Color psychology on the packaging & How it affects the purchase.

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Abstract

Color Psychology is a scientific field that studies the emotions, mood and behavior of people, caused by the stimulation of color. Colors are considered by many marketers as a very important part of a packaging. They are one of the most prompt approaches to convey messages. They are also a very important tool of marketing and our subconscious is directly affected from it which leads to an attraction or a rejection of the hidden meaning. Since the market is flooded with various products full of marketing messages, it is essential to make our product distinguish from the crowd. When a proper selection and combination of colors is made then companies can achieve better position of the product on the shelves and so increase their incomes. The survey and statistical analysis of the data were conducted by using descriptive statistics.
Preface

I would like to express my deep gratitude to Professor Mavragani, my research supervisor, for their guidance, encouragement and useful critiques of this research work. My grateful thanks are also extended to Ms. Kaldi my director for her support and understanding in the whole process.

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Contents

ABSTRACT .................................................................................................................................................. 3
PREFACE ................................................................................................................................................... 1
CONTENTS ................................................................................................................................................ 2
INTRODUCTION ........................................................................................................................................... 1
LITERATURE OVERVIEW .......................................................................................................................... 2
CONSUMER BUYING PROCESS .................................................................................................................. 2
ANALYSIS OF THE 5 STEPS ..................................................................................................................... 2
TYPES OF PURCHASING DECISIONS ....................................................................................................... 3
CONSUMER INVOLVEMENT ...................................................................................................................... 4
IN WHICH PART OF THE CONSUMER BUYING PROCESS COLOR PLAYS A ROLE? ......................... 4
MILESTONES OF THE PSYCHOLOGY OF COLORS ............................................................................. 5
COLORS AND PACKAGING ..................................................................................................................... 6
Packaging Color and Customers’ Buying Preferences .............................................................................. 6
COLOR HELPS IN RECOGNIZING BRAND .............................................................................................. 7
Color Communicates Brand Image .......................................................................................................... 8
Tuning Colors to Match Consumer Personality ....................................................................................... 9
COLOR MEASUREMENTS AND EFFECT OF INCLINATIONS ON BUYER CHOICES ...................... 9
Meanings of Colors .................................................................................................................................. 10
ROLE OF PRODUCT COLOR IN CONSUMER BEHAVIOR .................................................................... 10
Role of Color in Consumer Behaviour .................................................................................................. 11
Packaging: The State-of-the-art .............................................................................................................. 12
Key roles and functions Elements of packaging’s role .......................................................................... 13
Innovation - Innovation and technology ................................................................................................ 14
**THE PART OF ILLUSTRATIONS AND COLOR** ............................................................... 15

**ASSOCIATIVE LEARNING** .......................................................................................... 17

**SUMMARY OF THE LITERATURE REVIEW** .............................................................. 18

**METHODOLOGY** ......................................................................................................... 19

*Data Collection and Participants* ................................................................................. 19

*Reasons for choosing this method* .............................................................................. 19

*Projected Brand Personalities* .................................................................................... 20

*Limitations of the chosen method* ............................................................................... 20

**DATA ANALYSIS** ...................................................................................................... 21

*1st section of the survey* ............................................................................................. 24

*2nd section of the survey* ........................................................................................... 25

**INTERPRETATION OF FINDINGS** .......................................................................... 25

**CONCLUSIONS** ......................................................................................................... 26

**BIBLIOGRAPHY** ........................................................................................................... 1
Introduction

Color has a major role in marketing. It affects consumer’s buying decision. It may be an effective promoting tool that essentially impacts customer buys, so much so that it accounts for 85% of the reason why somebody chooses to buy a item. Marketers should comprehend the psychology of color to use it efficiently.

The Psychology of color is the study of shading as a determinant of human behaviour. Perceptions that are not obvious are affected by color, such as the taste of food. Color can indeed influence people; yet, it is important to remember that these effects differ between people. Factors such as gender, age, and culture can influence how an individual perceives color.

Psychology of color is also widely used in marketing and branding. Many advertising associates consider color as an significant part of marketing because color can be used to influence buyer’s emotions and perceptions of goods and services. Color is useful from companies so as to decide the brand logos. The logos seem to attract more customers when the color of the brand logo is alike the personality of the products or services. On the other hand, colors are not only important for logos and products, but also for displays of the stores. Researcher suggest that spontaneous buyers are attracted from warm colors, in spite of cooler colors being more favourable.

People tend to associate colors with meanings. These associations are studied thoroughly in this study.
Literature Overview

The following texts are a literature overview of the consumer buying process and in what part of that process the color can affect the decisions the consumer makes.

**Consumer buying process**

The consumer buying process consists of a series of invisible steps which all lead to the visible outcome, the act of the purchase. Elements such as motivation, perception, learning, memory, personality, and attitude contribute in the decision process that presupposes the consumer’s covering of five stages: problem recognition, information search, evaluation of alternatives, purchase decision, and post purchase behavior (Figure 1). (Maria-Cristiana MUNTHIU – The buying decision process and types of buying decision behavior 2009)

![Diagram of the buying decision process](Image)

**Figure 1 : The buying decision process**

There are more models that describe in a detailed way which use consumers’ involvement with the product, in the decision process; however, this thesis will use only on the basic model as the scope of view is different.

**Analysis of the 5 steps**

1. **Problem recognition**
   The process is activated with the recognition of a need. This need might come into the surface as a result of “internal” (such as motivation) or “external” (such as marketing strategy) stimulus. For example, a need for a new laptop because the old one no longer works properly or because there are new models that their value for money fulfills better the needs of the consumer than the old one.

2. **Information research**
   The second stage refers to the research and processing of the information for all the possible brands. The information research occurs through different sources which can be separated into the below categories.
   - Personal experience such as the usage of the product in the past
   - Personal sources such as word of mouth through family or friends
   - Commercial sources such as advertisement and packaging
   Past personal experience is recalled from consumers mind and usually is the first source that they refer to. Personal and commercial are external sources of information selection.
The importance of every information source for the evaluation and selection of a brand is a subject of research separately for each product category and for each target market.

3. Evaluation of alternatives
The third stage of the process depends on the evaluation of the alternative brands concerning specific choice criteria or characteristics. These criteria differ depending on the product or target market.

4. Purchase decision
The fourth stage of the process is the selection and purchase of a brand. At the same time the consumer makes other decisions concerning the purchase of the brand such as the store, the quantity, the time and the frequency of the purchase.

5. Post-purchase decision
At this phase the consumers analyse the extent that they were satisfied from the usage of the chosen product. Taking into consideration the expectations and the actual experience of the usage of the product the consumer forms a belief concerning the brand they choose.

Types of purchasing decisions

There are three (3) types of purchasing decisions, depending on the time and amount of information needed to make a consumer decision (Howard and Sheth, 1969; Howard, 1977). Specifically:

1. Extensive decision making:
This type of consumer decision-making is preferred when there is little relevant information on the product, no previous experience of using the product, and generally the perceived risk of consuming or using the product is high. When making this kind of purchasing decision, the consumer is seriously involved in defining selection criteria, collecting information and evaluating alternative brands.

2. Limited decision making:
When making limited purchasing decisions, the consumer makes no particular effort to collect information and evaluate alternative brands. The reason is that he probably has previous experience with the product.

3. Routinized decision making:
Custom buying decisions are the process with the least amount of time spent working, gathering information and generally the hassle of choosing a brand. When referring to products whose market is subject to automatic decision-making, the consumer has no incentive to look for new information, since the buying process is based on past experiences recalled.
**Consumer Involvement**

The degree to which a purchasing decision goes through all stages of the purchasing process depends on the degree of consumer involvement with the product. Consumer involvement refers to the perception of the importance or the relation of the consumer to an object, event or activity (Zaichkowsky, 1985). This involvement ranges from low, medium to high. According to Laurent & Kapferer (1985), the degree of consumer involvement with the product is commensurate with the importance of the market (functional, monetary), the perceived market risk, the emotional value of the product, and the symbolic value of the product.

![Figure 2: Consumer Involvement](image)

**In which part of the consumer buying process color plays a role?**

From the article the Influence of colors on consumer behaviour of Amel Arabi, it is suggested that the color of the packaging starts to affect the purchase from the analysis of the alternatives that the consumer has. It also depends on the type of decision and the involvement that the consumer has with the product. For example the consumer will search for the color of the alternative smartphones that they are going to buy, but they will not decide for the color of the milk packaging until they are in front of all the available packagings on the supermarket.

Also from the article the Influence of colors on consumer behaviour of Amel Arabi it is suggested that color affects attention, attribution and the coherence with the product brand personality. Concerning attraction which is based on the consumers genetics, it seems that a packaging which differs from its competitors will be more attractive on the supermarkets, and will capture more the buyers consideration. Colors don't have the same natural capacity to draw consideration. A few colors might draw more consideration than others, for illustration orange, at that point ruddy, blue, green and at last yellow. By using a color background instead of a illustrated environment it makes it more easy to spot from afar, an enviroment of color affects more the emotions because colors are known as a sign which creates reactions. Capacity of color to pull in consideration is critical in promoting, particularly for publicizing convention, the visual identity system of brands and the choice of colors in bundling.
On the other hand, colors can capture the attention of a consumer in a way that the marketing message might be lost. There are some colors that are easily perceived such as red which our eye perceives more. Color on packaging and advertising leads to a better understanding and memorizing of information when used properly. Each color has a different meaning to consumers depending on the cognitive experience. It affects how we understand and process information. It helps us recall memories with text and pictures and it is a very important aspect in preserving memories. Consumers use different color to highlight different information, so as to be more easy to recall them or to find them. The same with products, consumers categories them by color, theme and detail inside their minds. This way, when the consumers need it, they can think of a color that might assist them recall and sustain the information. A picture is much easier to remember than a sound or a text. The color of a thing would be saved within the optic memory. Without a doubt, it would show up that buyers creat a picture of an item interior their minds and the packagings that they are commonplace. The presentation to the pictures, makes them memorize it and this empowers to imagine the item within the future.

Milestones of the psychology of colors

From the article of Hunjet Anica & Vuk Silvija The Psychological Impact of Colors in Marketing in 2017 the below are the main milestones of the color psychology:

- Aristotle was one of the founders of the theory of color perception in the fourth century B.C. He connected basic elements of fire, water, earth and air with certain colors. (Hunjet Anica & Vuk Silvija 20

- Hippocrates discovered that light red could have different impact on people compared to dark red. According to Hippocrates` theory, the impact of light and dark colors is different.

- Sir Isaac Newton set the theory of colors in 1672. According to Newton, colors are related to light.

- Leonardo da Vinci claimed that an eye absorbs the light, i.e. electromagnetic waves. The term light purports the occurrence, which allows us to see things that are around us.

- The Celts used colors to describe the elements surrounding them.

- The Americans looked at colors as a basis for spirituality [1]. The color symbolism has been developing throughout history depending on different cultures and races.

- The basic anthropological colors of the Middle Ages of Western Europe found in all civilizations were white, red and black. In the Middle Ages appeared concepts such as intensity, density and color contrast.

- Colors have since 13th century been used for labeling individuals and certain social groups. Red was used for unbelieving Christians and the most noticeable color was yellow.
Colors and packaging

Packaging is a very important factor when a company wants to promote a item to a potential client since it some way or another leads to a potential buy. The color that stimulates the interest the most is red, while also attractive colors are orange, blue, black, green, yellow, purple and gray.

The makeup and cosmetic manufacturers most commonly use light blue and light green color for products of facecare. When combining white color with diverse colors, a run of messages can be accomplished. White packaging combined with red attracts the attention of a consumer. However, if you want to advertise a product that is intended for fun, a yellow decoration is most commonly used. Black color gives sophistication, prestige secrecy on the packaging and gives strong messages to the consumers. Moreover, by mixing black color with golden color on packaging, companies can achieve an elegant and sophisticated look and feel. With this mixture, the product attracts high-income target groups.

For example, for women, the most used combination is black packaging with pink writings. By including brighter colors on the bundling, the earnestness is diminished. Blue communicates certainty, quality, unwavering quality and solidarity. Dull blue is utilized when we require a more proficient and genuine see. Blue recommends unwinding and calmness. More youthful bunches more often than not relate it with more seasoned individuals. Blue is the favorite color of both genders and is in this manner the most secure color to utilize. Ruddy color causes consideration, customers faculties are invigorated and energy is awoken at potential client. Brighter shades of ruddy are more energizing and lively and for the most part less effortlessly seen than darker shades. Dark ruddy is seen as proficient and lavish color. Green color proposes a more characteristic, natural and sound item. Green is the color of adjust and concordance of intellect, body and feelings. Dull green color gives a more exquisite see and feel which joins to riches, extravagance and proficient quality. Orange bundling of item shows the accessibility of items, amusement and enterprise.

Packaging Color and Customers’ Buying Preferences

Color affiliations are utilized from marketers in arrange to extend item deals by communicating a message to the buyer. Peak 3D Whitestrips, for illustration, is primarily of blue. Blue is connected with cleanliness, emphasizing the product’s guarantee of clean, white teeth. White’s affiliation with purity makes it the most excellent highlight color. Nature Valley Granola Bars are stuffed in a green and yellow box. Green is connected with nature and the outside, which is suitable for this product’s deals pitch of all normal, and solid fixings. Besides, it is the most effortless for the eyes to handle. The yellow color is connected with sun and good faith, advancing a item in a positive way. Apple’s dark iPhone box communicates the productive utilize of dark on the bundling. In spite of the fact that dark is associated with passing and fiendish in particular settings in a few societies, in this setting, it is related with control. Apple’s items are costly and the dark color helps in offering the item as an elite high-quality item. Black is often the color of choice for electronics and other luxury items.
Color investigate paid little thought inside the field of displaying and impacts of differing colors on consumers’ choices. Consumers’ acknowledgments have been dismissed in composing in appear despise toward of the truth that most thing assessments by clients are based on colors alone. Color as one of the inborn quality prompts unequivocally related with customers’ wants while shopping. In show disdain toward of the truth that names inside and out affect on the customers’ acknowledgments concerning colors still the title related with a color is of assistant noteworthiness when the color itself looks for basic noteworthiness for the clients. Color was approximately three times more imperative than retail cost in forming consumers’ buy choices. Bundling color plays an greatly crucial part in communicating with clients.

Colors can stir the intrigued in a item and can persuade clients toward its buying. The five estimations of color as taking after, checking color significance, state of intellect towards color, color charm, directing color, and color slants. Color significance states that not all colors have same centrality for clients. For event, white is associated to peace though green shows up cool. State of intellect towards a thing color will anticipate their shopping behavior. Other than, clients are more likely to be beyond any doubt colored divide of notices than non colored divide. In controlling color, clients hunt for to affect from exterior components or environment.

Clients may favor certain colors over others in numerous items. For case, a color which a client inclines toward for automobiles may not be favored for furniture. Color inclinations anticipate customer’s buying inclinations in an outlet. The three main color preferences that a color performs well for low involvement, fast moving, and consumer goods which may not suit for high involvement purchasing decisions by customers. The right utilize of colors helps in recognizing and coordinating the demeanor towards that item be that as it may, it was too famous that color of bundling can too be deluding. For occasion, 20 per cent of the cigarettes’ buyers accept that cigarettes labeled as light are less unsafe than the cigarettes labeled as dull. In this manner, by appropriately examining the significance of product’s 7 Marketing and Branding Research 2(2015) bundling color for clients and how it influences customers’ acquiring eagerly, inclinations, and choices, marketers can successfully hold and fulfill their customers’ prerequisites.

**Color helps in Recognizing Brand**

Brand acknowledgment is the consumer’s capacity to distinguish or relate a item with a brand. Marketers set up brand acknowledgment by employing a particular equation of colors and shapes to make a brand stamp. The key is consistency; the same colors must be show in all aspects of a company. For illustration, a company’s site ought to be outwardly relatable to its store and customer itemsAnalysts at the College of University found that color increments brand acknowledgment by up to 80% In another ponder, when a gather of individuals were Green and appeared 3-second promotions, over 62% created an affiliation to a brand based simply on the colors they saw.

Brand acknowledgment includes an expansive affect on customer obtaining behavior. Aside from drive customers, numerous customers look for out items of brands they
recognize. Fruitful color control empowers customers to quickly and easily recognize the brand they are trying to find among a ocean of comparative items.

Once a company succeeds in setting up brand acknowledgment, it can incidentally control trademark colors to include intrigued to a item. Heinz, which effectively set up brand acknowledgment by utilizing the color ruddy, presented EZ Squirt Blastin” Green ketchup in October 2000. This emotional change from the recognizable deep-red ketchup bottles boosted item deals by $23 million. Shoppers had created such solid affiliations between Heinz and ruddy ketchup bottles that the green bottles pulled in consideration and drew intrigued. This outlines fair how effective color can be.

Color Communicates Brand Image
From the article The Psychology of Colour Influences Consumers’ Buying Behaviour – A Diagnostic Study J Suresh Kumar there some points worth mentioning.

Color makes a difference in setting up brand acknowledgment. It moreover passes on characteristics almost a company’s identity, or, brand picture. In this sense, color serves as a subliminal dialect. Color may be a exceptionally powerful source of data when individuals are making an obtaining choice. Clients by and large make an starting judgment on a item inside 90 seconds of interaction with that item and almost 62%-90% of that judgment is based on color. Individuals regularly see the symbol of a brand or company as a representation of that company. Without earlier involvement of seeing a symbol, we start to relate a brand with certain characteristics based on the essential symbol color. Color mapping gives a implies of distinguishing potential symbol colors for modern brands and guaranteeing brand separation inside a outwardly cluttered commercial center. A think about on symbol color inquired members to rate how suitable the symbol color was for anecdotal companies based on the items each company created. Members were displayed with fictional products in eight different colors and had to rate the appropriateness of the color for each product. This consider appeared a design of symbol color suitability based on item work. On the off chance that the item was considered useful, satisfies a require or fathoms a issue, at that point a utilitarian color was seen as most fitting. On the off chance that the item was seen as sensory-social, passes on demeanors, status, or social endorsement, at that point a sensory-social color was seen as more fitting. Companies ought to choose what sorts of items to create and after that choose a symbol color that's connotative with their products' capacities.

Although color can be valuable in promoting, its esteem and degree of utilize depend on how it is utilized and the group of onlookers it is utilized on. The utilize of color will have distinctive impacts on distinctive individuals; subsequently test discoveries cannot be taken as all around genuine. A ponder within the African Diary of Trade Administration uncovers how customers see the colors utilized by companies like Coco-Cola, Hermes, Starbucks, and IBM.

Members considered the ruddy of Coca-Cola passes on jolt, striking quality, youth, bliss and vitality. Members respected Hermes as meaning boldness, self image, uniqueness, separation; they moreover considered that the green of Starbucks passes on calm,
recreation, youth, staidness and consolation. Members see IBM as solid, staid, proficient, cool, novel and dependable. In expansion, the colors purple, white, and yellow reflect the taking after characteristics, individually: inventive, down-to-earth, and vivacious. Companies select colors for their logos and store plans not fair since they see great, but to communicate particular qualities almost a benefit or item. For illustration, McDonald's, Wendy’s, and Burger Lord utilize ruddy and yellow in their logos and store exteriors” pass on direness, vitality, and speed. This communicates to the customer that they are quick and effective. Companies like Entirety Nourishments utilize green for their symbol and store signs, which communicate that they are naturally cognizant. UPS”s profound brown symbol and conveyance trucks communicate UPS”s guarantee to provide bundles in a dependable and reliable way.

Tuning Colors to Match Consumer Personality

Whereas a few color affiliations show up to be emphatically established, a part depends on the identity, age sexual orientation, and social foundation of the customer. For case, diverse shades of color offer to particular identity sorts of customers. Quick nourishment eateries and clearance deals utilize stimulant colors like ruddy, orange, and dark to inspire a sense of direness in motivation buyers. Retail clothing stores utilize lighter colors like pink and sky blue to bring out calm, alleviating encounter for conventional customers who favor to browse through things at a comfortable pace.

Consider have appeared ladies tend to be more passionate and consider customers compared to men who are considered more definitive and proficient. In any case, heart rates of both men and ladies have been recognized to go up when customers are stood up to with a great deal. This illustrates that color is an compelling manipulative instrument that ought to be seized and utilized to its full advantage by architects. Eiseman concludes that individuals within the fifty to sixty age ranges are the greatest spenders since they are more likely to have an nonessential salary and youngsters are moreover huge spenders since they are competing with remaining drift pertinent among their social bunches.

Concurring to Eiseman, “95% of consumer’s decision-making is managed by the subliminal and around 5% is rational”. Typically why color is so critical when making a brand and offering a item or benefit. It is what builds up a consumer’s to begin with impression, whether positive or negative.

Color measurements and effect of inclinations on buyer choices

The consider Affect of colors on buyer behavior of Amel Arabi (2017) suggests that the color is composed of three estimations: the tone is the position of the color on the chromatic circle. It is chosen by the over-powering wavelength of the color; at that point, the luminance which is the relationship to light. It is the gloomy or light character, due to the entirety of light that the color reflects, and at final, inundation that’s the degree of
closeness of color. Compared to these distinctive conceivable varieties in color, a few commitments have appeared that person factors like age or sex affect consumers’ slants for selectinh a color. color slants are built nicely early in life. These starting slants are made in the midst of childhood as a work of the jars of the environment). For the foremost portion, children have slants for warm colors and their inclinations are arranged not because it were by subsidiary learning but besides by the physiological changes natural inside the developing of the central point. Color likability fragments people into bunches. Men appear to rather like the blue color more than the green and women would in a perfect world select pink or purple over cold colors.

Individuals inclinations are seperated into 2 categories agreeing to what they depend on: positive earlier encounter and acquainted information. Either the incline for a color would start from a past positive affiliation with it, or the incline would start from finding that specific shades that are more fitting than others for such sort of thing. This sort of learning would affirm the credibility that clients comply with models inside the assurance of colors, and particularly within the occasion that buys are show up to be perilous. Each color in an unexpected way influences the shopper; it exceptionally well may be fascinating or calming. A few thinks about recommend that colors such as ruddy, yellow, orange fortify the tangible framework of individuals. With no question ruddy builds the circulatory strain, the beat rate and respiratory rate. At that point once more, cool colors like blue would empower the parasympathetic tangible framework on the grounds that these colors diminish circulatory strain, beat rate and respiratory cadence.

Meanings of Colors

In order to employ colors in marketing activities, marketers ought to understand which emotions & needs each color can trigger from the target customers. The meanings related with colors may vary from culture to culture; there is absolutely no universal meaning applied for any color. Nowadays, the foremost prevalent investigates that portrayed what sentiments that colors may speak to and trigger are from North America. With the worldwide extension of North American culture, the definition of color implications by individuals around the world have been substituted and tenderly offers a few common focuses. The North American set of color implications showed up underneath to boot comparative to the facing west world and it is the preeminent intently suitable to the fininlands culture.

Role of Product Color in Consumer Behavior

The colors that we see in this world are not completely the same, they are specific due to their reliance on lighting condition, watching plans as well as encompassing environment, especially other interfacing colors, can affect the way the brain sees a particular color. Other than, without a doubt when we are going see the same color, how we see it, what it gathers to us and which opinions it can trigger from us modify by and huge from one person to another. This happens because for this ununiformed and moved color insight and incline is that they are colored by our sex, our age, our instruction, our culture we made up in and one-sided color sentiments of the social orders we live in, our childhood
affiliations with certain colors, and our life encounters, whether those affiliations are negatively or positively marked.

In a investigate by Choungourian it was found that assortments in color slants appear individual contrasts. Choungourian's subjects were from four grouped national backgrounds—the United States, Lebanon, Iran, and Kuwait. There were 160 subjects, with an break indeed with representation of folks and females for each nationality. Many stamped assortments in color slants were observed among the subjects from the differing countries. Americans had the foremost critical slant for reddish and blue, but these were not favored by subjects from the other nations. "Blue-green, which is the least preferred within the United States, takes as its inclination esteem the primary position in Iran and Kuwait, Choungourian's discoveries show unequivocal social contrasts in color inclinations.

Women are more likely to have more extensive extend of color inclinations and these inclinations regularly vary from those of guys. In development, it isn't exceptional that a number of Western folks are red/green color trance. Be that because it may, there are besides unisex colors such as white, dim, blue, reddish, silver or gold which can be utilized in displaying materials to target both folks and females. The more create we gotten to be, we switch from shinning and fundamental colors in solid squares to more quelled and cutting edge colors with plans. Coming to the adulthood, people show up to be less open for testing with advanced colors; instep they or possibly follow with their more secure favorites. In a comparable way with age, the more instructed people finished up the more complex their color choices show up to be, with by and large unusual names given. Moreover, climate and the nature of the living environment have huge impacts on people's color acknowledgment and slants. People tend to duplicate the colors that they are commonplace with and finished up parcel of their lives. Thus, it is to acknowledge that person.

Role of Color in Consumer Behaviour

The linkage between colors and buying conduct is exceptionally strongly. Product’s bundling and color have coordinate and first affect on buyers mind. Hence, it is critical to do inquire about on this point to recognize which color for the most part affect emphatically and which affect adversely on consumer’s choice and subsequently on buying conduct. The sum up inquire about appears that T.V notices have a extraordinary impact on children consumerism. So, the children don't know around the impressive components or quality of a item. They are as it were mesmerized towards the colors of the item. Therefore, if an advertisement has good color scheme, it will surely attract a lot of children and therefore buyers for the company. A good commercial attracts children’s attention and hence persuade their parents for buying the product (Brody et al., 1981). Earlier studies unveil that roughly 80 percent of the hiring decisions are based on exterior factors, and that 65 percent of that involves clothing color. Brown and green seem to arouse confidence hence, some designers use this information for intake interviews. In addition, black and deep blue colors imply authority. All this shows the importance of
colors in human perception and hence decisions. It is undeniable that color can help in attracting consumers’ attention since by nature we humans can quickly spot colorful items and on general level, color tends to grab the attention more than monochrome. The reason is that our pre-attentive system of the brain has been designed and evolved to easily detect color from the external environment, and more importantly this system has the immediate function of selecting items for subsequent attentional processing. However, in the world, color never stays alone and it is impossible to be perceived on its own but in the symphony with other adjacent colors; thus using color to capture consumers’ attention can face some obstacles of depending largely on the surroundings in which the item with target color(s) is placed and indeed different colors possess unique attention values.

The reason is that our pre-attentive framework of the brain has been planned and advanced to effectively distinguish color from the outside environment, and more vitally this framework has the prompt work of selecting things for ensuing attentional handling. In any case, within the world, color never remains alone and it is outlandish to be seen on its claim but within the ensemble with other adjoining colors; in this way utilizing color to capture consumers’ consideration can confront a few deterrents of depending to a great extent on the environment in which the item with target color(s) is put and undoubtedly diverse colors have special consideration values.

Packaging: The State-of-the-art

The capacities which bundling has to perform are essential, complicated. Bundling is personally related to showcasing communications, coordination and dissemination administration, feasible showcasing, and branding. In truth, bundling serves three primary communication capacities, specifically communication of data counting substance, goal, and implies of taking care of, advancing the item, and enhancing communication with buyers. Furthermore, bundling plays a major part and capacities in upgrading showcasing. The most bundling components which possibly apply impact on consumers’ buying choice, counting visual and enlightening components; the visual components relate to illustrations and color and estimate or shape of bundling and instructive components comprise of data approximately the item and the innovations utilized within the bundle.

Most recent, based on the considers conducted looking at diverse perspectives of bundling, summarized concisely the key parts and capacities of bundling. Given the centrality of bundling, for case, for passing nourishments, bundling teaches clients approximately extreme touchiness, wholesome slants, or indeed limits; furthermore, the freshness of a transitory thing can be scrutinized out from the information gave in bundling. For temporal nourishments, adroit bundling can be utilized which "screens states of food amid recognition with the nature of the thing" and fair as "contains sensors or markers to evaluate and give nature of a food thing to client."
Key roles and functions Elements of packaging's role

Protection
- Effects on the supply chain
- Tamperproof
- Role in transportation and logistics
- Product safety and quality

Containment
- Preservation/shelf-life of the product
- Protection from hazards: mechanical, chemical; environmental; climatic; bacteriological
- Aids customers use of product
- Containing and holding product
- Quantity/amount
- Facilitating/convenience handling
- Affect on quality
- Compatibility and constraints

Identification
- Product identification
- Labeling (effective)
- Information: Copy/illustrations on use

Marketing communication
- Supporting marketing communications
- Supporting promotion of other products
- Sales/marketing
- Positioning

Cost
- Transport and storage costs
- Process cost implications

User convenience
- Operability/access
- Reclosability
- Carrying
- Dispensing facilities
- Affecting consumer value
- New solutions
- Consumer convenience

Market appeal
- Suitable quantity/format
- Consumer and market appeal
- Branding
- Reinforcing the product concept
- Ability to improve sales
- Facilitating commercialization

Innovation - Innovation and technology

In show disdain toward of the reality that the effectiveness and fundamental centrality of bundling is neglected in creating nations and less competitive markets, however the estimation of bundling advertise could be a multi-billion-dollar commerce which encompasses a put with the creating and industrialized nations. Given e-commerce and online deals organization by implies of Web through organizations, for illustration, eBay and Amazon, salespersons and dealers are to lose their critical and key employments in progressing bargain; this conditions lead creators, masters, and specialists in advancing and commerce to concentrate on the key work of bundling in developing item sale.

These days deal frameworks, bundling, which is by and large utilized and backed in created and industrialized nations, is one of the foremost critical components in advancing deal since of the way that in these frameworks the closest relationship of a client with a thing isn't through salespersons be that because it may through the bundling.

It is impeccably clear that destitute outlines and plan of bundling would influence buyers' demeanors of intellect and lead to destitute deals performance. As of presently referenced, there's a need of understanding in showcasing, particularly bundling.

It in addition clear that in line with bundling, branding, as well, is "among a company's most priceless assets" which comes almost in brand esteem which is the regard a brand title incorporates to the thing. In significantly competitive markets, bundling and branding, taken together, can conceivably orchestrate organizations at a vantage point against their competitors in exceedingly competitive grandstand through upgrading the buyer probability to buy anything. Truly, shoppers' reactions to the arrange and color of bundling is acknowledged to be changed over into brand inclination; fundamentally put, the choice to choose a brand is based on aesthetics of bundling. Inside the same line of dispute, it is fundamental to indicate that bundling applies a crucial affect on two key components, particularly brand esteem and customer commitment which would result in actuating successful advancing.

Bundle gets to be a principal calculate interior the client decision-making arranges since it communicates to clients at the time they are genuinely choosing interior the store. other than the way clients see the subjective substance of producers which they ought to buy, as talked to through traces, color, orchestrate, and communication components interior the bundle, work out an impact on their choice and is respected as a key to succeed in thing showing techniques. Within some latest researches the professionals' view of consumers' bundling interacting. They came into the assumption that "By understanding the wonders inside the standard lives of customers, companies can make bundling that goes hand in hand with consumers' lives and sharpen. In this see, bundling is the consumers' extra in utilizing the thing, not a kept medium for sending messages"). They as well claimed that "For the buyer, well-designed bundling assembles productive
and fulfilling experiences that are dependably organizes into closeness. Beneficial consumer-centered bundling advance can advantage a company by making a competitive advantage, increasing client fulfillment and boosting bargains volumes".

**The Part of Illustrations and Color**

Color is an astounding source of data as much since it is surveyed that 62-90 per cent of persons' evaluations and assessments is based on colors alone. Colors have enthusiastic and basic influence on consumers' thoughts, estimations, and behaviors; so, marketers have long utilized color as a visual mental helper contraption to back cognition and thought and get a handle on consumers' thought. When customers need to create a buy, they ordinarily take several components and measurements into consideration. There's a understanding among advancing analysts and executives that thing outline or arrange and thing aesthetics are imperative devices to choose up competitive advantage in competitive publicize. "One implies of capturing perceiving buyers is through the key utilize of visual signals".

Bundling plan may be a key brand issue which ought to be connected essential significance in promoting. Visual boosts on packaging draw in consumers' consideration and leads shoppers to create Color is an amazing source of data as much because it is evaluated that 62-90 per cent of persons' evaluations and assessments is based on colors alone.

Colors have enthusiastic and critical effect on consumers' contemplations, opinions, and behaviors; so, marketers have long utilized color as a visual mental helper contraption to back cognition and thought and get a handle on consumers' thought. When buyers need to form a buy, they as a rule take several components and measurements into consideration. There's a ascension among advancing analysts and chiefs that thing outline or arrange and thing aesthetics are crucial devices to choose up competitive advantage in competitive promote. "One implies of capturing perceiving shoppers is through the vital utilize of visual prompts".

discernments of different items; these discernments essentially work out impact on consumers' buy choice. Design and color are definitive components in influencing consumers' buy choice which makers and showcasing specialists ought to not turn a dazzle eye to them in bundling. Design incorporates picture format, color combinations, typography, and item photography. Appropriately, it is watched that outward item prompts, specifically bundling color is compelling in buying choice, in specific shoppers who are in rush, which is normal in today's boisterous life fashion, depend on bundling color and plan in making buy choices.

As a matter of fact, analysts, originators, and makers ought to not overlook consideration-capturing traits of bundling. It is obvious that consumers to begin with impression is based on the bundling, particularly the design and color. An eye-catching illustrations and color would result in enduring impact on consumers' buy choice. In truth, allure, which can be gotten through illustrations and color, at the point of buying plays a key part in getting
brand choice. The diverse and different capacities of bundling colors, especially how colors pull in consumers' consideration and plays an compelling part in influencing recognitions at the point of buying is under-researched region of examination within the field of bundling and promoting. Based on the thinks about conducted to date analyzing bundling color, it is concluded that shoppers take advantage of colors as stimulus-based data and bundling color captures consumers' consideration, influences special judgments, and has the capacity to communicate the data almost the item at the point of buy.

A system exists which shows the capacities of bundling color at the point of buy and takes into thought the three fundamental capacities of bundling color, counting intentional or automatic consideration, aesthetics, and communication. Interests sufficient, bundling colors work out an impact on feelings and the reactions and responses to bundling color can be oblivious and intrinsic, half-conscious based on social components, or cognizant beneath the impact of individual inclinations based on individual encounters.

The preeminent reasonable bundling is required to have a development picture passing on clearly consolation and ease of utilize; allow the information of thing clearly and comprehensively; and have more classic and routine reasonable arrange, colors, and shape.

The impact of color separate on consumers' careful behaviors and found that concurrent separate of colors basically impacts the careful behaviors of customers, their acumen of quality of the thing, visual ask, and purchase ponder. As as of presently said, visual components, particularly plan and color, course of action of visual components, and bundling gauge and shape are among the choosing factors progressing thing bargain. Given bundling color and its irrefutable portion in impacting consumers' purchase choice, examiners and experts ought to be center on brain inquire about of colors and color slants of customers which are setting and culture specific. The disclosures of ask approximately into color slants illustrate that color slants are actually related to choosing components such as age and sexual introduction, personality, and ethnicity and religion.

Fundamentally, it is battled that "the affirmation and application of color is unequivocally impacted by ones characteristic physiological and mental incline, individual encounters, age, sexual presentation, character, recompense, ethnographic and estimation". In brief, it is basic to expand that colors are of essential centrality in persons' standard of living and particularly in showing, branding, bundling, and thing bargain. By and clearing, bundling originators are required to require advantage of colors' characters in organizing bundling and combining unmistakable colors to draw in consumers' thought in making buy choice. Architects can utilize more sanctioning colors such as rosy and blue to lock in buyers in drive buying. So, it needs to be highlighted that selecting the proper colors and imaginative and mental combination and arrange of them in bundling would actuate thing bargain drastically.
**Associative learning**

Before analyzing the data that came from the survey, it is fundamental to get it and characterize the three essential standards of color; hue, saturation, and value to get acquainted learning (see figure). Tint is the wavelength of a color and decides its name, such as orange or green. Immersion is the escalated of color or characterizes how pigmented a color is. Esteem is to represent the brightness of a color. Together, these three components decide how individuals see color and hence the affiliations they frame with it.

![Figure 3 Hue, Saturation, Value](image)

“hue”
Hue is more specifically described by the dominant wavelength and is the first item we refer to (i.e. “yellow”) when adding in the three components of a color. Hue is also a term which describes a dimension of color we readily experience when we look at color, or its purest form; it essentially refers to a color having full saturation, as follows:

“value”
As is discussed on the “Elements: Value” page, value refers to the lightness or darkness of a color. It indicates the quantity of light reflected. When referring to pigments, dark values with black added are called “shades” of the given hue name. Light values with white pigment added are called “tints” of the hue name.

“saturation,” or “chroma”
Saturation defines the brilliance and intensity of a color. When a pigment hue is “toned,” both white and black (grey) are added to the color to reduce the color’s saturation. In terms of the “additive” light color model, though, saturation works on a scale based on how much or how little other hues are represented in the color.
Summary of the literature review

Many scientists and marketing experts agree that color does play an important role when a consumer is about to make a buying decision. This can be explained from the color history, that color was used for many purposes so it goes without saying that it is written in our subconscious that there is an attribution allocated to each color, depending on the culture and the product that we are reviewing. Lots of brand names use colors in order to be more rememberable and to claim all the attributes that a color may have in people’s minds. Companies have moreover realized that colors can stimulate the intrigued and, in this way, increment the crave to buy the item. Customers consider a few colors are related with particular items which make the understanding of how individuals respond to colors much more troublesome. Each color must be utilized in a appropriate item agreeing to its mental characteristic.

Consumers have numerous desires, wants, needs and reactions checked in association to colors, but it as well has influenced such as age, sexual presentation or culture interior the stand up to of progressions. Their inclines depend a designate on their nation, culture, sexual introductions, ages and their mental states. It is thus principal, in exhibiting, to characteristic more centrality to this primal component of arrange. The colors of the bundling have to be compared to the goals for which these things are anticipating. Wide ask approximately to have to be take put a few time as of late the expedite of any thing as a awful choice will have comes about for the brand itself. Color not since it was serves to recognize the thing or brand quickly, but as well to survey its quality and it’s taken a toll. Colors are flawed. A number of feels that human responses to colors are resolute, in this way significant to everyone, in appear despise toward of the reality that others invalidate this thought, communicating that responses and slants to colors alter over culture, sex, and, age, among others. So, the proposal for showing officials is that they ought to use caution of the seen significance of colors and their outline in a specific geographic expand. Packaging’ colors can verifiably affect their deals. Chiefs have a choice of abusing these contrasts to their advantage whereas laying out arrange for their items. Depending upon their target gathering of individuals (gender-specific things, kid’s things, etc.), they need to select colors for things. Ask almost relating to choose of colors got to be conducted and concluded a few times as of late moving a thing, as the off-base color as the off-base color choice can have negative affect on the picture of the item and the company.

Promoting masters are especially well commonplace with the mental meaning of colors and their affect on buyers. With cautious color choice in communication, thing orchestrate and progressing a message that’s based on the right color affirmation comes to our "mindfulness" and makes securing to purchase a specific thing. This leads to influence and unavoidably to the specified behavior of the customer.as the off-base color choice can have negative influence on the picture of the thing and the company.
Methodology

The empirical work of this dissertation was approached with a qualitative questionnaire which consisted of three parts that will be analyzed in this section. Qualitative method is selected as the research design for this study because this method can provide factual data needed to support the theory of color psychology.

Data Collection and Participants

The duration for data collection for this study runs from November 2019 to December 2019. In the period of two months, 269 people answered the questionnaire. Social media accounts and pages were used in order to gain the maximum people from age groups 15-21 up to 42-65. The men that answered the questionnaire outcome the women (see figure 4)

![Figure 4. Red color shows the men that answered the questionnaire and Blue the women.](image)

There are three categories for the data that has been collected – projected brand personalities depending on the color, how colors affect the buying decision and demographic characteristics. All the questions were multiple choice and concerning the 1st question category (projected brand personalities) I used 2 possible random answers and 1 answer that applies to the theory of color psychology in order to form some conclusions.

Reasons for choosing this method

First of all, a questionnaire is one of the most affordable ways to gather quantitative data. Apart from being inexpensive, it is also a practical way to gather data by targeting specific groups and manage data in various ways. It’s quick and easy way to collect results with online tools that allow you to gather information from a large audience and finally it allows easy analysis of results.
Projected Brand Personalities

Due to the accelerated pace of modern life, consumers reduce time of purchase decisions and tend to choose services that match their own personality. The brand strategy of many brand names includes the projected brand personality that they desire to promote especially when it comes to their logo. Color helps to provide some personality characteristics to the logo of a brand and this questionnaire proves that the majority of the people who answered it have a common understanding of what a color refers to in means of personality characteristics.

The consumers had to answer the below questions for this section:

A. If the below brands where a person, how would you describe the person?
   (this question was answered for 8 color logo groups)

B. How color influences the buying decision
   1. Do you take into consideration the color of an object when you want to buy it?
   2. Do you consider the color of an item more when making a purchase decision for an expensive item than a smaller purchase?
   3. Do you consider the color of a smaller object such as a notebook or pen when buying it?
   4. Do you consider the color of a home item such as curtains and sofas?
   5. Does color play an important role when buying clothes?
   6. Have you ever thought about not buying something because you didn't like its color even though it was something you needed?
   7. Are you affected by the color of the packaging when buying a food?
   8. Would you sacrifice the quality of a product for color?

C. Demographic characteristics
D. Gender
E. Age group

Limitations of the chosen method

The limitation of the chosen method is that there might be some dishonest answers which make a questionnaire not reliable. The emotions of the consumer that answers are very hard to convey and there might be different understanding of the questions. In addition, surveys may be unsuitable for users with a visual or hearing impairment, or other impediments such as illiteracy. This should be considered when choosing to do research in this manner.

Finally, respondents may have a hidden questionnaire-agenda. As with any sort of research, respondent bias can be an issue. Participants in a survey may have an interest in the idea of it and others may be influenced to participate based on the subject of your questionnaire. These proclivities can lead to inaccuracies in data, generated from an imbalance of respondents who see your topic in an overly positive or negative light.
Data Analysis

The data that have been found on the 1st section about the below question will be shown from figure 5 to figure 12.

If the below brands were a person, how would you describe the person?

Figure 5: Personality Projection on Brands for RED colored logos

Figure 6: Personality Projection on Brands for ORANGE colored logos

Figure 7: Personality Projection on Brands for BLUE colored logos

Figure 8: Personality Projection on Brands for GREEN colored logos
Figure 9: Personality Projection on Brands for PINK colored logos

Figure 10: Personality Projection on Brands for YELLOW colored logos

Figure 11: Personality Projection on Brands for PURPLE colored logos

Figure 12: Personality Projection on Brands for PURPLE colored logos

The data that have been found on the 2nd section will be shown from figure 13 to figure 19.
Do you take into consideration the color of an object when you want to buy it?

**Figure 13**

Do you consider the color of an item more when making a purchase decision for an expensive item than a smaller purchase?

**Figure 14**

Do you consider the color of a smaller object such as a notebook or pen when buying it?

**Figure 15**

Do you consider the color of a home item such as curtains and sofas?

**Figure 16**

Does color play an important role when buying clothes?

**Figure 17**

Have you ever thought about not buying something because you didn't like its color even though it was something you needed?

**Figure 18**
Are you affected by the color of the packaging when buying a food?

![Pie Chart](image19)

Would you sacrifice the quality of a product for color?

![Pie Chart](image20)

Gender

![Pie Chart](image20)

Age group

![Pie Chart](image21)

The interpretation on the date found and how they link with the literature

The data found on the first section of the survey for the personality projection on brands by grouping logos into color categories, shows that there are some stereotypes concerning some colors and what they bring into the consumers minds.

1st section of the survey

The survey showed that the group of brands with red color indicated a personality that is daring and authentic that match the connotations given on figure 19. Orange logos were described as competitive and social. Blue logos that were described as loyal and green that the majority choose the description of friendly. Pink logos were matched with personalities with vivid imagination and yellow with strategic characters. Purple logos as dignified and lively and black as confident and practical.

Overall the results that were found match with the below figure 20, however not totally due to 2 main reasons. Firstly, the difference in culture (each culture perceives colors in
a different way) and due to the biases of some past events of the brands showed in the questions. However, the survey gives a good inside on how people perceive those brands depending in the color.

<table>
<thead>
<tr>
<th>The Connotations of Colors in Daily Life and Marketing</th>
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<tr>
<td>Color</td>
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<td>Gray</td>
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<tr>
<td>Pink</td>
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<tr>
<td>Purple</td>
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</table>

Figure 20 the Essences of Colors in Way Of life and Showcasing

2nd section of the survey
This section shows some interesting findings. When people are asked if they are affected from the colors almost half of them says yes and the other half that sometimes they do. This is confirmed from the questions that follow, which suggest that people are affected by the items color almost every time except when they buy food products. This outcome supports the hypothesis that colors have an impact on the buying process described previously.

Interpretation of findings

The reason of this consider was to evaluate the affect of the color of bundling arrange on buyer acknowledgment, appraisal and choice of purchase. Composing information appear up the influence of product’s color on the insight of characteristics in terms of taste, quality and brought, on evaluation, in terms of color thing amleness, and on client
choice. The acknowledgment of the thing is being influenced with the fundamental reality of seeing the color of the bundling. The harmoniousness between the color of the bundling and the common characteristics of the thing as well as the past encounters of the client outline to be essential concepts interior the understanding of client choice. From a hypothetical point of see, this stud approximately contributes to fueling information around how colors affect the buyer by centering on a variable that has been considered exceptionally small interior the showing field. It can be asserted that the color of bundling plays a parcel on their evaluation and their choice by clients.

Conclusions

Color is an vital figure affecting the shopper buying choice handle. When it comes to item bundling and company branding it isn't essentially an idea in retrospect. Marketers and businessmen contribute sufficient time in selecting colors that reflect the values of the company and inclinations of the target gathering of people. The remunerate for doing so is expanded deals, brand acknowledgment and customer devotion. Item bundling, branding, and shopper mindfulness all work on distinctive psychological principles. Color encompasses a enormous part to play in boosting victory. Subsequently, it is essential to get it the color’s agreement, its affect and standards, hence expecting and arranging how customers will respond to the chosen colors.

The survey shows that people do have specific characteristics linked to colors especially when they are referring to brand logos. Each logo has a story, a character and consumers are aware of how this. Finally, the majority of the consumers are influenced from the color of a product either it is expensive or cheap.

Future researches might be able to tell in a clearer way what personality characteristics link with each color when used in logos and in what degree we are all being influenced from the colors of a packaging when we are willing to buy it.
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