## <u>Konferans Makalesi</u>



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Conference Article

# **Use of Colors and Music in a Store Atmosphere**\*

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#### Abstract

The effect of color and music on the subconscious is a situation that contains many unknowns and can be explained with assumptions even today. Developing humanity and increasing competition conditions do not make the promotional activities available in sales efforts sufficient, and subliminal sales efforts beyond the known are gradually coming to the fore. Consumer behavior, which has been researched by thousands of authors in the literature, is blocked in the concept we call "motive" when humanity and the complexity of creation come into play. This situation envisages the examination of consumer behavior patterns within the discipline of psychology. Thus, all kinds of stimuli that will affect the subconscious have been examined, and the science of color is one of the most important of these effects. Even in the light of this obscurity and chaos, the fact known by both business owners and academics is that color and music are used as silent and powerful weapons in the field of marketing. Color and music attract the attention of the individual within the first three seconds of encountering people and affect the motives of people who are in a certain mood. In the light of this information, in this study, the use of color and music in the store atmosphere was examined in terms of its effects on both customers and employees. In the study, a questionnaire was conducted on the feelings of black, white, red, yellow and blue colors to the employees and SPSS statistical program was used. In the section for consumers, it was measured whether the effect of color and music use changed according to demographic characteristics. A questionnaire was applied to 250 employees in order to measure the emotions of the employees towards colors. A questionnaire was applied to 100 customers to measure the customers' reactions to color and music. A total of 350 face-to-face surveys were conducted with employees and customers at the Şişli shopping center in Istanbul. The obtained data were analyzed with frequency analysis, variance and t test analysis. The results of the study showed that the emotions of the employees and therefore their communication change according to the colors. In addition, it has been shown that there is a significant relationship between people who give importance to colors and music in the store atmosphere and their educational status. Further analysis also showed significant associations between Gender and Music, Income, Occupation and use of colours.

Keywords: Color, Music, Store Atmosphere, Consumer Behavior, Employee Communication, Employee Feelings

# Mağaza Atmosferinde Renk ve Müzik Kullanımı

#### Öz

Rengin ve müziğin bilinçaltına etkisi günümüzde dahi pek çok bilinmezliği içerisinde barındıran ve varsayımlar yolu ile açıklanabilen bir durumdur. Gelişen insanlık ve artan rekabet koşulları satış çabalarında var olan tanıtım faaliyetlerini yeterli kılmamakta, bilinenin ötesinde bilinçaltı satış çabaları yavaş yavaş gündeme gelmektedir. Literatürde binlerce yazar tarafından araştırılan tüketici davranışları insanoğlu ve yaratılış karmaşası işin içerisinde girdiğinde "güdü" dediğimiz kavramda tıkanmaktadır. Bu durum tüketicinin davranış şekillerinin psikoloji disiplini içerisinde incelenmesini öngörmektedir. Böylelikle bilinçaltını etki altına alacak her türlü uyarıcı inceleme altına alınmıştır ki renk bilimi de bu etkilerin önemlilerindendir. Bu bilinmezlik ve kaos ışığında dahi gerek işletmeciler gerekse akademisyenler tarafından bilinen gerçek ise renk ve müziğin pazarlama alanında sessiz ve güçlü bir silah olarak kullanılmakta olduğudur. Renk ve müzik bireyin dikkatini çekme süresi insanlar ile karşı karşıya kaldığı ilk üç saniye içerisinde gerçekleşmekte ve belli bir ruh hali içerisinde olan insanların güdülerini etkilemektedir. Bu bilgiler ışığında bu çalışmada mağaza atmosferinde renk ve müzik kullanımı hem müşteriler hem de çalışanlara etkisi açısından incelenmiştir. Çalışmada siyah, beyaz, kırmızı, sarı ve mavi renklerin çalışanlara hissettirdiği duygular üzerine anket yapılmış ve SPSS istatistik program kullanılmıştır. Tüketicilere yönelik kısımda ise renk ve müzik kullanımının etkisinin demografik özelliklere göre değişip değişmediği ölçümlenmiştir. Çalışanların renklere yönelik duygularını ölçümlemek için 250 çalışana anket uygulanmıştır. Müşterilerin renk ve müziğe yönelik tepkilerini ölçmek için ise 100 müşteriye anket uygulanmıştır. Çalışanları ve müşterilere yüz yüze uygulanan toplam 350 anket İstanbul Şişli alış veriş merkezinde

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yapılmıştır. Elde edilen veriler frekans analizi, varyans ve t testi analizleri ile analiz edilmiştir. Çalışma sonuçları çalışanların duygularının dolayısı ile iletişimlerinin renklere göre değiştiğini göstermiştir. Ayrıca mağaza atmosferinde renklere ve müziğe önem veren kişiler ile eğitim durumları arasında anlamlı bir ilişki olduğunu göstermiştir. Daha ileri analizler ayrıca Cinsiyet ve Müzik, Gelir, Meslek ve renklerin kullanımı arasında anlamlı bir ilişki olduğunu göstermiştir.

Anahtar Kelimeler: Renk, Müzik, Mağaza Atmosferi, Tüketici Davranışları, Çalışan İletişimi, Çalışan Duyguları

#### 1. Introduction

Nowadays, it is necessary to examine the behavior of the consumer which brings the necessity to examine many psychological issues related to people. All kinds of concepts that affect the subconscious have been examined and color science is one of these disciplines. Both the qualitative and quantitative methods have been investigated and the effect has been repeatedly and in today's world, thousands of different colors are presented to the people visual. In this context, the first purpose of the study is to find out which colors are associated with certain emotions.

Many factors that influence people communucation manifest themselves differently in each person. In addition to all this confusion, economic, cultural and technological development and the rapid change of demands and needs make the issue of how people behave more complex. Store atmospheres are a unity of psychical properties which create emotional effects on clients. Store atmospheres fits in the designing discipline called "atmosferics" by effecting the emotional and cognitive reactions especially instincts or reaction or unplanned desire to shop. It is a known fact that colours have a huge psychological effect on human beings.

Colors have to be used in a planned and correct way. In recent times, the buying behavior has been unregulated and subject to rapid change. This situation made the enterprises unable to sustain their lives with traditional marketing philosophy and this philosophy was replaced by modern marketing philosophy (Gündüzyeli, 2021). The phenomenon of color is examined within the academic framework in order to stimulate the purchasing motive through the subconscious interaction in today's marketing world where each consumer's individual needs are met and anticipated (Kılıçarslan, 2019) .

#### 2. Literature

### 2.1. Color and Communication

Color, which is a natural element of communication, can be considered as a universal language for people. In the periods when there was no writing, color was used and the message to be conveyed was conveyed through colors. The first examples of colors used as symbols since ancient times can be seen in animal figures found on the walls of small caves from the stone age in Lascaux and Altimara. It is thought that ancient people used colors for purposes such as frightening, looking beautiful, impressive, and worshiping (Kaptanoğlu, 2018). People believed that colors would protect them and it was symbolized as a safe guide in heaven (Kaptanoğlu vd., 2018).

From time to time, people describe their inner world with colors and continue their communication with the symbolic meanings of colors. For example, the color of a flower sent can have different meanings. In Turkish, there are many idioms in which colors are used in everyday speech. Colors can be perceived differently according to different cultures. Examples of this situation are given in Table 1.

Table 1. Meaning of Colors by Culture

Cole	or Counrty	Meaning
	Islamic Tradition	Light Brightness
	Christian Art	Belief
ie	New Zealand	Happines Puirty
White	Australia	
	China Japan	Death
	East Asia And Sweden	Cold Bad
	Iranian	Death
	India	Puirty
ВІие	Hollanda Holland	Sıcaklık Heat
В	Sweden USA	Masculinity
<u> </u>	Malaysia	Disease Danger
u	Belgium	Jealousy
Green	Japan	Happiness Love Trust
		Sincerity
	Nigeria Germany	Unlucky
Red	Hina Denmark	Chance
R	India	Desire And Ambition
	Usa	Heat
W	France	Unfaithfulness
Yellow	Russia	Jealousy
	China	Pleasure Happiness

**Source:** Özer, D. (2012). Toplumsal Düzenin Oluşmasında Renk ve İletişim. (*ODÜSOBİAD*), 3(6), s. 275

The assumption that colors are only to be used for approval or being liked has changed considerably today. As a result of research conducted, it was seen that Blue and green colors used in hospitals give confidence, white color evokes a sense of hygiene, and in active and risky areas such as casinos, conscious red and black color is used. (Nuhoğlu, 2006: 45).

Some researches on the colors used in the study and how they affect communication are as follows:

Black; the colour of black which imposes the feeling of despair, death, covering; especially in Western civilizations it is position as the colour of death, mourning and grief. In addition to these negative feelings, most of the black color is regarded as a symbol of honor, power and nobility in society. This is the main reason that the authority cars are black. Black refers to the power of clothing in most societies (Nuhoglu, 2006: 78). In most societies deep state is symbolized by black.

White; white, symbolized by cleanliness, innocence and sensitivity, also creates a feeling of eternity and emptiness in most people. When it comes side by side with blue, it gives a refreshing, health-appropriate feeling. It is these emotions that causes us to use predominantly white on health personnel or the marriage dress of a woman is white. (Nuhoğlu, 2006: 79).

Red; having one of the thickest wavelengths of the spectrum, red evokes a sense of dynamism, strength and vitality. It is invigorating, sometimes even annoying, and it steals the consumer glances over and establishes his presence. Red is considered the warmest color of the warm color group. As the tone of the colour changes, so does the character. For example, while

dark red has a serious and traditional energy, standard red symbolizes activity and movement (Avcı, 2014: 54). Red is also an appetizing color (Yağbasan and Aşkın, 2006: 4).

Blue: blue, which creates a relaxing, calm environment, is also considered by most societies as a feminine color. It is for this reason that male babies are combined with blue from the time of birth. Freud called blue only "calm." Faber Birren, on the other hand, emphasized that the colour blue slows the blood flow down and causes the blood pressure to fall. In Arab culture, it is also believed that blue colored stones slow blood flow, and in many societies, they pass strong negative energy called "evil eye" (Kılıç ve Başyol 2014: 59).

Yellow; The yellow color, which is the expression of youth and transience, is also the most striking color. Yellow is in the middle in terms of wavelength thickness in the spectrum, however, has a cosmic power. The Xerox Company, in its study, has reached the conclusion that, in terms of reading and understanding, the rate of reading is the most yellow-colored documents (Nuhoglu, 2006: 87). Yellow color gives movement and vitality with its similarity to the sun. Yellow is often used in the advertising industry (Çeken & Elif, 2015: 132).

### 2.2. Color and Consumer

The concept of consumer is defined by Mucuk (2009: 64) as all of the people living in a society. Every individual in society is in the consumer class from the moment they are born to the moment they die. According to the author, these individuals become customers when they shop from the store. From the marketing point of view, the consumer is the person who has the potential to buy or make purchases for himself or the individuals concerned. Since all emotions and thoughts are a part of human behavior, examining consumer behavior means examining human behavior (Odabaşı, 2009: 30). In the literature, the factors that affect the behavior of consumers in terms of purchasing appear in two separate groups which are external factors (consumer's social, geographical and economic environment) and internal factors (consumer-related factors) (Odabaşı & Barış, 2003: 30). Internal factors may also be called motivating factors that include physiological or psychological effects. Consumers are seeking two different types of benefits in the emergence of a need. The first is hedonic benefit, the second is functional benefit (Arnold & Reynolds, 2003: 78). The color factor is important for both types of benefits. Consumers can go shopping when they need any color product. For example, in a period where the blue color is fashionable, they may want to buy a blue dress (Zaltman, 2000: 425).

The movement of our senses is through universal signals. The objective environment is perceived by visuals in the first step and visual perception is reconstructive (Uçar, 2004: 59). Perception is closely related to the observation of the environment, objects, people, odors and sounds, colors (Odabaşı and Barış, 2003: 128) and consumers are confronted with colors millions of times during their lives in their packaging, advertising and even in store designs (Caivano and Lopez, 2012: 3). Researches revealed that purchasing decisions were perceived by touching 3%, tasting 3%, hearing 13%, sniffing 3% and seeing 78%. The reactions of individuals when they encounter colors are quite complex (İçli & Çopur, 2008: 25). Therefore, the results of all studies in this field have been surprising.

Favre and Nowember (1979), after examining the subject for years, have concluded that colors affect the subconscious and

cause reactions on the consciousness. While choosing the right colors for the target group in the product groups directed the consumer to the buying behavior (İçli & Çopur, 2008: 27), it was concluded that the colors used especially in the shelf arrangement directed the individuals to consumption. (Çınar and Çubukçu, 2009:280).

In the studies conducted on the use of color in marketing, it is concluded that color directs the consumer in all marketing communication channels and has an important impact on decision making. The phenomenon of color, which exists in every period of our lives, can be used as a message in marketing (Çınar and Çubukçu, 2009:280). Colors used in all details such as product, brand, advertisement, logo etc. are also the central element of corporate identities and help individuals remember the brand or place (Öztuna, 2007: 92). Colors, which are accepted as music in visual arts, are among the most powerful means of communication since individuals see colors before coding the message sent in communication. There are many examples where some colors are associated with brands of products. Coca-Cola red, Kodak yellow, Bayer aspirin green are the best known examples of this positioning (Meyers vd. 2003: 207).

The only purpose of colors is not to draw attention. It is necessary to know which color is the character and what purpose it should be used (Nuhoğlu, 2006: 48). As a result of a research conducted by a detergent company, it was concluded that the yellow color had a detrimental effect of cleansing, blue color, hygiene and red color had a damaging effect (Odabaşı & Barış, 2003: 139). Another example of using color provides easier or more sales will be an example of a company that sells eternit products in Switzerland after the change of packaging of the product (Nuhoğlu, 2006: 78).

According to Odabaşı and Barış (2003: 139), the perception of colors and their reconciliation to known products are as follows in Table 2:

ColorPerceptionRedStrong, Hot, Excited, ExtrovertedYellowLuxury, RichBlueCool-Calm, Sad,BlackCold, Prestigious, Sophisticated

 Table 2. Perception of Colors

**Source:** Yavuz Odabaşı & Barış, G. (2003), Consumer Behaviour, :139.

The assumption that colors are only to be used for approval or being liked has changed considerably today. As a result of research conducted, it was seen that Blue and green colors used in hospitals give confidence, white color evokes a sense of hygiene, and in active and risky areas such as casinos, conscious red and black color is used. (Nuhoğlu, 2006: 45).

As a result of conducted research, it was also seen that Warm colors attracts individuals to the store, cold colors have a calming effect (Arslan, 2004: 99). In a similar study, Belizzi and Hite (1992: 3) concluded that blue is a more desirable atmosphere color for the store than red.

## 2.2. Color and Music in the Shop Atmosphere

The word atmosphere is usually used to describe the quality in the environment (Kotler, 1973). Kotler has divided atmosphere in two which are targeted and percieved atmospheres.

Targeted atmosphere is the unity of sensory properties in an artificial environment. Targeted atmosphere is classified in 4 elements which are auditory, visual, olfacive and textular.

Percieved atmosphere is the perception of this environment by the clients. Consumers reactions to percieved atmosphere are learned and partially formed by culture. The atmosphere is considered successful if the targeted and percieved atmospheres are close (Dursun, vd., 2013).

The impressions of the potential clients are firstly effected before entering thanks to the factors such as appearance and the enterence and than it continues thanks to the factors inside (Fettahlıoğlu, 2014). Research suggests that the setting has a way of social communication and that the stores have their own personalities and social images and the social identity of a certain store can be transferred thanks to their setting.

A social image of a store depends on their style and appearance rather than its price, transportation etc. Experts suggest that the atmosphere and image leads to a relationship with the perception of goods and services. Store atmospheres are important parts that differentiates retail stores and effects consumer properties (http://tantalosmaket.blogspot.com.tr E.T. 05.02.2021).

Studies show that warm colors psychologically have different effects than fresh colors. e.g. red and warm colors increase blood pressure and respiration rate. If these results gets applied to retail stores; it would be logical to think these colors would effect clients more. Fresh colors in contrast can create anxiety as in expensive goods. Use of warm colors to create a thrill would be safer (Levy ve Weitz, 2001).

Music which has a large Area of utilisation which ranges from the treatment of psychological illnesses to motivation of employees at work is being used also at stores. The right hemisphere of the human brain perceives events and objects via intuition. Thanks to this people record events or objects faster. Deducting from this the display done with music would be more effective than a verbal one. Music can create a faster perception of the displayed product or object for the clients (Orel, 2005).

Colours in store can effect the judgement of clients on store atmosphere which effects, whether or not they visit the store,how much time to spend and how much money they will spend (Ailawadi, 2004). It is found out that a nice music reduces the psychological cost,a nice physical order reduces economic and psychologic cost (Yücel ve Yücel, 2012).

# 3. Methodology

#### 3.1. Purpose, Hypotheses, Method

The first aim of the study is to explain the effect of color psychology on worker behavior and to measure the level of emotions and thoughts evoked by different colors. In this study, although there are three main colors which are red, blue and yellow, additional colours of black and white are also considered. A questionnaire was applied to 250 store emplooyes selected in Istanbul in Şişli Profilo AVM with easy sampling method to measure the emotions evoked by the mentioned colors. The survey consists of two parts. In the first part, there are open-ended questions on demographic characteristics and in the second part, on the emotions felt by the mentioned colors.

The first hypothesis of the study is as follows:

H1: There is a statistically significant difference between colors and store employes' feelings.

For the second purpose of the study; The data obtained from the study are acquired measuring the social demographic properties with "yes" or "no" questions about colors and music use in a store environment with a 100% survey method in order to get a general opinion about the use of colors and music in a store environment. The surveys applied, with a convenience sampling method, to 100 applicants via face to face interview.

In this context, the second and third hypotheses of the study are as follows:

H2: Use of colors and music in stores differentiates in correlation with the clients socio-demograohic properties.

H3: Use of colors and music in stores doesn't differentiate in correlation with the clients socio-demographic properties.

SPSS (Static Program for SocialSciences) was used in the analysis of the data. The reliability of the study was analyzed according to Cronbach's Alpha method and the questions were subjected to reliability analysis and Alpha value was found to be 0,7855.

#### 3.2. Results

**Table 3.** Demographic Characteristics of the Store Employees

GENDER	Male	Female
Number	138	112
Percentage	%55,2	%44,8
Age	17-20 Between	21 and above
Number	203	47
Percentage	%81,2	%18,8

55.2% of the staf employees participated in the study were male and 44.8% were female. Age distributions for individuals within the range of 17-20 years, 81.2%, 21 years and older, 18.8%. The distribution of the colors that the participants felt in the sense of hunger is as follows in Table 4:

**Table 4.** Colours Evoked by The Feeling of Hunger

	•	
HUNGER	Number	Percentage
Black	1	%0,4
White	23	%9,2
Red	176	%70,4
Yellow	35	%14
Blue	10	%4,0
Other	5	%2,0
Total	250	%100

As seen in the table, it was found that red color was the first color that comes to mind with a ratio of 70.4%. Red was followed by yellow (14%) and white (9.2%). The percentage of remaining colors is 4% blue and 0.4% black, respectively, which is negligible. Five people selected the other option. Table 5 shows the distribution of colors that staf employees felt in the face of the sense of power:

**Table 5.** Colours Evoked by the Sense of Power

POWER	Number	Percentage
Black	218	%87,2
White	1	%0,4
Red	23	%9,2
Yellow	3	%1,2
Blue	5	%2,0
Other	0	%0,0
Total	250	%100

As can be seen in the table, the color evoked by the sense of power was black by 87.2%. Of the remaining colors, only 9.2% of the red is evocative of the feeling of power. The ratio of blue color to 2%, yellow color to 1.2%, none of the participants thought of a different type of colour which evokes a feeling for the sense of power other than the options provided. Table 6 shows the distribution of colors that staf employees felt in the face of energy sense:

**Table 6.** The Colors Evoked by the Sense of Energy

ENERGY	Number	Percentage
Black	76	%30,4
White	1	%0,4
Red	112	%44,8
Yellow	45	%18,0
Blue	13	%5,2
Other	3	%1,2
Total	250	%100

In the answers given to the colors evoked by the sense of energy, it was seen that red and black were close to each other with 44.8% and 30.4%. Studies in the literature show that the ratio of red is higher and that of black is lower. In the table, amongst the colours that evoke the feeling of Energy, it is seen that 18% of the colors are yellow, 5.2% are blue and 1.2% are other colors. Table 7 shows the distribution of colors that staf employees felt in the face of feeling of health:

**Table 7.** Colours Evoked by a Sense of Health

HEALTH	Number	Percentage
Black	0	%0,0
White	202	%80,8
Red	2	%0,8
Yellow	7	%2,8
Blue	35	%14,0
Other	4	%1,6
Total	250	%100

80.8% of the color that gives health feeling was white. White was followed by blue with 14.0%. The effect of red and yellow colors was very small, but 0.8% and 2.8% respectively. No participant marked the black color and the other color ratio was 1.6%. The distribution of the colors that the participants felt in the sense of peace is as follows in Table 8:

**Table 8.** Colours Evoked by a Sense of Peace

PEACE	Number	Percentage
Black	15	%6,0
White	152	%60,8
Red	10	%4,0
Yellow	9	%3,6
Blue	52	%20,8
Other	12	%4,8
Total	250	%100

The participants chose white as the color of peace by 60.8%. Following this, blue color is marked with 20.8%. The distribution of the colors that the participants felt in the sense of happiness is as follows in Table 9:

**Table 9.** Colours Evoked by the Feeling of Happiness

HAPPINESS	Number	Percentage
Black	1	%0,4
White	62	%24,8
Red	82	%32,8
Yellow	17	%6,8
Blue	87	%34,8
Other	1	%0,4
Total	250	%100

According to the results, 34.8% of the colors were blue, 32.8% were red and 24.8% were white. The effect of yellow is slightly less than 6.8%. The distribution of colors that the participants felt in the sense of innocence is as follows in Table 10:

Table 10. The Colors Evoked by the Sense of Innocence

INNOCENCE	Number	Percentage
Black	0	%0,0
White	222	%88,8
Red	2	%0,8
Yellow	1	%0,4
Blue	25	%10,0
Other	0	%0,0
Total	250	%100

It was seen that a great majority of the participants preferred white color as the most innocent color with 88.8%, blue color was chosen in the second place with 10% and the effect of other colors was negligible. The distribution of the colors that the participants felt in the sense of sincerity is as in Table 11:

Table 11. The Colors Evoked by Sense of Sincerity

SINCERITY	Number	Percentage
Black	10	%4,0
White	73	%29,2
Red	35	%14,0
Yellow	60	%24,0
Blue	68	%27,2
Other	4	%1,6
Total	250	%100

In the colors evoked by the sense of sincerity, white 29.2%, blue 27.2% and yellow 24.0% were close to each other, red color was marked less than 14.0%, followed by 4.0% black and other colors were marked 1.6%. The distribution of the colors that the

participants felt in the sense of seriousness is as follows in Table 12:

Table 12. The Colors Evoked by Sense of Seriousness

SERIOUSNESS	Number	Percentage
Black	163	%65,2
White	42	%16,8
Red	11	%4,4
Yellow	6	%2,4
Blue	28	%11,2
Other	0	%0,0
Total	250	%100

Participants chose 65,2% of the color of seriousness as black. Black color was followed by white with 16,8%, blue with 11,2%, red with 4.4% and yellow with 2,4%. The participants did not choose other colors. The distribution of the colors that the participants felt in the sense of excitement is as follows in Table 13:

Table 13. Colors Evoked by a Sense of Excitement

EXCITEMENT	Number	Percentage
Black	26	%10,4
White	38	%15,2
Red	103	%41,2
Yellow	64	%25,6
Blue	17	%6,8
Other	2	%0,8
Total	250	%100

Nearly half of the participants chose the color of excitement as red with a rate of 41,2%. Red was followed by yellow (25,6%), white (15,2%), black (10,4%) and blue (6,8%). Katılımcıların diğer renkleri seçmediği görülmüştür. The participants did not choose other colors. The distribution of the colors that the participants felt in the sense of freshness is as follows in Table 14:

Table 14. Colors Evoked by the Sense of Freshness

FRESHNESS	Number	Percentage
Black	0	%0,0
White	135	%54,0
Red	15	%6,0
Yellow	33	%13,2
Blue	65	%26,0
Other	2	%0,8
Total	250	%100

Most of the participants decided on white and blue color. The ratio of white color was 54,0% and that of blue color was 26.0%. Participants marked yellow with 13,2% and red with 6.0%, respectively. No participants marked the black color. The distribution of the colors that the participants felt in the sense of naturality is as follows in Table 15:

**Table 15.** Colors Evoked by the Sense of Naturality

NATURALITY	Number	Percentage
Black	3	%1,2
White	96	%38,4
Red	43	%17,2
Yellow	40	%16,0
Blue	61	%24,4
Other	7	%2,8
Total	250	%100

The most natural color of the participants was white (38.4%) and the second color was blue (24.4%). Red and yellow colors were close to each other by 16.0% and 17.2%. Three of the participants who indicated the other color stated that they found light colors natural. The distribution of the colors that the participants felt in the face of joy is as follows in Table 16:

**Table 16.** Colors Evoked by the Feeling of Joy

JOY	Number	Percentage
Black	0	%0,0
White	49	%19,6
Red	75	%30,0
Yellow	61	%24,4
Blue	53	%21,2
Other	12	%4,8
Total	250	%100

The participants marked white, yellow and blue colors close to each other with 30.0% being the most red. In addition, nine of the participants who selected the other option indicated orange as joy. The black color has not been marked. The distribution of the colors that the participants felt in the sense of flavor is as follows in Table 17:

Table 17. Colours Evoked by the Sense of Flavor

FLAVOR	Number	Percentage
Black	3	%1,2
White	45	%18,0
Red	109	%43,6
Yellow	92	%36,8
Blue	1	%0,4
Other	0	%0,0
Total	250	%100

The participants reconciled the sense of flavor with red color with a maximum of 43.6%. It is seen that 36.8% yellow, 18.0% white and 1.2% blue colors are chosen. The result of the sense of flavor is that the proportion of black color is more than blue.

The demographic characteristics of the consumers participating in the study are as in Table 18:

**Table 18.** Demographic Characteristics of the Consumers

		n	%
Age	19-24	9	9
_	25-44	80	80
	45-64	11	11
Gender	Female	93	93
	Male	7	7
	Non-Literate	4	4
Education	Literate	7	7
Status	Elementary School Graduate	39	39
Percentage	Middle School Graduate	22	22
	High School Graduate	19	19
	University Graduate	9	9
	Very Bad	5	5
Income	Bad	13	13
	Middle	54	54
	Good	28	28
	Officer	20	20
Profession	Worker	26	26
	Self employed	21	21
	Housewife	33	33

Applicants 9% are in between ages 19-24 80% are in 25-44 11% are in 45-64 and 94% of them are women and 7% are men. Education status is 9% of them are university graduates,19% are high school grads,22% are middle school grads and 39% are elementary school grads.7% are literate 4% are non-literate. Table 19 shows the answers given by customers about whether they pay attention to color and music while shopping in stores.

**Table 19.** The Frequency of Clients Shopping at Stores and Paying Attention to Colors and Music

Question	Answer	n	%
	Each Day	7	7
	More than once a week	2	2
How often do you	Once a week	1	1
shop at stores?	More than once in a month	88	88
	Once a month	1	1
	Less		
Do you pay attention	Yes	54	54
to music playing	No	46	46
while you shop at the store?			
Do you pay attention	Yes	58	58
to use of colors when you shop at the store?	No	42	42

It is noticed from the data from table that 88% of clients shop more than once a month. And while 54% pays attention to music playing at the store 46% doesn't and 58 % pays attention to the use of color while 42% doesn't. Table 20 shows the results of t-test and analysis of variance according to sociodemographic characteristics.

**Table 20.** T Test and Variance Analyses Results According to Socio-Demographic properties

		Color Usage	Music Usage
Age	t	1,555	1,570
	p	,062	,152
Gender	t	1,414	1,709
	p	,995	,008
Education	t	1,529	1,145
Status	p	,004	,001
Income	t	1,372	1,452
	p	,000	,320
Profession	t	1,959	1,412
	p	,002	,120

As it can be seen on the table there is no meaningful relationship between age and use of music and colors in stores. Eventhough there is no meaningful relationship between gender and use of colors there is a meaningful relationship with use of music. When analysed education status variable we see that there is a meaningful relationship with the use of both colors and music. When we analysed Income we see a meaningful relationship with colors but not music. As the last variable of the study there is a meaningful relationship between profession and use of colors.

### 4. Conclusion

When we look at the three main colors, red, blue and yellow, it is seen that the colors mentioned in the literature coincide with the characteristic features in accordance with the results.

Red symbolizes courage, strength, vitality, energy and dynamism (Sun, 1992: 35; Kamış, 1994: 23). The most important emotion that the color red awakens in the individual is that it gives excitement, makes you feel warm, and makes you want to take action as soon as possible. Continuous physical strength and perseverance are emotions integrated with red (Sun, 1992: 43). In the results of the study, red was chosen in the first place in the awakening of emotions such as energy, excitement, taste, joy and hunger.

Blue, on the other hand, is a color that pushes corporate serious and logical action. It is used to increase the stability message (Efendioğlu, 2004: 26). In the study, it was found that the feelings of naturalness, trust, sincerity and prestige were felt at high rates.

Black color is dark and covering. Hopelessness and death also symbolize power (Kamış, 1994: 22). Black, which is the color of fear and darkness, showed a high rate of seriousness, power and prestige in the study.

In the literature, it is seen that the effects of colors on individual behavior, especially consumer behavior, are mainly focused on packaging colors and store design. At the same time, it is determined to be a factor that can be used for marketing many times in the examples encountered.

Seeing the colors subconsciously affects many processes. At the bottom of the cerebellum, called the hypothalamus region and at the same time, many emotions are managed through the region, the color characters are reflected in the behavior of individuals. In the study where the effects of colors are examined in the light of all this information, it is evident that the subject is mixed and mainly related to the subconscious. In this context, a study in

which the effect of psychology, which is a different discipline, examining this subject in more depth can be suggested to those who will investigate the subject from now on.

Colors, settings and music played at enterences and/or inside of stores are elements thought to make passing time more enjoyable. For example we don't realize how time flies by when we visit some stores and have fun but it is possible to see the complete opposite of this. That's why one must tackle store atmosphere with great importance .According to the result of the study most of the clients are between ages 25-44, has an education status at an elementary and middle school level and have a midranged income.88% of clients shop more than 1 store in a month,54% pays attention to the music in the store,58% pays attention to colors.It is deducted from the study that there is no meaningful relationship between the age and the colors and music that are used to create the store atmosphere. The study showed that there is no meaningful connection between gender and use of colors. But it shows that there is a meaningful connection between education status, income, profession and use of music and colors in stores.It also shows that there is a meaningful relationship between gender, education status and use of music.

#### References

- Ailawadi, K. L. (2004). Understanding Retail Branding: Conceptual Insights And Research Priorities. *Journal Of Marketing*, 80, 331-32.
- Arnold, M. J., & Reynolds, K. E. (2003). Hedonic shopping motivations. *Journal of retailing*, 79(2), 77-95.
- Arslan, M. ( 2004). *Mağazacılıkta Atmosfer*. İstanbul: Derin Yayınları.
- Avcı, S. (2014). Bilimsel renk bilgisinin resim sanatındaki yansımaları. *Dokuz Eylül Üniversitesi Güzel Sanatlar Fakültesi*, 11(11), 53-67.
- Bellizzi, JA, & Hite, RE (1992). Çevresel renk, tüketici duyguları ve satın alma ihtimali. *Psychology & marketing*, 9 (5), 347-363
- Caivano, J. L., & López, M. A. (2012). Chromatic identity in global and local markets: analysis of colours in branding. JAIC-Journal of the International Colour Association, 1-14.
- Çeken, B., & Elif, Y. (2015). Renklerin Reklam Ödülleri. http://www.sanategitimidergisi.com/makale/pdf/1448548439 .pdf (30/05/2021)
- Çınar, R., & Çubukçu, İ. (2009). Tüketim Toplumunun Şekillenmesi ve Tüketici Davranışları-Karşılaştırmalı Bir Uygulama-/Formation of Consumption Society and Consumer Behavior-A Comparative Application. *Atatürk Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 13(1), 277-300.
- Dursun, T., Oskaybaş, K., & Gökmen, C. (2013). Mağaza Atmosferinin İçgüdüsel Satın Almaya Etkisi Ve Hazır Giyim Sektöründe Bir Araştırma. *Marmara Üniversitesi İ.İ.B. Dergisi*, 35 (2), 1-28.
- Fetttahlıoğlu, S. (2014). Tüketicilerin Mağaza Atmosferinden Etkilenme Düzeylerinin Demografik Faktörler Açısından İncelenmesi. Akademik Araştırmalar ve Çalışmalar Dergisi, 6 (11), 27-40.
- http://Tantalosmaket.Blogspot.Com.Tr. Mağaza Atmosferi. E.T. 05.02.2021
- Gündüzyelİ, B. (2021), Factors Affecting Brand Awareness. Avrupa Bilim ve Teknoloji Dergisi, (31), 675-680.
- İçli, G. E., & Çopur, M. E. (2008). Pazarlama iletişiminde renklerin rolü. *Journal Of Social Science*, 10(1), 22.

- Kaptanoğlu, R. & Keskin R. (2019). *Tüketici Gözüyle Duyguların Renkleri* II. Business & Organization Research Conference (II. BOR Conference), (4-6.9.2019 / İzmir), p. 287, ISBN: 978-605-68816-3-3, ISBN: 978-605-68816-3-3, https://www.eborconference.com/downloads/izmir/abstract. pdf (Özet)
- Kaptanoğlu, R., Gökgöz, M., Uler, E. & Şahinyılmaz, F. (2018). *Color in Health Care Settings*, International Conference on Sustainable Science and Technology, (15.10.2018 / Antalya), (Özet)
- Kılıç, Y., & Başol, S. (2014). Hitit Büyülerinde Sayı ve Renk Sembolizmi. *Electronic Turkish Studies*, 9(7).
- Kılıçarslan, M., (2019). Reduction Of Lean In The Health and Lean Application in The Emergency Of X Hospital. Elektronik Sosyal Bilimler Dergisi, 18(69), 454-465.
- Kotler, P. (1973). Atmospherics As A Marketing Tool. *Journal Of Retailing*, 49 (4), 48-64.
- Levy, M., Weitz, B. (2001). *Retailing Management*. Mcgraw-Hill Company, Fourth Edition, .
- Meyers, H. M., Lubliner, M. J., & Üsdiken, Z. (2003). *Başarılı* ambalaj başarılı pazarlama. Rota.
- Mucuk, İ. (2009). *Pazarlama İlkeleri*, Der Yayınları, 17. Baskı, İstanbul.
- Nuhoğlu, R. (2006). *Rengin Tüketici Satın Alma Davranışlarına Etkisi*. Marmara Üniversitesi Yüksek Lisans Tezi, İstanbul.
- Odabaşı, Y. (2009). *Tüketici Davranışı*, Mediacat Yayıncılık, İstanbul.
- Odabaşı, Y., & Barış, G. (2003). *Tüketici Davranışı*, İstanbul: Kapital Medya Hizmetleri AŞ.
- Orel, F. D. (2005). *Mağaza İçinde Müzik Yayını Nasıl Olmalıdır*. Çukurova Üniversitesi İkt. Ve İd. Bil. Fak.
- Özer, D. (2012). Toplumsal Düzenin Oluşmasında Renk ve İletişim. (*ODÜSOBİAD*), 3(6), 268-281.
- Öztuna, H. Y. (2007). Görsel iletişimde temel tasarım. Tiblan vayıncılık.
- Uçar, T. F. (2004). Görsel iletişim ve grafik tasarım. İnkılap.
- Yağbasan, Aşkın, (2006), Renklerle İletişim ve Ulusal TV Logolarının Göstergebilimsel (Dilbilimsel, Grafiksel, Renksel) Analizi, *Doğu Anadolu Bölge Araştırmaları*,
- Yücel, A., Yücel, N. (2012). Mağaza İmajı İle Mağaza Sadakati Arasındaki İlişkinin Belirlenmesi: Denizli İlinde Yapılan Bir Araştırma. *Yönetim Bilimleri Dergisi*, 10 (19), 1-30.
- Zaltman, G. (2000). Consumer researchers: take a hike!. *Journal of Consumer Research*, 26(4), 423-428.

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