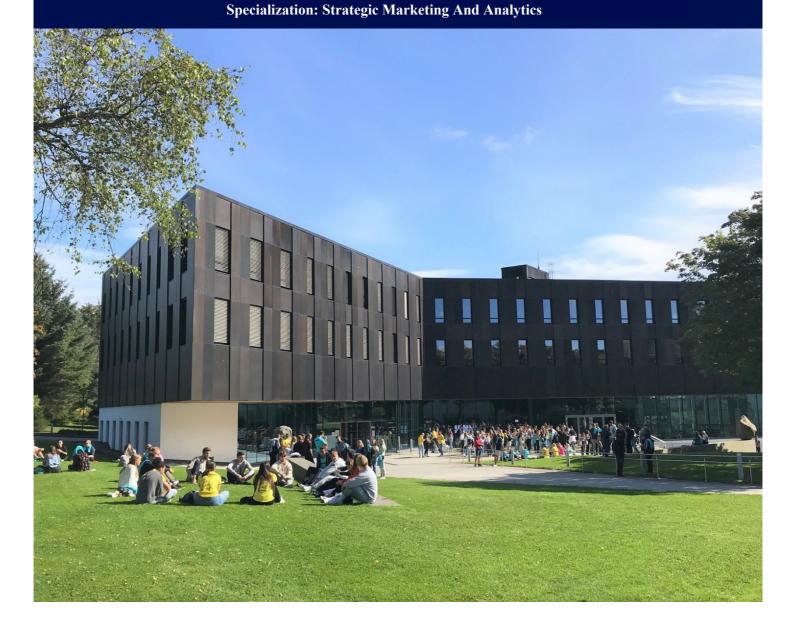


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Exploring the Influence of Consumer Behavior, Psychology, and Personality on Purchase Intention: A Study on the Impact of Color, Font Type, and Material in Coffee Packaging

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# ABSTRACT

Norway boasts a substantial coffee market and ranks as the second-highest consumer of coffee globally. Within a highly competitive market, it becomes crucial for businesses to differentiate themselves from competitors. While previous studies have primarily focused on examining the impact of various coffee packaging components on overall purchase intention, this research seeks to delve deeper and identify the specific factors that contribute to heightened purchase intentions for particular packaging components. By shedding light on these factors, this study aims to provide valuable insights for businesses aiming to gain a competitive advantage in the industry.

Our research comprised two distinct studies. Study 1 encompassed an exploratory investigation with the objective of examining the alignment between personalities and color preferences, as well as determining the magnitude of willingness to pay (WTP) and its key influencers. Study 2, our main study, focused on analyzing the factors that influence purchase intentions for various packaging components, specifically material, font type, and color. Within this study, we explored the interplay of consumer behavior, psychology, and personality as critical determinants of purchase intentions.

To examine the present study, we employed a comprehensive approach involving an online survey to gather relevant data. This data was subjected to rigorous analysis, including factor analysis and regression models, to facilitate a thorough exploration of the research variables. The outcomes of our analysis revealed compelling evidence supporting the significant influence of underlying factors such as consumer behavior, psychology, and personality on the purchase intentions pertaining to diverse coffee packaging components. These findings underscore the importance of considering these factors when making decisions regarding the packaging of coffee products, as they can significantly impact consumer preferences and behaviors.

# PREFACE

We extend our heartfelt appreciation to all those who have provided us with invaluable support and guidance throughout the development of this thesis.

This master's thesis constitutes a significant component of our specialization in Strategic Marketing and Analytics, within the Master of Business Administration program at the esteemed University of Stavanger. This undertaking has not only facilitated the acquisition of substantial knowledge and insights pertaining to the realm of purchase intention but has also nurtured our abilities as astute strategists and analytical thinkers. The impetus behind selecting this subject matter stems from our fascination with marketing and the desire to deepen our understanding of its intricacies.

In light of the study's focus, we explored the interplay between consumer behavior and product packaging, and their respective impacts on purchase intentions. By delving into this intricate relationship, we aimed to contribute to the existing body of knowledge and shed light on the factors that influence consumers' purchase intentions.

Lastly, we express our sincere gratitude to our supervisor, Shuai Yan, whose exceptional guidance and insightful feedback throughout this semester have been instrumental in shaping the trajectory of our research. The weekly discussions and meetings with our supervisor have provided invaluable opportunities for intellectual exchange and growth. Furthermore, we would like to extend our gratitude to our families and friends for their unwavering support and contributions to the fruition of this thesis. Their encouragement and assistance have been indispensable in navigating the challenges encountered along this scholarly journey.

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### **1 INTRODUCTION**

There are many products on the market today, and all businesses want and need customers to compete. As a result, in order to compete, businesses must employ a variety of strategies. Product packaging is one of the most effective competition tools because it attracts the majority of customers. Using packaging as a tool to capture consumer purchase intention has proven to be effective (Ranjbarian, 2009 as cited in Farooq et al., 2015). Rundh (2005) also stated that packaging catches the attention of customers and influences their perception of your product. This can lead to a variety of scenarios in which customers choose your product.

For countless years, coffee has played an indispensable role in the daily routines of households worldwide. A substantial number of individuals consider the act of obtaining a cup of coffee upon awakening as their initial step before embarking on their daily endeavors. Norway, in particular, has showcased remarkable expertise in the realm of coffee consumption, as evidenced by recent reports. These reports reveal that Norway has imported a staggering volume of over 50,000 tons of coffee, leading to an average per capita consumption rate of 9.3 kilograms. This statistical data firmly establishes Norway as the second highest consumer of coffee on a global scale, with only Finland surpassing its levels of consumption (Grydeland, 2021).

Considering the vastness of the coffee market, it can be inferred that there will be intense competition among coffee producers and retailers. Therefore, in order to gain a foothold in this cutthroat industry, it is imperative to pay close attention to every marketing detail. With an array of options available to consumers, the role of packaging cannot be underestimated as it plays a pivotal role in catching the eye of the potential buyer and influencing their purchasing decision, as noted by (Ranjbarian, 2009 as cited in Farooq et al., 2015). Additionally, developing a strong brand identity and establishing a unique selling proposition can also contribute to standing out in the competitive coffee market.

According to Connolly and Davidson (1996), a substantial proportion of purchase decisions, specifically 73 percent, are determined during the point of sale. Silayoi and Speece (2007) emphasized that the package plays a crucial role in influencing consumers' purchasing decisions, especially when they are unsure. During the decision-making process, packaging

interacts with the consumer, making it a significant factor. Packaging color and material are among the numerous elements that can influence consumer behavior.

In highly competitive markets where similar products are widespread, packaging serves a crucial function in distinguishing consumer goods, as Rundh (2009) notes. Effective use of packaging as a tool for product differentiation is crucial in achieving a competitive edge in the market. Therefore, it is essential for businesses to understand the significance of packaging in shaping consumer perceptions and purchase intentions towards their products. Businesses must consider packaging design and material selection as a strategic element of their product marketing and branding strategy. It is essential to choose packaging that aligns with their target audience's preferences and effectively conveys their brand image and product features. By doing so, they can create a positive perception of their products and increase their chances of success in the marketplace.

The primary objective of this study is to investigate fundamental packaging components, such as color, font, and material, and their associated personality traits. Cerrato's (2012) research indicates that diverse colors carry varied connotations in the business setting and that personal factors of consumers can influence their color preferences and attraction towards a specific hue.

Thus, our research question will be as follows:

"To what extent do consumer behavior, psychology and personality influence the purchase intention of different components (color, font type, and material) on coffee packaging?"

By answering this research question, we believe that this paper can be utilized to assist marketing managers in developing strategies to target the proper consumers and increase coffee sales.

The primary objective of this study is to meticulously determine the extent to which packaging influences consumers' purchase intention, while also identifying the key factors that contribute to this influence. The research will focus on three primary factors, namely color, font style, and

material, and will take into account the role of consumers' behavior in their decision-making process.

In order to provide a more thorough and comprehensive understanding of the research topic, a comprehensive review of existing literature will be presented in the subsequent section. This literature review will encompass a collection of theories and findings that have been previously explored in the field. Then we will present the hypotheses in chapter three.

To address the research question and achieve the research objectives, a well-defined research methodology will be outlined in chapter four. In this part of the study, primary quantitative data was collected through online surveys, which will serve as the main source of empirical evidence. The data collected will be analyzed using the Statistical Package for the Social Sciences (SPSS).

Chapter five will delve into the presentation and interpretation of the obtained data, shedding light on the relationship between packaging attributes and purchase intention. This chapter will include detailed statistical analyses, such as descriptive statistics, factor analysis and regression analysis, to examine the magnitude of the effects and the significance of the identified determinants.

Finally, chapter six and seven will serve as the discussing and concluding section of this thesis, where a comprehensive discussion of the research findings will take place. The implications of the results will be explored, and recommendations for marketing practitioners and future research directions will be provided. This chapter will ultimately synthesize the research findings, address any limitations encountered during the study, and draw a conclusive answer to the research question.

#### **2 LITERATURE REVIEW**

This section aims to explore various theories that are crucial in forming our understanding of specific aspects of product packaging. We attempt to investigate the impact of these theories on the intention to purchase coffee products by fusing consumer behavior with these theories.

The purpose of presenting these theories is to improve our general understanding of the topic as well as make it easier to derive useful hypotheses.

#### 2.1 Product packaging elements

Packaging elements are important features for conveying the brand message to customers, and knowledge about the product. "A good packaging is far more than a salesman, it is a flag of recognition and a symbol of values" (Lewis, 1991, as cited in Khuong & Tran 2018). The features such as color and font style can help to convince consumers to create a positive image of the brand (Hussain et al., 2015). (Rundh, 2007, as cited in Waheed et al., 2018) stated that packaging has been identified as a crucial tool for the stimulation of purchase intentions. (Smith and Taylor 2004 as cited in Waheed et al., 2018) say that six factors that must be taken into creating efficient packaging, elements such as color, graphics and material.

# 2.1.1 Font

(Mutsikiwa & Marumbwa, 2013, as cited in Waheed et al., 2018) defined that a key element of the packaging is the font style, this is because it is important to make the typing more visual by choosing a suitable font style. According to their assertion, the textual information displayed on a given product holds paramount significance in facilitating effective communication. This communicative efficacy can only be achieved through the meticulous selection of appropriate content and font styles. Research by Nayyar (2012) found that font style has the strongest effect on consumers' purchase intention, followed by color. A good font style on the packaging captures the attention of the customer. Successful businesses have the best font styles because they hire experts to create eye-catching and mind-blowing font styles (Deliya & Parmar, 2012).

In addition to its role in capturing customers' attention, font style can also provide valuable cues regarding a company's messaging and values, thereby facilitating enhanced customer understanding. This underscores the importance of utilizing a font type that can be readily associated with the intended expression of one's product or brand, as it enhances the consumer's ability to comprehend and internalize the intended messaging (Kim & Lim, 2019).

Given that font type has a demonstrable effect on consumer purchasing behavior, it is crucial to recognize that this phenomenon may be partially attributed to the tendency of consumers to

respond more favorably to products whose font type aligns with the product's message and overall appeal (Saleem et al., 2018). The scholarly inquiry conducted by Ribeiro et al. (2018) utilized multiple regression analysis and included various packaging-related variables. The study revealed that font styles exerted a significant influence on consumer purchasing intentions.

#### 2.1.2 Color

It is widely acknowledged that individuals have preferred colors which may influence their decision-making process when making purchases. In his study, Keller (2009) expounds on the notion that color constitutes a critical aspect of packaging design, as it serves as a tool that designers employ to communicate specific messages about the product. According to Keller (2009), the color scheme of packaging and other visual elements are integral components of the design vocabulary, and thus, their effective use is crucial for conveying the intended message. Additionally, Keller (2009) posits that the congruity between the color scheme and information presented in packaging is a significant element of visual design, and that marketers should strive to maintain consistency with their competitors in this regard. Kauppinen-Raisanen (2010) reveals that the packaging color and its association with the product hold significant influence on its meaning. Color is also an important part as companies use colors to differentiate their products from competitors. They use different colors as it emphasizes different moods (Hasani & Zeqiri, 2015).

According to Cerrato's (2012) in-depth analysis, colors have distinct personal and businessrelated connotations. Specifically, the color red is known to attract attention and signal excitement, energy, passion, and love. Cerrato (2012) further asserts that in the business context, red can be leveraged to stimulate consumer appetite and prompt impulsive purchasing decisions.

Cerrato's (2012) analysis further highlights that yellow is a widely employed color for food and beverage products worldwide, as it connotes joy, happiness, and warmth. This hue is often utilized in marketing strategies to appeal to consumers by evoking positive emotions. Specifically, the color yellow has been found to elicit feelings of happiness and joy in consumers (Cerrato, 2012).

Blue is the most popular color and one of the most frequently used colors for beverages packaging. The color blue is associated with trust, reliability, intelligence and coolness (Cerrato, 2012). Consequently, businesses often use this hue to communicate that their products can be trusted and depended on, while conveying a sense of honesty and integrity to the consumer (Cerrato, 2012).

#### 2.1.3 Material

The purchase of a product entails encountering a multitude of variations in form and dimension. Notably, the composition of the product may exhibit a wide range of materials, among which glass, cardboard, and plastic emerge as the most commonly employed. According to Ishaku et al. (2013), the material used in product packaging is a crucial component in preventing product loss. Furthermore, high-quality packaging materials are known to be more appealing to customers, compared to those of inferior quality. Convenience and usability are also impacted by the product's material. With its transparent nature and protective structure, glass is regarded as a material that appeals to consumers. However, consumers are drawn to packaging made of plastic and cardboard because of their ease of use and resistance to physical damage (Aday & Yener, 2014, as cited in Rahman et al., 2020).

As previously alluded to, the market is saturated with a multitude of products that share striking similarities, and in such cases, the packaging employed can wield considerable influence. The choice of materials utilized not only distinguishes the product from its competitors but also exerts an effect on the efficacy of coffee storage.

According to a study conducted by Benachenhou et al.,(2018), it was determined that the variances in product material possess a considerable impact on purchase intention. The research findings indicated that glass surpasses both paper and plastic in terms of effectiveness. In a similar vein, Farooq et al. (2015) undertook a study with the objective of examining the packaging elements that influence purchase intention. The results demonstrated that the packaging material exerts a notable and favorable influence on purchase intention.

#### 2.2 Consumer behavior

Consumer behavior can be seen as a consumer's selection, purchase and consumption of goods and services, to satisfy the needs he or she may have. Upon selecting the goods, the consumer engages in an evaluation process to estimate their financial capability, considering various factors such as social, cultural, personal, and psychological influences (Gajjar, 2013). Another study conducted by (Jisana, 2014) also found that consumers' purchase intentions are influenced heavily by personal and psychological factors.

#### 2.2.1 Psychological factors

Jisana (2014) contributes a theoretical framework elucidating consumer behavior models. Within this scholarly article, an exploration of the subject reveals the existence of four prominent psychological factors, namely motivation, perception, learning, beliefs and attitudes. As every person has a need, and they pursue the need, it will become a motivation. Customers also have particular attitudes and beliefs about various products. Marketers are interested in these ideas because they shape brand image and influence consumer purchasing behavior Jisana (2014). Similarly, Gajjar's (2013) study corroborates these findings by identifying the same set of psychological factors. Rani (2014), in concurrence with the aforementioned research, not only acknowledges the significance of these four factors but also highlights the conceptualization of motivation in relation to Maslow's hierarchy of needs. These collective scholarly contributions shed light on the foundational elements that underpin the complex nature of consumer behavior.

As other academics have noted, motivation is crucial. Abraham Maslow proposed that human needs are ranked from the most fundamental to the more important. When the basic needs are satisfied, they won't be motivators anymore, and people will seek for higher levels of needs. Maslow's hierarchy of needs has five levels (Appendix 1). The physiological needs come first; these are the necessities like food, water, and sleep. The need to feel safe in one's surroundings comes next in terms of needs. The need to be loved, accepted, and a part of a group are the third set of needs. The fourth is esteem needs, or the desire to be regarded and admired. The highest level of the hierarchy, known as self-actualization needs, is where people who have attained the levels above aim to continue their own personal development and self-fulfillment (Durmaz, 2014).

#### 2.2.2 Personal factors

In the discussion of the determinants of purchase intention, an examination of personal factors assumes paramount importance. These elements specifically cover a person's lifestyle and personality, both of which have a big impact on how they make decisions. In this context, lifestyle refers to the way in which people live their lives within society, as shown through their interactions and the material objects that adorn their immediate surroundings. On the other hand, personality has a significant influence on consumer purchasing behavior because it is a dynamic construct that varies from person to person, over time, and across space. The study also elaborated on the significant influence personality has on influencing consumers' buying decision, supports this claim (Jisana, 2014).

The concept of lifestyle pertains to the distinctive manner in which individuals lead their lives, encompassing a wide range of aspects. Notably, individuals belonging to similar cultural backgrounds or social strata often exhibit variations in their chosen lifestyles. Evaluating and comprehending lifestyle necessitates the utilization of psychographic assessments, specifically employing the AIO framework (Appendix 2) which encapsulates activities, interests, and opinions. By delving into psychographics, analysts aim to discern individuals' preferred activities, personal inclinations, and their respective viewpoints (Kotler et al., as cited in Nagarkoti, 2014). The formation of an individual's personality is influenced by a combination of personal experiences and inherited traits. Personality encompasses various attributes, including but not limited to compulsiveness, ambition, introversion, extroversion, and competitiveness (Pride and Ferrell, 2011, p. 160, as cited in Nagarkoti, 2014).

### 2.3 Demographics

The scholarly investigation conducted by Omar et al. (2016) explored the influence of five key demographic factors, namely age, gender, income, level of education, and the presence of children in the household. In a similar vein, Yahya et al. (2022) examined the relationship between age, occupation, and income level. Notably, Rezai et al. (2011) conducted research that revealed a noteworthy impact of educational level and income on purchase intention. In a parallel vein, In and Ahmad (2018) conducted a study that demonstrated the significant influence of age, gender, and education on purchase intention. Lastly, Demura et al. (2013) conducted an investigation specifically focusing on coffee consumption, which unveiled a

significant gender disparity, with males exhibiting a higher propensity for coffee consumption compared to females. These collective findings collectively contribute to the existing body of knowledge regarding the factors that shape consumer behavior and purchase intention.

# 2.3.1 Age

Age can be defined as the temporal extent of an individual's or entity's existence up to the present moment. As individuals undergo development, their purchasing habits and patterns undergo transformations due to evolving needs, lifestyles, and personal ideals (Murat, 2011; Haliru, 2013, as cited in Njigua, 2018). Within the realm of consumer behavior, a study conducted by Yahya et al. (2022) sought to explore the factors influencing consumers in the Klang Valley region of Malaysia. Notably, the investigation uncovered a significant impact of age on purchase intention among the respondents. Supporting this notion, a separate study by (Lewsley 2021, as cited in Yahya et al., 2022) found that individuals between the ages of 13 and 18 consumed the highest amount of coffee on a daily basis.

Moreover, Ribeiro et al. (2018) conducted a study focusing on how different age groups perceive packaging variations. Three distinct focus groups were formed: the first group encompassed individuals aged 18-30, the second group consisted of those aged 31-50, and the third group included participants aged 51-70. The findings from this investigation indicated that the first two age groups expressed a preference for glass packaging, whereas the third age group exhibited a preference for plastic packaging.

#### **2.3.2 Income**

Income, as an essential component of an individual's financial resources derived from employment, significantly influences their purchasing power and financial circumstances (Kotler et al., 2014, as cited in Njigua, 2018). This association between income and consumer behavior has been extensively explored in scholarly research. For instance, Rezai et al. (2011) investigated the influence of demographic factors on consumers' inclination to purchase green food products in Malaysia. Their findings revealed a notable relationship between income levels and purchase intention for green foods, demonstrating that individuals with higher incomes exhibited a higher increase in the likelihood of intending to purchase such products compared to those with lower incomes.

Similarly, an examination of Chinese consumers' intentions to purchase organic food conducted by Yin et al. (2010) emphasized the impact of income on purchase intentions. The study's findings illuminated the significant role income played in influencing the respondents' inclination to engage in organic food purchases. Notably, individuals with higher incomes displayed a heightened propensity to intend to purchase organic food products.

Further affirming the prominence of income in shaping consumer behavior, Yahya et al. (2022) emphasized the substantial influence of income on customer purchase intentions, specifically within the context of coffee consumption. Their investigation yielded statistically significant evidence supporting the association between income and customer purchase intention among coffee consumers.

# 2.3.3 Gender

The primary objective of the research conducted by Demura et al. (2013) was to comprehensively investigate and analyze potential dissimilarities pertaining to the patterns of coffee consumption between males and females. The study's outcomes unveiled a conspicuous and statistically significant contrast between men and women concerning their consumption habits when it comes to coffee. In a separate but related investigation, Omar et al. (2016) conducted an independent study with the aim of scrutinizing the impact of demographic factors on the intention of consumers to purchase organic products. The outcomes of this study shed light on the pivotal role played by gender in the decision-making process and its profound influence on individuals' inclination to buy organic products. These studies collectively underscore the significance of gender as a critical factor in understanding and elucidating consumption behavior and intentions in various contexts.

# 2.3.4 Education

The present investigation delves into the intricate relationship between education level and purchase intention. Extensive scrutiny of existing literature has shed light on the profound impact education level exerts on the likelihood of individuals engaging in purchasing activities. A study conducted by Rezai et al. (2011) has elucidated that education level bears considerable significance in shaping purchase intention. Specifically, individuals boasting higher educational attainment exhibit a substantially elevated intention to make purchases, with the

effect size estimated to be 1.847 times greater than their counterparts possessing lower levels of education. This finding underscores the pivotal role education plays in influencing consumer behavior. Omar et al. (2016) have also contributed to the discourse by revealing, through their empirical inquiry, that education level emerges as a key determinant of purchase intention among consumers. Their study corroborates the notion that individuals' educational background significantly influences their propensity to engage in purchasing activities.

Furthermore, an investigation into the factors influencing purchase intention of vitamin beverages has yielded noteworthy insights. Notably, Kanchanopast's (2022) study has unveiled a strong and statistically significant relationship between education level and the purchase decision of said beverages.

# 2.4 Purchase intention

Purchase intention can be defined as a consumer's decision-making reason for purchasing a specific brand, or how a consumer tends to purchase a certain product under certain conditions (Shah et al., 2012; and Morinez et al., 2007, as cited in Mirabi et al., 2015). Purchase intention also depends on product categories, demographics and the moods of consumers (Kamaruddin & Kamarulzaman, 2009, as cited in Waheed, 2018). The intention of consumers to purchase products or services serves as a valuable tool for marketers to forecast future consumer behavior and formulate effective marketing strategies (Morwitz, 2014, as cited in Waheed, 2018). Customers purchase intention is a complex process to understand. Purchase intention is related to the consumers behavior, perceptions and attitudes. According to Ghosh (1990, cited in Mirabi et al., 2015), purchase intention is an effective way to predict consumers' purchasing processes. Purchase intent can be influenced by changes in price, perceived quality, and value (Gogoi, 2013). Others believe that purchase intention is related to demographic factors such as age, gender, profession, and education (Lu, M. 2007, as cited in Rezvani et al., 2012).

# 2.5 Willingness to Pay

Willingness to pay (WTP) is a commonly used measure in academic research, and its interpretation varies depending on the context in which it is employed. According to Murphy et al. (2015), willingness to pay is conceptually defined as the maximum amount an individual

is willing to expend for a given product or service. In further exploring our research topic, Rebollar et al. (2012) identified a linkage between willingness to pay and the format of product packaging. Their investigation revealed that the color of the packaging exerted the most substantial influence on individuals' willingness to pay. The influence of font style on product packaging and its effect on willingness to pay have been examined in the literature. Henderson et al, (2004) found that various font styles elicit different emotions in customers, thereby impacting their willingness to pay for the product. Lastly, it is imperative to acknowledge that customers are inclined to manifest an elevated willingness to pay when they experience emotions characterized by warmth and joy towards both the product and its packaging. This observation highlights the influential role of positive emotional states in shaping consumers' valuation of the product and their subsequent WTP (Lau et al, 2013).

# **3 THEORETICAL FRAMEWORK**

A theoretical framework functions as a conceptual framework built upon theories advanced by experts in the relevant field. It provides a solid foundation for analyzing data and interpreting research results. This framework enables researchers to contextualize their findings within existing scholarly knowledge, facilitating a deeper understanding of the research outcomes (Kivunja, 2018). This section of the research endeavors aims to thoroughly examine a variety of existing studies, augmenting our understanding, and subsequently constructing our own hypotheses. Our investigation will encompass the presentation of two distinct studies, namely Study 1 and Study 2. Study 2, in particular, will offer an elucidation of our hypotheses, while concurrently introducing the conceptual framework that serves as the foundation for our research. Furthermore, the theoretical framework will be incorporated to delineate pertinent theories that will aid in comprehending our research problem more comprehensively.

#### 3.1 Study 1

For this initial study, our focus will be on exploratory research rather than formulating specific hypotheses. The aim is to delve into the subject matter and gain a deeper understanding, laying the groundwork for future research. By conducting exploratory analysis, we will identify key patterns, relationships, and potential avenues for further investigation. This approach will allow

us to gather valuable insights and inform the development of specific hypotheses in subsequent studies.

The initial phase of study 1 centers around the examination of the personal aspects related to color. Within our literature review, Cerrato (2012) provides an elucidation of the diverse emotions associated with various colors. Furthermore, Cerrato (2012) expounds on the potential application of these findings within a business context. Our objective is to empirically investigate the validity of this assumption and ascertain whether the personal attributes associated with colors influence color choices. Hence, our primary focus in the initial exploratory analysis will be the assessment of these different personalities.

The subsequent and final segment of Study 1 will concentrate on investigating consumers' willingness to pay (WTP). Based on our comprehensive literature review, it is established that WTP represents the upper limit of what a customer is willing to spend on a product or service (Murphy et al., 2015). Furthermore, our analysis reveals that the format, color, and font type of a product or its packaging have a positive influence on WTP (Rebollar et al., 2012; Henderson et al., 2004). Integrating these research components, our study aims to conduct an in-depth investigation into the extent of customers' willingness to pay (WTP). This examination will encompass an exploration of various packaging components, including the diverse materials employed (format), the array of colors utilized, and the different font types employed. By undertaking this exploratory analysis, we seek to discern the actual magnitude of WTP before advancing to Study 2.

# 3.2 Study 2

This section of the study encompasses the formulation of hypotheses derived from an extensive review of the existing literature. Specifically, we aim to explore the relationship between distinct packaging elements and consumers' purchase intention. By analyzing the varied factors associated with packaging, we seek to establish a comprehensive understanding of how different aspects influence consumers' purchase intentions.

#### 3.2.1 Red coffee packaging

Our proposition asserts that motivation for concentration and personality traits associated with excitement and energy have a favorable effect on purchase intention regarding coffee products packaged in red. Conversely, expertise in coffee exhibits a negative impact on purchase intention for such packaging. We know from our examination of the literature that Cerrato (2012) classified the use of red as having a tendency to entice impulsive purchasing decisions and to express energy and excitement in business. According to Jisana (2014), it has been observed that customers frequently possess preexisting attitudes towards specific products, thereby influencing their selection process. Individuals who self-identify as coffee experts exhibit a heightened tendency to eschew unconventional options and resist impulsive purchasing choices. Jisana (2014) asserts that the motivations underlying a customer's purchase of a particular product can be attributed to their diverse range of needs. It is noteworthy that individuals who engage in impulsive buying behavior when acquiring red-colored products are more inclined towards coffee consumption as a means to enhance their concentration. Thus, our hypothesis is:

 $H_1$ : (a) Motivation of concentration and (b) exciting/energetic personality have a positive impact and (c) coffee experts have a negative impact on purchase intention of coffee packaging with the color red.

# 3.2.2 Yellow coffee packaging

It is our contention that the motivation to enhance concentration exerts a detrimental influence, whereas the motivation to obtain energy exhibits a negative impact on the purchase intention pertaining to yellow coffee products. In our comprehensive review of the literature, Cerrato (2012) explained that the color yellow carries symbolic connotations of joy and happiness. Moreover, in commercial contexts, yellow can be strategically employed to elicit positive emotional responses in customers. Considering Jisana's (2014) notable emphasis on the salience of motivation in coffee consumption and Cerrato's (2012) elucidation on the symbolism associated with the color yellow, we posit that customers with a motivation for coffee as a concentration aid are more likely to exhibit an inclination towards purchasing yellow products. This propensity is postulated to arise from their potential disposition towards perpetually experiencing happiness and joy. Conversely, individuals who engage in the

acquisition of products symbolizing happiness and joy are presumed to possess an abundance of energy and positive emotional states. Consequently, they exhibit a reduced propensity to rely on coffee as a means of energizing themselves. Hence, our hypothesis is:

 $H_2$ : (a) Motivation of concentration has a positive effect and (b) the motivation underlying the acquisition of energy have a negative impact on purchase intention of yellow coffee packaging.

# 3.2.3 Blue coffee packaging

Our proposition suggests that the motivation derived from engaging in rituals and the desire to embody an exciting and energetic persona significantly influence the intention to purchase blue coffee packaging. Drawing from existing literature, the qualities of excitement and energy are often associated with the color red, which symbolizes love and passion Cerrato (2012). When individuals reach the pinnacle of their needs hierarchy and strive for self-actualization, they tend to be highly passionate and inclined towards embracing rituals. Consequently, the color of the packaging may not be a significant concern for them, but due to the prevalence of blue as the most common color for beverages, they opt for this choice. Interestingly, possessing expertise in coffee will likely have a negative impact. This assumption can be understood within the context of the AIO (Activities, Interests, and Opinions) framework (Durmaz, 2014). If you have genuine interest in coffee, you will be more likely to prioritize the taste of the beverage over its packaging. Their deep appreciation for the intricacies of coffee flavors diminishes their emphasis on external factors such as packaging color.

As highlighted by Cerrato (2012), the strategic utilization of the color blue in business settings can effectively communicate notions of trustworthiness and reliability to customers. In line with this perspective, individuals who regard coffee consumption as a ritual are inclined to demonstrate a preference for brands that evoke a sense of trust, providing them with a predictable and familiar experience. Our hypothesis is:

 $H_3$ : (a) Motivation of ritual and (b) energetic/excited personality have positive impact and (c) coffee experts have negative impact on purchase intention of blue coffee packaging.

### 3.3.1 Font type 1 coffee packaging

We propose that individuals who engage in the ritualistic consumption of coffee experience a positive influence on their purchase intention towards coffee packaging featuring font type 1. Conversely, we suggest that individuals with a high level of coffee consumption exhibit a negative impact on their purchase intention towards the same packaging with font type 1. In a study conducted by Kim and Lim (2019), it was also emphasized that selecting a font style that captures attention while remaining easily legible is crucial. In line with this, individuals who view coffee as a ritual tend to prefer font type 1 due to its simplicity and straightforwardness, which aligns with their preference for a clear and understandable design. On the other hand, individuals who consume coffee at a higher frequency often desire a more elaborate font that strikes a balance between sophistication and readability, reflecting their heightened interest and discernment towards coffee products.

 $H_4$ : (a) Motivation of coffee as a ritual has a positive impact and (b) high coffee consumption has a negative impact on purchase intention of coffee packaging with font type 1.

# **3.3.2 Font type 2 coffee packaging.**

Our suggestion posits that individuals characterized by energetic and excited dispositions, who rely on coffee as a means to enhance their concentration, exhibit a higher likelihood of selecting coffee packaging featuring font type 2. Saleem et al. (2018) underscored the significance of customer preference for products that align with their personal beliefs. Considering that font type two manifests as a more ornate and less legible style, it is plausible to surmise that individuals characterized by an energetic disposition, who rely on coffee for concentration purposes, are more inclined to select coffee packaging featuring this particular font type. Thus, our hypothesis:

 $H_5$ : (a) Motivation of concentration and (b) exciting/energetic personality both have a positive impact on purchase intention coffee packaging with font type 2.

# 3.3.3 Font type 3 coffee packaging

Our assertion maintains that the motivation to consume coffee for social connection and concentration exerts a positive influence, while a calm and trustworthy personality has a negative impact on the purchase intention regarding coffee products featuring font type 3. As previously discussed, Saleem et al. (2018) highlighted the significance of font type alignment with consumer values. In light of this, it is plausible to suggest that individuals who consume coffee for the purpose of concentration may be inclined to select font type three due to its bold and relatively legible characteristics. Such individuals are more likely to opt for coffee packaging that is visually appealing and easily readable, as they seek convenience and an aesthetically pleasing design. On the other hand, individuals who utilize coffee for social connection purposes may prioritize the overall visual impression of the packaging, potentially lacking extensive knowledge about coffee. For these individuals, a clear and simple font type may be preferred, emphasizing ease of understanding and simplicity in their decision-making process. In line with the assertions made by Kim and Lim (2019), the choice of font type is also linked to the conveyed message and values of the company. Consequently, individuals characterized by calm, composed, and trustworthy personalities are less likely to favor font type three due to its bold nature, which might be perceived as less indicative of trustworthiness or professionalism. Such individuals are more inclined to gravitate towards font types that exude a sense of elegance, sophistication, and reliability, aligning with their own disposition and desired associations with the brand or product. Hence, our hypothesis:

 $H_6$ : (a) Motivation of social connection and (b) motivation of concentration have a positive impact and (c) calm and cool personalities have a negative impact on purchase intention of coffee products with font type 3.

# 3.4.1 Plastic coffee packaging

Consumers who view coffee as a ritual and possess an exciting and energetic personality are likely to positively influence the purchase intention of plastic packaging. Research by Ishaku et al. (2013) indicates that customers are more attracted to high-quality packaging materials compared to lower-quality alternatives, which explains why individuals who view coffee as a ritual often opt for plastic packaging. Additionally, consumers are attracted to the convenience and durability of plastic and cardboard packaging, as highlighted by Aday and Yener (2014)

cited in Rahman et al. (2020). This preference for plastic packaging may be particularly evident among energetic and exciting individuals who appreciate the material's quality and resistance to damage. Conversely, those who consume a large amount of coffee may exhibit a negative impact on purchase intention when it comes to plastic packaging. This could be attributed to their prioritization of coffee itself, without much concern for the packaging material.

**H**<sub>7</sub>: (a) Motivation of ritual and (b) exciting/energetic personality have a positive impact and (c) high coffee consumption has a negative impact on purchase intention for plastic packaging.

#### **4 METHODOLOGY**

#### 4.1 Research Strategy

Research endeavors encompass two fundamental approaches: quantitative and qualitative. The quantitative method primarily relies on numerical data and textual descriptions to facilitate the analysis and interpretation of phenomena, whereas the qualitative method delves into textual descriptions to depict and understand the intricacies of reality. Within the realm of quantitative research, a comprehensive framework consisting of five distinct survey designs has been established: cross-sectional design, longitudinal time design, case study, comparative design, and experimental design (Ringdal, 2013 as cited in Sønvisen et al., 2020). In light of our specific thesis undertaking, we adopted a data collection approach that predominantly revolves around primary data, employing a quantitative methodology to scrutinize and analyze the gathered information.

# 4.2 Research Design

The data collection method employed for our thesis entailed the utilization of an online survey. To facilitate this process, we opted for the implementation of Google Forms as the platform for survey creation and data aggregation. In order to maximize the reach and diversity of our respondent pool, the survey was disseminated across a range of popular social media platforms, including but not limited to Facebook, Instagram, and Snapchat. Delving into the intricacies of survey design, our aim was to acquire a minimum of 150 responses, a sample size deemed sufficient to furnish a more accurate depiction of coffee consumers and their preferences. The survey itself was thoughtfully structured into six distinctive sections, each serving a specific purpose. The initial section focused on exploring participants' preferences related to color, while the subsequent section delved into their font type inclinations. The third section probed into material preferences, seeking to ascertain the factors that influence participant choices.

Moving forward, the fourth section of our survey was dedicated to the measurement of personal factors that may exert an influence on coffee consumers. The fifth section sought to glean insights into participants' psychological factors that shape their coffee preferences and consumption habits. Lastly, the final section of our survey was designed to capture pertinent demographic information, thereby enabling a more comprehensive understanding of the respondents' characteristics and their potential impact on the research findings.

The survey instrument employed in this study consisted of a comprehensive set of 28 questions, strategically designed to gather pertinent data for analysis. Prior to the commencement of the questionnaire, the initial page of the survey provided a concise overview elucidating the purpose and objectives of the research. Notably, in order to foster a sense of anonymity and ensure respondent comfort, we deliberately opted to maintain the survey's anonymous nature, thus obviating any potential for identifying individual participants.

As previously indicated, the initial segment of the survey was dedicated to eliciting responses regarding color, font type, and material preferences. This deliberate arrangement aimed to captivate respondents' attention, thereby engendering a more meticulous and accurate response process, as opposed to mere skimming or inattentive completion. To facilitate ease of data analysis, a diverse range of measurement scales was judiciously employed throughout the survey instrument. These encompassed the utilization of Likert scales, nominal scales, and ordinal scales, each serving a specific purpose within the dataset.

To assess respondents' preferences for different color, font type, and material options, participants were initially prompted to make discrete choices from a selection comprising red, yellow, and blue. Subsequently, they were requested to rank these options on a 5-point Likert scale, with a score of 1 signifying "strongly disagree" and a score of 5 denoting "strongly

agree." This standardized Likert scale framework was consistently implemented across all sections of the survey, owing to its inherent simplicity and clarity, which reduces the likelihood of respondent confusion (Westland, 2015).

Furthermore, with regard to the aspect of willingness to pay, respondents were queried after each component of the packaging exercise, encompassing the selection and ranking of preferred colors, about the monetary value they would be willing to allocate. This monetary range was delineated using a 5-point Likert scale, spanning from "nothing" to "50 NOK or more," thereby enabling participants to express their propensity to pay.

The data collected in this study was subjected to rigorous statistical analysis employing the Statistical Package for the Social Sciences (SPSS). This analytical tool facilitated the examination of the gathered data through the utilization of various statistical techniques, including descriptive statistics, factor analysis and multiple regression analysis. The adoption of these analytical methods enabled a more comprehensive exploration of the relationships among the variables under investigation.

Prior to conducting the SPSS analysis, a meticulous examination of the survey data was undertaken to identify any missing values or instances where respondents may have provided incomplete or hasty responses. As a result of this meticulous data screening process, a total of 14 respondents were deemed unsuitable for inclusion in the subsequent analysis. Consequently, the initial sample size of 168 was reduced to a final sample size of 154, ensuring the reliability and validity of the ensuing data analysis.

The careful elimination of these respondents who did not meet the criteria of proper survey completion was imperative to uphold the integrity and robustness of the subsequent data analysis, thereby enhancing the overall quality and credibility of the study's findings.

# 4.3 Dependent Variables

In study 1 we used willingness to pay as a dependent variable. This variable is a factor that consists of willingness to pay for all the different components of the product packaging. Additionally, we examined the relationship between different personality types and color

preferences, utilizing preference for color as another dependent variable. The preference for color variable was operationalized as a set of dummy variables, representing preferences for blue, yellow, and red colors. Notably, the only model that yielded statistically significant results was the one with preference for the color blue as the dependent variable. Therefore, this particular model was selected for further analysis in the subsequent stages of study one.

In study 2, all the independent variables examined were associated with the purchase intention of various packaging components. Participants in our survey were queried about their likelihood to purchase a product using a Likert scale ranging from 1 to 5. The first section focused on colors (Appendix 3), where participants were specifically questioned about their purchase intention for red, blue, and yellow hues. In the second section, participants provided their purchase intention ratings for different font types, namely font type 1, font type 2, and font type 3 (Appendix 3). Lastly, the third section pertained to packaging material, where participants were asked about their purchase intention for glass, plastic, and cardboard options (Appendix 3).

#### 4.4 Independent Variables

We conducted a comprehensive survey consisting of 28 questions (Appendix 3) that served together as our independent variables. These questions aimed to assess the influence of various packaging elements and consumer behavior on individuals' purchase intention towards coffee products. To begin the survey, we focused on evaluating respondents' preferences regarding color, font, and material. For each element, participants were presented with three options and asked to select their favorite. Subsequently, they were requested to rank each option on a Likert scale ranging from 1 to 5, indicating their level of preference. Finally, we inquired about the maximum amount they would be willing to pay for a coffee product featuring their favorite color, font style, and material.

Following the assessment of packaging-related aspects, we proceeded to examine personal factors. This section consisted of five questions, each to be rated on a Likert scale from 1 to 5, allowing respondents to express their preferences and opinions. Additionally, we sought to gain insights into participants' behavior, leading us to include three specific questions. The first and third questions were rated on a Likert scale from 1 to 5, while the second question utilized a

scale from 1 to 3. In the final part of the survey, our focus shifted towards measuring psychological factors. This segment comprised five statements, and respondents were requested to rate each statement on a scale of 1 to 5, indicating the extent to which they agreed or disagreed with the given statements.

#### **4.5 Control Variables**

Prior to assessing participants' purchase intention regarding the various packaging components, we solicited their preferences. Regarding color, participants were prompted to select their preference from the options of red, yellow, and blue (Appendix 3). Similarly, participants were asked to express their preference among font type 1, font type 2, and font type 3. Lastly, participants indicated their preference for packaging material, specifically glass, plastic, and cardboard (Appendix 3). This approach aimed to determine both the prevailing element preference among our respondents and whether individuals who favored a particular packaging element also exhibited higher purchase intentions for that specific element.

#### 4.6 Pre-study

A preliminary investigation, commonly referred to as a pre-study, was conducted to ensure the quality and comprehensibility of the survey prior to its distribution. The purpose of this prestudy was to minimize the risk of respondents misinterpreting survey questions, thus safeguarding the validity and reliability of the subsequent data collection process (Maribi et al., 2012). Comparable to a pilot test conducted on a smaller scale, the pre-study enabled us to assess several crucial aspects: (1) the survey's time requirements, (2) its overall appeal, and (3) any suggestions or feedback provided by respondents after completing it (Bell and Waters, 2018). To facilitate this process, a select group of acquaintances, including friends and family members, were invited to participate in the pre-study, and their valuable input significantly contributed to its refinement. Importantly, respondents were given the flexibility to various technological platforms. Based on the pre-study results, the estimated duration for survey completion was determined to be approximately 3 to 4 minutes. Feedback from pre-study participants indicated a clear understanding of each question, and they expressed satisfaction with the allotted time frame, perceiving it as appropriate and not unduly protracted.

#### 4.7 Validity of the sample

In the present investigation, the data collection process entailed the utilization of an online form that was disseminated through diverse social media platforms. It is crucial to acknowledge the inherent challenges associated with assessing the level of respondents' commitment and their accurate comprehension of the survey questions, given the total number of 168 participants. Consequently, it is plausible that certain respondents may have exhibited impatience, leading to hasty completion of the survey in order to expedite its conclusion. To mitigate potential issues, a comprehensive pretest was conducted to ascertain the appropriateness and effectiveness of the survey instrument. Moreover, the questionnaires underwent rigorous scrutiny by our supervisor before being distributed to ensure their quality and validity.

Additionally, it is imperative to recognize the global scope of the literature employed in this study, sourced from various regions worldwide. Another thing to keep in mind is that the literature we used came from all over the world, and in our case, we collected data in Norway, so how Norwegians perceive coffee packaging may differ.

# 4.8 Sample Demographics

After two weeks, the survey was closed, and data collection started. The total number of responses we received was 168, but since not all of them were correctly entered, we had to discard 14 of them, leaving us with 154 final samples. Table 1 shows that there were 41.9 percent men, 55.8 percent women, and 2.6 percent other people. The gender distribution seems to be very balanced because both sexes consume coffee, which is the subject of our discussion. According to the respondents' age distribution, the majority (60.4 percent) are in the 18–30 age range, and that the majority's income is under 100 000 NOK, as we shared this on our own social media, so this was to be expected.

Sample Demographics			
	N	%	
Gender			
Male	64	41.9%	
Female	86	55.8%	
Other	4	2.6%	
Age			
18 or below	34	22.1%	
18-30	93	60.4%	
30-40	11	7.1%	
40-50	8	5.2%	
50 or above	8	5.2%	
Education			
Primary school	3	1.9%	
Secondary school	46	29.9%	
Certificate/Diploma	31	20.1%	
Bachelor Degree	53	34.4%	
Master Degree or higher	21	13.6%	
Income			
Under 100 000 NOK	76	49.4%	
100 000 - 250 000 NOK	36	23.4%	
250 000 - 400 000 NOK	17	11.0%	
400 000 - 550 000 NOK	11	7.1%	
550 000 NOK or higher	14	9.1%	

Table 1: Sample Demographics

# **5 ANALYSIS**

Based on the SPSS results, we will describe, analyze, and test our hypothesis in this chapter. To begin, we will present a descriptive statistic displaying the mean and standard deviation of the questions. We will then present the regression analysis performed by SPSS, which will be used to test the hypothesis we have developed.

#### 5.1 Descriptive Statistics

The following text presents a comprehensive analysis of the responses obtained from the survey participants, focusing on descriptive statistics (Appendix 4). This analysis sheds light on their preferences and allows us to gain valuable insights. By examining the mean values, we can discern the average preference of the respondents. To illustrate this, let us consider the initial question posed to them, which inquired about their preferred color. Based on the mean score of 1.65, derived from the respondents' choices (where red = 1, yellow = 2, and blue = 3), it is evident that the majority of individuals exhibit a preference for the colors red and yellow. Additionally, we can delve further into the likelihood of purchasing each color. Specifically,

the likelihood of purchasing red (RedPI) is reported as 3.40, while the corresponding values for yellow (YellowPI) and blue (BluePI) are 2.44 and 2.78, respectively. Upon careful examination of these statistics, it becomes apparent that red garners the highest level of favorability among the respondents.

#### 5.2 Factor analysis

Factor analysis was employed as a statistical technique with the aim of reducing the dimensionality among the variables in the present study. As elucidated by Williams et al. (2010), factor analysis is a widely utilized multivariate statistical approach within the realms of psychology, education, and health-related professions. Its application facilitates the identification of latent factors that underlie the observed variables, enabling a more parsimonious representation of the data while retaining the meaningful information embedded within the original variables. A principal component analysis (PCA) was conducted as the chosen method for the factor analysis. Prior to interpreting the obtained results, an assessment of the sampling adequacy was performed using the Kaiser-Meyer-Olkin (KMO) test, yielding a satisfactory result of 0.718. The KMO test is a measure that evaluates the suitability of the data for factor analysis by assessing the magnitude of partial correlations among variables and the adequacy of sample size. The obtained value of 0.718 indicates an acceptable level of intercorrelation among the variables, suggesting that the data is suitable for further factor analysis.

Furthermore, it is crucial to assess the number of factors derived from the analysis. According to Brown (2009), various approaches can be employed to determine the appropriate number of factors. One such method involves examining the eigenvalues, wherein only those exceeding a value of 1 are considered significant. Eigenvalues represent the amount of variance explained by each factor and are utilized to gauge their relative importance. Therefore, eigenvalues exceeding 1 are typically retained as they contribute a substantial proportion of variance to the observed data. This criterion aids in determining the optimal number of factors to be retained for further interpretation and analysis.

Finally, we will proceed to examine the rotated component matrix, wherein we assign meaningful names to the identified components. Additionally, we will investigate the proportion of explained variance attributed to each component. This analysis allows us to elucidate the underlying structure of the factors and understand the extent to which they account for the observed variance in the dataset.

Upon examining Table 2 the decision was made to assign the name "Fac\_WillingnessToPay" to the first factor, which accounts for approximately 34.918 percent of the observed variance. The second factor was labeled "Fac\_Motivation," explaining approximately 26.256 percent of the variance. Lastly, the third factor was denoted as "Fac\_Knowledge," contributing to approximately 13.507 percent of the explained variance.

	Factors		
Scale items	Fac_WillingnessToPay	Fac_Motivation	Fac_Knowledge
After looking at the different types of packaging color what would you be willing to pay for a product with your favorite color showed above?	0,931		
After looking at the different types of packaging materials what would you be willing to pay for a product with your favorite packaging material showed above?	0,92		
After looking at the different types of font types what would you be willing to pay for a product with your favorite font type showed above?	0,898		
I drink coffee because it makes me concentrate		0,872	
I drink coffee becuase it gives me energy		0,819	
I drink coffee because of stress relief		0,624	
I drink coffee because it is a ritual or habbit in my life		0,624	
"Among my friends and family I am one of the 'experts' on coffee"			0,906
"I know a lot about coffee"			0,873
Percentage of Variance	34,918	26,256	13,507
Eigenvalue	3,143	2,363	1,216

#### Table 2: Factor Analysis

#### **5.3 Multiple Regression**

Multiple regression analysis is a sophisticated data analytical approach commonly employed when examining the association between a dependent variable and independent variables. It is particularly useful when investigating relationships that are potentially nonlinear and involve a combination of quantitative and qualitative independent variables. This method allows researchers to explore the impact of individual or multiple variables while accounting for the influence of other variables in the model (Berger, 2004; Cohen, Cohen, West, & Aiken, 2003, as cited in Berger, 2003). By employing multiple regression, scholars can gain insights into the intricate interplay of variables and uncover meaningful patterns within the data.

The expression of a multiple regression equation for the purpose of predicting the dependent variable Y. Multiple regression analysis is a statistical technique employed to investigate the relationship between a dependent variable and two or more independent variables. By formulating a regression equation, researchers can estimate the impact of various independent variables on the outcome of interest, allowing for predictive modeling and hypothesis testing (Berger, 2003).

In accordance with the recommendations provided by Kim and Choi (2021), the selection of an appropriate significance level for our study is essential. In light of this, we have determined that a significance level of  $\alpha = 0.1$  is suitable for our analysis. This decision is based on the fact that our sample size, comprising 168 observations, falls within the range of 100-200, indicating that the chosen significance level aligns well with the requirements of our research.

In the context of predicting Y, the multiple regression equation can be represented as in Equation 1.

# 5.4 Regression Study 1

In Study 1, we conducted an analysis using SPSS, resulting in two distinct SPSS output files. Table 3 presented our findings based on the dependent variable (DV) called "PrefColorBlue," which corresponds to the preference for the color blue. To examine the effects of independent variables (IVs), we utilized Likert-scale responses ranging from 1 to 5 to assess participants' agreement with specific claims. Each claim was associated with a particular color and thus served as an IV. In total, three claims were considered, resulting in three IVs.

Analyzing Table 3 we assessed the statistical significance of the IVs by examining the p-values. Only the coefficient for "Joyful/Happiness" (-0.104) exhibited statistical significance, as its p-value (0.004) is less than 0.05.

Further we observed that the constant value was 0.365. This value signifies the intercept or the point at which the dependent variable (Y) equals zero when all other variables are set to zero. The beta-values presented in the Table 3 represent the coefficients we can employ in a regression equation to predict the DV based on the IVs. Examining the beta-values, we can ascertain the extent to which the preference for "PrefColorBlue" increases as we manipulate the IVs. For instance, if we were to increase the variable "Joyful/Happiness" by one unit, it will lead to a decrease of (-0.104) on "PrefColorBlue".

	Coefficients		
Model	В	Std. Error	Sig.
1 (Constant)	0,365	0,19	0,056
Energetic/Excited	0,015	0,033	0,653

0,051

-0,104

0,037

0.035

0,176

0,004

Reliability/Intelligence

Dependent Variable: PrefColorBlue

Joyful/Happiness

Table 3: Multiple Regression – PrefColorBlue

## Equation 1 Regression - PrefColorBlue

 $PrefColorBlue = \beta_0 + \beta_1 Energetic/Excited + \beta_2 Reliability/Intelligence - \beta_3 Joyful/Happiness$ 

The unstandardized coefficient associated with an increase of one unit in the variable "Joyful/Happiness" reveals a negative relationship. This implies that respondents who selfidentified as joyful, positive, creative, and optimistic individuals tend to associate themselves more with the color yellow. Consequently, when participants were prompted to select their preferred color in the survey, it is likely that they did not choose "PrefColorBlue," which was one of the options provided. The regression output presented in Table 4 illustrates the results obtained from a factor analysis, as mentioned previously, as the dependent variable. The purpose of this analysis was to examine the respondent's willingness to pay (WTP) for three specific packaging components: color, font, and material. By observing the significance levels, we can discern that only two variables display statistical significance. These variables are Font2PI (p=0.082) and GlassPI (p=0.001). Consequently, individuals who expressed a strong inclination towards purchasing products with font type 2 and glass packaging exhibit the highest WTP. Specifically, for each unit increase in Font2PI and GlassPI, we anticipate an associated increase in WTP by 0.136 and 0.255, respectively. The results indicate that a unit increase in "Font2PI" is associated with a corresponding 13.6 percent increase in WTP. Similarly, a one-unit increase in "GlassPI" is linked to a substantial 25.5 percent increase in WTP. These findings highlight the significant impact of these variables on individuals' valuation and willingness to allocate financial resources.

Coefficients			
Model	В	Std. Error	Sig.
1 (Constant)	-1,578	0,352	0,001
RedPI	-0,014	0,091	0,874
YellowPI	0,003	0,086	0,969
BluePI	-0,009	0,068	0,899
Font1PI	0,041	0,088	0,646
Font2PI	0,136	0,078	0,082
Font3PI	-0,058	0,074	0,433
GlassPI	0,255	0,067	0,001
PlasticPI	0,054	0,069	0,438
CardboardPI	0,078	0,093	0,404
Dependent Variable: Fac_WillingnessToPay			

Table 4: Multiple Regression - Fac\_WillingnessToPay

## 5.5 Regression Study 2

In this section, we will delve into the analysis of seven distinct regression outputs obtained. Our investigation focuses on employing a consistent set of independent variables across these models while varying the dependent variables of interest. Moreover, to ensure robustness in our findings, we have diligently incorporated various controlling variables within each regression model we conducted. By adopting this comprehensive approach, we aim to elucidate the nuanced relationships between the chosen independent variables and the diverse dependent variables under consideration.

#### 5.5.1 Regression Color

In Study 2, our initial regression model aims to ascertain the primary variables influencing purchase intentions for the color red. Thus, the dependent variable is defined as "RedPI," while all other variables that potentially exert an influence on this outcome are designated as independent variables. By employing this regression model, we aim to uncover the significant predictors that contribute to individuals' purchase intentions specifically related to the color red.

Coefficients			
Model	В	Std. Error	Sig.
1 (Constant)	2,132	0,564	0,001
PrefColorRed	0,862	0,158	0,001
StressRelief	-0,111	0,076	0,146
SocialConnection	0,111	0,073	0,132
CoffeeRitual	0,084	0,079	0,291
Concentration	0,178	0,081	0,03
GivesEnergy	-0,011	0,077	0,884
Consumption	-0,077	0,069	0,271
ShoppingTime	-0,036	0,108	0,743
ShoppingFrequency	0,06	0,085	0,48
CoffeeExpert	-0,148	0,086	0,086
KnowledgeCoffee	-0,046	0,098	0,637
Joyful/Happiness	-0,002	0,081	0,984
Reliability/Intelligence	0,048	0,083	0,565
Energetic/Excited	0,135	0,075	0,075
Dependent Variable: Purchase intention for Red			

Table 5: Regression RedPI

Based on the findings presented in Table 5 it is observed that the intercept term exhibits statistical significance, as evidenced by a p-value of 0.001. The coefficient associated with the intercept is estimated to be 2.132, indicating that when all independent variables are set to zero, the predicted value of the dependent variable is expected to be 2.132.

Upon examining our control variable, denoted as "PrefColorRed," which takes on a dummy variable form where Red=1, Blue=0, and Yellow=0, we observe its statistical significance with a p-value of 0.001. Additionally, the positive coefficient of 0.862 associated with this control variable indicates that individuals who have a preference for the color red exhibit a significantly higher purchase intention for packaging featuring this particular color.

Based on our research on independent variables, it is noted that certain variables demonstrate statistical significance. Specifically, "Concentration" exhibits a p-value of 0.03, "CoffeeExpert" exhibits a p-value of 0.086, and "Energetic/Excited" exhibits a p-value of 0.075. Regarding "Concentration," which represents individuals' motivation for consuming coffee, we observe a positive beta of 0.178. This implies that a one unit increase in "Concentration" results in a 17.8 percent increase in purchase intention for red packaging. In contrast, "CoffeeExpert," representing individuals who perceive themselves as coffee experts, exhibits a negative beta of -0.148. This indicates that a one unit increase in "CoffeeExpert" leads to a 14.8 percent decrease in purchase intention for red products. Lastly, "Energetic/Excited," representing individuals with an energetic and excited personality, demonstrates a beta of 0.135. This suggests that a one unit increase in this variable corresponds to a 13.5 percent increase in purchase intention for red products.

Based on the statistical evidence provided, our findings align with and support hypothesis H1. Therefore, we accept hypothesis  $H_1$  based on the observed results.

In our subsequent regression model, our focus shifts to examining the impact of independent variables on purchase intention for coffee packaging featuring the color yellow. Thus, we designate "YellowPI" as the dependent variable for this analysis.

Based on a thorough analysis of Table 6 it is apparent that the intercept demonstrates statistical significance with a p-value of 0.001. Notably, the intercept exhibits a beta of 2.213, indicating that under the condition where all other independent variables are set to zero, the corresponding value of the dependent variable would be 2.213.

Model	В	Std. Error	Sig.
1 (Constant)	2,213	0,539	0,001
PrefColorYellow	1,816	0,205	0,001
StressRelief	-0,091	0,074	0,222
SocialConnection	0,051	0,072	0,478
CoffeeRitual	0,046	0,078	0,558
Concentration	0,264	0,079	0,001
GivesEnergy	-0,149	0,076	0,053
Consumption	-0,044	0,068	0,522
ShoppingTime	-0,138	0,107	0,197
ShoppingFrequency	-0,043	0,084	0,6
CoffeeExpert	0,075	0,084	0,376
KnowledgeCoffee	-0,104	0,096	0,28
Joyful/Happiness	0,017	0,079	0,827
Reliability/Intelligence	-0,041	0,082	0,619
Energetic/Excited	0,098	0,074	0,183

## Table 6: Regression YellowPI

Additionally, we observe that the control variable "PrefColorYellow" exhibits statistical significance with a p-value of 0.001. This variable, represented as a dummy variable where Red=0, Yellow=1, and Blue=0, showcases a positive impact on the dependent variable. Notably, the beta associated with "PrefColorYellow" is estimated to be 1.816.

Among the various independent variables considered, two exhibit statistical significance. Firstly, "Concentration" demonstrates a p-value of 0.001, indicating its significant influence. Secondly, "GivesEnergy," representing individuals who consume coffee for the purpose of attaining energy, presents a p-value of 0.053, suggesting a potential impact on the dependent variable. Upon analyzing the variable "Concentration," we observe a positive beta coefficient of 0.264, indicating a favorable association with the dependent variable. In contrast, the variable "GivesEnergy" exhibits a negative beta coefficient of -0.149, suggesting an inverse relationship. Specifically, a one unit increase in "Concentration" corresponds to a 26.4 percent rise in purchase intention for yellow coffee products, whereas the same increase in "GivesEnergy" results in a 14.9 percent decrease in purchase intention for yellow coffee packaging.

Based on the outcomes of this regression analysis, we find sufficient evidence to support the acceptance of hypothesis  $H_2$ .

In the last regression model for color, we aim to analyze the purchase intention for coffee products featuring blue packaging. In this analysis, we explore the influence of all independent variables to determine their relative impact on the dependent variable.

Coefficients			
Model	В	Std. Error	Sig.
1 (Constant)	1,341	0,569	0,02
PrefColorBlue	1,783	0,189	0,001
StressRelief	0,039	0,077	0,616
SocialConnection	0,002	0,076	0,982
CoffeeRitual	0,167	0,082	0,043
Concentration	0,015	0,084	0,861
GivesEnergy	-0,047	0,08	0,558
Consumption	-0,066	0,072	0,358
ShoppingTime	0	0,113	0,998
ShoppingFrequency	0,068	0,088	0,446
CoffeeExpert	-0,149	0,089	0,097
KnowledgeCoffee	0,051	0,102	0,616
Joyful/Happiness	0,038	0,085	0,659
Reliability/Intelligence	0,061	0,087	0,484
Energetic/Excited	0,131	0,078	0,093
Dependent Variable: Purchase intention for Blue			

Table 7: Regression BluePI

Upon careful examination of Table 7 we observe that the intercept demonstrates statistical significance with a p-value of 0.02. Moreover, the beta associated with the intercept is 1.341, suggesting that when all other independent variables are held at zero, the dependent variable would assume a value of 1.341. The control variable "PrefColorBlue" displays statistical significance with a p-value of 0.001. This binary variable, representing Red=0, Yellow=0, and Blue=1, exhibits a significant positive relationship with the dependent variable, as indicated by its substantial beta of 1.783.

Among the independent variables, we observe three variables that exhibit statistical significance. The first variable, "CoffeeRitual," representing individuals who consume coffee due to its ritualistic or habitual nature, attains a p-value of 0.043. The second variable, "CoffeeExpert," capturing those who perceive themselves as knowledgeable about coffee, yields a p-value of 0.097. Lastly, the variable "Energetic/Excited," characterizing individuals with energetic and excited personalities, obtains a p-value of 0.093.

Upon closer examination, "CoffeeRitual" displays a beta of 0.167, signifying a positive relationship with the dependent variable. In contrast, "CoffeeExpert" exhibits a beta of -0.149, indicating a negative relationship. Lastly, "Energetic/Excited" demonstrates a beta of 0.131, suggesting a positive relationship. Notably, a one unit increase in the significant independent variables results in a corresponding increase of 16.7 percent for "CoffeeRitual", an increase of 13.1 percent for "Energetic/Excited" in the dependent variable, and a decrease of 14.9 percent for "CoffeeExpert".

Based on the obtained results, it is evident that hypothesis  $H_3$  can be reasonably accepted.

#### **5.4.2 Regression Font**

In this part of the regression analysis conducted, we wanted to investigate the key determinants influencing individuals' purchase intentions regarding font types. The findings of this investigation are presented on the different tables, where initial regression model is showcased. The main objective of this model is to discern the primary factors that significantly impact the purchase intentions associated with a particular font, which is denoted as the dependent variable "Font1PI." Other variables that hold the potential to exert an influence on this outcome are referred to as independent variables.

Model	В	Std. Error	Sig.
1 (Constant)	1,26	0,626	0,046
PrefFontType1	0,952	0,17	0,001
StressRelief	0,001	0,081	0,987
SocialConnection	0,037	0,08	0,648
CoffeeRitual	0,174	0,086	0,045
Concentration	0,061	0,088	0,489
GivesEnergy	0,053	0,085	0,457
Consumption	-0,168	0,077	0,03
ShoppingTime	-0,027	0,12	0,82
ShoppingFrequency	0,038	0,093	0,685
CoffeeExpert	0,018	0,094	0,848
KnowledgeCoffee	-0,029	0,107	0,787
Joyful/Happiness	0,111	0,088	0,209
Reliability/Intelligence	0,048	0,091	0,598
Energetic/Excited	0,12	0,082	0,147

Table 8: Regression Font1PI

Upon examining our control variable, denoted as "PrefFont1," which takes on a dummy variable form where Font1=1, Font2=0, and Font3=0, we observe its statistical significance with a p-value of 0.001. Based on the findings presented in Table 8, it becomes apparent that when all independent variables (IVs) are held at zero, the constant holds statistical significance with a p-value of 0.046. In terms of the IVs, two variables exhibit statistical significance: CoffeeRitual (p=0.045) and consumption (p=0.03). It is evident that engaging in coffee consumption as a ritual or habit has a positive impact on the purchase intention of "Font1PI". Specifically, a unit increase in "CoffeeRitual" results in a corresponding increase of 0.174, which translates to a 17.4 percent increase in the purchase intention of "Font1PI". Conversely, the variable "consumption" captures the frequency at which respondents consume coffee. It is observed that a one-unit increase in "consumption" exerts a negative influence on "Font1PI", leading to a decrease of -0.168, equivalent to a 16.8 percent reduction.

Based on the compelling statistical evidence presented, our findings are in line with and provide support for hypothesis  $H_4$ . Consequently, we can confidently accept hypothesis  $H_4$  based on the observed outcomes.

In this section, we will delve into the analysis of the dependent variable (DV) known as "Font2PI".

	В	Std. Error	Sig.
1 (Constant)	0,731	0,542	0,179
PrefFontType2	1,4	0,168	0,001
StressRelief	-0,034	0,073	0,644
SocialConnection	0,058	0,073	0,43
CoffeeRitual	0,017	0,078	0,824
Concentration	0,135	0,08	0,093
GivesEnergy	0,079	0,076	0,305
Consumption	-0,013	0,07	0,857
ShoppingTime	0,015	0,109	0,893
ShoppingFrequency	-0,042	0,084	0,621
CoffeeExpert	-0,034	0,085	0,684
KnowledgeCoffee	0,042	0,097	0,663
Joyful/Happiness	0,087	0,079	0,272
Reliability/Intelligence	0,074	0,082	0,37
Energetic/Excited	0,154	0,074	0,04

Table 9: Regression Font2PI

Coefficients

The variable "PrefFont2," serves as our controlling variable. PrefFont2 takes the form of a dummy variable, where Font1 is represented by 0, Font2 by 1, and Font3 by 0. Notably, we have found statistical significance in relation to PrefFont2, as indicated by a p-value of 0.001.

Upon examining Table 9, we identify two variables that display statistical significance: "Concentration" with a p-value of 0.093, and "Energetic/Excited" with a p-value of 0.04. By analyzing the unstandardized coefficients, we find that individuals who consume coffee to enhance their concentration (beta=0.135) and those who drink coffee to boost their energy levels (beta=0.154) exhibit a noteworthy impact on the purchase intention of Font2PI. Specifically, a one-unit increase in either of these variables corresponds to a respective increase of 13.5 percent and 15.4 percent in the purchase intention of Font2PI.

After carefully analyzing the robust statistical evidence that has been presented, it becomes evident that our research outcomes substantiate hypothesis H<sub>5</sub>, thereby establishing a strong

correlation between our findings and the aforementioned hypothesis. As a result, we can assert with confidence that hypothesis  $H_5$  holds true, as it is unequivocally supported by the observed outcomes we have obtained.

The regression analysis conducted for Font3PI dataset Table 10 yielded valuable insights, particularly concerning the variable "PrefFont3," which serves as the controlling variable in our study. To capture the influence of different font preferences, we employed a dummy variable approach, wherein Font1 and Font2 were assigned values of 0, while Font3 was assigned a value of 1. Notably, our analysis revealed a statistically significant relationship with PrefFont3, supported by a p-value of 0.001, while keeping all independent variables (IVs) at zero.

Coefficients			
Model	В	Std. Error	Sig.
1 (Constant)	2,221	0,567	0,001
PrefFontType3	1,691	0,245	0,001
StressRelief	-0,037	0,077	0,632
SocialConnection	0,182	0,077	0,019
CoffeeRitual	0,077	0,082	0,35
Concentration	0,157	0,084	0,062
GivesEnergy	-0,103	0,08	0,201
Consumption	-0,103	0,072	0,157
ShoppingTime	-0,123	0,112	0,273
ShoppingFrequency	-0,04	0,088	0,652
CoffeeExpert	-0,005	0,088	0,955
KnowledgeCoffee	-0,053	0,101	0,6
Joyful/Happiness	0,098	0,083	0,24
Reliability/Intelligence	-0,187	0,086	0,032
Energetic/Excited	0,071	0,079	0,37
Dependent Variable: Purchase intention for FontTy	pe3		

#### Table 10: Regression Font3PI

Examining the regression output, we observed that three IVs displayed statistical significance, with p-values less than or equal to 0.1. The first two variables pertained to the reasons behind respondents' coffee consumption, namely socialization and concentration, both of which exhibited significance. The third variable involved respondents' ratings trust, reliability,

intelligence and coolness of a claim associated with the color blue. The levels of significance for these variables were as follows: "SocialConnection" (p=0.019), "Concentration" (p=0.062), and "Reliability/Intelligence" (p=0.032).

Analyzing the beta-values for the first two variables, we observed that "SocialConnection" had a beta-value of 0.182, while "Concentration" had a beta-value of 0.157. Conversely, "Reliability/Intelligence" had a negative beta-value of -0.187. Thus, we can deduce that a oneunit increase in the first two IVs leads to an approximate 18.2 percent and 15.7 percent increase, respectively, in the purchase intention of Font3PI. On the other hand, a unit increase in the "Reliability/Intelligence" variable results in a decrease of approximately 18.7 percent in the purchase intention of Font3PI.

The results of our research clearly support hypothesis  $H_6$ , establishing a strong correlation between our findings and the aforementioned hypothesis after carefully examining the compelling statistical evidence that has been provided. As a result, we can confidently state that hypothesis  $H_6$  is true because it is unmistakably supported by the results we have observed.

#### 5.5.3 Regression Material

The most recent regression analysis conducted Table 11 aimed to examine the impact of "PlasticPI." In this analysis, we considered the controlling variable "PrefPlastic" by creating a dummy variable, where Glass was assigned a value of 0, Plastic was assigned a value of 1, and Cardboard was assigned a value of 0. The statistical significance of this variable was observed with a p-value of 0.001. The analysis yielded three independent variables (IVs) with p-values less than or equal to 0.1: "CoffeeRitual" (p = 0.048), "Consumption" (p = 0.074), and "Energetic/Excited" (p = 0.005).

Model	В	Std. Error	Sig.
1 (Constant)	2,39	0,601	0,001
PrefPlastic	1,912	0,327	0,00
StressRelief	-0,097	0,081	0,23
SocialConnection	0,096	0,08	0,234
CoffeeRitual	0,173	0,087	0,04
Concentration	-0,016	0,09	0,85
GivesEnergy	-0,01	0,085	0,9
Consumption	-0,138	0,076	0,074
ShoppingTime	-0,171	0,119	0,152
ShoppingFrequency	-0,091	0,094	0,332
CoffeeExpert	-0,090	0,094	0,33
KnowledgeCoffee	-0,071	0,107	0,5
Joyful/Happiness	0	0,089	0,99
Reliability/Intelligence	-0,037	0,092	0,68
Energetic/Excited	0,233	0,082	0,00

#### Table 11: Regression PlasticPI

To assess the influence of these three variables on the purchase intention of "PlasticPI," the following effects were observed: engaging in coffee consumption as a ritual or habit and feeling energetic and excited had positive effects with beta = 0.173 and beta = 0.233 respectively. So, increasing both this IVs will lead to an increase in 17.3 percent, and 23.3 percent. Conversely, the frequency of coffee consumption per week had a negative effect with beta = -0.138. This tells us that an increase in this variable will lead to a negative impact of -13.8 percent.

Based on the obtained results, it is evident that hypothesis  $H_7$  can be reasonably accepted.

## **6 DISCUSSION**

The research question addressed in our thesis is formulated as follows:

"To what extent do consumer behavior, psychology and personality influence the purchase intention of different components (color, font type, and material) on coffee packaging?"

The main findings derived from our studies demonstrate significant impacts of various factors on the different components of packaging. Our hypotheses were all supported, revealing substantial influences of individuals' psychology, personality traits and consumer behavior on their purchase intentions for specific packaging components. In the following discussion, we will delve into the interpretation of these results, examining the extent to which they contribute to our understanding of the research question and the overall significance of our studies.

# 6.1 Study 1

In our initial study, we aimed to investigate the potential relationship between Cerrato's (2012) descriptions of different colors in business and the corresponding personality traits he associated with them. Our findings indicated that individuals exhibiting a joyful/happiness personality, which aligns with the emotional connotations of the color yellow, were less inclined to prefer the color blue. This observation aligns with our initial assumptions, as the color blue is commonly associated with notions of trust and reliability, which may contrast with the characteristics attributed to the color yellow.

However, it is important to note that although our study provided some supporting evidence, the lack of significant results prohibits us from definitively affirming the connection between personalities and color preferences. Further research is warranted to explore this relationship more comprehensively.

In the subsequent phase of Study 1, our focus shifted towards examining the relationship between purchase intention for distinct packaging components and its influence on willingness to pay (WTP). Specifically, we aimed to determine whether individuals exhibiting a higher purchase intention for a particular packaging component would have a positive or negative impact on their WTP, while also assessing the magnitude of this relationship.

The seminal works of Rebollar et al. (2012) and Henderson et al. (2004) have posited that material, font type, and color exert a positive influence on willingness to pay (WTP). Our research findings provide partial support for this claim by elucidating the relationship between purchase intention for specific font types and packaging materials and their subsequent impact on WTP.

Our analysis revealed that individuals exhibiting a high purchase intention for Font type 2 and glass packaging demonstrated a heightened WTP. This observation suggests that customers who express a preference for Font type 2 and glass packaging are more inclined to assign a greater monetary value to coffee products associated with these particular attributes. The current findings align consistently with previous research conducted in this domain. Regarding the choice of materials, Ishaku et al. (2013) posited that consumers generally find glass to be a more attractive option. Similarly, Benmansour's (2016) study also revealed that glass outperforms both plastic and cardboard in terms of consumer preference.

In terms of font style, Deliya and Parmar (2012) highlighted that an appealing font style on product packaging effectively captures the attention of customers. Successful businesses recognize the importance of employing experts to design visually striking and awe-inspiring font styles, as it plays a significant role in captivating consumers' interest.

While our findings align with the notion that certain packaging components can elicit a willingness to pay a premium, it is important to acknowledge that the relationship between purchase intention and WTP is multifaceted and influenced by various factors beyond the scope of this study. Nonetheless, our results contribute to the existing literature by shedding light on the specific effects of font type and packaging material on consumer behavior and willingness to pay.

One limitation of Study 1 is the lack of significant values, which limits the interpretability of the exploratory findings. However, these findings provide valuable insights and suggest promising directions for future research in the field of WTP and packaging components.

# 6.1 Study 2

## 6.1.1 Discussion Color

In Study 2, our objective was to examine the factors influencing purchase intention for various packaging components. We conducted seven regression models, corresponding to seven hypotheses. Notably, all of our hypotheses were confirmed, as the results yielded significant findings that substantiate our initial assumptions.

Our initial hypothesis focused on examining the purchase intention for products with the color red and its influencing factors. The findings from our study align with Cerrato's (2012) interpretation of color symbolism, specifically regarding the emotional associations attributed to the color red. We discovered that individuals who identified with an energetic and excited personality exhibited a higher purchase intention for red coffee products. This finding supports Cerrato's assertions regarding the emotional response evoked by the color red.

Additionally, our results indicated that individuals identified as coffee experts were less inclined to purchase red coffee products, aligning with Jisana's (2014) argument that consumers tend to make purchasing decisions in line with their beliefs. Coffee experts, who exhibit greater knowledge and discernment in their coffee choices, were less likely to engage in impulsive purchases of red coffee products.

Moreover, our study revealed that individuals who required coffee to enhance concentration were more likely to exhibit a higher purchase intention for red coffee products. This observation supports the idea that the energetic and exciting attributes associated with the color red, as posited by Cerrato (2012), appeal to individuals seeking heightened energy levels and concentration.

In the second model of our study, we aimed to investigate the factors influencing the purchase intention of yellow coffee products. Our findings corroborated the assertions made by Jisana (2014) and Cerrato (2012) regarding consumer behavior and color symbolism. As suggested by Jisana (2014), individuals who purchase yellow coffee products tend to align their choices with their personal beliefs and values. Similarly, Cerrato (2012) posited that the color yellow evokes sentiments of happiness and joy.

Consistent with these perspectives, our results revealed that individuals with a higher purchase intention for yellow coffee products were more likely to associate their coffee consumption with the need for enhanced concentration. This finding suggests that these individuals, characterized by their abundant energy and inner joy, are drawn to the vibrant and cheerful attributes often associated with the color yellow.

Conversely, we observed a negative relationship between the purchase intention for yellow coffee products and individuals who consume coffee primarily for the purpose of obtaining

energy. It is plausible to speculate that individuals already possessing high energy levels may perceive less of a need for the additional invigorating qualities associated with yellow coffee products.

In the third model of our study, our objective was to examine the various factors influencing the purchase intention for blue coffee packaging. Our findings align with the interpretations of Durmaz (2014) and Cerrato (2012) regarding the purchase intentions associated with blue product packaging. The color blue, symbolizing trust and reliability, was found to positively influence the purchase intention among individuals who view coffee consumption as a ritual or habit. These individuals prioritize trustworthy products in their decision-making process. Interestingly, our results also revealed that individuals with an energetic and excited personality exhibited a higher purchase intention for blue products. This association could be attributed to impulsive buying tendencies, as blue is commonly utilized in marketing strategies. Moreover, our study observed a negative impact on purchase intention for blue products among self-proclaimed coffee experts. This could be attributed to their heightened interest in the beverage itself rather than the packaging.

#### 6.1.2 Discussion Font types

According to our findings indicate that individuals who engage in the ritual or habit of drinking coffee exhibit a higher inclination to purchase font type 1. This observation aligns with the insights provided by Jisana (2014), who suggests that psychological factors play a role in influencing consumer behavior. When it comes to individuals who consume coffee as part of their routine or ritual, their attitudes and beliefs towards coffee likely drive their preference for font type 1. Given that drinking coffee is deeply ingrained as a habit and ritual, it is reasonable to expect that they would gravitate towards font type 1 due to its simplicity and fundamental nature.

In terms of consumption, our analysis reveals a negative impact on the purchase intention of font type 1. Kim and Lim (2019) underscore the importance of selecting fonts that capture attention. Consequently, an easily recognizable and basic font type may fail to garner attention from those who consume coffee extensively.

The subsequent regression analysis of Font2PI revealed a significant positive relationship between consuming coffee for enhanced concentration and possessing an energetic/excited personality, with the perceived attractiveness of font type 2. Deliya and Parmar (2012) assert the significance of employing visually appealing font styles. Individuals who consume coffee for concentration purposes are inclined to find font type 2 appealing. Furthermore, Jisana (2014) posits that beliefs and attitudes, as psychological factors, exert an influence on consumer behavior. Consequently, individuals with such characteristics are likely to be drawn towards font type 2.

Last part of the font types we looked at font type 3 that is positively influenced by individuals who consume coffee for socializing and concentration purposes. Conversely, individuals with an energetic/excited personality have a negative inclination towards font type 3. According to Saleem et al. (2018), consumers are attracted to fonts that align with their personal values. Given that font type 3 is a basic, bold font, it fails to attract consumers who possess this particular personality trait. Consequently, it is reasonable to propose that individuals who drink coffee to enhance their concentration might be more inclined to choose font type 3 due to its bold and easily readable characteristics. However, individuals who use coffee as a means of social connection may prioritize the overall visual impression of the packaging, potentially lacking extensive knowledge about coffee. For these individuals, a clear and simple font type that emphasizes ease of understanding and simplicity in their decision-making process would likely be preferred.

#### 6.1.3 Discussion Material

In our final model of study 2, our objective was to examine the factors influencing the purchase intention for coffee packaging made of plastic. Our findings align with the research conducted by Ishaku et al. (2013) and Rahman (2020), which explored the utilization of plastic materials and their associated attributes. Our results indicated that individuals who perceive coffee consumption as a ritual or habit exhibited a higher purchase intention for coffee packaging made of plastic. This inclination may be attributed to the perceived quality and convenience offered by plastic packaging. Furthermore, our results demonstrated that individuals with energetic/excited personalities displayed a greater purchase intention for plastic packaging, which we interpret as being influenced by the perceived durability and resilience of such packaging. Lastly, we observed a negative relationship between high coffee consumption and

the purchase intention of plastic coffee products. We speculate that this finding may be due to the emphasis placed by these individuals on the quality of the coffee itself, as plastic packaging is not commonly associated with premium beverage offerings.

A notable limitation of study 2 pertains to the limited availability of significant results for the analysis of purchase intentions related to glass and cardboard materials. Consequently, our understanding of the factors influencing purchase intentions for these specific materials remains constrained. This limitation restricts the comprehensiveness of our investigation into the diverse range of packaging materials used in the coffee industry. Further research is warranted to explore these aspects more extensively and enhance our understanding of consumers' purchase intentions towards glass and cardboard packaging options.

# **7 CONCLUSION AND FURTHER RESEARCH**

Given the substantial coffee consumption in Norway, it is evident that the market is characterized by intense competition. In such a competitive landscape, meticulous attention to details becomes crucial in order to gain a competitive edge. Among the various factors warranting scrutiny, product packaging of coffee products emerges as a significant aspect. Consequently, our research question is:

"To what extent do consumer behavior, psychology and personality influence the purchase intention of different components (color, font type, and material) on coffee packaging?"

Drawing upon our rigorous quantitative research, it can be deduced that personality traits, psychological factors, and consumer behavior exert significant influence over the purchase intentions pertaining to distinct packaging components featured on coffee packaging.

Utilizing the existing body of literature, we identified several knowledge gaps pertaining to coffee product packaging. To bridge these gaps, we conducted an exploratory study guided by the insights obtained from the literature review. Additionally, we formulated hypotheses that aimed to address our research question effectively. Study 1 focused on examining the relationship between individual personalities, color preferences, and willingness to pay (WTP).

Our objective was to discern how distinct personality types align with specific colors and determine the extent to which these associations manifest in higher levels of WTP. Moving on to Study 2, our aim was to investigate the various factors that influence purchase intentions concerning different packaging components of coffee products.

In order to address our research question and test our hypotheses, we implemented an online survey as the primary data collection method. The survey data underwent a rigorous process of factor analysis to extract relevant factors for further analysis. Subsequently, we employed a series of nine regression models to investigate both our exploratory study and main study, thereby evaluating the hypotheses formulated. The statistical analyses enabled us to retain all the hypotheses, as we obtained statistically significant results that supported their validity and provided empirical evidence to substantiate our findings.

In contrast to previous research, our study aims to elucidate the factors influencing purchase intentions for various packaging elements. By doing so, we provide valuable insights to marketers, enabling them to tailor their packaging strategies according to specific customer segments they intend to target.

The findings of our study hold great significance within a fiercely competitive market where meticulous attention to detail is paramount. By identifying the key attributes that influence purchase intentions for various packaging components, our research provides valuable insights for future investigators to explore the most viable customer segments to target for optimal sales and success in the coffee industry.

## REFERENCES

- Bell, J., & Waters, S. (2018). Ebook: doing your research project: a guide for first-time researchers. McGraw-hill education (UK).
- Benachenhou, S., Guerrich, B., & Moussaoui, Z. (2018). The effect of packaging elements on purchase intention: case study of Algerian customers. Management Science Letters, 8(4), 217-224.

Doi 10.5267/j.msl.2018.2.004

- Berger, D. E. (2003). Introduction to multiple regression. USA: Claremont Graduate
  University. http://wise.cgu.edu/wp-content/uploads/2016/07/Berger-Intro-to-MRC-2008.pdf
- Brown, J. D. (2009). Statistics Corner. Questions and answers about language testing statistics:
  Choosing the right number of components or factors in PCA and EFA. Shiken: JALT
  Testing & Evaluation SIG Newsletter, 13(2), 19-23.
  https://hosted.jalt.org/test/PDF/Brown30.pdf
- Cerrato, H. (2012). The meaning of colors. The graphic designer. https://blocs.xtec.cat/gemmasalvia1617/files/2017/02/the-meaning-of-colors-book.pdf
- Connolly, A., Davison, L. How does design affect decision at point of sale?. *J Brand Manag* 4, 100–107 (1996). https://doi.org/10.1057/bm.1996.33
- Deliya, M. M. M., & Parmar, B. (2012). Role of Packaging on Consumer Buying Behavior a Patan District. global Journal of management and Business research, 12(10), 49-68.
- Demura, S., H. Aoki, T. Mizusawa, K. Soukura, M. Noda and T. Sato, "Gender Differences in Coffee Consumption and Its Effects in Young People," *Food and Nutrition Sciences*, Vol. 4 No. 7, 2013, pp. 748-757. doi: 10.4236/fns.2013.47096.
- Durmaz, Y. (2014). The impact of psychological factors on consumer buying behavior and an empirical application in Turkey. doi:10.5539/ass.v10n6p194
- Farooq, S., Habib, S., & Aslam, S. (2015). Influence of product packaging on consumer purchase intentions. International Journal of Economics, Commerce and Management, 3(12), 538-547.
  https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=7b723bafed75899c cffdebb4ba48597c5da122c0

Gajjar, N. B. (2013). Factors affecting consumer behavior. International Journal of

Research in Humanities and Social Sciences, 1(2), 10-15. https://www.raijmr.com/ijrhs/wp-

content/uploads/2017/11/IJRHS\_2013\_vol01\_issue\_02\_02.pdf

- Gogoi, b. (2013), Study of antecedents of purchase intention and its effect on brand loyalty of private label brand of apparel, International Journal of Sales & Marketing, Vol. 3, Issue 2, Jun 2013, 73-86. <u>http://www.tjprc.org/publishpapers/2-33-1367497537-6.%20STUDY%20OF%20ANTECEDENTS%20-%20full.pdf</u>
- Grydeland, B. (2021). *Forbruket av kaffe i Norge*. Kaffe. <u>https://kaffe.no/forbruket-av-kaffe-i- norge-2/</u>
- Henderson, P. W., Giese, J. L., & Cote, J. A. (2004). Impression management using typeface design. Journal of marketing, 68(4), 60-72.

https://journals.sagepub.com/doi/pdf/10.1509/jmkg.68.4.60.42736

- Hussain, S., Ali, S., Ibrahim, M., Noreen, A., & Ahmad, S. F. (2015). Impact of product packaging on consumer perception and purchase intention. Journal of Marketing and Consumer Research, 10(1), 1-10. https://core.ac.uk/download/pdf/234693879.pdf
- In, Faridah & Ahmad, Afham. (2018). THE EFFECT OF DEMOGRAPHIC FACTORS ON CONSUMER INTENTION TO PURCHASE GREEN PERSONAL CARE PRODUCTS.https://www.researchgate.net/publication/328494976\_THE\_EFFECT\_O F\_DEMOGRAPHIC\_FACTORS\_ON\_CONSUMER\_INTENTION\_TO\_PURCHAS E\_GREEN\_PERSONAL\_CARE\_PRODUCTS
- Ishaku, E., & Tijani, R. Impact of Packaging on Consumer Purchase of Beverage Drinks in Taraba State, Nigeria. ISO 690
- Jisana, T. K. (2014). Consumer behaviour models: an overview. Sai Om Journal of Commerce & Management, 1(5), 34-43.

https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=ef54146370ef2e3e 015f182092d8b816efbf4306

 Kanchanopast, S. (2022, October). Factors affecting Consumer Purchase Decisions of Vitamin Beverages. In INTERNATIONAL ACADEMIC MULTIDISCIPLINARY RESEARCH CONFERENCE IN GENEVA 2022 (pp. 62-66).

http://icbtsproceeding.ssru.ac.th/index.php/ICBTSGENEVA2022/article/view/699/65

Kauppinen-Räisänen, H. (2010), "The impact of extrinsic and package design attributes on preferences for non-prescription drugs", *Management Research Review*, Vol. 33 No. 2, pp. 161-173. https://doi.org/10.1108/01409171011015847

Keller, K. L. (2009). Choosing brand elements to build brand equity. Strategic Brand

Management. 3rd ed. Delhi: Dorling Kindersley, 187-96.

- Khan, Marium & Waheed, Sidra & Ahmad, Nawaz. (2018). Product Packaging and Consumer Purchase Intentions. 13. 97-114.
- Kim, J. H., & Choi, I. (2021). Choosing the level of significance: A decision-theoretic approach. Abacus, 57(1), 27-71. https://onlinelibrary.wiley.com/doi/epdf/10.1111/abac.12172
- Kivunja, C. (2018). Distinguishing between theory, theoretical framework, and conceptual framework: A systematic review of lessons from the field. International journal of higher education, 7(6), 44-53. doi:10.5430/ijhe.v7n6p44
- Kobayashi, M. L., & Benassi, M. D. T. (2015). Impact of packaging characteristics on consumer purchase intention: Instant coffee in refill packs and glass jars. Journal of Sensory Studies, 30(3), 169-180. https://doi.org/10.1111/joss.12142
- Lau, H.P.B., White, M.P. & Schnall, S. Quantifying the Value of Emotions Using a Willingness tocPay Approach. J Happiness Stud 14, 1543–1561 (2013). https://doi.org/10.1007/s10902-012-9394-7
- Luo, D., Yu, L., Westland, S., & Mahon, N. (2019). The influence of colour and image on consumer purchase intentions of convenience food. Journal of the International Colour Association, 24, 11-23.

https://www.researchgate.net/publication/332304769\_The\_influence\_of\_colour\_and\_i mage\_on\_consumer\_purchase\_intentions\_of\_convenience\_food/citation/download

Maryam, N. (2021). AESTHETICS OF PACKAGING DESIGN AND CONSUMERS PURCHASE INTENTION OF READY-TO-EAT FOOD PRODUCTS AT THE POINT OF SALE.

https://thelawbrigade.com/wp-content/uploads/2022/05/AJMRR\_Noshaba-Maryam.pdf

- Min Jung Kim & Joon Ho Lim (2019) A comprehensive review on logo literature: research topics, findings, and future directions, Journal of Marketing Management, 35:13-14, 1291-1365, DOI: 10.1080/0267257X.2019.1604563
- Mirabi, V., Akbariyeh, H., & Tahmasebifard, H. (2015). A study of factors affecting on customers purchase intention. Journal of Multidisciplinary Engineering Science and Technology (JMEST), 2(1). <u>http://www.jmest.org/wp-content/uploads/JMESTN42350395.pdf</u>
- Nagarkoti, B. (2014). Factors influencing consumer behavior of Smartphone users. https://www.theseus.fi/bitstream/handle/10024/70466/Nagarkoti\_Bishal.pdf

- Ngoc Khuong, Mai & Tran, Nguyen. (2018). The Impacts of Product Packaging Elements on Brand Image and Purchase Intention — An Empirical Study of Phuc Long's Packaged Tea Products. International Journal of Trade, Economics and Finance. 9. 8-13. Doi: 10.18178/ijtef.2018.9.1.580.
- Nayyar, Dr & Nayyar, Er. (2012). Packaging -An Innovative source of Impulsive and Abrupt Buying Action. INTERNATIONAL JOURNAL OF MANAGEMENT & INFORMATION TECHNOLOGY. DOI: 1. 10.24297/ijmit.v1i1.1454.
- Njigua, R. W. (2018). Influence of personal factors on consumer purchase decisions of mobile phones in Nairobi County, Kenya (Doctoral dissertation, Strathmore University). http://su-plus.strathmore.edu/handle/11071/6168
- Norheim, S.E, & Sønvisen, J.C. (2020). Influencer Marketing: The effect on consumer's purchase intentions and perceived value [Master-thesis]. University Of Stavanger https://uis.brage.unit.no/uisxmlui/bitstream/handle/11250/2788462/no.uis%3ainspera %3a82490702%3a14967092.pdf?sequence=1&isAllowed=y
- Omar, N. A., Nazri, M. A., Osman, L. H., & Ahmad, M. S. (2016). The effect of demographic factors on consumer intention to purchase organic products in the Klang Valley: An empirical study. Geografia, 12(2). https://core.ac.uk/download/pdf/77967146.pdf
- Pereira, C. P. G. D. C. (2021). How packaging materials influence the Consumers' Purchase Intention: the mediation role of perceived quality (Doctoral dissertation). https://repositorio.ucp.pt/bitstream/10400.14/34755/1/202657310.pdf
- Purwaningsih, Isti & Surachman, Surachman & Pratikto, Pratikto & Santoso, Imam. (2019). Influence of Packaging Element on Beverage Product Marketing. International Review of Management and Marketing. DOI:9. 205-210. 10.32479/irmm.8831.
- Rahman, P. N. A. A., Harun, R., & Johari, N. R. (2020). The Effect Of Packaging Design
  Elements On Youth Purchase Intention Of Junk Food. JBMP (Jurnal Bisnis,
  Manajemen Dan Perbankan), 6(1), 25-38. https://doi.org/10.21070/jbmp.v6i1.442
- Rani, P. (2014). Factors influencing consumer behaviour. International journal of current research and academic review, 2(9), 52-61. <u>http://www.ijcrar.com/vol-2-</u> <u>9/Pinki%20Rani.pdf</u>
- Rebollar, R., Lidón, I., Serrano, A., Martín, J., & Fernández, M. J. (2012). Influence of chewing gum packaging design on consumer expectation and willingness to buy. An analysis of functional, sensory and experience attributes. Food Quality and Preference, 24(1), 162-170. https://doi.org/10.1016/j.foodqual.2011.10.011

Rezai, G., Mohamed, Z., Shamsudin, M. N., & Teng, P. K. (2011). Demographic and attitudinal

variables associated with consumers' intention to purchase green produced foods in Malaysia. International Journal of Innovation, Management and Technology, 2(5), 401. http://www.ijimt.org/papers/166-S00035.pdf

- Rezvani, Samin & Dehkordi, Goodarz & Rahman, Muhammad & Fouladivanda, Firoozeh & Habibi, Mahsa & Eghtebasi, Sanaz. (2012). A Conceptual Study on the Country of Origin Effect on Consumer Purchase Intention. Asian Social Science. 8. 10.5539/ass.v8n12p205.
- R. G. L. Murphy and others, Definition, willingness-to-pay, and ranking of quality attributes of U.S. pork as defined by importers in Asia and Mexico, *Journal of Animal Science*, Volume 93, Issue 1, January 2015, Pages 433–441, https://doi.org/10.2527/jas.2014-8102
- Ribeiro, A.P.L., Carneiro, J.d.D.S., De Melo Ramos, T., Patterson, L. and Pinto, S.M. (2018),
  "Determining how packaging and labeling of Requeijão cheese affects the purchase behavior of consumers of different age groups", *British Food Journal*, Vol. 120 No. 6, pp. 1183-1194. https://doi.org/10.1108/BFJ-02-2017-0081
- Rundh, B. (2005), "The multi-faceted dimension of packaging: Marketing logistic or marketing tool?", *British Food Journal*, Vol. 107 No. 9, pp. 670-684. https://doi.org/10.1108/00070700510615053
- Rundh, B. (2009), "Packaging design: creating competitive advantage with product packaging", *British Food Journal*, Vol. 111 No. 9, pp. 988-1002. https://doi.org/10.1108/00070700910992880
- Saunders, M., Lewis, P., & Thornhill, A. (2009). Research methods for business students. Pearson education. https://books.google.no/books?id=utxtfaCFiEC&lpg=PA2&ots=DxNVGoFddN&dq=Saunders%2C%20M.%2C%20Lewi s%2C%20P.%2C%20%26%20Thornhill%2C%20A.%20(2009).%20Research%20me thods%20for%20business%20students.%20Pearson%20education.&lr&hl=no&pg=P A2#v=onepage&q=Saunders,%20M.,%20Lewis,%20P.,%20&%20Thornhill,%20A. %20(2009).%20Research%20methods%20for%20business%20students.%20Pearson %20education.&f=false
- Silayoi, P. and Speece, M. (2007), "The importance of packaging attributes: a conjoint analysis approach", *European Journal of Marketing*, Vol. 41 No. 11/12, pp. 1495-1517. https://doi.org/10.1108/03090560710821279

Saleem, Mariam & Khan, Marium & Ahmed, Mohammad Ekhlaque & Shah, Sanober & Surti,

Saad. (2018). Online Grocery Shopping and Consumer Perception: A Case of Karachi Market in Pakistan. Journal of Internet and e-business Studies. 2018. 1-13. 10.5171/2018.931248.

- Westland, J. C., (2015). Structural Equation Models: From Paths to Networks. Springer International Publishing. https://doi.org/10.1007/978-3-319-16507-3
- Williams B, Onsman A, Brown T. Exploratory Factor Analysis: A Five-Step Guide for Novices. Australasian Journal of Paramedicine. 2010;8:1-13. doi:10.33151/ajp.8.3.93
- Yahya, N. Y., Mazlan, N. A., & Wan Kamarudin, W. N. B. (2022). Personal factor and consumer purchase intention: the risen of coffee culture in Klang Valley, Malaysia. Journal of Tourism, Hospitality and Culinary Arts, 14(2), 130-148. https://ir.uitm.edu.my/id/eprint/68344/1/68344.pdf
- Yin, S., Wu, L., Du, L., & Chen, M. (2010). Consumers' purchase intention of organic food in China. Journal of the Science of Food and Agriculture, 90(8), 1361-1367. https://doi.org/10.1002/jsfa.3936
- Zekiri, J., & Hasani, V. V. (2015). The role and impact of the packaging effect on consumer buying behaviour. Ecoforum journal, 4. ZEKIRI, J., & HASANI, V. (2015). THE ROLE AND IMPACT OF THE PACKAGING EFFECT ON CONSUMER BUYING BEHAVIOUR. *Ecoforum Journal, 4*. Retrieved from http://www.ecoforumjournal.ro/index.php/eco/article/view/189

# APPENDIX



Appendix 1: Maslow Hierarchy of Needs

Appendix 2: AIO Framework

Activities	Interest	Opinions
Work	Family	Themselves
Hobbies	Home	Social issues
Social events	Job	Politics
Holidays	Community	Business
Entertainment	Recreation	Economics
Club membership	Fashion	Education
Community	Food	Products
Shopping	Media	Future
Sports		Culture

# Appendix 3: Full Questionnaire

# **Questionnaire for Master Thesis**

The present inquiry constitutes an instrument that shall procure indispensable data for our forthcoming master's thesis. Our research endeavors shall be focused on an exploration of the packaging employed in the coffee industry. Our objective is to develop an understanding of the salient factors that are deemed significant when assessing consumer preferences in the context of coffee products. The broad scope of this survey encompasses an array of elements ranging from consumer behavior, demographics, psychological proclivities, and physical design attributes. This questionnaire has been designed to ensure anonymity, and we kindly request that respondents provide candid responses to facilitate accurate data collection. We express our sincere appreciation in advance for your time and efforts in completing this questionnaire.

1. Looking at the 3 different coffee packaging below, what color do you prefer?



- (1) Red
- (2) Yellow
- (3) Blue
- 2. On a scale from 1-5, how likely is that you would buy this product?
  - (1) Very unlikely
  - (2) Unlikely
  - (3) Neutral
  - (4) Likely
  - (5) Very Likely
- 3. On a scale from 1-5, how likely is that you would buy this product?
  - (1) Very unlikely
  - (2) Unlikely

- (3) Neutral
- (4) Likely
- (5) Very Likely
- 4. On a scale from 1-5, how likely is that you would buy this product?
  - (1) Very unlikely
  - (2) Unlikely
  - (3) Neutral
  - (4) Likely
  - (5) Very Likely
- 5. After looking at the different types of packaging colors, what would you be willing to pay for a product with your favorite color showed above?
  - (1) Nothing
  - (2) 20-30NOK
  - (3) 30-40NOK
  - (4) 40-50NOK
  - (5) 50NOK or more
- 6. Looking at the different coffee packaging, what font type do you prefer?



- (1) Font type 1
- (2) Font type 2
- (3) Font type 3
- 7. On a scale from 1-5, how likely is that you would buy this product?
  - (1) Very unlikely
  - (2) Unlikely
  - (3) Neutral
  - (4) Likely
  - (5) Very Likely

- 8. On a scale from 1-5, how likely is that you would buy this product?
  - (1) Very unlikely
  - (2) Unlikely
  - (3) Neutral
  - (4) Likely
  - (5) Very Likely
- 9. On a scale from 1-5, how likely is that you would buy this product?
  - (1) Very unlikely
  - (2) Unlikely
  - (3) Neutral
  - (4) Likely
  - (5) Very Likely
- 10. After looking at the different type of font types, what would you be willing to pay for a product with your favorite font type above?
  - (1) Nothing
  - (2) 20-30NOK
  - (3) 30-40NOK
  - (4) 40-50NOK
  - (5) 50NOK or more
- 11. What type of material do you prefer when buying a coffee product?



- Glass
- Plastic
- Cardboard
- 12. On a scale from 1-5, how likely is that you would buy this product?
  - (1) Very unlikely
  - (2) Unlikely

- (3) Neutral
- (4) Likely
- (5) Very Likely

13. On a scale from 1-5, how likely is that you would buy this product?

- (1) Very unlikely
- (2) Unlikely
- (3) Neutral
- (4) Likely
- (5) Very Likely
- 14. On a scale from 1-5, how likely is that you would buy this product?
  - (1) Very unlikely
  - (2) Unlikely
  - (3) Neutral
  - (4) Likely
  - (5) Very Likely
- 15. After looking at the different types of packaging materials what would you be willing to pay for a product with favorite packaging material showed above?
  - (1) Nothing
  - (2) 20-30NOK
  - (3) 30-40NOK
  - (4) 40-50NOK
  - (5) 50NOK or more
- 16. On a scale from 1-5, how much do you agree with that this claim relates to your personality? "I am very extroverted and want things to happen quickly and efficiently. I am also emotional and energetic."
  - (1) Strongly disagree
  - (2) Disagree
  - (3) Neutral
  - (4) Agree
  - (5) Strongly agree
- 17. On a scale from 1-5, how much do you agree with this claim related to your personality? "I am a calm person and I appreciate reliability, stability and credibility. When I buy a product, I do so with awareness and intellect."

- (1) Strongly disagree
- (2) Disagree
- (3) Neutral
- (4) Agree
- (5) Strongly agree
- 18. On a scale from 1-5, how much do you agree with this claim related to your personality? "I am very joyful and positive, and I would also describe myself as creative and optimistic."
  - (1) Strongly disagree
  - (2) Disagree
  - (3) Neutral
  - (4) Agree
  - (5) Strongly agree
- 19. On a scale from 1-5, how much do you agree with this claim: "I know a about coffee."
  - (1) Strongly disagree
  - (2) Disagree
  - (3) Neutral
  - (4) Agree
  - (5) Strongly agree
- 20. On a scale from 1-5, how much do you agree with this claim: "Among my friends and family I am one of the "experts" on coffee."
  - (1) Strongly disagree
  - (2) Disagree
  - (3) Neutral
  - (4) Agree
  - (5) Strongly agree
- 21. How often do you go shopping for groceries?
  - (1) Once a month
  - (2) Once every second week
  - (3) Once every week
  - (4) Once a day
  - (5) More than once every day

- 22. What time of the day do you usually go shopping for groceries?
  - (1) Morning
  - (2) Afternoon
  - (3) Evening
- 23. How many times a week do you drink coffee?
  - (1) Once or less
  - (2) 1-2 times
  - (3) 3-4 times
  - (4) 5-7 tomes
  - (5) At least once a day
- 24. Rank the following statements from 1 (strongly disagree) to 5 (strongly agree).
  - (1) I drink coffee because it give me energy.
  - (2) I drink coffee because it makes me concentrate.
  - (3) Ritual or habit of my daily life.
  - (4) Social Connection.
  - (5) Stress relief.
- 25. What is you gender?
  - (1) Male
  - (2) Female
  - (3) Other
- 26. How old are you?
  - (1)18 or below
  - (2) 18-30
  - (3) 30-40
  - (4) 40-50
  - (5) 50 or above
- 27. What is your level of education?
  - (1) Primary school
  - (2) Secondary school
  - (3) Certificate / Diploma
  - (4) Bachelor's degree
  - (5) Master's degree or higher

- 28. What is your level of income?
  - (1) Under 100 000NOK
  - (2) 100 000-250 000NOK
  - (3) 250 000-400 000NOK
  - (4) 400 000-550 000NOK
  - (5) 550 000NOK or higher

# Appendix 4: Descriptive Statistics

Descriptive Statistics				
	N	Mean	Std. Deviation	
Looking at the 3 different coffee packaging below, what color do you prefer?	154	1,65	,844	
RedPI	154	3,40	1,026	
YellowPI	154	2,44	1,137	
BluePl	154	2,78	1,211	
ColorWTP	154	3,14	1,087	
Looking at the different coffee packaging, what font type do you prefer?	154	1,56	,705	
Font1PI	154	3,23	1,119	
Font2PI	154	2,86	1,157	
Font3PI	154	2,19	1,153	
FontWTP	154	2,86	1,075	
What type of material do you prefer when buying a coffee product?	154	1,77	,934	
GlassPl	154	3,45	1,289	
PlasticPl	154	2,14	1,180	
CardboardPI	154	3,21	1,041	
MaterialWTP	154	3,30	1,097	
EnergeticPersonality	154	2,97	1,134	
CalmPersonality	154	3,70	,978	
JoyfulPersonality	154	3,41	1,039	
KnowledgeCoffee	154	2,39	1,122	
CoffeeExpert	154	2,19	1,242	
ShoppingFrequency	154	2,94	,898	
TimeOfDayShopping	154	2,05	,717	
CoffeeConsumption	154	2,86	1,572	
CoffeeGivesEnergy	154	3,27	1,330	
CoffeeMakesMeConsentrat e	154	2,92	1,393	
CoffeeRitual	154	2,87	1,507	
SocialConnection	154	2,47	1,243	
StressRelief	154	2,31	1,306	
Gender	154	1,61	,540	
Age	154	2,11	,981	
Education	154	3,28	1,094	
Income	154	2,03	1,311	
Valid N (listwise)	154			

#### **Descriptive Statistics**

# Appendix 5: Literature Reviews

Author	Data Sample method	Theory	Dependent Variable	Independent Variable
This study	Online Survey, 168 respondents	Factors that has effect on purchase intention (PI). We will use coffee packaging as our product, and will see how coffee packaging elements such as colors, fonts and material combined with consumer behavior and WTP has effect on PI.	Purchase intention	Packaging elements (color, font & material), consumer behavior and willingness to pay (WTP)
Henderson (2004)	Survey, 336 respondents	This article develops empirically based guidelines to help managers select typefaces that affect strategically val- ued impressions.	x	x
Rundh (2005)	Five case studies	The purpose of this paper is to study how packaging can contribute to competitive advantage.	х	x
Silayoi et al., (2007)	Sample, 305 respondents	The importance of packaging design and the role of packaging	Likelihood to buy	Packagaing attributes
Rundh (2009)	A single case study based on five "corporate stories	Packaging and packaging design can contribute to competitive advantage for marketing a consumer product.	x	x
Keller (2009)	x	Use of colors in packaging, and how different colors can emphasize different moods	x	x
Kauppinen-Räisänen (2010)	Coinjoint Analysis of 18 consumers	examine the influence of extrinsic attributes and package design attributes on consumer preferences of high-risk products.	Preferences for non-prescription drugs	The impact of extrinsic and package design attributes
Yin et al., (2010)	Survey, with 432 respondents	Consumer's purchase intention of organic food in China	Purchase intention	Income
Rezai et al., (2011)	Interviewed using structured questionnaire, 1 355 respondents	Intention to purchase green produced foods	Purchase intention	Education level & Income
Nayyar (2012)	Survey 100, respondents	This study examines the result of good packaging of products on consumers buying alternative as well as on impulse buying	Buying choice	Product packaging

Rezvani et al., (2012)	x	Country of origin literature and mention different variables that influence consumer purchase intention	Purchase intention	Demographic factors
Cerrato (2012)	x	Describing the meaning of the different colors	x	x
Deliya & Parmar (2012)	Simple Random Sampling, 150 respondents	Role of Packaging on Consumer Buying Behavior–Patan District	Consumer Buying Behavior	Packaging
Rebollar & Fernández (2012)	Investigation comprised of 390 respondents	Willingness To Pay and format of product packaging	Two Packages of chewing gum	WTP
Demura et al., (2013)	Survey, with 1189 respondents	Gender differences in coffee consumption	Coffee consumption / coffee noncomsumption	Gender
Ishaku et al., (2013)	Questionnaire, with 89 respondents	Impact of Packaging on Consumer Purchase of Beverage Drinks in Taraba State, Nigeria	Purchasing of beverage	Material Color
Gajjar (2013)	x	Looking at different factors affecting consumer behavior	Consumer behavior	Consumer behavior
Gogoi (2013)	Sample, 300 respondents	STUDY OF ANTECEDENTS OF PURCHASE INTENTION AND ITS EFFECT ON BRAND LOYALTY OF PRIVATE LABEL BRAND OF APPAREL	Purchase intention	Price, perceived quality & value
Lau et al., (2013)	Survey, 184 respondents, from 2 different studies	Check peoples WTP: Quantifying the Value of Emotions Using a Willingness to Pay Approach	x	Willingness To Pay
Rani (2014)	x	Here the aaticle looks at factors influencing consumer behavior	x	x
Nagarkoti (2014)	2 Focus group with 6 respondents in each group	Factors Influencing Consumer Behavior	Consumer behavior	Personal Factors

Jisana (2014)	x	Presents a review of theory of consumer behavior models. Besides this factors influencing consumer behavior and are discussed in this paper.	x	Psychological factors Personal factors
Durmaz (2014)	Survey, 1400 respondents	In this study, the influence of psychological factors on consumer buying behavior is investigated.	Consumer Buying Behavior	Psychological Factors
Zekiri & Hasani (2015)	Questionnaire, with 395 respondents	Objective is to determine the elements that play important role on CB	Consumer behavior	Packagaging
Lautiainen (2015)	Questionnaire, with 86 respondents	Factors that affect buying decision	Buying decision	social, personal & psychological factors
Murphy et al., (2015)	Interviews of 255 respondents	Willingness To Pay for U.S imported pork	Willingness To Pay	7 predetermined quality categories
Hussain et al., (2015)	Questionnaire, with 120 respondents	Element of packaging	Consumer behavior	Color Material
Farooq et al., (2015)	Questionnaire, with 161respondents	INFLUENCE OF PRODUCT PACKAGING ON CONSUMER PURCHASE INTENTIONS	Purchase intention	Material & Color
Mirabi et al., (2015)	Random sampling, 384 respondents	This study aimed to investigate the factors affecting on the purchase intention of Bono brand tile customers.	Purchase intention	Product quality, advertising, brand name, packaging, price, purchase intention, Bono brand
Omar et al., (2016)	Questionnaire, with 150 respondents	Demographic factors on purchase intention	Purchase intention	Gender Age
				Level of education
Benachenhou et al., (2018)	Survey, with 140 customers	The effect of packaging elements on purchase intention	Purchase intention	Color & material

Waheed et al., (2018)	Questionnaire, with 278 respondents	Product packaging and consumer purchase intention	Consumer purchase intention	Font style, material & color
Ribeiro et al., (2018)	3 focus group with 10 participant in each group	Product packaging affect on purchase behavior	Packaging	Age
Khuong & Tran (2018)	Survey, 410 respondents	Aimed to examine the effects of product packaging on purchase intention through the mediating role of brand imag	Purchase intention	Product packaging
Saleem at el., (2018)	90 respondents	Study aims to comprehend the attitude and behavior of Pakistani consumers towards online grocery shopping	Online grocery shopping	Attitude and behavior
In & Ahmad (2018)	Questionnaires, 200 respondents	The effec of demographic factors on consumer intention to purchase green personal care products	Purchase intention	Demographics Factors
Njigua (2018)	Questionnaires, 384 respondents	Personal factors (age, occupation, income, lifestyle and personality) have become a key aspect in determining the purchase decisions that consumers make.	Purchase Decision	Personal Factors
Purwaningsih et al., (2019)	Questionnaires, 86 respondents	Influence of Packaging Element on Beverage Product Marketing	Purchase intention	Color
Kim & Lim (2019)	Review of 124 studies	Looked in to Logos as visual cue to help firms communicate their unique identities and capture consumers' attention	x	x

Luo et al., (2019)	1: questionnaire and interview, and second part was questionnaire of 200 respondents in UK and China	The influence of colour and image on consumer purchase intentions of convenience food	Purchase intention	color
Rahman et al., (2020)	samplesizeof322respondents	The main purpose of this research study is to examine the packagingdesign elements as a determinant factor to purchase junk food among youthconsumer	Purchase intention of junk food	Packaging DesignElements
Maryam (2021)	Survey, with 460 respondents	Packagaging design	Purchase intention	Material
Pereira (2021)	Online survey, with 512 respondents	How Packaging Materials influence the Consumers' Purchase Intention	Purchase intention	Material
Yahya et al., (2022)	Online survey, with 398 respondents	Personal factors and purchase intention	Purchase intention	Age, income & occupation
Kanchanopast (2022)	online survye, 385 samples	Factors affecting Consumer Purchase Decisions of Vitamin Beverages	Purchase intention	Demographic characteristics