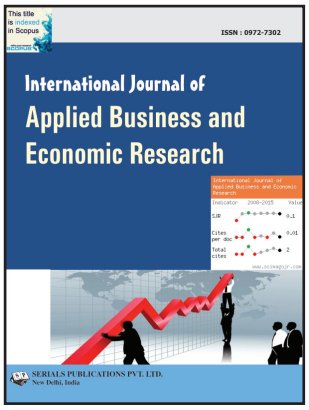

International Journal of Applied Business and Economic Research

ISSN : 0972-7302

available at http: www.serialsjournal.com

Volume 15 • Number 5 • 2017

A Study on the Impact of Package Color of Juices on Consumers' Perceptions and Purchase Decisions

Solanki Sandip P.[1]

[1]*Associate Professor, Symbiosis Institute of International Business, Symbiosis International University, Pune. Email: spsolanki@hotmail.com*

ABSTRACT

Purpose: The main aim of this paper is to find out how Color of food packages/boxes especially of Juices influences consumers' purchase behavior and consumers perception about product healthiness.

Design/Methodology/Approach: Study was conducted in the selected cities of state of Gujarat to generate the data for the research The impact of four different colored packages/boxes of Juices was analyzed in the study.

Findings: Results of the study revealed that majority of respondents are influenced by Package Color. The findings revealed that among various colors of packages of Juices. Most preferred package Color on various dimensions like product healthiness, product liking and purchase intention was Orange colored box. Consumers have higher intention to purchase the Juices packed in orange colored boxes.

Research Limitations: The study sample size was not extensive and was limited to a small geographical area of selected cities of state of Gujarat. A more representative sample of the other cities of Gujarat region could be basis of future research.

Implications: The findings of the study increase the understanding about the consumers' perceptions about the various types of packages of Juices and their influence on their buying behavior. They also highlight how various package colors especially for Juices could be used for various products so as to differentiate the product from competitors and to attract consumers' attention.

Originality/Value: The present paper focuses specifically on how each package color of Juices affect consumer perceptions about product healthiness and thus contributes to a limited amount of existing literature on package Color usage and understanding.

Keywords: Packaged Foods, Package Color, Consumer behavior, Food Package, Juices.

1. SECTION I
INTERNATIONAL, NATIONAL AND LOCAL SCENARIO OF FOOD PROCESSING INDUSTRY

1.1. Global Processed Food Industry

According to Food Agricultural Organization (FAO), Food processing can be defined as the process that encompasses all the steps that food goes through from the time it is harvested to the time it arrives on consumer's plate. The size of global processed food industry is estimated to be valued around at US $ 3.6 trillion and accounts for three-fourth of the global food sales.[11] Despite its large size, only 6% of processed foods are traded across borders compared to 16% of major bulk agricultural commodities. United States of America (USA) is the single largest consumer of processed food and accounts for 31% of the global sales. This is because as countries develop, high quality and value-added processed food such as convenience food is preferred over staples, which are prevalent in less developed economies. Over 60% of total retail processed food sales in the world are accounted by U.S.A, European Union and Japan taken together. Japan is the largest food processing market in the Asian region, though India and China are catching up fast and are likely to grow more rapidly. One of the most technically advanced food-processing industries globally is Australia as the products produced are of international standards and at comparatively lower prices. The share of India in global Food processed industry stands at around 1.6 %. The Ministry of Food Processing Industries has stated in its Vision 2015 that it aims to increase India's share from current level to 3% of world processed food trade.

1.2 Indian Processed Food Industry

India has the second largest arable land of 161 million hectares and has the highest acreage under irrigation. Next to China, India is the second largest food producer in the world and has potential to immerge the biggest with food and agriculture sector. The size of food industry in India is around of ₹13, 20,000 crores (US $ 220 billion) by the end of 2015 and that of processed food industry is around of ₹6, 60,000 crores (US $ 110 billion) by the end of 2015. The food processing industry is the 5th largest industry in India in terms of production, consumption, export and expected growth. The food processing accounts for about 14% of manufacturing GDP, nearly 13% of India's exports and 6% of total industrial investment and employs about 13 million people directly and 35 million people indirectly.

The main sectors of the food processing industry are given in the following table:

Table 51.1
Main sectors of the Food Processing Industry

Sectors	*Products*
Fruits & Vegetables	Beverages, Juices, Concentrates, Pulps, Slices, Frozen & Dehydrated products, Potato Wafers/ Chips etc.
Grains & Cereals	Flour, Bakeries, Starch Glucose, Cornflakes, Malted foods, Beer and Malt extracts, Vermicelli, Grain based alcohol.
Fisheries	Frozen & Canned products mainly in fresh form.

1 National Skill Development Corporation report, (2010). *Human Resource and Skill Requirements in the Food Processing Sector: Study on mapping of Human Resource Skill Gaps in India till 2022.* New Delhi, India. Page 2.

Sectors	*Products*
Diary	Whole Milk Powder, Skimmed milk powder, Condensed milk, Ice cream, Butter, Ghee & Cheese.
Meat & Poultry	Frozen and packed – mainly in fresh form, Egg powder.
Consumer Foods	Snakes, Namkeens, Biscuits, Alcoholic and Non alcoholic beverages.

Source: Ministry of food processing India, Annual Report 2013

2. SECTION II

2.1. Definition of Packaged Food and its Various Segments

Packaged foods can be defined as those foods that are wrapped or stored in container and could be shipped to another place without any damage or destruction. They can be eaten immediately or after adding water or other product, heating or thawing. They are usually partially prepared or completely prepared. Packaged foods are also known as convenience foods because of ease of consumption. Packaged food is wide term that encompasses the various products across the different sectors of food processing industry. In broader terms, the packaged food/convenience food could be basically classified into two categories:-

Shelf stable convenience foods are further classified as:

- Ready to cook foods – e.g. instant mixes like cake mixes, gulab-jamun mix, falooda mix, ice cream mix etc., pasta products like noodles, macaroni, vermicelli etc.
- Ready to eat foods – e.g. breads, biscuits, buns, ice cream, chips, namkeens etc.

Besides above the other general items that come under shelf stable convenience foods include milk, Atta, corn flakes, vegetable and edible oils.

Frozen convenience food include fruits & vegetables in frozen form, yogurt etc.

Packaged food industry is expected to be ₹91, 000 crores industry by end of 2015. The industry is largely dominated by ready to eat food segment which contributes 90 % of total sales of packaged food industry. Out of various segments of packaged food industry the ready to eat food is growing at the fastest pace of about 30 % p.a.

2.2. Packaging and its Importance for Packaged Food Industry

The package is defined as a container which holds, protects and identifies the product throughout its distribution channel (Ampuero & Vila, 2006). It has been found from the recent research that approximately 73% of the products are sold on the self-service bases at the point of sale (Silayoi & Speece, 2007). This shows that important cues need to be provided to the consumers at the point of sale so that companies could differentiate their products from the competitors on one hand and could attract and persuade the consumers to buy their products on the other hand. Under these circumstances the packaging would be the most useful tool that may be available for attracting the consumers" attention. This is because unlike other forms of communication which tend to be fleeting, packaging plays a crucial role not only at the point of sale, but also after the actual purchase of the product. The first moment of truth is about obtaining the customers attention and communicating the benefits of the offer. The second moment of truth is about providing the tools the customer needs to experience the benefits when using the product.

The packaging is even more important for packaged and ready to eat food products this is because they belong to low involvement category. Low involvement products are basically low priced products with little importance.

E.g. impulse purchase categories like namkeens and ice-creams. In these categories, consumers tend to be driven by in-store factors and extrinsic cues (e.g. brand name, packaging etc.) to help them to make their decisions as they have neither the desire nor the need to comprehensively investigate and assess all the offerings available to them. Hence, to take advantage of the situation companies often make innovative use of various packaging elements like shape, size, color, labels, position of visual and verbal elements etc. to differentiate their products from competitors and to attract consumers to their products.

2.3. Objectives of the Study

The main objectives of the research study are as under:

1. To identify the package color usually preferred by consumers while purchasing food products like juices.
2. To evaluate how particular package color influences consumers" overall evaluation of selected Packaged food product, perception about the overall nutritional healthiness and disease risk reduction power of the product and consumers purchase intentions & overall attitude towards the product.

3. SECTION III

3.1. Literature Review

Various researches have been undertaken from time to time to analyze the success of various strategies that companies had already employed for selling their food products to consumers and for finding still new strategies that could be developed and employed so as to attract still more number of consumers .Some of the researches that severed as source of inspiration for the current study are given below:-

- Although many people are not aware of the effect a color or a color combination has on them, in marketing it is well documented that color can be effectively used to suggest certain product characteristics (Birren, 1956; Cheskin, 1954; Danger, 1968; Favre, 1969; Margulies, 1970). Colors have a powerful effect on humans (Elliot, Maier, Moller, Friedman, & Meinhardt, 2007; Spence, 2010). Color is one of the most potent features in the design of product packaging in the food industry (Deliza, Macfie, & Hedderley, 2003; Hine, 1995). According to (Charters, Lockshin and Unwin, 1999) shoppers often do not read the information that is presented on packages, they mainly recognize what they want or need in order to make a quick purchase decision. Since color is perhaps the feature of a product package that triggers the fastest response (Swientek, 2001), it is essential to consider the associations and expectations that consumers have with certain colors, in the design process, in order to ensure effectiveness and the successful communication of brand and sensory qualities. It is expected that the use of a healthy package color will lead to a more healthy product perception, in comparison with the use of an unhealthy package color.

- Responses to colors can be explained by a combination of rather physiological factors and of certain traditional uses. Also according to (Hine,1995) consumers perceive package color at three levels: the associational, the physiological, and the cultural level. The associational level refers to those packaging color expectations that have become associated with a brand image or even a product category, through consumers having interacted with it over some extended period of time (Cheskin & Ward, 1948; Garber, Hyatt, & Boya, 2008; Spence, 2010). On a physiological level, it can for instance be said that red is known to have arousing effects on behavior, in comparison to green which is said to be "restful" (Bellizi, Crowley, & Hasty, 1983). The meaning of these findings is clear: the color of a product or of its package may set up expectations about the characteristics of this product (Pinson, 1986). These associations are mostly not general, rather the effect of color appears to be dependent upon the nature of the product, the particular consumer, and the consumer (Pinson, 1986). For cultural associations there are already well-established conventions about what colors are more appropriate to certain product categories, and in certain cultures/geographical regions (Sacharow, 1970; Spence, 2010; Wheatley, 1973).
- A previous study concerning food and color, indicated that food color affects the consumer's ability to correctly identify flavor, to form distinct flavor profiles and preferences, and dominates other flavor information sources, including labeling and taste (Garber, Hyatt, & Starr, 2000). These results show that food color is inextricably linked to expected flavor in the minds of consumers, making the selection of uncharacteristic food color problematical.
- A good example is provided by crisps (or potato chips). Each flavor variety is typically represented by an arbitrary color: red stands for natural, blue for paprika, yellow for cheese/onion etc. The established convention (Spence, 2011) linking the color to the flavor can help facilitate a shopper's ability to rapidly and effortlessly identify the particular flavor they want. By getting the color "right", companies should hopefully be able to deliver products that are immediately recognized, that match the expectations of the consumers (those loyal and undecided), and increase not only their satisfaction, but also their sales (Piqueras-Fiszman & Spence, 2011).
- With beverages (Deliza and MacFie, 2001) found that packaging color is an important determinant of sweetness ratings: orange, compared to white, packaging color led consumers to expect a higher level of juice sweetness, and consequently affected taste evaluations. Hence, consumers adjusted their taste ratings in line with the expectations triggered by packaging color. According to (Schifferstein and Tanudjaja, 2004) highly saturated colors boost perceptions of stimulus intensity, therefore research addressing the relationship between color saturation and potency perception is of particular relevance.
- (Schuldt, 2012) explored whether one under researched aspect of nutrition labels, namely their color, might influence perceptions of a product's healthfulness. Results show that participants perceived a candy bar as healthier when it bore a green rather than a red calorie label, despite the fact that the labels conveyed the same calorie content. It also investigated the perceived healthfulness of a candy bar bearing a green versus white calorie label and assessed individual differences in the importance of healthy eating. Overall, results suggest that green labels increase perceived healthfulness, especially among consumers who place high importance on healthy eating. This study thus shows that when concerning nutrition labels, the color green is being

perceived as more healthy than the color red or white, even though white is being associated with 'purity' in several cultures (Aslam, 2006). Also according to (Aslam, 2006) red is associated with fear and anger and black is associated also with fear and anger, but also with grief.

4. SECTION IV

4.1. Research Methodology

Target Population: Adult consumers of Selected cities of Gujarat namely Ahmedabad, Baroda, Rajkot, Jamnagar & Bhuj

Design and Setting: The study was undertaken in month of November and December 2015 in the city of Rajkot.

Type of Research: Descriptive research. Since the aim of the study is to examine and analyze the perceptions, preferences and buying behavior of consumers of Rajkot especially with respect to ready to eat food products.

Research Hypothesis: The hypothesis tested using the study are:

I. Consumers perceptions of product healthiness do not differ significantly between different packaging colors of Juices.

II. Consumers product liking do not differ significantly between different packaging colors of Juices.

III. Consumers purchase intentions do not differ significantly between different packaging colors of Juices

Sampling Plan:

(i) **Samples and their size:**

Description of the Study	*Name of City*	*Total no. Respondents selected for the study from each city*
Study Undertaken to analyze the impact of Package color on Consumers Health perception and purchase Decision	Ahmedabad	240
	Baroda	72
	Rajkot	56
	Jamnagar	20
	Bhuj	12
	Total	400

(a) **Products selected for Study:** Fruit Juices.

(ii) **Sampling Method:** The Quota sampling has been used. Here in the initial stage quota was decided on the basis of Population of each city and then samples were selected by Investigator as per his convenience from each city..

Sources of Data: The research study employed both secondary and primary sources of data. The details are as under:

(a) **Primary sources of Data:** Personal Interview, Mall Intercept, Observation

(b) **Secondary sources of Data:** Gujarat related websites, Leading Magazines and Newspapers, Company Reports, Research papers, books.

5. SECTION V

5.1. Findings of the Study

The stimuli used for Juices were four different boxes of Juices of different Color They are shown in Figure 51.1. The respondents were exposed to one of the four conditions only.

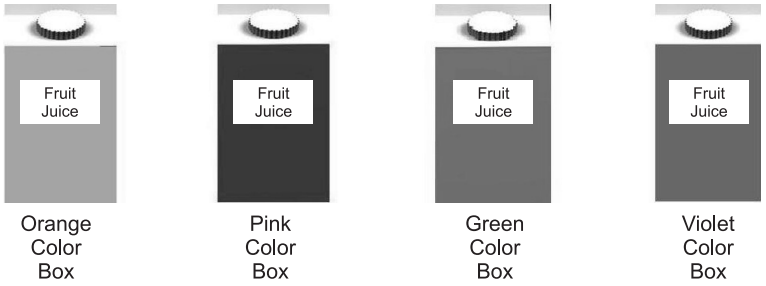

Figure 51.1: Boxes of Juices of Different colors
Source: **Developed by Investigator**

The first thing that was analyzed was consumers' health perception for boxes of Juices of different Color. The corresponding Hypothesis are as under. Here H_0 stands for Null Hypothesis & H_a stands for alternate Hypothesis

H_0: Consumers' perceptions of product healthiness do not differ significantly between different packaging colors of Juices

H_a: Consumers' perceptions of product healthiness differ significantly between different Packaging colors of Juices

The data was analyzed using one way Anova (between the group) test. The following tables from Table 51.2 to 51.6

Table 51.2
Descriptives

Mean

	N	*Mean*	*Std. Deviation*	*Std. Error*	*95% Confidence Interval for Mean*		*Minimum*	*Maximum*
					Lower Bound	*Upper Bound*		
Orange Color Box	79	3.7071	1.02095	.11487	3.4784	3.9357	1.29	5.00
Light Pink Color Box	74	2.6004	.79556	.09248	2.4161	2.7847	1.00	3.86
Light Green Color Box	76	3.2744	.93132	.10683	3.0616	3.4873	1.29	5.00
Violet Color Box	81	3.4462	1.22940	.13660	3.1744	3.7181	1.00	5.00
Total	310	3.2687	1.08574	.06167	3.1473	3.3900	1.00	5.00

Table 51.3
Test of Homogeneity of Variances

Mean

Levene Statistic	*df1*	*df2*	*Sig.*
6.041	3	306	.001

Table 51.4
ANOVA

Mean

	Sum of Squares	*df*	*Mean Square*	*F*	*Sig.*
Between Groups	50.786	3	16.929	16.525	.000
Within Groups	313.470	306	1.024		
Total	364.257	309			

Table 51.5
Robust Tests of Equality of Means

Mean

	Statistic[a]	*df1*	*df2*	*Sig.*
Welch	21.441	3	169.433	.000

[a]Asymptotically F distributed.

Table 51.6
Multiple Comparisons

Mean
Games-Howell

(I) Group	*(J) Group*	*Mean Difference (I-J)*	*Std. Error*	*Sig.*	*95% Confidence Interval*	
					Lower Bound	*Upper Bound*
Orange Color Box	Light Pink Color Box	1.10667*	.14747	.000	.7234	1.4899
	Light Green Color Box	.43262*	.15687	.033	.0251	.8401
	Violet Color Box	.26084	.17848	.463	–.2027	.7244
Light Pink Color Box	Orange Color Box	–1.10667*	.14747	.000	–1.4899	–.7234
	Light Green Color Box	–.67405*	.14130	.000	–1.0413	–.3068
	Violet Color Box	–.84582*	.16496	.000	–1.2748	–.4168
Light Green Color Box	Orange Color Box	–.43262*	.15687	.033	–.8401	–.0251
	Light Pink Color Box	.67405*	.14130	.000	.3068	1.0413
	Violet Color Box	–.17177	.17341	.755	–.6224	.2788
Violet Color Box	Orange Color Box	–.26084	.17848	.463	–.7244	.2027
	Light Pink Color Box	.84582*	.16496	.000	.4168	1.2748
	Light Green Color Box	.17177	.17341	.755	–.2788	.6224

*The mean difference is significant at the 0.05 level.

For analysis first the assumptions were checked: (1) The four groups were completely independent (2) The skewness & Kurtosis valued for each group were within acceptable values of 1 & indicated that data is normally distributed. (3) Homogeneity of variance is assessed by using Levene's test for equality of variance since the sig-value in the Table of Homogeneity of Variance was less than 0.05 so the assumption was not met and hence Welch Test is used the significance value in Anova Table is $p < 0.05$, i.e. $p = 0.00$ so null hypothesis is rejected and alternate hypothesis is accepted and there exists difference in consumers Health perception for boxes of Juices of different colors. Now to find where the difference exists, post hoc analysis is done using Games Howell test. The outcomes of Games Howell tests are shown in the above. Hence it can be concluded that

> "A one way between the groups of analysis of variance revealed that there was statistically significant difference in consumers' health related perceptions between the boxes of Juices of different Colors. F (3, 169.433) = 21.441, $p < 0.05$, Post Hoc comparison using Games Howell test indicated that consumers consider Orange color Box (3.70 ± 1.02) as more healthy as compared to Light Green color Box (2.60 ± 0.79, $p = 0.033$) and Light Pink Color Box (3.27 ± 0.93, $p = 0.000$)

The next thing that was analyzed was consumers' product perception for boxes of Juices of different colors. The corresponding Hypothesis are as under. Here H_0 stands for Null Hypothesis & H_a stands for alternate Hypothesis

H_0: Consumers product liking do not differ significantly between different packaging colors of Juices.

H_a: Consumers product liking differ significantly between different packaging colors of Juices.

The data was analyzed using one way Anova (between the group) test. The following tables from Table 51.7 to 51.11.

Table 51.7
Descriptives

Mean

	N	*Mean*	*Std. Deviation*	*Std. Error*	*95% Confidence Interval for Mean*		*Minimum*	*Maximum*
					Lower Bound	*Upper Bound*		
Orange Color Box	79	3.7532	1.00327	.11288	3.5284	3.9779	1.20	5.00
Light Pink Color Box	74	2.5649	.73828	.08582	2.3938	2.7359	1.00	3.60
Light Green Color Box	76	3.2928	.89360	.10250	3.0886	3.4970	1.40	5.00
Violet Color Box	81	3.4611	1.21630	.13514	3.1922	3.7301	1.00	5.00
Total	310	3.2803	1.07146	.06085	3.1606	3.4001	1.00	5.00

Table 51.8
Test of Homogeneity of Variances

Mean

Levene Statistic	*df1*	*df2*	*Sig.*
6.941	3 306	.000	.001

Table 51.9
ANOVA

Mean

	Sum of Squares	*df*	*Mean Square*	*F*	*Sig.*
Between Groups	58.201	3	19.400	20.019	.000
Within Groups	296.539	306	.969		
Total	354.740	309			

Table 51.10
Robust Tests of Equality of Means

Mean

	Statistic[a]	*df1*	*df2*	*Sig.*
Welch	27.209	3	169.047	.000

[a]Asymptotically F distributed.

Table 51.11
Multiple Comparisons

Mean
Games-Howell

(I) Group	*(J) Group*	*Mean Difference (I-J)*	*Std. Error*	*Sig.*	*95% Confidence Interval*	
					Lower Bound	*Upper Bound*
Orange Color Box	Light Pink Color Box	1.18830*	.14180	.000	.8197	1.5569
	Light Green Color Box	.46040*	.15247	.016	.0643	.8565
	Violet Color Box	.29205	.17608	.349	–.1653	.7494
Light Pink Color Box	Orange Color Box	–1.18830*	.14180	.000	–1.5569	–.8197
	Light Green Color Box	–.72790*	.13369	.000	–1.0754	–.3804
	Violet Color Box	–.89625*	.16009	.000	–1.3127	–.4797
Light Green Color Box	Orange Color Box	–.46040*	.15247	.016	–.8565	–.0643
	Light Pink Color Box	.72790*	.13369	.000	.3804	1.0754
	Violet Color Box	–.16835	.16962	.754	–.6091	.2724
Violet Color Box	Orange Color Box	–.29205	.17608	.349	–.7494	.1653
	Light Pink Color Box	.89625*	.16009	.000	.4797	1.3127
	Light Green Color Box	.16835	.16962	.754	–.2724	.6091

*The mean difference is significant at the 0.05 level.

For analysis, first the assumptions were checked: (1) The four groups were completely independent (2) The skewness & Kurtosis valued for each group were within acceptable values of 1 & indicated that data is normally distributed. (3) Homogeneity of variance is assessed by using Levene's test for equality of variance since the sig-value in the Table of Homogeneity of Variance was less than 0.05 so the assumption was not met and hence Welch Test is used the significance value in Anova Table is $p < 0.05$, i.e. $p = 0.00$ so null hypothesis is rejected and alternate hypothesis is accepted and there exists difference in consumers product perception for boxes of Juices of different colors. Now to find where the difference exists, post hoc analysis is done using Games Howell test. The outcomes of Games Howell tests are shown in the above. Hence it can be concluded that

"A one way between the groups of analysis of variance revealed that there was statistically significant difference in consumers' product related perceptions between the boxes of Juices of different colors. F (3, 169.047) = 27.209 $p < 0.05$, Post Hoc comparison using Games Howell test indicated that consumers liked Orange color box (3.75 ± 1.00) more as compared to Pink Color Box (2.54 ± 0.73, $p = 0.000$) & Light green color Box (3.29 ± 0.89, $p = 0.016$)."

The next thing that was analyzed was consumers purchase intentions for boxes of Juices of different colors. The corresponding Hypothesis are as under. Here H_0 stands for Null Hypothesis & H_a stands for alternate Hypothesis

H_0: Consumers' purchase intentions do not differ significantly between different Packaging colors of Juices.

H_a: Consumers purchase intentions differ significantly between different packaging colors of Juices.

The data was analyzed using one way Anova (between the group) test. The following tables from Table 51.12 to 51.16.

Table 51.12
Descriptives

Mean

	N	*Mean*	*Std. Deviation*	*Std. Error*	*95% Confidence Interval for Mean*		*Minimum*	*Maximum*
					Lower Bound	*Upper Bound*		
Orange Color Box	3.7418	.99648	.11211	3.5186	3.9650	1.20	5.00	5.00
Light Pink Color Box	74	2.5649	.72931	.08478	2.3959	2.7338	1.00	3.60
Light Green Color Box	76	3.2868	.88865	.10193	3.0838	3.4899	1.40	5.00
Violet Color Box	81	3.4642	1.21648	.13516	3.1952	3.7332	1.00	5.00
Total	310	3.2768	1.06630	.06056	3.1576	3.3959	1.00	5.00

Table 51.13
Test of Homogeneity of Variances

Mean

Levene Statistic	*df1*	*df2*	*Sig.*
7.335	3	306	.000

Table 51.14
ANOVA

Mean

	Sum of Squares	*df*	*Mean Square*	*F*	*Sig.*
Between Groups	57.439	3	19.146	19.935	.000
Within Groups	293.894	306	.960		
Total	351.333	309			

Table 51.15
Robust Tests of Equality of Means

Mean

	Statistic[a]	*df1*	*df2*	*Sig.*
Welch	27.337	3	168.974	.000

[a]Asymptotically F distributed.

Table 51.16
Multiple Comparisons

Mean
Games-Howell

(I) Group	*(J) Group*	*Mean Difference (I-J)*	*Std. Error*	*Sig.*	*95% Confidence Interval*	
					Lower Bound	*Upper Bound*
Orange Color Box	Light Pink Color Box	1.17691*	.14056	.000	.8115	1.5423
	Light Green Color Box	.45493*	.15153	.016	.0613	.8485
	Violet Color Box	.27757	.17561	.393	–.1786	.7337
Light Pink Color Box	Orange Color Box	–1.17691*	.14056	.000	–1.5423	–.8115
	Light Green Color Box	–.72198*	.13258	.000	–1.0666	–.3774
	Violet Color Box	–.89933*	.15955	.000	–1.3145	–.4842
Light Green Color Box	Orange Color Box	–.45493*	.15153	.016	–.8485	–.0613
	Light Pink Color Box	.72198*	.13258	.000	.3774	1.0666
	Violet Color Box	–.17736	.16929	.722	–.6173	.2626
Violet Color Box	Orange Color Box	–.27757	.17561	.393	–.7337	.1786
	Light Pink Color Box	.89933*	.15955	.000	.4842	1.3145
	Light Green Color Box	.17736	.16929	.722	–.2626	.6173

*The mean difference is significant at the 0.05 level.

For analysis, first the assumptions were checked (1) The four groups were completely independent (2) The skewness & Kurtosis valued for each group were within acceptable values of 1 & indicated that data is normally distributed. (3) Homogeneity of variance is assessed by using Levene's test for equality of variance since the sig-value in the Table of Homogeneity of Variance was less than 0.05 so the assumption was not met and hence Welch Test is used

The significance value in Anova Table is $p < 0.05$, i.e. $p = 0.00$ so null hypothesis is rejected and alternate hypothesis is accepted and there exists difference in consumers purchase intentions for boxes of Juices of different colors. Now to find where the difference exists, post hoc analysis is done using Games Howell test. The outcomes of Games Howell tests are shown in the above. Hence it can be concluded that

> "A one way between the group of analysis of variance revealed that there was statistically significant difference in consumers purchase intentions between the boxes of Juices of different Colors. F (3, 168.975) = 27.337, $p < 0.05$. Post Hoc comparison using Games Howell test indicated that consumers purchase intention was higher for Orange color Box (3.74 ± 0.99) as compared to Light Green color Box (3.26 ± 0.88, $p = 0.016$) and Pink Color Box (2.56 ± 0.72, $p = 0.000$)."

5.2. Limitations of the Study & Scope of Future Research

Present research is carried out with Juices, but could also be performed with many other products. Currently many other food producers put health claims on their products, these products can also be used in research concerning the effect of product package on perceived healthfulness (drinks, meat products, fish, other deserts etc.). It can also be performed on other unhealthy products, like for instance chips, ice, chocolate etc. It is interesting to examine whether the main effects in this research also apply for other food products.

In this research the products have no specific brand name, meaning that participants are not familiar with the brand. Main effects therefore will not automatically also hold true for product packages of well-known brands. Underwood, Klein, and Burke (2001) conducted a research where respondents were asked to make purchases in a simulated shopping environment. They examined to what extent a consumer is guided or not guided by the presence of photography in a package, and whether there is a difference between familiar and unfamiliar brands. The results show that brands which are less generally known than the national brands, are more dependent upon visual indications to attract attention. According to Underwood, Klein, and Burke (2001) the theory behind this is that in general consumers use more visual packaging features when they are not of hardly familiar with a brand. Therefore, it might be interesting for future research to examine if the same effects hold true for brands that are nationally known.

Another starting point for future research is the fact that in this research product packages are displayed in the form of pictures, meaning that respondents did not have any real references. This might have biased the results, therefore making it interesting to carry out the same research, but instead of using images of the package, using actual packages. Respondents then can refer to an actual package, making it easier to make judgments about size, shape and color. Also all respondents will then see the exact same color, whereas displaying the images on respondents' computer screens may lead to perceived differences in package color.

The study took place in Gujarat. Therefore findings can't be generalized to other and dissimilarities in color preferences and color meaning associations between different cultures. There also might be difference in what is perceived as healthy or unhealthy or there might be differences in associations with shapes, between different cultures. Therefore for future research it is important to include a cultural moderator to examine whether there are also differences in consumer's perceived healthfulness and overall product evaluation.

In this research package color is the package feature being manipulated, but for future research it might be interesting to manipulate other package features. For instance logo, font type and package material can be used as independent variables, to examine whether these can also affect the perceived healthfulness of a product.

5.3. Conclusion

The findings of the study revealed that in case of Juices, the most preferred package color was orange color box. The reason for such preference was that consumers consider that juice in orange color box is healthy and good source of energy and should be purchased. The findings of the study are unique to the study only.

The current research study indicated that packaging element like package color plays an important role in differentiating the brand from its competitors & in establishing the unique position of the brand in the market place & in the minds of the consumers.

The company's manufacturing & selling products like Fruit Juices if taken into consideration the findings of the present study & if implements them for their existing or upcoming products then it would have an advantage of developing the package that would will able to grab consumers' attention, stimulate the consumers to try or purchase that product & would encourage them for repeat purchases & thereby keep them loyal to the brand for long period of time.

5.4. Implications

The findings of the study increase the understanding about the consumers' perceptions about the various types of packages of Juices and their influence on their buying behavior. They also highlight how various package colors especially for Juices could be used for various products so as to differentiate the product from competitors and to attract consumers' attention

References

Ampuero, O., & Villa, N. (2006), Consumer perceptions of product packaging. *Journal of Consumer Marketing, 23*, 100-112.

Arnheim, R. (1974), *Art and visual perception: A psychology of the creative eye.* Berkeley: University of California Press.

Aslam, M. (2006), Are you selling the right colour? A cross cultural review of colour as a marketing cue. *Journal of Marketing Communications, 12*(1), 15-30.

Barreiro-Hurle, J., Garcia, A., & De Magistris, T. (2010), The Effects of Multiple Health and Nutrition Labels on Consumer Food Choices. *Journal of Agricultural Economics, 61*, 426-443.

Barselou, L.W. (2008), Grounded Cognition. *Annual Review of Psychology, 59*, 617-645.

Becker, L., Van Rompay, T.J.L., Schifferstein, H.N.J., & Galetzka, M. (2011), Tough package, strong taste: The influence of packaging design on taste impressions and product evaluations. *Food Quality and Preference, 22,* 17-23.

Bellizzi J.A., Crowley A.E. & Hasty R.W. (1983), "The Effects of Color in Store Design", *Journal of Retailing, 59*, 21-45.

Berlyne, D.E. (1974a).The New Experimental Aesthetics. In: S*tudies in the New Experimental Aesthetics, David E. Berlyne,* (ed), New York: John Wiley & Sons, 1-25.

Berlyne, D.E. (1974b), Novelty, Complexity and Interestingness. In: *Studies in the New Experimental Aesthetics, David E. Berlyne,* (ed), New York: John Wiley & Sons, 175- 180.

Berlyne, D. E. (1976), Psychological aesthetics. *International Journal of Psychology, 11*, 43–55.

Birren, F. (1956), *Selling color to people*. New York: University Books.

Bloch, P.H. (1995), Seeking the ideal form: Product design and consumer response. *Journal of Marketing, 59*(3), 16-29.

Bloch, P.H., Brunel, F.H., & Arnold, T.J. (2003), Individual differences in the centrality of visual product aesthetics: Concept and measurement. *Journal of Consumer Research, 29,* 551-565.

Bone, P.F., & Ellen, P.S. (1999), Scents in the marketplace: Explaining a fraction of olfaction. *Journal of Retailing, 75* (2), 243-262.

Bordo, S. (2003), *Unbearable weight: Feminism, Western culture, and the body (2nd ed.)*. Berkeley: University of California Press.

Carels, R.A., Harper, J., & Konrad, K. (2006), Qualitative perceptions and caloric estimations of healthy and unhealthy foods by behavioral weight loss participants. *Appetite, 46*, 199-206.

Carels, R.A., Konrad, K., & Harper, J. (2007), Individual differences in food perceptions and calorie estimation: an examination of dieting status, weight and gender. *Appetite, 49*, 450-458.

Chapman, G., & MacLean, H. (1933), "Junk Food" and "Healthy Food": Meanings of Food in Adolescent Women's Culture. *Journal of Nutrition Education, 25*, 108-113.

Cardello, A. V. (1994), Consumer expectations and their role in food acceptance. *In H. J. H. MacFie & D. M. H. Thomson (Eds.), Measurement of food preferences*, 253–297. London: Blackie Academic.

Charters, S., Lockshin, L., & Unwin, T. (1999), Consumer response to wine bottle back label. *Journal of Wine Research, 10*, 183-195.

Cheskin, L. (1954), *Color guide for marketing media*. New York: McMillan.

Cheskin, L., & Ward, L.B. (1948), Indirect approach to market reactions. *Harvard Business Review, 26,* 572-580.

Cockerham, W. C., Kunz, G. & Lueschen, G. (1988) On concern with appearance, health beliefs, and eating habits: a reappraisal comparing Americans and West Germans. *Journal of Health and Social Behavior, 29*, 265–270.

Cohen, D.(1972), Surrogate indicators and deception in advertising. *Journal of Marketing, 36*, 10-15.

Cox, D.F. (1967), The sorting rule model of the consumer product evaluation process. *D.F.* City Mayors: The world's fastest growing cities and urban areas from 2006 to 2020. (n.d.). Retrieved from: http://www.citymayors.com/statistics/urban_growth1.html

Fox (ed.), Risk taking and information handling in consumer behavior, 34-81. Boston, MA: Graduate School of Business Administration, Harvard University.

Creusen, E. H., & Schoormans, P. L. (2005), The different roles of product appearance in consumer choice. *Journal of Product Innovation Management, 22*, 63-81.

Crilly, N., Moultrie, J., & Clarkson, P. J. (2004), Seeing things: consumer response to the visual domain in product design. *Design Studies, 25*, 547-577.

Danger, E.P. (1968), *Using colour to sell*. London: Gower.

Deliza, R., & MacFie, H. (2001), Product Packaging and Branding. In Frewer, L. J. and E. Risvik (eds.), Food, People and Society. *A European Perspective of Consumers' Food Choices*. Springer, Germany

Deliza, R., Macfie, H., & Hedderley, D. (2003), Use of computer-generated images and conjoint analysis to investigate sensory expectations. *Journal of Sensory Studies, 18*, 465-486.

Doczi, G. (1981), *The Power of Limits, Proportional Harmonies in Nature, Art, and Architecture*. Shambala, Boulder, CO.

Doyle, J. R., & Bottomley, P. A. (2006), The interactive effects of colors and products on perceptions of brand logo appropriateness. *Marketing Theory, 6*, 63-83.

Elder, R., & Krishna, A. (2012), The „Visual Depiction Effect' in advertising: Facilitating embodied mental simulation through product orientation. *Journal of Consumer Research, 38*, 988-1003.

Elliot, A.J., Maier, M.A., Moller, A.C., Friedman, R., & Meinhardt, J. (2007), Color and psychological functioning. The effect of red on performance attainment. *Journal of Experimental Psychology: General, 136,* 154-168.

Favre, J.P. (1969), *Richtige farbe erfolgreiche Packung*. Zurich: ABC Verlag.

Federation of Indian Chambers of Commerce and Industries (FICCI) - KPMG (2007). *Processed Food and Agribusiness: Opportunities for Investment in India.* Available at http://www.in.kpmg.com/pdf/Processed%20Food%20%20Final.pdf.

Fenko, A., Schifferstein, H. N. J., & Hekkert, P. (2010), Shifts in sensory dominance between various stages of user-product interactions. *Applied Ergonomics, 41*, 34-40.

Folkes, V., & Matta, S. (2004), The Effect of Package Shape on Consumers' Judgments of Product Volume: Attention as a Mental Contaminant. *Journal of Consumer Research, 31*, 390-401.

Garber, L.L. (1995), The package appearance in choice. *Advances in Consumer Research, 22*, 653-661.

Garber, L.L. Jr., Hyatt, E.M., & Boya, Ü, Ö. (2008), The mediating effects of the appearance of nondurable consumer goods and their packaging on consumer behavior. In H.N.J.

Schifferstein & P. Hekkert (Eds.), *Product experience,* 581-602. London: Elsevier.

Garber, L.L., Hyatt, E.M., & Starr, R.G. (2000), The effects of food color on perceived flavor. *Journal of Marketing Theory and Practice, 8*, 59-72.

Govers, P. C. M., & Schoormans J. P. L. (2005), Product personality and its influence on consumer preference. *Journal of Consumer Marketing, 22*, 189-197.

Hekkert, P. (2006), Design aesthetics: Principles of pleasure in design. *Psychology Science, 48*(2), 157-172.

Hine, T. (1995), *The total package: The secret history and hidden meanings of boxes, bottles, cans, and other persuasive containers.* New York: Little Brown.

Holmberg, L. (1983), The effect of form on the perceived volume and heaviness of objects. *Psychological Research Bulletin, 20*, 15.

Hughner, R.S., McDonagh, P., Prothero, A., Shultz, C.J., & Stanton, J. (2007), Who are organic food consumers? A compilation and review why people purchase organic food. *Journal of Consumer Behaviour, 6*, 94-110.

Hutchings, J.B. (2003), *Expectations and the food industry: The impact of color and appearance.* New York: Kluwer Academic/Plenum Publishers.

Jacoby, J., Chestnut, R., & Silberman, W. (1977), Consumer use and comprehension of nutrition information. *Journal of Consumer Research, 4*, 119-128.

Kang, Y., Williams, L. E., Clark, M. S., Gray, J. R., & Bargh, J. A. (2010), Physical temperature effects on trust behavior: The role of insula. *Social Cognitive and Affective Neuroscience, 6*, 507-515.

Katz, M.L., Gorden-Larsen, P., Bentley, M.E., Kelsey, K., Shields, K., & Ammerman, A. (2004), Does skinny mean healthy? Perceived ideal, current, and healthy body sizes among African-American Girls and their Female Caregivers. *Ethnicity & Disease, 14*, 533-541.

Kreijl, C.F., van, & Knaap, A.G.A.C. (2004), *Ons eten gemeten. Gezonde voeding en veilig voedsel in Nederland.* Bilthoven: Rijksinstituut voor Volksgezondheid en Milieu.

Krishna, A. (2006), Interaction of senses: The effect of vision versus touch on the elongation bias. *Journal of Consumer Research, 32*, 557-566.

Krishna, A. (2010), *Sensory Marketing: Research on the sensuality of products.* New York: Routledge.

Krishna, A. (2012), An integrative review of sensory marketing: Engaging the senses to affect perception, judgment and behavior. *Journal of Consumer Psychology, 22*, 332-351.

Krishna, A., Elder, R.S., & Caldara, C. (2010), Feminine to smell but masculine to touch?

Multisensory congruence and its effect on the aesthetic experience. *Journal of Consumer Psychology, 20*, 410-418.

Kwan, S. (2009), Competing Motivational Discourses for Weight Loss: Means to Ends and the Nexus of Beauty and Health. *Qualitative Health Research, 19*, 1223-1233.

Lähteenmäki, L., Lampila, P., Grunert, K., Boztug, Y., Ueland, Q., & Åström, A. (2010). Impact of health-related claims on the perception of other product attributes. *Food Policy, 35*, 230–239.

Lappalainen, R., Saba, A., Moles, A., Holm, L., Mykkanen, H., & Gibney, M.J. (1997). Difficulties in trying to eat healthier: descriptive analysis of perceived barriers for healthy eating. *European Journal of Clinical Nutrition, 51*, 36–40.

Ledyard, J. O. (1995)*, Public goods: A survey of experimental research*. In J. H. Kagel & A. E. Roth (Eds.), The handbook of experimental economics. Princeton, NJ: Princeton University Press, 111-194.

Lee, A. Y., & Labroo, A. A. (2004), The effect of conceptual and perceptual fluency on brand evaluation. *Journal of Marketing Research, 41*(2), 151-165.

Lewalski, Z.M. (1988), *Product Esthetics: An Interpretation for Designers*. Carson City, NV: Design & Development Engineering Press.

Liem, D.G., Toraman Aydin, N., & Zandstra, E.H. (2012), Effects of health labels on expected and actual taste perception of soup. *Food Quality and Preference, 25*, 192-197.

Lofgren,M.(2005), Winning at the first and second moments of truth: an exploratory study, *Managing Service Quality: An International Journal, 15* (1), 102-115.

Lutz, R.J. (1976), *Communicating with consumers*, 101-112. Beverly Hills, CA: Sage Publications.

Madden, T.J., Hewett, K., & Roth, M.S. (2000), Managing Images in Different Cultures: A Cross-National Study of Color Meanings and Preference. *Journal of International Marketing, 8* (4), 90-107.

Magnusson, M.K., Arvola, A., Hursti, U.K.K., Aberg, L., & Sjoden, P.O. (2003), Choice of organic food is related to perceived consequences for human health and to environmentally friendly behaviour. *Appetite, 40*, 109-117.

Margulies, W.P. (1970), *Packaging power*. New York: World Publishing.

Marshall, D., Sutart, M., & Bell, R. (2006), Examining the relationship between product package colour and product selection in preschoolers. *Food Quality and Preference, 17*, 615-621.

Mayall. W.H. (1968), *Machines and Perception in Industrial Design*. London: Studio Vista.

Meyers-Levy, J.M., & Peracchio, L.A. (1995), Understanding the effects of color: How the correspondence between available and required resources affects attitudes. *Journal of Consumer Research, 22*(2), 121-138.

Ministry of Food Processing Industry (2013) *Annual Report 2012-13*.

Mitchell, A.A. & Olson, J.C. (1981), Are product attribute beliefs the only mediator of advertising effects on brand attitude? *Journal of Marketing Research 18*, 318-332.

Moers, P.H.J.M. (2007), *Merk toch hoe sterk: Het merk als strategische factor tot Success*. Kluwer: Amsterdam

Murray, J.M., & Delahunty, C.M. (2000), Mapping consumer preference for the sensory and packaging attributes of Cheddar cheese. *Food Quality and Preference, 11,* 419 – 435.

National Skill Development Corporation report (2010), *Human Resource and Skill* Requirements in the Food Processing Sector: Study on Mapping of Human Resource Skill *Gaps in India till 2022*. New Delhi India. Available at: http://www.nsdcindia.org/pdf/food-processings.pdf

Ngo, M.K., Piqueras-Fiszman, B., & Spence, C. (2012), On the colour and shape of still and sparkling water: Insights from online and laboratory-based testing. *Food Quality and Preference, 24*, 260-268.

Oakes, M.E., & Slotterback, C.S. (2001), Judgements of food healthfulness: Food name stereotypes in adults over 25. *Appetite, 37*, 1-8.

Olson, J.C. (1978), Inferential belief formation in the cue utili- zation process. *H.K. Hunt (ed.), Advances in consumer research, 5*, 706-713. Chicago, IL: ACR.

Olson, J.C. (1980), Encoding processes: levels of processing and existing knowledge structures. *Advances in consumer research, 7*, 154-160. Ann Arbor, MI: ACR.

Papanek, V. (1984), *Design for the Real World.* New York: Van Nostrand.

Peck, J.,& Childers, T.L. (2003), Individual differences in haptic information processing: The need for touch scale. *Journal of Consumer Research, 30*, 430-442.

Peracchio, L.A., & Tybout, A.M. (1996), The moderating role of prior knowledge in schema- based product evaluation. *Journal of Consumer Research, 23*, 117.

Pinson, C. (1986), An implicit product theory approach to consumer inferential judgments about product. *International Journal of Research in Marketing, 3*, 19-38.

Piqueras-Fiszman, B., & Spence, C. (2011), Do the material properties of cutlery affect the perception of the food you eat? An exploratory study. *Journal of Sensory Studies, 26,* 258-262.

Pope, H.G., Jr., Phillips, K.A., & Olivardia, R. (2000), *The Adonis complex: The secret crisis of male body obsession.* New York: Free Press.

Prince, G. W. (1994), The Contour: A Packaging Vision Seen Through Coke-Bottle Lenses. *Beverage World, 1*, 6.

Proper, K.I., Bakker, I., Overbeek, K., van, Verheijden, M.W., & Mechelen, W., van (2006).

De effectiviteit van interventies ter stimulering van gezonde voeding. *Tijdschrift voor Bedrijfs- en Verzekeringsgeneeskunde, 14*, 285-292.

Raghubir, P., & Greenleaf, E.A. (2006), Ratios in proportion: What should the shape of the package be? *Journal of Marketing, 70*, 95-107.

Raghubir, P., & Krishna, A. (1999), Vital Dimensions in Volume Perception: Can the Eye Fool the Stomach? *Journal of Marketing Research, 36,* 313-326.

Reber, R., Schwarz, N., & Winkielman, P. (2004), Processing fluency and aesthetic pleasure: Is beauty in the perceiver's processing experience? *Personality and Social Psychology Review, 8*(4), 364-382.

Rettie, R., & Brewer, C. (2000), The verbal and visual components of package design. *Journal of Product & Brand Management, 9*(1), 56-70.

Rodríguez Tarango, J.A. (2003), Introducción a la Ingeniería en Envase y Embalaje. In J.A.

Rodríguez Tarango (Ed.), *Manual de ingería y diseño en envase y embalaje para la industria de los alimentos, farmaceutica, química y de cosméticos* (pp. 1:1-1:6), México: Instituto Mexicano de Profesionales en Envase y Envalaje S.C.

Roininen, K., Lähteenmäki, L., & Tuorila, H. (1999), Quntification of Consumer Attitudes to Health and Hedonic Characteristics of Foods. *Appetite, 33*, 71-88.

Sacharow, S. (1970), Selling a package through the use of color. *Color Engineering, 9*, 25-27.

Schifferstein, H.N.J. (2009), The drinking experience; cup or content? *Food Quality and Preference, 20*, 268-276.

Schifferstein, H. N. J., Kole, A. P. W., & Mojet, J. (1999), Asymmetry in the disconfirmation of expectations for natural yogurt. *Appetite, 32,* 307-329.

Schifferstein, H. N. J., & Spence, C. (2008), Multisensory product experience. In H. N. J. Schifferstein & P. Hekkert (Eds.), *Product experience*, 133–161. Amsterdam: Elsevier.

Schifferstein, H.N.J., & Tanudjaja, I. (2004), Visualizing fragrances through colours: the mediating role of emotions. *Perception*, 1249-1266.

Schmitt, B. H., & Simonson, A. (1997), *Marketing aesthetics: The strategic management of brands, identity and image*. New York: The Free Press.

Schuldt, J.P. (2012), Does Green Mean Healthy? Nutrition Label Color Affects Perceptions of Healthfulness. *Health Communication,* DOI: 10.1080/10410236.2012.725270.

Sengupta, J., & Gorn, G.J. (2002), Absence makes the mind grow sharper: Effects of element omission on subsequent recall. *Journal of Marketing Research, 39*, 186-201.

Sherwood, M. (1999), Winning the Shelf Wars. *Global Cosmetic Industry, 164*, 64–67.

Smets, G.J.F., & Overbeeke, C.J. (1995), Expressing tastes in packages. *Design Studies, 16,* 349-365.

Solanki Sandip and Sheth Jaydeep (2015) Healthy Food Selection: The Role of Nutritional Information of Packaged Foods on Consumers' Purchase Intentions. *Indian Journal of Marketing*, 45(9), 37-54.

Solanki Sandip, Jaydeep Sheth and Sheth Bhagyashree (2015) The Smart Food Choice: A Study on the influence of Front of Package Nutritional label on the perceptions and buying behaviour of Consumers. *Elixir International Journal*, 85, 34340-34347.

Soriano, C., & Valenzuela, J. (2008), Sensorial perception as a source domain: A cross- linguistic study. *Paper presented at the Seventh International Conference on Researching and Applying Metaphor (RaAM 7*), Cáceres, Spain.

Spence, C. (2010), Ízérzékelés öt érzékszervvel (Colour associations), *IPM Interpress Magazin, October,* 108-112.

Spence, C. (2011), Crossmodal correspondences. A tutorial review. *Attention, Perception, & Psychophysics, 73,* 971-995.

Steptoe, A., Pollard, T.M., & Wardle, J. (1995), Development of a measure of the motives underlying the selection of food: the food choice questionnaire. *Appetite, 25*, 267-284.

Strack, F., Martin, I., & Stepper, S. (1988), Inhibiting and facilitating conditions of human smile: A nonobtrusive test of facial feedback hypothesis. *Journal of Personality and Psychology, 54*, 768-777.

Swientek, B. (2001), Uncanny developments. *Beverage Industry, 92* (12), 39-39.

Technopak Advisors Pvt. Ltd. and Federation of Indian Chambers of Commerce and Industries (FICCI), (2008), *Land of opportunities: The Food Industry in India.* Available at: http://cifti.org/Reports/Ficci_Technopak%20'08.pdf

Underwood, R.L., Klein, N.M., & Burke, R.R. (2001), Packaging communication: Attentional effects of product imagery. *Journal of Product & Brand Management, 10*(7), 403-422.

Underwood, R.L., & Ozanne, J.L. (1998), Is your package an effective communicator? A normative framework for increasing the communicative competence of packaging. *Journal of Marketing Communications, 4*, 207-220.

Van Rompay, T. J. L., Hekkert, T., Saakes, D., & Russo, B. (2005), Grounding abstract object characteristics in embodied interactions. *Acta Psychologica,119*, 315-351.

Van Rompay, T. J. L., & Pruyn, A. T. H. (2011), When visual product features speak the same language: Effects of shape-typeface congruence on brand perception and price expectations. *Journal of Product Innovation Management, 28*, 599-610.

Van Rompay, T., Pruyn, A., & Tieke, P. (2009), Symbolic Meaning Integration in Design and its Influence on Product and Brand Evaluation. *International Journal of Design, 3* (2), 19-26.

Verbeke, W. (2005), Funtional foods: Consumer willingness to compromise on taste for health? *Food Quality and Preference, 17*, 126-131.

Wansink, B. (2006), *Mindless Eating: Why we eat more than we think*. Bantam-Dell: New York.

Westerman, S.J., Sutherland, E.J., Gardner, P.H., Baig, N., Critchley, C., Hickey, C., Mehigan, S., Solway, A., & Zervos, Z. (2013), The design of consumer packaging: Effects of manipulations of shape, orientation, and alignment of graphical forms on consumer's assessments. *Food Quality and Preference, 27*, 8-17.

Wheatley, J. (1973), Putting colour into marketing. *Marketing, 24-29*, 67.

WHO (World Health Organization) (2002), *The World Health Report 2002. Reducing Risks, Promoting Healthy Life*. Geneva: World Health Organization.

Williams, L. E., & Bargh, J. A. (2008), Experiencing physical warmth promotes interpersonal warmth. *Science, 322*, 606-607.

Wright, J., O'Flynn, G., & Macdonald, D. (2006), Being Fit and Looking Healthy: Young Women's and Men's Constructions of Health and Fitness. *Sex Roles, 54*, 707-716.

Zhang, Y., Feick, L., & Price, L.J. (2006), The Impact of Self-Construal on Aesthetic Preference for Angular versus Rounded Shapes. *Personality and Social Psychology Bulletin 32*(6), 794-805.