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Factor Analysis of the Children's Attitude towards TV Advertisement: (Special reference to Noida & Greater Noida Region)

Debjani Chakraborty* and A. K. Agarwal**

Understanding the people taking part in buying center is the key to success for marketers. They can design marketing communication accordingly and can target them through appropriate channels. The role of children in buying decision process is important in family buying decision making. And with the increased disposable income and nuclear family structure of NCR households, their role as influencers and opinion leaders in buying decision making is ever increasing. The growth of communication and the exposure of children to various media vehicles, be it internet, TV, print ads or below the line Ads, has increased product and brand awareness among children and given them a capability to give meaningful inputs in buying decision. The paper aims at finding out the impact of means of marketing communication especially TV advertisements in formation of attitude towards certain product. The marketing communication molds the children's attitude towards any product and hence it influences the parents buying behavior. The

* Research Scholar, Department of Commerce, Meerut College, Meerut, Uttar Pradesh (India) E-mail: <debjanic003@gmail.com>
** Associate Professor, Department of Commerce, Meerut College, Meerut, Uttar Pradesh (India)

study was conducted to find the impact of TV advertisement and the factors were identified and analyzed in understanding the attitude formation. A sample of 180 children and parents were selected on random sampling basis in Noida and Greater Noida region.

1. Introduction

When we talk about the influence of reference groups, the most influential is the immediate family. The family can be categorized in to two ways, Family of Orientation and Family of Procreation. The family of orientation means the family in which an organization takes birth into, *i.e.* constituting parents, grandparents and other elders. The family of orientation shapes the consumers buying preferences and shapes the liking and values since childhood. It shapes the attitude on one individual to great extent and influence in making his buying choices though out his life.

On the other hand, with the progression in someone's life stage, the family of procreation becomes more important. When a person starts his own family, gets married, has children, it is termed as family of procreation. It consists of the spouse and children of an individual whose influence become greater in later part of life of an individual. In the context of the population in concern related to this paper, i.e. the households staying in Noida and Greater Noida region, the importance of the family of procreation is more than ever. Noida, Greater Noida and Ghaziabad are satellite cities situated in the area around the National capital, termed as National Capital Region, or NCR. The region saw rapid development and population increase because of the migration from other areas. And also, we found that the majority of the families settled and staying in the area are nuclear families.

The importance of children in influencing buying behavior of households is more than ever in this special demographic arrangement. In urban and suburban areas of NCR, the demography consists of families of procreation and nuclear families, where the children get a lot of importance in buying decision making of a family. The high disposable household income in the area of research also makes it possible to parents to afford the expenditure incurred on products demanded by children of this family. Also, in this type of

families, generally both the parents work, resulting into high family income but reduced time given by parents to children. They normally want to compensate the time not given by expensive gifts, toys and giving importance and freedom in purchasing materialistic things.

Also, in the era of communication revolution, each and every individual, including small children are exposed to marketing communication in every sphere of this life. Be it while watching television, or while commuting to school, or while watching YouTube videos from their parent's phone, a child is getting very high exposure to marketing communications directed by marketers and getting awareness about various products and brands. The awareness among kids with knowledge of various offerings and brands make them a kind of 'opinion leader' within the family.

The study on the attitude of children towards the marketing communication especially on TV advertisements has become more important to design and direct the right kind of messages attracting them. The messages directed towards them should be in a way that attracts the attention of the child towards the content of communication, arouse interest in the offering and brand, a sense of liking of the brand by them in the form a favorable brand positioning in their minds, which ultimately can induce an action from them into influencing their parents to buy the product.

This research tries to identify various factors that form an attitude towards the marketing communication and identify the extent to which children influence the buying decision process of households and finally the implication of this on marketing and branding of products.

Targeting children and using them as opinion leaders and influencers can be a great option for marketers. At the same time, children constitute a vulnerable segment and targeting them through materialistic marketing communication, can be unethical and can have adverse effect on the society. So as a marketer, one has to be cautious while using children as a tool to influence buying decision among families.

2. Objectives of the Study

- To identify various factors that has an impact in attitude formation in children towards TV advertisement.

- To analyze the factors in terms of their effectiveness.
- To suggest the marketers the various factors that can be beneficial in formulating the marketing communication.

3. Scope of the Study

The area covered for this research is Delhi NCR region, with special reference to families residing in Noida and Greater Noida region. The region is the world's second most populous region with a population of 4.61 Crore people living in the area. The total area under the National Capital Region is 30,242 sq. km, in which the share of land area of Delhi consisting 1,483 square kilometers, land area of Haryana consisting 1,3343 square kilometers, land area of UP consisting 10,853 square kilometers, and the land area Rajasthan consisting 4,493 square kilometers. As regards the population of the region, it was 10.58 million in 1961, which increased to 37.03 million in 2001, and 46.06 million by 2011and the projected population of the region by the year 2021 will be 69.59 million. The population is increasing exponentially due the migration from smaller cities in search of livelihood and job opportunities.

This population density of NCR makes it a huge lucrative market for marketers and businesses. Understanding the dynamics of buying decision process of this market is key to success for marketers and thus identifying the players influencing buying behavior of this market is important. With this research, the researchers tried to find out the role played by the children in family buying decision process.

4. Review of Literature

Oates et al. (2002) tested that what shall be the children's reaction aged between the six and ten years with respect to how much they understand, recall and recognize various TV advertisements. Two experiments were carried out. In terms of persuasion it was found that none of the kids of six years old discuss TV advertisements and only a quarter of the eight year olds and a third of the ten year olds discussed advertisements in terms of persuasion. The most common response across all age groups was that advertisements existed simply to provide information about products. Children were able to recognize the scenes from advertisements after one exposure but recall of brand names was

poor for the younger children, even after three exposures. Recall for the advertising content increased by age and number of exposures. The authors concluded that advertisements do make an impression on children, but the majority of children in the study did not recognize the persuasive intent.

According to a study conducted by Singh and Aggarwal (2012), it was evaluated that the celebrity influences the children buying behaviour. Their study mainly targeted children between 5-14 years of age. A sample size of 800 respondents from 70 cities in Punjab and Chandigarh ware selected randomly. A comparative study was done of three groups of children in the age groups of 5-8 years; 9-11 years; and 12-14 years belonging to urban and rural areas. The consequences indicated that children of all age groups were vigilant about the celebrity endorsements in advertising however were strongly influenced by the presence of celebrities in the advertise-ments as they like their presence and would try to purchase those products which were promoted by these celebrities.

Jawaid, Rajput and Naqvi (2013) Study was completed to find out the impact of celebrity endorsement on impulsive buying behaviour of youngsters in Pakistan. Information was composed of non-probability convenience sampling technique and survey was conducted to collect the data. Sample size of 150 young people (male and female) of Islamabad city was taken. Results show that star support i.e endorsement by celebrity has significance impact on impulsive buying style. It also pointed out the impact of icon endorsement on impulsive buying manners of youth in Pakistan have strong relation with each other. Thus celebrity endorsement was done in advertisements and it encourages impulsive buying behaviour among adolescents.

Lawlor and Prothero (2008) argued that other aspects of advertising also need to be considered. When they probed eight-to nine year-old children about their understanding of television advertising is the showed awareness of some of the wider issues regarding advertising. They discussed the role of television channels in selling space to advertisers, the financing of programmes by advertising, advertising as aspirational, advertising as entertain-ment, and the convenience of advertising breaks. The latter is sometimes dismissed as a rather unsophisticated response and as something that many younger children would say (but often this is

the only answer young children will offer as to the purpose of advertising). But Lawlor and Prothero argued that it is a valid point from the children's perspective because advertising breaks permit them to plan other activities during the break, such as consuming food and drink.

5.　Research Methodology

For conducting the study, the researchers have opted for a descriptive research design. The study was conducted using survey method of research. A sample size of 180 consisting of Children and their parents were obtained. Parent's response included either of father or mother. A schedule was prepared to collect information from the children and questionnaire was used to collect information from parents. The children of age group from 8 to 12 years were considered for the given study.

Primary data was collected using a structured questionnaire which was administered to the chosen respondents by convenience sampling method.

6.　Factors Identified for this Study

The review of research signifies that there are various factors infusing the attitude of the children towards the TV advertisement. However, to make it concise and manageable, 18 independent factors (components) were taken here. These are :

1. Annoying (poor in test).
2. Credible/believable.
3. Easily remember the ads because of repetition.
4. Enjoyable advertisement.
5. Entertaining and funny.
6. Feel angry with the interruption of program due to TV ads.
7. Friend has bought the same product.
8. Helps them to choose suitable product.
9. Honesty of advertisement.
10. Influenced by their friends to buy.
11. Irritation with the repetition of TV ads.
12. Latest information.

13. Like to engage themselves in TV Ads.

14. Pleasant and friendly.

15. Pressurized by their friends to buy.

16. Provides new innovative ideas.

17. Relevant information of the product.

18. Trustworthy (never lies to them).

To analyze the above components in more details, the factor analysis with the same has been performed. Factor analysis has been used to describe variability among observed, correlated variables in terms of a potentially lower number of unobserved variables called factors.

7.   Multicollinearity among the Factors

In the following table the Multicollinearity matrix is shown. It reflects the correlation coefficients of each factors with rest of the factors. It is very much necessary for the applicability of the Factor Analysis to analyze the multicollinearity matrix.

It is observed from the table that the maximum Pearson conflation coefficient between F1 and F7 are maximum at 0.276 among the all pairs of variables. This signifies that there is no two factors which are highly correlated with each other. Hence the factor analysis can be performed.

Table-1 : Correlation Matrix

	F1	F2	F3	F4	F5	F6	F7
F1	1.000	0.043	0.011	0.010	0.112	0.089	0.276
F2	0.043	1.000	0.179	0.186	0.093	0.063	0.025
F3	0.011	0.179	1.000	0.146	0.021	0.065	0.256
F4	0.010	0.186	0.146	1.000	0.010	0.081	0.119
F5	0.112	0.093	0.021	0.010	1.000	0.182	0.084
F6	0.089	0.063	0.065	0.081	0.182	1.000	0.238
F7	0.276	0.025	0.256	0.119	0.084	0.238	1.000
F8	0.106	0.094	0.189	0.053	0.027	0.101	0.010
F9	0.007	0.237	0.001	0.116	0.165	0.177	0.025
F10	0.108	0.092	0.135	0.072	0.085	0.065	0.031

F11	0.136	0.013	0.039	0.030	0.029	0.067	0.201
F12	0.119	0.204	0.092	0.112	0.016	0.041	0.164
F13	0.053	0.030	0.104	0.097	0.127	0.113	0.039
F14	0.176	0.151	0.047	0.046	0.091	0.156	0.116
F15	0.113	0.024	0.014	0.005	0.146	0.186	0.081
F16	0.229	0.152	0.082	0.047	0.085	0.187	0.149
F17	0.018	0.004	0.019	0.156	0.007	0.047	0.125
F18	0.204	0.092	0.112	0.016	0.041	0.164	0.083

	F8	**F9**	**F10**	**F11**	**F12**	**F13**	**F14**
F1	0.106	0.007	0.108	0.136	0.119	0.053	0.176
F2	0.094	0.237	0.092	0.013	0.204	0.030	0.151
F3	0.189	0.001	0.135	0.039	0.092	0.104	0.047
F4	0.053	0.116	0.072	0.030	0.112	0.097	0.046
F5	0.027	0.165	0.085	0.029	0.016	0.127	0.091
F6	0.101	0.177	0.065	0.067	0.041	0.113	0.156
F7	0.010	0.025	0.031	0.201	0.164	0.039	0.116
F8	1.000	0.104	0.047	0.089	0.083	0.179	0.113
F9	0.104	1.000	0.062	0.051	0.105	0.115	0.164
F10	0.047	0.062	1.000	0.025	0.002	0.017	0.065
F11	0.089	0.051	0.025	1.000	0.053	0.146	0.125
F12	0.083	0.105	0.002	0.053	1.000	0.059	0.065
F13	0.179	0.115	0.017	0.146	0.059	1.000	0.112
F14	0.113	0.164	0.065	0.125	0.065	0.112	1.000
F15	0.051	0.081	0.143	0.086	0.016	0.200	0.034
F16	0.081	0.091	0.073	0.065	0.147	0.133	0.176
F17	0.079	0.066	0.028	0.034	0.025	0.167	0.085
F18	0.092	0.013	0.204	0.030	0.151	0.024	0.176

8. Kaiser-Meyer-Olkin Measure of Sampling Adequacy and Bartlett's Test of Sphericity

For the second assumption for performing factor analysis, The Kaiser-Meyer-Olkin measure of sampling adequacy and Bartlett's test of sphericity has been tested.

The value of Kaiser-Meyer-Olkin Measure of Sampling Adequacy is found to be 0.721 which is greater than 0.5. Hence the factor analysis will yield distinct and reliable factors.

The value of Bartlett's Test of Sphericity is found to be 471.221 with a significant value of 0.023. Since the significant value is less than 0.05, Hence, it is concluded that there is some relationship between the variables and are to be included in the analysis.

9. Factor Analysis and Extracted Components

Now, after extraction and rotation, 6 components have been extracted. The eigenvalue in terms of the percentage of variance explained is depicted in the following table :

Table-2 : Total Variance Explained

Component	Initial Eigenvalues		
	Total	% of Variance	Cumulative %
1	4.013	22.294	22.294
2	3.123	17.350	39.644
3	2.132	11.844	51.489
4	1.501	8.339	59.828
5	1.221	6.783	66.611
6	1.015	5.639	72.250
7	0.961	5.339	77.589
8	0.902	5.011	82.600
9	0.914	5.078	87.678
10	0.796	4.422	92.100
11	0.599	3.328	95.428
12	0.291	1.617	97.044
13	0.162	0.900	97.944
14	0.095	0.528	98.472
15	0.087	0.483	98.956
16	0.075	0.417	99.372
17	0.061	0.339	99.711
18	0.052	0.289	100.000

Component	Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	4.013	22.294	22.294
2	3.123	17.350	39.644
3	2.132	11.844	51.489
4	1.501	8.339	59.828
5	1.221	6.783	66.611
6	1.015	5.639	72.250
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Component	Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	2.715	15.083	15.083
2	2.454	13.633	28.716
3	2.265	12.583	41.299
4	2.241	12.450	53.749
5	1.838	10.211	63.96
6	1.492	8.290	72.250
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Extraction Method : Principal Component Analysis.

It is seen that the total percentage of variance explained by the 6 factors extracted here is 72.25%. The contribution of each of the 6 factors are 15.08%, 10.21%, 12.45%, 13.63%, 12.58% and 8.29% respectively.

10. Factor Loading of different Components Identified

The following rotated component matrix shows the factor loading of each component after optimization. Analyzing the load onto the same factor shows in the table below :

Table-3 : Rotated Component Matrix

	Component					
	1	**2**	**3**	**4**	**5**	**6**
Relevant Information		.814				
Latest information		.821				
Innovative ideas		.867				
Irritation with the repetition				.754		
Interruption of program				.786		
Remember ads due to Repetition				.756		
Entertaining and funny	.790					
Enjoyable	.691					
Engagement	.754					
Annoying (poor in test)			.852			

Helps to choose suitable product			.792			
Pleasant and friendly			.756			
Credible/believable						.752
Trustworthy (never lies to them)						.899
Honest						.821
Influenced by their friends					.823	
Friend has bought the same					.915	
Pressurized by their friends					.804	

Extraction Method : Principal Component Analysis.

Rotation Method : Varimax with Kaiser Normalization.

Rotation converged in 11 iterations.

From the above table, analyzing the components, the six common themes were identified by the researcher with respect to the attitude of children towards TV advertisement are as under :

Factor 1 : Entertainment
- Entertaining and funny
- Enjoyable
- Like to engage themselves in TV Ads

Factor 2 : Information shown
- Relevant information of the product
- Latest information
- Provides new innovative ideas

Factor 3 : Congeniality (suitable/pleasant/friendly)
- Annoying (poor in test)
- Helps them to choose suitable product
- Pleasant and friendly

Factor 4 : Repetition
- Irritation with the repetition of TV ads
- Feel angry with the interruption of program due to TV ads
- Easily remember the ads because of Repetition

Factor 5 : Peer groups and friends

- Influenced by their friends to buy
- Friend has bought the same product.
- Pressurized by their friends to buy

Factor 6 : Reliability

- Credible/believable
- Trustworthy (never lies to them)
- Honest.

11. Conclusion

The various factors that have been identifies can be finally beneficial to the marketers as this will help in understanding the major influential factors among all and as such will be helpful in designing the correct marketing campaign. The factors identified is very crucial for the advertiser to decide the right content, tone, modulation, and overall structure of the ad that will be attractive for the children audience who in turn are considered to be the major influencer in buying decision. From the study it has been identifies that the factors like attractiveness of the Ad, Emotional and behavioural aspect shown through the ad, the information that is shared in terms of content and use of the product, the reliability or trustworthiness of the ad shows the likeability of the audience in terms of believing the ad and thereby finding confidence in buying the product. Also the entertainment factor in terms of humour, funny aspects are some of the factors that has been identified through the study and the analysis gives a clear picture to the marketer as what should be more effective and what less that has an impact on the attitude formation of the children. With the increase in competition and the immense clutter of advertisement shown via various medium, the impact of the ad has been very much criticised and hence it is very imperative for the marketers to understand the exact requirement of the audience and thereby design n the ad in such a manner that it is effective and solve the actual problem.

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