors in their clothing to influence their mood.	Spearman's rho Correlation	$\rho = .503, .349, .488$, all $p < .001$	**Do Not Reject H6** (Supported)

6. Conclusions

6.1. Main Conclusions

This dissertation set out to examine how color perceptions and psychology influence consumer behavior in the fashion industry, with a particular focus on gender, age, emotional associations stereotypes and fashion trends this study aimed to evaluate whether demographic and social factors shape consumer preferences and whether these preferences translate into meaningful behavioral patterns in clothing choices.

The results of the quantitative analysis provided partial support for the hypothesis. Gender differences in color preferences (H1) were confirmed, aligning with existing literature that consistently demonstrates female preferences for pink and lilac bushes colors and male preferences for blue and neutral tones (Bonnardel et al., 2018; Dantas et al., 2021). Similarly, specific emotional associations with colors (H4) were strongly supported as participants consistently linked red and black to sexiness and power, blue and white to calmness, and orange and pink to playfulness. These findings reinforce the long-standing evidence that color is not only a visual element but is also a psychological and emotional driver in fashion contexts (Hemphill, 1996; Wexner, 1954). Finally, the results also supported H6, showing that individuals actively use color in their clothing to influence or to regulate their moods confirming this concept of enclothed cognition (Adam & Galinsky, 2012).

On the other hand, other hypotheses were not supported. Age-related differences in color preferences (H2) were not statistically significant even though descriptives results suggested subtle shifts across groups. This contrasts the findings from Sengupta et al. (2020) and Dittmar (2001), who reported a clearer age-related pattern. A possible explanation lies in the limited sample size and distribution which may have lacked the statistical power to capture generational differences. Similarly, H3 regarding the persistence of traditional stereotypes (like pink being for women and blue for men) did not find strong correlations with cultural or social perceptions. Although participants acknowledged these stereotypes, their responses suggested that such associations may be weakening or evolving in line with more recent studies pointing towards cultural shifts in color gender symbolism (Wong & Hines, 2015). Finally, the hypothesis that fashion trends override personal preferences (H5) was also rejected. While many participants admitted to occasionally adopting trendy colors, they largely resisted wearing colors they actively disliked. This result nuances prior research (Jackson, 2012; Han et al., 2022) by highlighting the limits of trend influence and showing that personal taste continues to be a strong determinant in fashion-related choices.

Overall, the objectives of the dissertation were achieved. This research confirmed that color significantly influences consumer behavior in fashion through gender differences, emotional associations and mood regulation, while also revealing areas where commonly held assumptions (for example, about age or fashion trends) may not be fully applied. By comparing the findings with the literature review, the research demonstrates both consistency with established theories and the emerge of new insights that question or refine previous assumptions.

6.2. Limitations of the study

Despite the valuable insights provided by this research, it is important to acknowledge a few limitations. Firstly, the sample size may be insufficient to support broad generalizations, limiting the representativeness of the findings. Additionally, the sampling method relied on convenience, as the questionnaire was primarily distributed through WhatsApp groups, which may have introduced bias by predominantly reaching individuals within specific social circles.

Although the sample included participants from various age groups, social classes, and backgrounds, it may not accurately reflect the diversity of the Portuguese population or fashion consumers as a whole. Moreover, the study is based on self-reported data, which carries the risk of social desirability bias or misinterpretation of certain questions.

Lastly, another limitation pertains to the cultural scope of the research. Since data collection was conducted exclusively in Portugal, the findings cannot be directly extrapolated to other cultural contexts, where perceptions of color may vary significantly. The short two-week data collection period further restricts the ability to analyze potential variations over time.

6.3. Research Contributions

This research offers a range of contributions spanning academic, practical, and societal dimensions. From an academic perspective, it provides empirical evidence that enriches the existing body of literature on color psychology and consumer behavior, particularly within the fashion sector. By investigating the connection between color preferences, perceptions, and purchasing decisions, the study enhances our understanding of how colors drive emotional and behavioral responses. Moreover, by focusing on Portugal, the research addresses a geographical gap, as much of the current literature is centered on studies conducted in other countries and cultural contexts, thereby broadening the global perspective on this topic.

On a practical level, the study provides actionable insights for fashion brands, marketers, and designers. The findings can inform strategies in branding, product development, and marketing communications, helping businesses align color choices with consumer expectations and preferences. These insights are especially critical for companies seeking to establish a deeper emotional bond with their audience and refine their decision-making processes in competitive markets. Additionally, the study offers valuable guidance for tailoring campaigns to specific demographic segments, ensuring that color-related strategies resonate with diverse consumer groups.

From a societal standpoint, the research sheds light on the psychological and emotional significance of colors, as well as their role in self-expression and personal identity. It emphasizes the diversity of individual perceptions (shaped by factors like age, gender, and cultural background) and how these differences influence consumer engagement with fashion. Furthermore, the study underscores the potential of color to impact well-being, suggesting that thoughtful color choices in fashion may contribute to enhancing individuals' moods and confidence.

6.4. Prospects for Future Research

Future research could expand the sample to various countries as well as different cultural contexts, examine age and generational differences and explore how emotional states influence color perception and clothing choices. Investigating the role of fashion trends, sensory factors (such as texture or pattern), and digital experiences could provide further insight into consumer behavior. Longitudinal studies and applications of color psychology in marketing and branding would help optimize product design and engagement, advancing the understanding of color's role in fashion.

Some variants of my study that I think would be interesting are:

- Home decor and interior design- Investigate how color perception affects mood, purchasing decisions, and room aesthetics in residential or commercial spaces.
- Cosmetics and personal care- Explore how packaging colors influence product attractiveness, perceived quality, and consumer choice.
- Sustainability and eco-conscious products- Study if and how color influences the perception of eco-friendly clothing or products and impacts purchase intentions.

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Annexes

Annex A – Google forms questionnaire

Perception and Psychology of Color in the Fashion Industry

Olá! O meu nome é Inês Madeira. Sou estudante do Mestrado em Marketing no ISCTE e estou a fazer a minha tese sobre "Perception and Psychology of Color in the Fashion Industry".
Este questionário é anónimo e demora cerca de 2 minutos.
Muito obrigada pela ajuda! :)

* Indica uma pergunta obrigatória

1. Idade *

Marcar apenas uma oval.

- ◯ <18
- ◯ 18-30
- ◯ 30-45
- ◯ 45-60
- ◯ 60+

2. Género *

Marcar apenas uma oval.

- ◯ Feminino
- ◯ Masculino
- ◯ Outro

3. Qual é a tua cor preferida *

Marcar apenas uma oval.

- ◯ Azul
- ◯ Verde
- ◯ Rosa
- ◯ Roxo
- ◯ Amarelo
- ◯ Laranja
- ◯ Encarnado
- ◯ Branco
- ◯ Castanho
- ◯ Cinzento
- ◯ Preto
- ◯ Outra: _____

4. Sentes que o teu gosto por certas cores mudou com a idade? *

Marcar apenas uma oval.

- ◯ Sim
- ◯ Não

5. O género influencia a escolha de cores *

Marcar apenas uma oval.

	1	2	3	4	5	
Disc	◯	◯	◯	◯	◯	Concordo totalmente

6. Hoje em dia, ainda existe muito o "cor de rosa é para as meninas e azul é para os meninos" *

Marcar apenas uma oval.

	1	2	3	4	5	
Disc	◯	◯	◯	◯	◯	Concordo totalmente

7. A idade influencia a preferência pela cor *

Marcar apenas uma oval.

	1	2	3	4	5	
Disc	◯	◯	◯	◯	◯	Concordo totalmente

8. A cultura influencia a preferências pela cor *

Marcar apenas uma oval.

	1	2	3	4	5	
Disc	◯	◯	◯	◯	◯	Concordo totalmente

9. A classe social influencia a preferencia pela cor *

Marcar apenas uma oval.

	1	2	3	4	5	
Disc	◯	◯	◯	◯	◯	Concordo totalmente

10. Já compraste roupa só porque a cor estava "na moda"? *

Marcar apenas uma oval.

- ◯ Sim
- ◯ Não

11. Como descobres novas tendências de cor? *

Marcar tudo o que for aplicável.

- ☐ Redes sociais (Instagram, TikTok, etc.)
- ☐ Revistas de moda
- ☐ Influencers/bloggers
- ☐ Sites/marcas de moda
- ☐ Não acompanho tendências

12. Quando uma cor se torna muito popular: *

Marcar tudo o que for aplicável.

- ☐ Ficas com mais vontade de comprar roupa nessa cor
- ☐ Perdes interesse
- ☐ Depende da peça
- ☐ Não ligo

13. As cores em tendência influenciam as minhas decisões de compra *

Marcar apenas uma oval.

	1	2	3	4	5	
Disc	◯	◯	◯	◯	◯	Concordo totalmente

14. Sou influênciado(a) a comprar uma peça de roupa porque vejo uma celebridade/influencer que gosto a usá-la *

Marcar apenas uma oval.

	1	2	3	4	5	
Disc	◯	◯	◯	◯	◯	Concordo totalmente

15. Costumo seguir as tendências de cor nas estações primavera/verão e outono/inverno *

Marcar apenas uma oval.

	1	2	3	4	5	
Disc	◯	◯	◯	◯	◯	Concordo totalmente

16. Mesmo que não goste muito, uso uma cor se estiver na moda *

Marcar apenas uma oval.

	1	2	3	4	5	
Disc	◯	◯	◯	◯	◯	Concordo totalmente

17. Acredito que usar cores que estão "na moda" melhora a minha imagem e a percepção que as pessoas têm de mim *

Marcar apenas uma oval.

	1	2	3	4	5	
Disc	◯	◯	◯	◯	◯	Concordo totalmente

18. Já te aconteceu comprar roupa online e a cor parecer diferente ao vivo? *

Marcar apenas uma oval.

- ◯ Sim
- ◯ Não

19. Se sim, o que fizeste? *

Marcar apenas uma oval.

- ◯ Fiquei com a peça mesmo assim
- ◯ Devolvi
- ◯ Fiquei insatisfeito/a, mas não devolvi
- ◯ Outra: _____

20. Que tipo de conteúdo digital influencia mais a tua perceção das cores de roupa? *

Marcar tudo o que for aplicável.

- ☐ Fotografias em e-commerce
- ☐ Vídeos/Try-ons
- ☐ Reels/TikToks
- ☐ Stories/Posts

21. Vídeos são mais fiáveis que fotografias para avaliar a cor de uma peça *

Marcar apenas uma oval.

	1	2	3	4	5	
Disc	◯	◯	◯	◯	◯	Concordo totalmente

22. Confio mais nas imagens publicadas por consumidores do que nas fotografias das marcas *

Marcar apenas uma oval.

	1	2	3	4	5	
Disc	◯	◯	◯	◯	◯	Concordo totalmente

23. As cores das roupas parecem mais apelativas nas redes sociais *

Marcar apenas uma oval.

	1	2	3	4	5	
Disc	◯	◯	◯	◯	◯	Concordo totalmente

Emotional Responses to Colors in Fashion

24. Que cor associas a estes sentimentos: *

Marcar apenas uma oval por linha.

	Preto	Branco	Encarnado	Azul	Laranja	Verde	Roxo	Rosa
Confiante	◯	◯	◯	◯	◯	◯	◯	◯
Feliz	◯	◯	◯	◯	◯	◯	◯	◯
Calmo	◯	◯	◯	◯	◯	◯	◯	◯
Poderoso	◯	◯	◯	◯	◯	◯	◯	◯
Sexy	◯	◯	◯	◯	◯	◯	◯	◯
Divertido	◯	◯	◯	◯	◯	◯	◯	◯

25. Escolho cores de roupa de acordo com o meu estado de espírito *

Marcar apenas uma oval.

	1	2	3	4	5	
Disc	◯	◯	◯	◯	◯	Concordo totalmente

26. Uso cores diferentes para transmitir certas emoções *

Marcar apenas uma oval.

	1	2	3	4	5	
Disc	◯	◯	◯	◯	◯	Concordo totalmente

27. Sinto-me melhor quando uso as minhas cores favoritas *

Marcar apenas uma oval.

	1	2	3	4	5	
Disc	◯	◯	◯	◯	◯	Concordo totalmente

28. As cores que uso influenciam diretamente o meu estado de espírito *

Marcar apenas uma oval.

	1	2	3	4	5	
Disc	◯	◯	◯	◯	◯	Concordo totalmente

29. Evito cores demasiado chamativas porque me fazem sentir desconfortável *

Marcar apenas uma oval.

	1	2	3	4	5	
Disc	◯	◯	◯	◯	◯	Concordo totalmente

30. Uso certas cores quando quero destacar-me ou chamar atenção *

Marcar apenas uma oval.

	1	2	3	4	5	
Disc	◯	◯	◯	◯	◯	Concordo totalmente

31. Certas cores que uso fazem-me sentir mais eu mesma/o *

Marcar apenas uma oval.

	1	2	3	4	5	
Disc	◯	◯	◯	◯	◯	Concordo totalmente

Este conteúdo não foi criado nem aprovado pela Google.

Google Formulários