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# Investigating the Psychological Impact of Colors on Process of Consumer Shopping Behavior

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#### Abstract

Buying the necessaries in the not too distant past was not as appealing as it is today. Families bought their necessaries from disorderly dark shops which provided almost everything but the kitchen sink in a small space. But nowadays consumers find themselves in colorful rows of glittering goods in places in which the combination of psychological, sociological and marketing factors has changed them to a pleasant environment. The result of this collaboration is the shopping carts getting full and empty more than the needs of the households. The diversity of goods, in spite of the upsides, makes the shopping decision a terrible dilemma. For most consumers, choosing the needed goods and materials requires full attention and the way a product is chosen is limited to the color, packing and appearance in general except in cases which the consumer may have used the item before or been familiar with it. It is necessary to consider some basics in deciding the color and packing of new products, regarding the fact that the message conveyed by the color of the product is highly significant. Some fundamental research is crucial on the way to this goal. The aim of this research is the study of psychological impact of colors on the process of consumer shopping behavior. This research aims at practical ends and benefits from a descriptive-survey method. In order to collect information, library method has been used. A researcher-made questionnaire has been utilized to study psychological impact of colors on the process of consumer shopping behavior. The statistical population was a number of customers of Refah chain store in Isfahan city. Simple random sampling was used in order to determine the amount of the sample. Based on this, 80 questionnaire sheets were divided among the customers. In order to analyze the data the statistical software program SPSS and the Pearson correlation test were used. All the Hypotheses have been accepted accordingly.

Key Words: Shopping Behavior, Psychology of Colors, Shopping Decision.

#### Introduction

One of the aspects common to all humans is their being consumers, regardless of their education, policies and commitments. In other words they make use of food, apparel, housing, transportation, education, home furniture, leave of absence, services, and ideas on a special order. Consumers play a key role in a domestic, national, international healthy economy. The decisions made for the consumption, raw materials demand, transportation, production, technical affairs and recruiting new personnel, establishment and allocation of

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the resources influence the success of some industries and failure of the rest. Therefore the consumer behavior is a comprehensive factor in stagnation or the progress of the entire commercial activities in a consumer-oriented society. The consumer behavior is a disputatious and challenging issue and involves the individuals and whatever the buy, why and how they buy, marketing mixed and market. Consumer behavior is a very interesting field to study. Since it is consumers who buy goods and services, they can use their daily experience in order to perceive the concepts and theories of this field. (Johan, Michiel; 2010). Perceiving consumer behavior and evaluation of the consumer performance is of particular importance considering cultural differences in different societies. Consumer behavior is a subtle phenomenon due to the fact that individuals do not always act overtly. Their performance as consumers is not often predictable and even explainable. Individuals gain practical experience through observing shopping behavior of others and doing their own shopping. Yet most people are not well aware of their shopping behavior or the external factors and internal processes influencing the shopping. In a lot of cases, understanding the consumer behavior is a difficult matter. Based on Maslow theory, human is an ever in need animal who is rarely completely satisfied except for a short period of time and once his wishes is fulfilled, he attends to another desire. This is a human characteristic to always have a desire during their lifetime. (Samadi, 1386). The complexity of shopping behavior along with the internal and external variables impacts the shopping decision. Moreover, it is specified that making decision based on different sort of products with different products entails different risk levels. Human being has continuously been affected by colors either physically or psychologically. How humans are affected by colors has obviously a psychological nature which indirectly influences norms, reactions and individual behavior. (Elm, 2012). Psychological impact of colors on the process of consumer shopping behavior has been scrutinized in this article. To attract customer, color is considered to be a crucial factor. Being acquainted with psychological impact of colors and its different combinations would be of great help to designers. Designers pick out a particular color based on the nature of the product (Rouland, 1999). In addition, particular colors could be signified by marketers by using association theory and be used as an experimental sign or image expansion.

## **Literature Review**

## **Shopping Behavior**

Shopping as a daily activity has penetrated into our social customs and processes. As a result shopping behavior has come into existence through social interactions (Arpita, 2011). Consumer behavior is consisted of a set of psychological and physical processes which starts before shopping and continues after consumption. Consumer behavior involves mental, emotional and physical activities that people in time for choosing, buying, using and discarding products and services that are used to satisfy their needs and demands. Shopping behavior is the entire activities that people do in order to obtain, consume and organize the products and services (Shahhosseini et al., 2011). Consumer behavior covers many areas and consumers can be of different forms; from an eight-year-old child buying a doll to a huge company which makes purchase of enormous computer systems. Consumers increase their knowledge about the amount of materials they buy. Some even do research on the producer of the product and want the producer to change his method in a clear and moral way (Bin, 2012). There are lots of factors affecting the consumer decision process. These factors are personal characteristics (age, gender, life level, character and personal beliefs), environmental characteristics (cultural interactions, social status, reference groups and family) and psychological characteristics such as character and personal beliefs. Culture is one of the most influential factors which affects the social behavior of an individual by explaining the overall values and norms of the society. Culture also has a minor influence on shopping behavior. Whatever people perceive of colors is based on the relationships between the color and its associated meaning (Krietler and Klietler, 2001). Another class of variables involves instances which are controllable by the seller such as price, quality, delivery time, promotions and trademark. It is quite remarkable that different individuals attach different degrees of importance to this factor. In fact, difference in independent variables which stem in personal and

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environmental characteristics affects the degree of importance of the seller's control variables for different individuals. Producers along with sellers can release their appropriate product suited for the market goal based on personal and environmental factors.

## **Psychology of Colors**

Psychology is defined as how people think, feel and among different options choose one and how an environment (culture, family, signs, and media) affects them. Production owners, marketers and all those who are interested in consumer behavior in business world have to be aware of the perceptional, possessive and behavioral layers of potential buyers in order to meet demands and to preserve and expand the market share. In this way they can set out to produce, distribute and circulate their products suited to their decision mechanisms. This is not possible without the use of psychology (Biabani et al., 2010).

Colors are a component of nonverbal signs which are studied as one of the important market phenomena (Kotler and Keller, 2006; McWilliam, 1999). Consumers tend to attribute particular colors to particular product classes by learning the dependencies between colors. The importance of colors is realized when we refer to marketing and packing. Harmony, composition and arrangement of colors attract the consumer attention. One of the major factors that affect consumer perception is the type of colors which is used in packing. In fact it is the color that attracts consumer attention in the first place, although the colors accepted by consumers in packing are limited (Behnoud, 2012). Consumers acquire the color of particular products based on the relations that they experientially establish. In some instances having a pleasant experience may lead to the preference of a certain color. In other cases consumers acquire particular colors for special products based on relations such that definite colors would be suitable for special groups of products (Luscher and Scott, 2003). Cool colors like blue and green are pacifying and warm colors like red and orange are stimulating. Being aware of the psychological impacts of colors is utilized to relieve a company's personnel without the use of medicaments. Consumers are divided into three categories in terms of how they respond to various colors:

- 1. Those who tend to test new colors due to the idea of novelty and freshness and are ready to pay more for that. Usually women ranging between 30 and 50 and men under 30 years old belong to this category.
- 2. Those who use new colors provided that it has been used earlier by others. Generally men and women ranging between 30 and 50 who are known as cautious buyers belong to this category.
- 3. Those who tend to dependable colors like blue, black and grey. Men above 60 years old who are not fond of shopping belong to this category.

In different countries and cultures, colors convey different meanings. Even a minor mistake in choosing a color might lead to hold people back to use a particular product. The role of colors has achieved prominence in marketing communications. Since making headway in technology involves information related to the consumer's lifestyle, it would be considered beside the other aspects of information. In other words, a developed technology about colors stems in recent procedures of the product and consumer behavior. Due to the influence of colors on the customer perception, marketers should take the color of their products into account in the same way that the customer's awareness in the development of companies has raised to the top. As mentioned earlier, human being has continuously been affected by colors either physically or psychologically. How humans are affected by colors has obviously a psychological nature which indirectly influences norms, reactions and individual behavior (Elm, 2012). Those who are involved in marketing mostly consult color advisers in determining the color of the product they present. Being aware of the color preferences of the consumers has a logical consequence. Because those marketers who have discovered which color is most effective on selling the product would probably reduce the production costs as well as providing the consumer's desired product. The striking use of colors along with growing

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competition among those producers who have increased their sales has led up to a great development in psychology of colors. As the psychology steps in the market, most of the researches might not be flawless and accurate enough (Trent, 2000). We are so affected by nature colors that they deeply influence our soul. There are also colors which either we like or not. Accordingly, the producer must be assured that their product is prioritized over the others.

### **Shopping Decision**

Consumers make decisions on the way to their goals. These goals involve choosing the best alternative, reducing the attempts made to make a decision, minimizing negative emotions and maximizing the ability to justify decisions. The consumer goes through five stages in shopping decision: Identification of the problem, information enquiry, evaluation of options, shopping decision and eventually post-shopping behavior. The consumer shopping decision procedure begins even before the shopping occurs and proceeds ever after. Therefore marketers need to pay attention to the whole shopping decision procedure rather than focusing merely on factors which result in shopping decision. In addition, consumers may never go through decision steps one after the other, but may proceed the stages either with different behaviors or some of them being ignored. Shopping decision procedure is influenced by controllable and uncontrollable categories under which the socio-cultural, psycho-individual, situational and marketing mixed factors are considered to be the most prominent ones (Geravand, 2010). Desire is a strong internal stimulus which requires an action and the timescale which is directed by a stimulus becomes a motivation and buying a commodity is a response to that stimulus. Customers mind changing at the last moment is something that happens very often. It is quite usual that recalling a memory or being impressed by a shop assistant commenting on something may have entirely changed the customers' decision. At the time of making shopping decision, buyers are influenced by several factors. Economical factor is considered the most affecting factor by some marketers. They believe that buyers are looking for the lowest possible prices rather than better quality or services. That is why the economical advantages are emphasized.

According to Silayoi and Speece (2004), some products require a higher level of involvement. Consumers expend a lot of effort at more expensive, personal and emotive commodities (such as car, medical care, clothing...), while they spare less thought on cheaper and less exciting products which they constantly buy such as the products they buy from supermarkets. Customers purchasing high involvement products generally require a basic research on first shopping to obtain a proper understanding of the product. Customer is well aware of the product in advance when the issue is a low involvement product. Therefore he probably does the shopping with a low guarantee level. These products not being vital and not too much affecting customers lives have repeatedly been bought with the least thought and effort. The consumer shopping intention depends on their understanding of how much their expectations are fulfilled by means of the use of the product. But this issue depends on the extent of connection rate in selling point in products quickly bought by consumers. In selling point the color and pictures of the packing is a strategy for making distinctions to attract the customer attention. According to McInis and Price, this issue is of utmost importance especially in relation to not durable products which often require a selection procedure with low eagerness (Aghazadeh et al., 2011).

There happen some behavioral changes parallel to singles being increased and overcrowded families being decreased which lead up to a reduction of the time available. The consumer's time limit is influenced by multitudinous personal properties. Recruitment qualifications, income, education, age and the number of children are among these properties. When consumers purchase under higher levels of perceived time pressure, they, against their will, tend to buy less amount of products and do less unplanned shopping. Needless to say, the strategy used in this condition to attract the attention of those customers running short of time to buy a product, affects their shopping decision (Kelson, 2000).

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# **Background of Research**

Dirk and Jia (2011), in a research titled as the impact of red and blue over the effects of primary behavior, worked on how a color can change the way that affects the structure of primary behavior (Aghazadeh et al., 2011). In a research titled as a study on the effects of the visual and informational aspects of packing on shopping behavior, the impact of different packing elements regarding the time pressure and eagerness effects over the consumers' shopping behavior was scrunitized. One of the factors having a profound effect on consumer behavior is the product color which they intend to buy. Colors exist everywhere all around us. Geravand et al. (2010) studied the promotion of knowledge in production cooperatives in the country and a probable relation between quality, price and advertisement and the way the products produced in Koohdasht are distributed with the customers shopping decision. They discovered that the customer satisfaction is a function of quality, price and advertisement and the way the products are distributed as intervening variables which lead to a shopping decision along with meeting the customer demands.

## **Hypotheses:**

**Hypothesis 1**: The Balance between color and product's type affects on consumer shopping behavior.

**Hypothesis 2:** using colors which is accepted by society's culture affects on consumer shopping behavior.

**Hypothesis 3:** Using attractive colors in product's Packaging affects on consumer shopping behavior.

**Hypothesis 4:** Understanding and applying colors with the therapeutic effects, affects on consumer shopping behavior.

**Hypothesis 5:** Using various colors for different age (Children, young's, middle-aged, adults) consumers. Affects on consumer shopping behavior.

## **Conceptual Model of the Research**

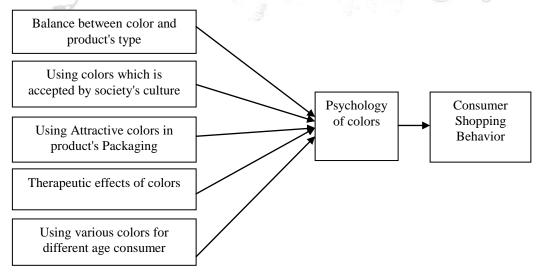


Fig. 1: The psychological aspects of colors

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## Research Methodology

This research aims at practical ends and benefits from a descriptive-survey method. In order to collect information, library method by use of books, magazines, foreign and domestic MA and PhD dissertations has been used. A researcher-made questionnaire has been utilized to study psychological impact of colors on the process of consumer shopping behavior. The questionnaire consists of two parts: Part one is five questions related to demographical variables. Part two is 26 five choice questions ranging from 1 (strongly disapproving) to 5 (strongly approving). The statistical population was a number of the customers of Refah chain store in Isfahan city. Simple random sampling was used in order to determine the amount of the sample. Based on this, 80 questionnaire sheets were divided among the customers. In order to analyze the data the statistical software program SPSS and the Pearson correlation test were used.

## Reliability and Validity of the Questionnaire

The Cronbach's alpha method was used in order to determine the reliability of the test. By using SPSS, the Cronbach's alpha was computed both for each subscale and the entire questionnaire. In this way, the reliability coefficient for the total test was 0.931which is higher than the minimum level (0.70). Thus the reliability of the questionnaire was appropriate. The basic designed questionnaire was shown to several experts in this field to ensure the validity of the questionnaire. Based on the responses and comments of the experts to the primary questionnaire, the ultimate version underwent necessary adjustments and then was distributed among the statistical population.

Demographical information of the sample under study table 1.

## **Findings**

Gender	Female	Male			A VALUE
Number	56	24			
Percent	70	30			3/3/
Education	diploma	Associates	BA	MA a	nd above
Number	16	14	38		12
Percent	20	17.5	47.5		15
Age	<20	20-25 2	25-30	30-35	>35
Number	11	26	17	8	18
Percent	13.75	32.5	21.25	10	22.5
Marital Status	Single	Married			
Number	38	42			
Percent	47.5	52.5			
Occupational Status	State	Independer student	nt		unemployed
Number	33	12	32		13

#### **Hypothesis 1:**

Percent

**H0:** The Balance between color and product's type does not affect on consumer shopping behavior.

H1: The Balance between color and product's type affects on consumer shopping behavior.

41.25

15

40

16.25

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According to Table 2, the mean of proportionality between the color and product's type with a standard deviation of 0.48 is 4.05 and the mean of consumer behavior is 3.97 with standard deviation 0.41. The correlation coefficient of the two variables is 0.61 which is more than 0.05 and as a result the two variables are highly interdependent. The confidence level of t statistic was 6.86. Therefore, H0 should be rejected. F test obtained from ANOVA table is 47.11. Taken together, there is a relation between the color and product's type and the consumer shopping behavior.

Table 2: hypothesis test

	Average	Standard deviation	N
and Balance between color	4.1417	.69512	80
product's type consumer shopping behavior	3.9726	.41362	80

### **Hypothesis 2:**

**H0:** using colors which is accepted by society's culture does not affect on consumer shopping behavior.

H1: using colors which is accepted by society's culture affects on consumer shopping behavior.

According to Table 3, the mean of accepted colors by society's culture with a standard deviation of 0.79 is 3.92 and the mean of consumer shopping behavior is 3.97 with standard deviation 0.41. The correlation coefficient of the two variables is 0.502 which is more than 0.05 and as a result the two variables are highly interdependent. The confidence level of t statistic was 5.12. Therefore, H0 should be rejected. F test obtained from ANOVA table is 26.23. Taken together, there is a relation between accepted colors by society's culture and the consumer shopping behavior.

Table 3: hypothesis test

	Average	Standard deviation	N
accepted colors by society's culture	3.9250	.79551	80
Consumer shopping behavior	3.9726	.41362	80

## **Hypothesis 3:**

**H0:** Using attractive colors in product's Packaging does not affect on consumer shopping behavior.

H1: Using attractive colors in product's Packaging affects on consumer shopping behavior.

According to Table 4, the mean of attractive colors in packing with a standard deviation 0.73 is 4.12 and the mean of consumer behavior is 3.97 with standard deviation 0.41. The correlation coefficient of the two variables is 0.54 which is more than 0.05 and as a result the two variables are highly interdependent. The confidence level of t statistic was 5.68. Therefore, H0 should be rejected. F test obtained from ANOVA table is 32.92. Taken together, there is a relation between the using attractive colors in product's Packaging and the consumer shopping behavior.

Table 4: hypothesis test

	Average	Standard deviation	N
attractive colors in product's Packaging	3.7208	.75649	80
Consumer behavior	3.9726	.41362	80

#### **Hypothesis 4:**

**H0:** Understanding and applying the colors with the therapeutic effects, does not affect on consumer shopping behavior.

H1: Understanding and applying the colors with the therapeutic effects, affects on consumer shopping behavior.

According to Table 5, the mean with therapeutic effects with a standard deviation of 0.54 is 3.75 and the average of consumer behavior is 3.97 with standard deviation 0.41. The correlation coefficient of the two variables is 0.62 which is more than 0.05 and as a result the two variables are highly interdependent. The confidence level of t statistic was 7.1. Therefore, H0 should be rejected. F test obtained from ANOVA table is 50.5. Taken together, there is a relation between Understanding and applying colors with therapeutic effects and the consumer shopping behavior.

Table 5: hypothesis test

		Standard	
	Average	deviation	N
therapeutic colors with the	3.7531	54901	80
effects			
Consumer behavior	3.9726	.41362	80

## **Hypothesis 5:**

**H0:** Using various colors for different age (Children, young's, middle-aged, adults) consumers, does not affects on consumers shopping behavior.

**H1:** Using various colors for different age (Children, young's, middle-aged, adults) consumers, affects on consumers shopping behavior.

According to Table 6, the mean of various colors with a standard deviation of 0.48 is 4.05 and the mean of consumer behavior is 3.97 with standard deviation 0.41. The correlation coefficient of the two variables is 0.86 which is more than 0.05 and as a result the two variables are highly interdependent. The confidence level of T statistic was 15.52. Therefore, H0 should be rejected. F test obtained from ANOVA table is 241.07. Taken together, there is a relation between various colors used for different age (Children, young's, middle-aged, adults) consumers, and the consumer shopping behavior.

Table 6: hypothesis test

	Average	Standard deviation	N
various colors affects	4.0525	.48234	80
Consumer behavior	3.9726	.41362	80

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Table 7: The summarized analysis of the hypotheses:

F Test	β	t	Confidence level	Hypotheses
47.11	0.61	6.86	0.000	The Balance between color and product's type, affects on consumer shopping behavior.
26.23	0.5	5.12	0.000	using colors which is accepted by society's culture, affect on consumer shopping behavior.
50.51	0.62	7.1	0.000	Using attractive colors in product's Packaging, affects on consumer shopping behavior.
32.92	0.54	5.68	0.000	Understanding and applying the colors with the therapeutic effects, effects on consumer shopping behavior.
241.0	0.86	15.52	0.000	Using various colors for different age (Children, young's, middle-aged, adults) consumers, affects on consumer shopping behavior.

### **Discussion and Results**

What is happening today is that industrial superpowers which have become transnational and universal know how psychology works in shopping behavior prediction. By virtue of the power of the media and advertisement they induce people to opt for what they intended to either right or wrong. To meet demands, maintain and expand the market share, production owners, marketers and all those in business world interested in consumer behavior should be aware of the layers of perception, insight and behavior of potential buyers to attend to production, distribution and promotion of the products well suited to decisionmaking mechanisms which is not possible without the use of psychology. In fact, consumer behavior is a psychological issue of marketing and without considering the role of psychology in the study of consumer behavior no success will be achieved. The framework of learning through association presents a plausible explanation for the various effects in color-oriented researches. Consumers learn about color relations. They prefer definite colors associated with certain groups of products. People are exposed to different relations in different cultures. They expand color preferences based on the cultural relations within their country. Marketers can use this knowledge in different ways. First they can identify the relations they have set for their product groups and make an effort to adjust to appropriate colors. This issue stands out for products of enormous importance. Marketers care a lot about this dimension of social learning because they want to select the colors associated with their products. By using associative learning mechanism they can create an impressive relation in promotion activities. Marketers need to take the color of their products into consideration. The packing color or whichever relating to product advertisement should be supervised as a marketing strategy. These factors are controlled by the marketer. Marketers with the help of image-color matching signify a particular meaning to a certain color. Colors are carried to account as a strong potential guide especially when used to show a unique mark. Moreover, a lot of companies use colors as a distinctive tool and a trademark. In the present study, we attended to psychological impact of colors on the process of consumer shopping behavior. After analyzing the hypotheses by means of SPSS, it was concluded that there is a relation between consumer shopping behavior and culturally conventional colors. People decide to make purchase of the products based on quality, price, promotion and distribution as well as their local culture, customs and socially acceptable values.

As stated earlier, public associations are based on relations they hold between the colors and their meanings. In addition, there is a relation held between different colors in products and consumer shopping behavior in different age groups (children, the young, the middle-aged, adults). People in different age groups are affected by different factors and each group prefers a particular color appropriate with their age. Furthermore, there is a relation between the Proportionality of color and type of the product and consumer

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shopping behavior. Consumers choose the product color based on the usage. For example women in different situations (parties, home ...) choose the appropriate color. A color preference does not take place in a vacuum. Rather it depends on conditions and associations that people themselves have established. Colors cannot be perceived independently of the objects in the human brain. Thus, being only aware of the favored colors of consumers does not sufficiently assist marketers to determine the product color set. On the contrary, knowing what the color preferences of consumers for different product types are is of great importance. Moreover, there is a relation between the identification and use of colors with therapeutic effects and consumer shopping behavior. According to studies, a long-term use of a color aimed at treating a certain disease will reverse the effects of it. It is recommended to use these colors alternately. The use of colors in packing and consumer shopping behavior are related. It is necessary to consider some basics in deciding the color and packing of new products, regarding the fact that the message conveyed by the product color being significant. Specialists should pay a lot of attention to packing in terms of attractiveness and the meaning conveyed. Since colors evoke different emotional responses, appropriate colors should be chosen to convey the intended message.

## References

Aghazade, H and Haghighi, M and Ebrahimi, E (2011), "Impacts of informational and visual aspects of packing on shopping decision". Business Management Prospect, No.7, pp 111-135.

Arpita, K,(2011)." Mall shopping behaviour of Indian small town consumers". Journal of Retailing and Consumer Services 18, 110–118

Biabani, A (2010), "The role of psychology in consumer behavior". Industry and entrepreneurship, No.54.

Bin ,S.andYulan, W.and Chris, K.Y. Lo. andMomoko, S(2012)." The impact of ethical fashion on consumer purchase behavior". www.emeraldinsight.com/1361-2026.htm

Coulson, N. S. (2000). "An Application of the Stages of Change Model to Consumer Use of Food Labels". *British Food Journal*, 102, 661-668.

Derek, H.(2011). "Perceptual pairing of colour and motion". Vision Research 45. 3015–3026.

Dirk ,S .and Jia ,L.(2011). "The effect of color (red versus blue) on assimilation versus contrast in prime-to-behavior effects". Journal of Experimental Social Psychology 47 .653–656.

Elm, N (2012), "How color affects customer perception". Iran's industrial design.

Farzad, B (2012), "Product features and consumer perception". <a href="https://www.banik.ir/ShowArticle.asp?ArticleID=50">www.banik.ir/ShowArticle.asp?ArticleID=50</a>.

Geravand, A and Noorayi, M and Saeeyarasi, I (2010), "The mixed impact of marketing on shopping decision and satisfaction of the customers of production cooperative companies in Koohdasht. Cooperation, year 21, New period, No.3.

Luscher, M.andscott, I (2003), "The Luscher color Test, Random House, Newyork, Ny"

Johan, C. and Michiel, S. (2010). "Framework Consumer Behavior". PP10-15

Kotler, P., & Keller, K. L. (2006). Marketing Management. New Jersey: Prentice Hall International.

Krietler,H. and Klietler,S. (2001). Psychology of the Arts, Duke university press, Durham, NC. Forbes, vol. 148, December, pp.144-7.

McWilliam, G. (1997). Low Involvement Brands: Is the Brand Manager to Blame? *Marketing Intelligence & Planning*, 15, 60-70.

Rouland, R.C. (1999), "what colord are your school supplies? Direct Marketing, March, pp. 60-2.

Samadi, M (2007), "Consumer behavior", Ayeezh publication, pp 6-8.

Silayoi, P., &Speece, M. (2004). "Packaging and Purchase Decisions". British Food Journa, 106, 607-628.

Trent, L. (2000). "Color can affect success of products", Marketing New s, vol.27, July, p.4.