

CATALOGUING OF ISSUES AFFECTING CHILDREN'S
BUYING BEHAVIOR TOWARDS CONFECTIONARY
ITEMS

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Abstract

This paper has mainly focused to categories items used in buying behavior by children and effect of their demographic variables on the items in and on the factor as a whole. Factor analysis is employed on data of 25 items that have the most impinge on children's buying behavior towards confectionary items. The findings indicate that factor 5 is at the top by which children makes their buying behavior towards confectionery items (mean= 4.64) followed by factor 4 sales promotion (\bar{x} =4.47). On the contrary, they least consider satisfaction and promotional activities (\bar{x} =3.61) followed by attractive design (\bar{x} =3.89). Overall, the analysis provides an understanding consumer's satisfaction and promotional activities, attractive design and advertisement and availability are the alternatives and almost all reviewed studied in literature has also concluded these point directly and indirectly. The results are important for companies in confectionery business, regulators, investor, distributors and shopkeepers.

Keywords: Confectionary, Buying Behavior, Consumer's Satisfaction, Promotional Activities, Advertisement, Regulators and distributors.

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1. INTRODUCTION

The global confectionery industry revenue is estimated to reach \$176 billion by 2018 with a compound annual growth rate (CAGR) of 3.0% over the next five years (2013-2018). Asia Pacific (APAC) emerged as the most growth potential region over 2007-2012, driven by growing population and gross domestic product (GDP) growth in developing nations. In Asia the confectionery industry of India is estimated around of Rs. 3000 crores, which was ranked 25th in the world in 2009, has now growing 15 per cent per year, as one of the largest and well-developed food processing sectors of the country. The credit goes to liberalization along with growing Indian economy, which

has led several multinational companies to invest in India's confectionery market. Trend of gifting confectionery products and untapped rural market are among the key factors that are expected to fuel growth in Indian confectionery market in the near future. Children have crucial role in making decisions for their concerned family which attract many researchers. The Indian families are becoming more modern day by day so that the decision making power is also changing (Chadha, 1995; Dhobal, 1999). As compare to India, Western countries are experiencing an increase in the number of single parent or female-headed households (Ahuja and Mangleburg et al., 1999). Such a shift in family composition and structure has a bearing on the strength in the role that children are expected to play as buyers in the family. Backed by these factors, the Indian confectionery market is expected to grow at a compound annual growth rate (CAGR) of more than 18% during 2012-2015. It is also estimated that 30.7 percent population of India is less than 14 years in age in the year 2011 (A. R. Nanda, Haub A. R., (2007). In addition to this, 54% of India is estimated to be under the age of 25 (Bansal, 2004). So the Study has focused on this industry and on the basis of precedence made cataloguing of the factors affecting this market. Consequently, policies may be made for investment and promotions for this industry.

2. LITERATURE REVIEW

Children play an important role in deciding buying behavior of the family. There are many factors which influence children's buying behavior. Recent studies show that the main motivators are television, internet, peer group, media, advertisement, attached benefits of products, and attractiveness of the product. In today's swiftly changing world technology and information are advancing very fast. Children attracts toward technology faster as compared to

other age groups. McNeal(1993) describes five ways in which a child learn to buy i.e. observation, requesting to buy something, doing selection, giving purchase assistance and finally shopping goods on their own choices. According to Kelly et al. (2002) brand and advertisement is like a mediator for teenagers when they shop for something. Livingstone (2006) finds internet responsible for increasing role of children in shopping. Pine and Nash (2002) evidenced that children (ranging from 3.8 to 6.5 years) who watched more commercial television requested a greater number of items from Father Christmas and also requested more branded items in comparison to Sweden where advertising to children is not permitted and found that the Swedish children asked for significantly fewer items. Seiter (1993), employed persuasive strategy in advertising on age category 8-10 years to children is to associate the product with fun and happiness, rather than to provide any factual product-related information and found a positive attitude towards advertisements. Lam's (1978) surveyed 4 to 7 years old children and their mothers in North America. The study revealed that a quarter of children said that they 'always', and 59% that they 'sometimes', asked mothers to buy cereals they had seen advertised on television, and the majority of mothers said that they yielded to requests (55% 'sometimes', 9% 'lot of the time'). (The confectioner– 2006 issue by Mr. Bardy Darwin) found that religious and the non-religious are both viable marketing targets for confections. Today's Gen X-aged moms are all about the "cute" factor. They love unusual novelty packages for confectioneries, it easier for her by giving basket-creation suggestions at point-of-purchase, by offering novelty packages that remind moms such items are "perfect for kids,". Hitchings and Moynihan's (1998) research with nine to ten-year-old children and parents in England, parents reported granting 96% of children's food requests. Four of the ten foods that children most frequently asked their parents to buy also appeared in the top ten most frequently recalled food adverts by children. Donkin *et al.* (1992, 1993) survey of English parents found that the largest category of children's requests for foods seen advertised on television was for cereals (18%), followed by biscuits and cakes (11%), fruit and vegetables (11%), and sweets and chocolates (10%). A total of 11% of requests were specifically for Kellogg's cereals; 45% of the requested products had added sugar. Radkar and Mundlay (2001) found that 'child's demand' for the product was reported by Indian parents as a substantial influence on buying decisions for several categories of food product. Ekstrom, Patriya and Ellen (1987) took a reciprocal view of consumer socialization of children and proposed that children contribute to decision outcome influencing their parents by direct

expression of preferences and by communicating new knowledge to the parents and influencing purchases. They proposed that children whose family communication pattern is characterized by a high concept-orientation will influence (socialize) their parents more than children whose family communication pattern is characterized by a high socio-orientation. A child in a single-parent family, higher socio-economic status, and higher personal resources and in a sex-role egalitarian family will have more influence. A child will have greater influence for product purchase decisions that he/she considers important or for which he/she has high product knowledge. His/her participation in family decision making will tend to increase his/her satisfaction with family purchase decisions. Taras *et al.* (1989) investigated the relationship between children's television viewing and their food purchase requests. While watching television was also significantly positively correlated with number of food items and purchases were significantly correlated with saturated fat and sugar consumption ($p = 0.012$ and $p = 0.001$ respectively), but not with salt intake. Research suggests that children have less clearly developed brand preferences than do adults, and that they are less consistent in terms of their brand choices (Bahn, 1986). This may be due to the fact that adults have more sophisticated categorisation ability, while younger consumer's apparent inconsistency may be due to lack of a frame of reference (John & Lakshmi-Ratan, 1992). Thus, we might anticipate that children would be more influenced by promotional activities than would adults (Young, 2003). This is consistent with the findings of Atkin (1978) and Ryans (1980); further, John (1999) notes that 'children have the most influence over purchases of child-relevant items (e.g. cereal). Confectionery has no fixed pattern of purchase although purchases are affected due to festival seasons (The confectioner-2006 issue by Jey Zemke. It was also observed that the purchase of white mint candies increased during winter. The sale pattern of gums remained stable throughout. At the advanced level suggestions were made to the industry that the varied shapes of candies like those of Santa Clauses, special cartoon characters if made available during summer vacations wrapped in gold stripes could be beneficial to the growth of industry. Conclusively no one author has categorized the variables as per their precedence and checked their demographic effect. The present study has tried to fill up these gaps.

OBJECTIVE

To categories items used in buying behavior by children and effect of their demographic variables on the items in the factors.

3. METHODOLOGY

Hypothesis: There is no significant affect of demographic variables of children on the items in the factors related to their buying behavior.

SIZE OF SAMPLE, DATA COLLECTION METHOD AND TOOL: Non-Probabilistic convenience-cum-judgment sampling was used and responses of 100 children selected from Sirsa city of Haryana state. The children age group varies from 5-12 years. A structured questionnaire was prepared for the purpose and responses were filled by the researcher as age group of children was not suitable for filling questionnaire themselves.

Reliability: The response on 25 items chosen of children used for buying behavior in purchasing confectionery items were collected on 5-point Likert scale from 5 for completely agree, 4 for slightly agree, 3 for neutral, 2 for slightly disagree and to 1 for completely disagree. The interactive Cronbach's Alpha values for reliability in responses of respondents were found 0.629. The Content Validity Ration (CVR) above 0.80 is significant ($0.60 \leq$ significant) of the present study. It means items in questions contains in questionnaires cover the content of the research significantly as by Kapoor D.R. and Saigal P. (2013).

Data Analysis Strategy: To analysis and interpret mean, standard deviation, factor analysis has been applied. For confirmation of descriptive statistics, *F*-test Statistic has used. The correlation matrix of 25 reaction items which were developed to know the overall affecting children's buying behavior towards confectionary items and the present study has found that there are more than 10 loadings greater than 0.600 correlation (greater than .400 correlation) between variables; it is reliable regardless of the sample size, (F. Andy and M. Jeremy, 2010). To test the appropriateness of factor analysis technique the correlation between the variables are checked and Keiser-Meyer-Olkin (KMO) measure of sample adequacy is also used for the same. The population correlation matrix is an identity matrix, is rejected by Bartlett's Test of Sphericity. The approximate Chi-square value is 1.421E3 with 300 degree of freedom, which is significant at 0.05 levels. The value of KMO statistic, 0.663, is also large than 0.6. Further, PCA method is used for extraction of variable for the component (factor) concerned. The extraction communalities, averagely for each variable has found 0.724 which is the amount of variance a

variable share with all the other variables being considered. It is also the proportion of variance explained by the common factors. Theoretically, sample size is enough to calculate factor analysis. The reproduced correlation matrix of overall items in opinion making of agent towards selling of policies has shown 25 per cent non-redundant residuals (less than 50 per cent as per cent, as per application of Factor Analysis) with absolute values greater than 0.05, indicating an acceptable model fit.

4. Analysis and Interpretation

As per appropriateness of factor analysis technique stepwise confirmation is proceed in the analysis and interpretation.

Table 1: Communalities

Variables	Initial	Extraction
Taste-V ₁	1.000	.748
Colour-V ₂	1.000	.800
Packaging-V ₃	1.000	.776
Suitable Price-V ₄	1.000	.707
Shape-V ₅	1.000	.803
Quantity-V ₆	1.000	.785
Quality-V ₇	1.000	.610
Radio/TV-V ₈	1.000	.376
News Paper-V ₉	1.000	.756
Kids Magazine-V ₁₀	1.000	.774
Peer Group-V ₁₁	1.000	.792
Elders-V ₁₂	1.000	.812
Parents-V ₁₃	1.000	.719
Free Gift-V ₁₄	1.000	.814
Buy 1 Get 1 Free-V ₁₅	1.000	.815
Extra Quantity-V ₁₆	1.000	.687
Scratch Coupon-V ₁₇	1.000	.869
Discount-V ₁₈	1.000	.858
Easily Accessibility-V ₁₉	1.000	.749
Salesman Behaviour-V ₂₀	1.000	.814
Window Display-V ₂₁	1.000	.604

Festive Season Display-V ₂₂	1.000	.705
Bright Lighting-V ₂₃	1.000	.694
Pleasant Scent-V ₂₄	1.000	.716
Music-V ₂₅	1.000	.596

Source: Primary, (Data Processes through SPSS 18.0).

Extraction Method: Principal Component Analysis.

Table 1 shows that scratch coupon share variation the most with other variables with .869 followed by discount. On the contrary, it is found that radio/television (TV) share the variation the least followed by music. But, averagely it is found that 0.724, which is the amount of variance a variable averagely share with all the other variables being considered.

Table 2: Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.353	21.413	21.413	5.353	21.413	21.413	3.746	14.985	14.985
2	3.391	13.565	34.978	3.391	13.565	34.978	3.358	13.430	28.415
3	2.776	11.103	46.081	2.776	11.103	46.081	2.475	9.900	38.316
4	2.256	9.026	55.107	2.256	9.026	55.107	2.362	9.447	47.763
5	1.966	7.863	62.970	1.966	7.863	62.970	2.286	9.143	56.905
6	1.539	6.156	69.126	1.539	6.156	69.126	2.104	8.414	65.320
7	1.094	4.376	73.502	1.094	4.376	73.502	2.046	8.183	73.502

Source: Primary, (Data Processes through SPSS 18.0).

Table 2 shows that out of 25 variables 7 components have been extracted which having Eigenvalue one or more than one. The extracted components cumulative percentage of variance accounted for 73.502 of the total variance.

Table 3: Factor Pattern Matrix

Reaction items→ ↓	Component Matrix							Rotated Component Matrix						
	1	2	3	4	5	6	7	1	2	3	4	5	6	7
V ₁	-.296	-.258	.485	-.036	.407	.436	-.036	-.078	.353	.064	.108	.018	-.154	.760
V ₂	-.735	.077	.430	-.106	.165	.023	.173	-.270	.813	.000	.142	-.034	-.100	.188
V ₃	-.758	.061	.299	-.247	.151	.088	.132	-.357	.756	-.018	.004	-.145	-.141	.190
V ₄	.568	-.411	.099	-.076	.020	.447	.004	.394	.458	-.183	.071	-.130	.010	.536
V ₅	-.691	.114	.393	-.120	.150	-.075	.340	-.163	.874	-.035	.067	-.013	-.014	.076
V ₆	-.064	-.514	.396	.195	.374	.420	.078	.103	.134	-.131	.077	.274	-.070	.808
V ₇	.624	-.314	.120	-.038	.078	.312	.053	.488	.412	-.081	.061	-.067	.049	.429
V ₈	.198	.191	-.009	.316	-.234	.295	-.242	-.139	.392	.044	.358	-.074	.252	.060
V ₉	.795	-.337	.011	-.067	.034	.060	.027	.635	.539	-.066	.129	-.003	-.042	.198
V ₁₀	.822	-.129	.115	-.115	.132	-.134	.139	.787	.354	.117	.118	-.011	.005	.043
V ₁₁	-.054	-.443	-.185	.606	.418	-.121	-.037	-.086	.131	-.009	.087	.843	-.037	.218
V ₁₂	-.117	-.387	-.170	.653	.391	-.199	-.031	-.117	.070	.001	.034	.880	-.029	.133
V ₁₃	-.145	-.287	.004	.607	.055	-.454	.196	.066	.141	-.212	.144	.770	.017	-.189
V ₁₄	-.063	.217	.617	.433	-.258	-.019	-.359	-.042	.040	.111	.891	.043	-.042	.023
V ₁₅	.261	.170	.683	.236	-.428	-.079	.072	.432	.075	-.122	.754	-.134	.127	-.072
V ₁₆	-.105	.115	.608	.424	-.263	.052	-.203	-.020	.110	-.027	.811	.061	.019	.104
V ₁₇	.730	-.017	.440	-.194	.096	-.291	.100	.880	.112	.199	.114	-.102	-.134	-.024
V ₁₈	.755	-.007	.463	-.035	.055	-.213	.155	.878	.145	.150	.206	-.037	.004	.022
V ₁₉	.274	.513	.118	-.018	.613	.019	-.146	.166	.011	.828	.031	-.018	.145	.118

V ₂₀	.437	.467	-.107	.360	-.028	.068	.510	.333	-.099	.125	.029	.070	.798	-.188
V ₂₁	.164	.699	.197	.020	.194	-.050	.093	.168	.179	.567	.172	-.179	.364	-.166
V ₂₂	.269	.510	-.117	-.012	.454	.016	-.391	-.047	-.244	.796	-.040	-.059	.058	-.021
V ₂₃	.028	.470	-.321	.386	-.182	.422	.090	-.345	-.246	.065	.110	-.073	.700	-.051
V ₂₄	.078	.556	-.202	.317	.089	.361	.348	-.116	-.004	.226	-.023	-.028	.806	.014
V ₂₅	.128	.570	.086	-.050	.431	-.195	-.145	.092	.112	.738	.019	-.035	.071	-.153

Extracted Method: Principal Component Analysis. Rotation

Method: Varimax with Kaiser Normalization. A. 7

Components Extracted.

Table 3 related to factors pattern matrix shown in the left side components matrix, which reveals that factors one has larger values than factors second, third and so on. It visualized a precedence picture of values. The right side of the table rotated component matrix, in the rotation larger value are given larger weight age and smaller are given smaller weight than factors items having more than 0.300 value is scrutinized and place in to the table 4.

Table 4: Factors Interpretation of the overall Issues Affecting Children’s Buying Behaviour towards Confectionary Items

Serial no.	Factors	Coefficient value	Name of Item in Factor
1	Consumer satisfaction & promotional activities (21.413)	.488	Quality(v7)
		.635	News paper ad(v9)
		.787	Magazines ad (v10)
		.880	Scratch coupon(v17)
		.878	Discount(v18)
2	Attractive Design & Advertisement (13.565)	.813	Color(v2)
		.756	Packaging (v3)
		.874	Shape(v5)
		.392	Radio adv(v8)
3	Availability(11.103)	.828	Easily accessibility(v19)
		.567	In store display(v21)
		.796	Festive season(v22)

		.738	Music(v25)
4	Sales promotion(9.026)	.891	Free gift(v14)
		.754	Buy 1 get 1free(v15)
		.811	Extra quantity(v16)
5	Reference group(7.863)	.843	Peer group(v11)
		.880	Elders(v12)
		.770	Parents(v13)
6	Pull strategy(6.156)	.798	Behavior of sales sales person(v20)
		.700	Bright light(v23)
		.806	Pleasant scent(v24)
7	Desires(4.376)	.760	Taste(v1)
		.536	Suitable price(v4)
		.808	Quantity(v6)

Source: Primary, (Data Processes through SPSS 18.0).

Table 4 has shown that consumer satisfaction and promotional activities have explained 21.413 per cent variation where as desires have explained 4.376 per cent only. The overall confirmation of descriptive statistics is checked through *F*-value given in the table 5.

Table 5: Confirmatory Statistics of Factors Affecting Overall Children’s Buying Behaviour towards Confectionary Items

Factors	\bar{x}	Inferential Statistics of Demographic Variables							
		Age		Gender		Level of Education		Family status	
		<i>F</i> -value	<i>Sign.</i> -value	<i>F</i> -value	<i>Sign.</i> -value	<i>F</i> -value	<i>Sign.</i> -value	<i>F</i> -value	<i>Sign.</i> -value
1. Consumer Satisfaction & Promotional Activities	3.61(7)	234.702	.000*	.001	.978	234.702	.000*	3.419	.037
Quality	3.45	15.920	.000*	.130	.719	15.920	.000*	.355	.702
News paper ad	3.02	245.692	.000*	.568	.453	245.692	.000*	3.830	.025
Magazine adv	3.62	97.184	.000*	.634	.428	97.184	.000*	1.800	.171
Scratch coupon	3.95	158.656	.000*	2.357	.128	152.980	.000*	3.585	.031
Discount	4.04	152.980	.000*	.459	.500	158.656	.000*	4.393	.015
2. Attractive Design & Advertisement	3.89(6)	42.490	.000*	2.386	.126	42.490	.000*	1.166	.316

Color	3.78	36.640	.000*	3.564	.062	36.640	.000*	.223	.801
Packaging	3.63	31.890	.000*	3.600	.061	31.890	.000*	1.413	.248
Shape	3.62	35.803	.000*	2.245	.137	35.803	.000*	.231	.794
Radio adv	4.53	1.091	.340	.045	.832	1.091	.340	8.753	.000*
3. Availability	4.45(3)	9.301	.000*	.324	.571	9.301	.000*	1.654	.197
Easily accessibility	4.48	6.487	.002*	.679	.412	6.487	.002*	2.458	.091
In store display	4.42	7.566	.001*	2.088	.152	7.566	.001*	1.308	.275
Festive season music	4.45	2.084	.130	6.482	.012	2.084	.130	3.135	.048
	4.45	7.267	.001*	.083	.774	7.267	.001*	.711	.493
4. Sales promotion	4.47(2)	1.514	.225	.117	.733	1.514	.225	.251	.778
Free gift	4.42	.752	.470	2.082	.152	.752	.474	2.180	.119
Buy 1 get 1 free	4.43	4.670	.012	1.406	.239	4.670	.012	.499	.609
Extra quantity	4.56	1.869	.160	1.588	.211	1.869	.160	.843	.434
5. Reference group	4.64(1)	1.452	.239	1.938	.167	1.452	.239	.627	.536
Peer group	4.66	1.895	.156	1.321	.253	1.895	.156	.213	.809
Elders	4.68	1.408	.249	2.948	.089	1.408	.249	1.449	.241
Parents	4.57	.705	.497	.330	.567	.705	.497	1.155	.391
6. Pull strategy	4.44(4)	.007	.993	4.228	.042	.007	.993	1.795	.172
Behavior of sales person	4.47	3.183	.046	1.367	.245	3.183	.046	.545	.582
Bright lighting	4.42	2.184	.118	5.751	.018	2.184	.118	1.034	.359
Pleasant scent	4.43	.610	.545	1.905	.171	.610	.545	4.478	.014
7. Desires	4.01(5)	2.525	.085	.016	.900	2.525	.085	.768	.467
1.Taste	4.47	2.061	.133	.020	.889	2.061	.133	.045	.956
2.Suitable price	3.25	31.369	.000*	2.371	.127	31.369	.000*	.249	.780
3.Quantity	4.32	1.678	.192	1.500	.224	1.678	.192	2.339	.102

Source: Primary, (Data Processes through SPSS 18.0).

Value in the Parenthesis shows rank, *Significant at 0.01

The Table 5 shows that factor 5 is at the top by which children makes their buying behavior towards confectionery items (mean= 4.64) followed by factor 4 sales promotion (\bar{x} =4.47). On the contrary, they least consider satisfaction and promotional activities (\bar{x} =3.61) followed by attractive design (\bar{x} =3.89).

As far as F - statistics (ANOVA) is concerned, table 5 shows that age wise and level of education wise children are significantly differ on factors, consumers satisfaction and promotional activities, attractive design and advertisement and availability (except, item as festive season) towards buying behavior of confectionery items. In addition to, age wise and level of education wise children are significantly differ on desire related to suitable price. So the hypothesis is rejected.

But, they are unanimously completely agreed on other factors viz. sales promotion, reference group, pull strategy and desire so on basis of these hypothesis is accepted.

Other sides, family status and gender wise children are unanimously agreed on all factors, consumer satisfaction and promotional activities, attractive design and advertisement, availability, sales promotion, reference group, pull strategy and desires, so the hypothesis is accepted on all factors.

On the basis of family status, children are significantly differing on radio advertisement item of factor, attractive design and advertisement so the study rejects the hypothesis on this item.

5. Conclusions and Suggestions

Conclusions: It is concluded that policies related to consumers satisfaction and promotional activities, attractive design and advertisement and availability are the alternatives and almost all reviewed studied in literature has also concluded these point directly and indirectly.

Suggestions: It is suggested that policies related to consumers satisfaction and promotional activities, attractive design and advertisement and availability are the alternatives which should be targeted on the basis of age and level of education for development of the items of confectionery business.

Further Area of research: The study may be extended at national and international level by including independent variables such as culture, family size, occupation of family, etc.

References

1. Ahuja, R. D. B., K.M. Stinson (1993) "Female-Headed Single Parent Families: An Exploratory Study of Children's Influence in Family Decision Making." *Advances in Consumer Research*, 20, 469-474.
2. Atkin, C.K. (1978). Observation of parent-child interaction in supermarket decision-making, *Journal of Marketing*, 42 (4), pp. 41-45.
3. Bardy Darwin (2006), Moms influences the purchases of confectionery products (The confectioner – 2006 issue).
4. Bahn, K.D. (1986). How and when do brand perceptions and preferences first form: A cognitive developmental investigation. *Journal of Consumer Research*, 13 (3), pp. 382-393.
5. Chadha, R. (1995) *The Emerging Consumer – A Profile of Indian Housewife and Its Implications*, Wiley Eastern Ltd., New Delhi.
6. Dhobal, Shailesh. (1999) "NUFgen Marketing or Selling to the New Urban Family." *Business Today*, February 22, 66-81.
7. Donkin, A.J.M.; Neale, R.J. and Tilston, C. (1993). Children food purchase request. *Appetite*, 21 (3), pp. 291-294.
8. Ekstrom, K.M., Patriya S. Tansuhaj, and Ellen R. Foxman. 1987. "Children's Influence in Family Decisions and Consumer Socialization: A Reciprocal View." *Advances in Consumer Research*, 14, 283-287.
9. F. Andy, M. Jeremy (2010) *Discovering Statistics Using SAS*, SAGE Publication India Pvt. Ltd. New Delhi, pp. 541-593.
10. Hitchings and Moynihan, P.J. (1998). The relationship between television food advertisement recalled and actual food consumed by children. *The Journal of Human Nutrition and Dietetics*. 11 (6), pp. 511-517.
11. Jey Zemke (2006) Confectionery purchases are effected due to festival seasons (The confectioner -2006 issue.)
12. John, D.R. and Lakhmi Rattan (1992). Age differences in children's choice behaviour: The impact available alternatives. *Journal of Marketing Research*, 29 (2), pp. 216-226.
13. John, D. R. (1999). "Consumer Socialization of Children: A Retrospective Look at Twenty-Five Years of Research." *Journal of Consumer Research*, 26 (3), 183-213.
14. Kapoor D.R. , Saigal P. (2013) *Research Mehtodology Methods and Techniques*, Regal Publications, New Delhi-110027, P. 319.

15. Kelly, K.J.; Slater, M.D. and Karan, D. (2002). Image advertisements influence on adolescents perception of the desirability of beer and cigarettes. *Journal of Public Policy and Marketing* 21 (2), pp. 295-304.
16. Lam's, P.X.Y. (1978). Influence of Television commercial on young children. Master's Thesis, North Texas State University, TX May.
17. Livingstone, Sonia (2006) Opportunities and constraints framing children and young people's internet use In: Consalvo, Mia and Haythornthwaite, Caroline, (eds.) *Internet research annual. Digital Formations*, vol. 4 (33). Peter Lang, New York, USA, 59-75. ISBN 9780820478579
18. Mangleburg, T.F., D. Grewal, and T. Bristol. 1999. "Family Type, Family Authority Relations and Adolescents' Purchase Influence." *Advances in Consumer Research*, 26, 379-384.
19. McNeal JU (1993). Born to shop. Children's shopping patterns. *American demographics* 15(6), pp 3439. Blackwell R, Miniard P & Engel J (2001). *Consumer behaviour*. 9th edition. New York Harcourt.
20. Nanda A. R., Haub Carl (2007) *The Future Population of India*, Population Foundation of India, PRB, P.10.
21. Pine, K. J. and Nash, A. S. (2002). Dear Santa: The effects of TV advertising on children. *International Journal of Behavioural Development*, 26, 6.
22. Radkar, A. and Mundlay, A (2001). Impact of TV food advertisement on buying decision: Joint project by consumers international (ROAP) and Mumbai Grahak Panchayat India. Results of a survey from Maharashtra, India. Pune: Centre for Research and Education. <http://www.ciroap.org/food>.
23. Ryans, A.B. (1980). A second look at children and the advertising of premiums. *Journal of Consumer Research*, 6 (4), pp. 414-420.
24. Seiter, E. 1993. *Sold Separately: Children and Parents in Consumer Culture*. New Brunswick, NJ: Rutgers University Press.
25. Taras, H.; Boyd, C.; Zive, M.; Nadar, P.; Berry C.C. and Hoy, T. (2000). Television advertising and classis of food products consumed in a paediatric population. *International Journal of Advertising* 19 (4), pp. 487-494.
25. Young (2003). Does food advertisement influence children's food choice? A critical review of some of the recent literature. *International Journal of Advertising*, 22, pp. 441-459.

Appendices

Table: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.663
Bartlett's Test of Sphericity	Approx. Chi-Square	1.421E3
	df	300
	Sig.	.000

Source: Primary, (Data Processes through SPSS 18.0).



Table: R-Matrix

Reaction items→ ↓	V ₁	V ₂	V ₃	V ₄	V ₅	V ₆	V ₇	V ₈	V ₉	V ₁₀	V ₁₁	V ₁₂	V ₁₃	V ₁₄	V ₁₅	V ₁₆	V ₁₇	V ₁₈	V ₁₉	V ₂₀	V ₂₁	V ₂₂	V ₂₃	V ₂₄	V ₂₅
V ₁	1.000	.424	.399	.123	.314	.611	.010	-.134	-.058	-.140	.117	.066	-.033	.168	-.038	.164	-.058	-.073	.078	-.291	-.009	-.103	-.116	-.147	-.082
V ₂	.424	1.000	.742	-.358	.796	.208	-.383	-.092	-.548	-.489	-.054	-.018	.055	.140	.048	.173	-.311	-.301	-.048	-.279	.037	-.158	-.155	-.101	.045
V ₃	.399	.742	1.000	-.316	.720	.137	-.383	-.214	-.596	-.474	-.117	-.037	-.088	.049	-.074	.093	-.334	-.412	-.106	-.372	-.035	-.158	-.110	-.068	.041
V ₄	.123	-.358	-.316	1.000	-.362	.291	.629	.093	.574	.476	.051	-.033	-.137	-.090	.128	-.081	.345	.342	-.043	.019	-.193	.001	-.050	-.052	-.165
V ₅	.314	.796	.720	-.362	1.000	.125	-.344	-.168	-.594	-.401	-.085	-.038	.123	.107	.056	.117	-.245	-.261	-.060	-.196	.044	-.122	-.196	.012	.009
V ₆	.611	.208	.137	.291	.125	1.000	.283	-.033	.160	-.021	.325	.280	.115	.076	.011	.170	.006	.103	-.042	-.140	-.234	-.190	-.213	-.114	-.148
V ₇	.010	-.383	-.383	.629	-.344	.283	1.000	.113	.485	.489	.029	-.019	-.086	-.083	.163	-.081	.414	.421	.078	.154	-.113	.071	-.113	-.048	-.082
V ₈	-.134	-.092	-.214	.093	-.168	-.033	.113	1.000	.013	.069	-.018	-.020	-.023	.171	.155	.113	.010	.135	-.024	.163	.083	.199	.253	.201	-.038
V ₉	-.058	-.548	-.596	.574	-.594	.160	.485	.013	1.000	.732	.052	.006	-.106	-.141	.093	-.113	.541	.584	.066	.175	-.042	.001	-.086	-.130	-.086
V ₁₀	-.140	-.489	-.474	.476	-.401	-.021	.489	.069	.732	1.000	.026	-.062	-.076	-.111	.201	-.146	.705	.704	.190	.261	.072	.176	-.184	.000	.099
V ₁₁	.117	-.054	-.117	.051	-.085	.325	.029	-.018	.052	.026	1.000	.748	.440	-.066	-.166	-.013	-.155	-.101	-.023	-.031	-.257	-.047	-.024	-.063	-.093
V ₁₂	.066	-.018	-.037	-.033	-.038	.280	-.019	-.020	.006	-.062	.748	1.000	.527	.002	-.186	.027	-.155	-.114	-.046	-.053	-.185	-.045	.002	-.037	-.092
V ₁₃	-.033	.055	-.088	-.137	.123	.115	-.086	-.023	-.106	-.076	.440	.527	1.000	.148	.023	.121	-.062	-.023	-.218	.060	-.150	-.163	-.108	-.058	-.122
V ₁₄	.168	.140	.049	-.090	.107	.076	-.083	.171	-.141	-.111	-.066	.002	.148	1.000	.629	.626	.014	.121	.055	.040	.147	.062	.043	.006	.088
V ₁₅	-.038	.048	-.074	.128	.056	.011	.163	.155	.093	.201	-.166	-.186	.023	.629	1.000	.492	.430	.458	-.086	.259	.188	-.079	.058	-.031	.050
V ₁₆	.164	.173	.093	-.081	.117	.170	-.081	.113	-.113	-.146	-.013	.027	.121	.626	.492	1.000	.048	.114	.073	-.041	.134	-.193	.056	.068	-.038
V ₁₇	-.058	-.311	-.334	.345	-.245	.006	.414	.010	.541	.705	-.155	-.155	-.062	.014	.430	.048	1.000	.877	.290	.195	.220	.153	-.258	-.188	.166
V ₁₈	-.073	-.301	-.412	.342	-.261	.103	.421	.135	.584	.704	-.101	-.114	-.023	.121	.458	.114	.877	1.000	.238	.295	.215	.101	-.221	-.038	.170
V ₁₉	.078	-.048	-.106	-.043	-.060	-.042	.078	-.024	.066	.190	-.023	-.046	-.218	.055	-.086	.073	.290	.238	1.000	.268	.477	.545	.032	.323	.489
V ₂₀	-.291	-.279	-.372	.019	-.196	-.140	.154	.163	.175	.261	-.031	-.053	.060	.040	.259	-.041	.195	.295	.268	1.000	.350	.170	.461	.502	.225
V ₂₁	-.009	.037	-.035	-.193	.044	-.234	-.113	.083	-.042	.072	-.257	-.185	-.150	.147	.188	.134	.220	.215	.477	.350	1.000	.346	.215	.343	.402
V ₂₂	-.103	-.158	-.158	.001	-.122	-.190	.071	.199	.001	.176	-.047	-.045	-.163	.062	-.079	-.193	.153	.101	.545	.170	.346	1.000	.151	.249	.473
V ₂₃	-.116	-.155	-.110	-.050	-.196	-.213	-.113	.253	-.086	-.184	-.024	.002	-.108	.043	.058	.056	-.258	-.221	.032	.461	.215	.151	1.000	.455	.151
V ₂₄	-.147	-.101	-.068	-.052	.012	-.114	-.048	.201	-.130	.000	-.063	-.037	-.058	.006	-.031	.068	-.188	-.038	.323	.502	.343	.249	.455	1.000	.138
V ₂₅	-.082	.045	.041	-.165	.009	-.148	-.082	-.038	-.086	.099	-.093	-.092	-.122	.088	.050	-.038	.166	.170	.489	.225	.402	.473	.151	.138	1.000

Source: Primary, (Data Processes through SPSS 18.0).

Table: Reproduced Correlation

Reaction Items	V ₁	V ₂	V ₃	V ₄	V ₅	V ₆	V ₇	V ₈	V ₉	V ₁₀	V ₁₁	V ₁₂	V ₁₃	V ₁₄	V ₁₅	V ₁₆	V ₁₇	V ₁₈	V ₁₉	V ₂₀	V ₂₁	V ₂₂	V ₂₃	V ₂₄	V ₂₅
V ₁	.748 ^a	.481	.457	.192	.386	.669	.122	-.081	-.101	-.159	.138	.102	-.086	.145	-.010	.204	-.082	-.072	.107	-.314	-.081	-.062	-.192	-.095	-.046
V ₂	.481	.800 ^a	.766	-.384	.780	.242	-.398	-.242	-.587	-.509	-.079	-.032	.054	.177	.030	.225	-.301	-.321	-.032	-.284	.063	-.200	-.168	-.052	.034
V ₃	.457	.766	.776 ^a	-.364	.738	.191	-.400	-.260	-.589	-.542	-.144	-.109	-.063	.050	-.104	.102	-.373	-.416	-.061	-.354	.009	-.186	-.162	-.073	.004
V ₄	.192	-.384	-.364	.707 ^a	-.420	.395	.639	.135	.624	.484	.041	-.055	-.211	-.112	.084	-.062	.352	.386	-.022	.050	-.194	-.053	-.054	-.064	-.228
V ₅	.386	.780	.738	-.420	.803 ^a	.169	-.408	-.296	-.565	-.446	-.100	-.045	.105	.099	.045	.161	-.239	-.259	-.041	-.170	.106	-.238	-.167	-.004	.046
V ₆	.669	.242	.191	.395	.169	.785 ^a	.326	-.035	.154	.041	.378	.326	.122	.088	.025	.179	.021	.075	-.012	-.182	-.229	-.182	-.179	-.097	-.209
V ₇	.122	-.398	-.400	.639	-.408	.326	.610 ^a	.111	.628	.547	.053	-.030	-.150	-.095	.128	-.061	.443	.476	.071	.145	-.090	.014	-.061	-.025	-.121
V ₈	-.081	-.242	-.260	.135	-.296	-.035	.111	.376 ^a	.075	-.003	-.026	-.032	-.086	.302	.212	.256	-.057	.020	.043	.193	.088	.141	.365	.225	-.006
V ₉	-.101	-.587	-.589	.624	-.565	.154	.628	.075	.756 ^a	.706	.070	-.008	-.079	-.164	.125	-.155	.592	.603	.066	.181	-.098	.048	-.144	-.115	-.087
V ₁₀	-.159	-.509	-.542	.484	-.446	.041	.547	-.003	.706	.774 ^a	-.012	-.068	-.056	-.139	.209	-.150	.741	.736	.233	.303	.111	.147	-.187	-.056	.111
V ₁₁	.138	-.079	-.144	.041	-.100	.378	.053	-.026	.070	-.012	.792 ^a	.794	.573	-.037	-.245	-.009	-.159	-.102	-.015	-.031	-.259	-.024	-.047	-.040	-.097
V ₁₂	.102	-.032	-.109	-.055	-.045	.326	-.030	-.032	-.008	-.068	.794	.812 ^a	.629	.015	-.213	.034	-.188	-.129	-.023	-.019	-.228	-.031	-.037	-.031	-.072
V ₁₃	-.086	.054	-.063	-.211	.105	.122	-.150	-.086	-.079	-.056	.573	.629	.719 ^a	.136	.086	.164	-.060	.003	-.201	.089	-.159	-.252	-.090	-.070	-.129
V ₁₄	.145	.177	.050	-.112	.099	.088	-.095	.302	-.164	-.139	-.037	.015	.136	.814 ^a	.630	.730	.083	.156	.053	-.013	.189	.039	.076	-.026	.092
V ₁₅	-.010	.030	-.104	.084	.045	.025	.128	.212	.125	.209	-.245	-.213	.086	.630	.815 ^a	.601	.432	.509	-.039	.249	.229	-.149	.010	.010	-.002
V ₁₆	.204	.225	.102	-.062	.161	.179	-.061	.256	-.155	-.150	-.009	.034	.164	.730	.601	.687 ^a	.046	.130	-.036	.002	.119	-.085	.071	-.008	-.011
V ₁₇	-.082	-.301	-.373	.352	-.239	.021	.443	-.057	.592	.741	-.159	-.188	-.060	.083	.432	.046	.869 ^a	.845	.286	.223	.234	.138	-.335	-.164	.215
V ₁₈	-.072	-.321	-.416	.386	-.259	.075	.476	.020	.603	.736	-.102	-.129	.003	.156	.509	.130	.845	.858 ^a	.266	.328	.246	.107	-.230	-.067	.177
V ₁₉	.107	-.032	-.061	-.022	-.041	-.012	.071	.043	.066	.233	-.015	-.023	-.201	.053	-.039	-.036	.286	.266	.749 ^a	.249	.530	.657	.087	.288	.620
V ₂₀	-.314	-.284	-.354	.050	-.170	-.182	.145	.193	.181	.303	-.031	-.019	.089	-.013	.249	.002	.223	.328	.249	.814 ^a	.423	.153	.484	.628	.196
V ₂₁	-.081	.063	.009	-.194	.106	-.229	-.090	.088	-.098	.111	-.259	-.228	-.159	.189	.229	.119	.234	.246	.530	.423	.604 ^a	.428	.230	.400	.515
V ₂₂	-.062	-.200	-.186	-.053	-.238	-.182	.014	.141	.048	.147	-.024	-.031	-.252	.039	-.149	-.085	.138	.107	.657	.153	.428	.705 ^a	.169	.235	.565
V ₂₃	-.192	-.168	-.162	-.054	-.167	-.179	-.061	.365	-.144	-.187	-.047	-.037	-.090	.076	.010	.071	-.335	-.230	.087	.484	.230	.169	.694 ^a	.619	.051
V ₂₄	-.095	-.052	-.073	-.064	-.004	-.097	-.025	.225	-.115	-.056	-.040	-.031	-.070	-.026	.010	-.008	-.164	-.067	.288	.628	.400	.235	.619	.716 ^a	.212
V ₂₅	-.046	.034	.004	-.228	.046	-.209	-.121	-.006	-.087	.111	-.097	-.072	-.129	.092	-.002	-.011	.215	.177	.620	.196	.515	.565	.051	.212	.596 ^a

Note: The lower left triangle contains the reproduced correlation matrix, a. diagonal contains the communalities and the upper right triangle contains the residuals between the observed correlation and the reproduced correlations. There are 79 (26%) non-redundant residuals with absolute values greater than 0.05.

Source: Primary (Data processed through PASW 18.0).

This equation can be used to estimate a person's score on a factor, $Y_i = b_1 X_1 + b_2 X_2 + \dots + b_n X_n + \epsilon_i$

Where, b= component matrix value X= range value or interval scale value of a person.