



Psychographic Segmentation Based on Belief Factors Underlying Attitude toward Advertising in General

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ABSTRACT: Consumer Segments based on psychographics is preferred over the traditional criteria of segmentation. Applying the Exploratory Factor Analysis, the study identifies the dimensionality of beliefs underlying attitude toward advertising in general (Ag). Hierarchical clustering and K-Means clustering has been used to identify the unique segments of consumers of Northern India, differing by their attitude toward advertising in general. Two segments 'Ad Avoiders' (45%) and 'Ad Lovers' (55%); have been identified. These have been profiled using the psychographic, demographic as well as behavioural variables. The results of the study will help the marketers in strategically targeting the consumers of North India.

KEYWORDS: Psychographic Segmentation, Cluster Analysis, Attitude toward Advertising in General.

INTRODUCTION

There has been considerable interest in the role of consumer's affective responses to advertising. Specifically, the attitude-toward-the-ad construct has been posited as an important mediator of brand attitudes and purchase intentions (Mitchell and Olson 1981; Shimp 1981; Lutz 1985). Conceptual research by Lutz (1985) has helped to delineate the various cognitive and affective antecedents and consequences of attitude toward advertisement (Aad). One key antecedent to attitude toward advertisement (Aad) is the attitude-toward-advertising-in-general (Ag) construct (Andrews, 1989).

Attitude-toward-advertising-in-general (Ag) has been found to influence the success and effectiveness of a particular advertising campaign. Since Aad has been found to influence consumer brand attitude (Shimp, 1981; Thorson, 1981; Lutz, 1985; MacKenzie et al., 1986; Muehling, 1987; MacKenzie and Lutz, 1989), the influence of Ag on advertising effectiveness is bound to be important. Interest in the Ag construct gained momentum as advertising scholars showed it was an important

determinant of attitude towards the advertisement (Aad) (Lutz, 1985; Mehta and Purvis, 1995). Theoretically, the Ag construct is grounded in consumer beliefs toward advertising in general. Bauer and Greyser (1968) provide evidence that overall attitudes toward advertising in general are influenced by beliefs toward advertising in general. In turn, it is suggested that a relationship exists between consumers' overall attitudes toward advertising and reasons why certain ads are considered informative, enjoyable, annoying, or offensive.

Market segmentation recognizes that markets are heterogeneous and made up of segments, and that marketing strategy involves selecting a target market segment and determining its needs. The variables that determine market segments include: (a) demographic/socioeconomic, (b) behavioral/attitudinal, and (c) psychographic. Demographic/socioeconomic segments are based on income, sex, and age and life-cycle stage. Behavior and attitudinal variables involve the customer characteristics of: (i) rate of usage, (ii) product benefit orientation, (iii) reaction to price, advertising, quality, and service, (iv) brand loyalty, and (v) product

perceptions and preferences. Psychographic segmentation is based on analysis of consumer personality and life style (Unger, 1982). Consumer marketers have realised that geo-demographics seldom provide adequate perspectives of today's complex markets. Instead, psychographic segmentation has revealed more powerful target market insights while providing marketers a springboard for adapting selling propositions and tailoring the marketing mix (James and Art, 2009).

The present study attempts to identify the dimensionality of consumer beliefs toward advertising in general and segment the consumers into groups based upon their attitude toward advertising. The study explores the psychographic, demographic as well as behavioural variables to profile the identified unique segments of consumers.

PREVIOUS RESEARCH

Since the landmark study by Bauer and Greyser (1968), which identified distinct social and economic effects of advertising, many researchers across the world have attempted to study and compare the dimensionality of advertising beliefs. Andrews (1989) investigated several key research issues associated with beliefs toward advertising in general. The study indicates separate economic and social belief dimensions. Pollay and Mittal (1993) conducted a study to identify the factors underlying consumers' attitude towards advertising in general and presented a model depicting the primary structure of belief and attitudes about advertising. Yavas (1997) investigated the dimensionality of advertising attitudes in a non-US setting (Saudi Arabia) and confirmed that dimensions indeed decompose into social and economic effects. Ramprasad and Thurwanger (1998) compared the factor structure of beliefs toward advertising in south Asia and compared it with the United States studies and found similar belief structure. Five south Asian countries studied were Bangladesh, India, Nepal, Pakistan and Sri Lanka. Yang (2000) investigated college students' attitudes towards advertising in Taiwan, applying two advertising constructs- beliefs about advertising and attitudes towards advertising in general (Ag). He also compared the belief factor structure with USA and South Asia. Ashill and Yavas (2005) have examined the similarities and differences in the dimensionality of advertising attitudes between Turkish and New Zealand consumers. The study

finds that advertising attitudes consist of social and economic dimensions in both the countries.

Boote (1984) suggests that psychographic segmentation is increasingly being found to be more meaningful than conventional product usage and demographic segmentation. He has conducted a survey of male owners of automotive tools to segment and to profile the market for this product. Miller and Easterling (1991) have determined the lifestyle dimensions relevant to bank services and also developed a bank user typology. Factor analysis was used to confirm lifestyle dimensions. Two market segments were identified that exhibited distinctive attitudinal differences. Jackie and Susan (1998) have generated the psychographic dimensions of female consumers in Greater China, and also developed a typology of female consumers based on their psychographic patterns. Kumar and Sarkar (2008) have segmented the Indian metropolitan consumers on behavioral aspects to understand their consumption pattern. They used cluster analysis to segment the Indian metropolitan consumers into six behavioral categories, namely 'Well Settled', 'Strugglers', 'Enjoyers', 'Conservatives', 'Self Concerned' and 'Realist'. The segments have been profiled in terms of their product ownership, activities and interests, financial investment avenues and media habits. Narang (2010) has used cluster analysis to identify four psychographic clusters amongst Indian youth in the evolving Indian retail market: 'Get-going Adopter', 'Inner Value oriented Conservative', 'Political and Sport Enthusiast' and 'Independent Life Lover'. Her findings reveal significant psychographic differences among the identified clusters and suggest that it is more meaningful for the marketer to concentrate on two segments, 'Get-going Adopter' and 'Independent Life Lover' that account for 70% of the respondents rather than the other two clusters and design their marketing strategies accordingly.

METHOD

This study is aimed at achieving the following two objectives:

- I. Identification of the belief factors underlying attitude toward advertising in general.
- II. Identification of consumer segments based upon their beliefs about advertising.

The population for the study comprised the general public from 7 North Indian States (Punjab, Jammu &

Kashmir, Himachal Pradesh, Uttar Pradesh, Rajasthan, Haryana and Uttranchal) plus Union Territory of Chandigarh and National Capital Territory of Delhi. A sample of 900 respondents comprising 100 from every State/U.T was selected on the basis of convenience sampling. The data has been collected personally with the help of a well structured and non-disguised questionnaire. After scrutiny of the filled questionnaires, 873 were found to be fit for analysis; others were incomplete or lacked seriousness in response and hence weeded out. People from all strata of society were included in the survey to make the sample more representative. Table 1 gives the description of demographic characteristics of the respondents.

An inventory of 28 belief statements developed by Pollay and Mittal (1993) has been used. These statements are regarding attitude-toward-advertising-in-general and have been presented in the form of a comprehensive model depicting the primary structure of belief and attitudes about advertising.

Statistical Package for Social Sciences, SPSS and Microsoft Excel have been used for data analysis purpose. Factor analysis has been employed to reduce the statements to a few uncorrelated belief dimensions. Cluster analysis has been used to segment the total population into consumer groups uniquely distinct in terms of their beliefs about advertising in general.

TABLE 1. Demographic Characteristics of Respondents

	<i>Number of Respondents</i>	<i>Percentage</i>
Age		
Up to 25 years	368	42.2
25-50 years	418	47.9
Above 50 years	87	10.0
Sex		
Male	458	52.5
Female	415	47.5
Occupation		
Business	109	12.5
Service	354	40.5
Student	267	30.6
Housewife	100	11.5
Retired	26	3.0
Any Other	17	1.9
Education		
Post Graduation and above	308	35.3
Graduation	238	37.6
Matric or	192	22.0
Undergraduate	10	1.1
Below Matric	35	4.0
Any Other		
Income		
Below Rs. 10,000 p.m.	459	52.6
Rs. 10,000-20,000 p.m.	274	31.4
Rs. 20,000-30,000 p.m.	86	9.9
Above Rs. 30,000 p.m.	54	6.2
Family Type		
Joint Family	349	40.0
Nuclear Family	524	60.0
Religion		
Hindu	673	77.1
Sikh	118	13.5
Muslim	52	6.0
Christian	13	1.5
Others	17	1.9

RESULTS AND DISCUSSION

I. Identification of Belief Factors Underlying Attitude-toward-Advertising-in-General

In order to find out the dimensionality of beliefs toward advertising, Exploratory Factor Analysis has been used. Factor analysis has been applied to the responses of all 873 respondents regarding 28 belief statements shown in Table 2, measured on a five point Likert Scale.

To test the suitability of the data for factor analysis, the correlation matrix was computed and examined. This revealed that there were enough correlations to go ahead with factor analysis. Anti image correlations were computed. These showed that partial correlations were low, indicating that true factors existed in the data. Kaiser-Meyer-Olkin measure of Sampling Adequacy (MSA) for individual variables was found to be sufficiently high for all variables. Overall MSA was found to be 0.823 which indicated that the sample was good enough for sampling. Bartlett's Test of Sphericity showed statistically significant number of correlations among the variables (Approx. chi-square=4363.663, df=378, significance=.000). Principal Component Analysis was employed for extracting factors. The number of factors to be extracted was finalised on the basis of 'Latent Root Criterion' i.e. factors having eigenvalues greater than 1 have been selected. Orthogonal rotation with Varimax was run. Rotation converged in 10 iterations. All factor loadings greater than 0.30 (ignoring signs) have been considered for further analysis. Guidelines for identifying significant factor loadings based on sample size suggest considering factor loading of .30 for sample size of 350 or more (Hair et al, 1995, p.385). Six factors were extracted which accounted for 45.88 per cent

of the total variance. The six extracted factors have been given appropriate names on the basis of variables represented in each case. The names of factors, the statement labels and factor loadings have been summarised

in Table 3. On the bases of underlying statements representing these factors, the dimensions have been briefly defined as follows:

TABLE 2. Belief Statements Regarding Attitude toward Advertising in General

<i>LABEL</i>	<i>BELIEF STATEMENT</i>
B1	Advertising is essential.
B2	Advertising is valuable source of product information
B3	In general, advertising is misleading.
B4	Quite often advertising is amusing and entertaining.
B5	Advertising persuades people to buy things they should not buy.
B6	Most advertising insults the intelligence of the average consumer.
B7	From advertising I learn about fashions and about what to buy to impress others.
B8	Advertising helps raise our standard of living.
B9	Advertising results in better products for the public.
B10	Advertising tells me what people with life styles similar to mine are buying and using
B11	Advertising is making us a materialistic society, overly interested in buying and owning things
B12	Advertising tells me which brands have the features I am looking for.
B13	Advertising promotes undesirable values in our society
B14	Sometimes I take pleasure in thinking about what I saw or heard or read in advertisements
B15	Advertising makes people buy unaffordable products just to show off.
B16	In general, advertising results in lower prices
B17	Advertising helps me know which products will or will not reflect the sort of person I am.
B18	In general, advertisements present a true picture of the product advertised.
B19	Sometimes advertisements are even more enjoyable than other media contents
B20	In general, advertising helps our nation's economy.
B21	Mostly, advertising is wasteful of our economic resources
B22	Advertising makes people live in a world of fantasy.
B23	There is too much sex in advertising today.
B24	Because of advertising, people buy a lot of things they do not really need.
B25	In general, advertising promotes competition, which benefits the consumer
B26	Some products/services promoted in advertising are bad for our society.
B27	Advertising helps me keep up to date about products/services available in the market place.
B28	Most advertising distorts the values of our youth.

1. Harmful for Society: This dimension represents the consumers' belief about the harmful/negative implications of advertising for the social fabric. They feel that some products/services promoted in advertising are bad for our society as they distort the values of our youth and make people live in a world of fantasy. They have objections regarding harmful effects of advertising for youth and society in general like- distortion of values, use of sex appeals in advertising and conspicuous buying etc.
2. Good for Economy: The belief of the consumers that advertising helps our nation's economy. They view advertising as a necessity. They do not find advertising

as a waste of economic resources. They find advertising 'good for economy' because it keeps the consumers up to date about product/services and acts as a valuable source of product information. They feel that advertising promotes competition, which benefits consumer.

3. Better Quality of Life: The belief of consumers that advertising helps in raising their standard of living and improving the quality of life. They feel that advertising results in better products for the public. They feel that advertising improves their social role/image by enabling them make proper choices regarding lifestyles and fashions. Advertising guides them in selecting the

products which suit their personality and look impressive to others also.

4. Manipulative: The belief of the consumers that advertising misleads and manipulates the consumers. They feel that advertising is making us a materialistic

society, overly interested in buying and owning things and sometimes persuading people to buy unnecessary things. Advertising insults the intelligence of consumers by playing on their emotions and making them buy the things they should not buy.

TABLE 3. Dimensions of Consumers' Beliefs toward Advertising

Factor Number	Name of Dimension (% of Variance)	Label	Statement (Factor Loading)
Factor 1	Harmful for Society (9.76%)	B26	Some products/services promoted in advertising are bad for our society (.660)
		B28	Most advertising distorts the values of our youth (.622)
		B23	There is too much sex in advertising today (.615)
		B24	Because of advertising, people buy a lot of things they do not really need (.604)
		B22	Advertising makes people live in a world of fantasy (.599)
		B15	Advertising makes people buy unaffordable products just to show off (.478)
		B13	Advertising promotes undesirable values in our society (.443)
Factor 2	Good for Economy (9.46%)	B27	1. Advertising helps me keep up to date about products/services available in the market place (.698)
		B25	2. In general, advertising promotes competition, which benefits the consumer (.597)
		B2	3. Advertising is valuable source of product information (.592)
		B20	4. In general, advertising helps our nation's economy (.520)
		B12	5. Advertising tells me which brands have the features I am looking for (.519)
		B21	6. Mostly, advertising is wasteful of our economic resources (-.502)
		B1	7. Advertising is essential (.443)
Factor 3	Better Quality of Life (8.45%)	B8	1. Advertising helps raise our standard of living (.771)
		B9	2. Advertising results in better products for the public (.636)
		B10	3. Advertising tells me what people with life styles similar to mine are buying and using (.594)
		B7	4. From advertising I learn about fashions and about what to buy to impress others (.588)
		B17	5. Advertising helps me know which products will or will not reflect the sort of person I am (.417)
Factor 4	Manipulative (6.67%)	B5	1. Advertising persuades people to buy things they should not buy (.710)
		B6	2. Most advertising insults the intelligence of the average consumer (.671)
		B3	3. In general, advertising is misleading (.453)
		B11	4. Advertising is making us a materialistic society, overly interested in buying and owning things (.334)
Factor 5	Lower Prices (5.94%)	B16	1. In general, advertising results in lower prices (.700)
		B18	2. In general, advertisements present a true picture of the product advertised (.597)
Factor 6	Hedonic Pleasure (5.60%)	B19	1. Sometimes advertisements are even more enjoyable than other media contents (.686)
		B4	2. Quite often advertising is amusing and entertaining (.590)
		B14	3. Sometimes I take pleasure in thinking about what I saw or heard or read in advertisements (.587)

5. Lower Prices: The belief of consumers that advertising results in lower prices of goods and services by making it feasible to produce in large quantities at lowest possible costs. Their lower prices argument is also

supported by the belief that advertisements present a true picture of the product advertised.

6. Hedonic Pleasure: The belief of the consumers that advertisements provide enjoyment, amusement and entertainment. They feel that sometimes

advertisements give more hedonic pleasure than other media contents. They also derive pleasure in thinking about what they saw or heard or read in advertisements.

These belief dimensions are supposed to determine the attitude of the consumers toward advertising in general.

TABLE 4. Analysis of Agglomeration Coefficient for Hierarchical Cluster Analysis*

Stage	Number of Clusters	Fusion Coefficient	Change in Coefficient to Next Level	Percentage Change
863	10	8.16	0.46	5.63
864	9	8.62	0.27	3.13
865	8	8.89	0.46	5.17
866	7	9.35	0.33	3.52
867	6	9.68	3.88	40.08
868	5	13.56	0.00	0.00
869	4	13.56	0.41	3.02
870	3	13.97	0.53	3.79
871	2	14.50	12.03	82.96
872	1	26.53	-	-

*Euclidean distance with Average Linkages (Between-Groups) method

TABLE 5. Results of Non-hierarchical Cluster Analysis (K-means Clustering)

Mean Values							
Clusters	X_1	X_2	X_3	X_4	X_5	X_6	Cluster Size
Final Cluster Centers (Total Sample, N=873)							
1	3.43	3.77	3.03	3.31	2.38	3.42	388
2	3.54	4.29	4.01	3.42	3.37	4.02	485
Final Cluster Centers (Sub-sample1, N=435)							
1	3.46	3.86	3.09	3.38	2.36	3.42	189
2	3.55	4.31	3.97	3.42	3.34	4.09	246
Final Cluster Centers (Sub-sample2, N=435)							
1	3.41	3.71	3.02	3.22	2.43	3.41	208
2	3.53	4.28	4.06	3.44	3.42	3.99	227

TABLE 6. Segments of Public Differing by Attitudes toward Advertising

Cluster	Segments	% of cases	Global Attitudes (Ag)	X_1 Harmful for Society *	X_2 Good for Economy	X_3 Better Quality of Life	X_4 Manipulative*	X_5 Lower Prices	X_6 Hedonic Pleasure
1	Ad Avoiders	45	3.63	3.43	3.77	3.03	3.31	2.38	3.42
2	Ad Lovers	55	4.28	3.54	4.29	4.01	3.42	3.37	4.02
	Total	100	3.99	3.49	4.06	3.57	3.37	2.93	3.76

*High scores for all cells indicate mean pro-factor agreement, therefore, for these factors unfavourable attitude toward advertising.

II. Segmentation Based on Belief Factors Underlying Attitude-toward-Advertising-in-General

The results of factor analysis suggest following six variates explaining the attitude of respondents toward advertising:

TABLE.7.Results of X^2 between Clusters and Demographics

Variables	Ad Avoiders		Ad Lovers		X^2	p-value	Sig.
	N	%	N	%			
DEMOGRAPHICS							
OCCUPATION					4.744	0.448	-
Business	55	50.5	54	49.5			
Service	161	45.5	193	54.5			
Student	115	43.1	152	56.9			
Housewife	37	37	63	63			
Retired	11	42.3	15	57.7			
Other	9	52.9	8	47.1			
GENDER					1.326	0.249	-
Male	212	46.3	246	53.7			
Female	176	42.4	239	57.6			
INCOME (per month)					4.585	0.205	-
Below Rs.10000	197	42.9	262	57.1			
10000-20000	119	43.4	155	56.6			
20000-30000	41	47.7	45	52.3			
Above Rs. 30000	31	57.4	23	42.6			
AGE					0.245	0.885	-
Below 25 years	160	43.5	208	56.5			
25-50 years	189	45.2	229	54.8			
Above 50 years	39	44.8	48	55.2			
EDUCATION					6.235	0.182	-
Post graduation	142	46.1	166	53.9			
Graduation	143	43.6	185	56.4			
Matric	81	42.2	111	57.8			
Below matric	8	80	2	20			
Any other	14	40	21	60			
FAMILY TYPE					6.342	0.012	p<0.05
Joint family	137	39.3	212	60.7			
Nuclear family	251	47.9	273	52.1			
RELIGION					9.174	0.057	p<0.10
Sikh	65	55.1	53	44.9			
Hindu	294	43.7	379	56.3			
Muslim	18	34.6	34	65.4			
Christian	6	46.2	7	53.8			
Others	5	29.4	12	70.6			
MEDIA EXPOSURE							
Read Newspaper/magazine							
Watch Television	378	44.6	470	55.4	0.206	0.650	-
Listen to Radio	369	43.8	473	56.2	3.694	0.055	P<0.10
Surf Internet	176	43.1	232	56.9	0.530	0.467	-
Read National Daily	202	44.6	251	55.4	0.008	0.928	-
Read Regional Daily	280	44.0	357	56.0	0.228	0.633	-
Read National Magazine	256	43.2	337	56.8	1.216	0.270	-
Read Regional Magazine	196	43.4	256	56.6	0.444	0.505	-
Read Field Specific Magazine	32	47.1	36	52.9	0.204	0.651	-
Watch Movie Channels	111	51.2	106	48.8	5.262	0.022	p<0.05
Watch News Channels	253	43.5	328	56.5	0.568	0.451	-
Watch Entertainment Channels	316	42.9	420	57.1	4.329	0.037	p<0.05
Watch Educational Channels	291	41.6	408	58.4	11.244	0.001	p<0.01
Watch Music Channels	281	42.3	383	57.7	5.073	0.024	p<0.05
	219	39.5	336	60.5	15.334	0.000	p<0.01
AD EXPOSURE							
Take interest in newspaper Ads	297	42	410	58	8.936	0.003	p<0.01
Take interest in magazine Ads	233	39.4	358	60.6	18.671	0.000	p<0.01
Take interest in T V Ads	295	42.4	401	57.6	5.896	0.015	p<0.05
Take interest in Radio Ads	81	35.2	149	64.8	10.767	0.001	p<0.01
Take interest in internet Ads	96	40	144	60.0	2.648	0.104	-
Buy products after watching Ads	195	39.8	295	60.2	9.775	0.002	p<0.01

1. Harmful for Society (X_1)
2. Good for Economy (X_2)
3. Better Quality of Life (X_3)
4. Manipulative (X_4)
5. Lower Prices (X_5)
6. Hedonic Pleasure (X_6)

Since the six belief dimensions (factors) are independent; they can be used to identify the segments with distinguishing belief and attitude profiles; within the given population group. A Cluster Analysis was run to group respondents into relatively homogeneous segments based on their belief profiles, using these six dimensions.

For Cluster Analysis, a composite measure (i.e. average summated scale) for each of these six factors was computed by averaging the scores for their constituent statements. Alternative approach of using factor scores was also considered but it had to be rejected because it captures variance from diverse sources (because of cross-loadings) which impedes conceptual clarity in case of defining the clusters. Secondly, summated scale is easily replicated on subsequent samples whereas exactly comparable factor scores are much harder to compute for other samples (Hair *et al* 1995; p.390).

In the first stage, to identify the number of existing clusters, hierarchical clustering procedure available in the SPSS application program has been employed. The clustering procedure was applied with squared Euclidean distance¹ as the measure of between-groups similarity and the 'average linkage'² method as the clustering algorithm which combines clusters, based upon the average distance between members of the two clusters (Punj and Stewart, 1983; Hair *et al*, 1995; Nargundkar, 2003). This distance is reported as a coefficient for each iterative step, and an examination of the agglomeration schedule for this coefficient shows as to when the successive clusters are being combined into a larger group at an average distance.

It is clear from the Table 4 that hierarchical cluster analysis suggests a 2-cluster solution because the largest

increase (82.96%) in change in percentage of fusion coefficient was observed in going from two to one cluster. Another choice could be 6-cluster solution as next highest change in percentage (40.08%) is for going from six to five clusters. But it is suggested that a manageable number of clusters are in the range of two to five (Hair *et al*, 1995; p.448), we have decided in favour of 2-cluster solution for quick clustering procedure and profiling of the respondents on the basis of beliefs toward advertising in general. Alternatively, the vertical icicle plot³ or the dendrogram⁴ (which provides a rescaled distance measure between various cluster combines at various stages) could also be used to identify the number of clusters existing in the data set. But these measures are not advisable for larger samples (greater than 200), so a 2-cluster solution as determined by agglomeration coefficient is finally decided for next stage.

In the second stage, K-means clustering (quick clustering), a non-hierarchical procedure, was employed using SPSS with predetermined number of clusters (2-clusters) with the results given in Table 5.

Validation and Profiling of Clusters

Validation is required to assure that the cluster solution is representative of the general population and thus is generalisable to other objects and stable over time (Hair *et al* 1995; p.444). One of the more frequently used methods involves dividing the sample in half and carrying on clustering on each half (Punj and Stewart, 1983; p.145). The profiling stage involves describing the characteristics of each cluster to explain how they may differ on relevant dimensions. The procedure involves labeling the clusters and utilising the data (demographic, psychographic and behavioural patterns etc) not previously included in the cluster procedure to profile the characteristics of each cluster. The emphasis is on the characteristics that differ

¹ Euclidean Distance is the most commonly used measure of the similarity between two objects. It is a measure of the length of a straight line drawn between two objects.

² Average Linkage is the agglomerative algorithm using the average distance from all objects (or individuals) in one cluster to all objects in another. At each stage, the two clusters with the smallest average distance are combined. This approach tends to combine clusters with small variances.

³ Vertical Icicle Plot is the graphic presentation of clusters. The numbers of the objects are shown horizontally across the top and the number of clusters is shown vertically down the left side. This plot aids in determining the appropriate number of clusters in the solution.

⁴ Dendrogram is the graphical representation (tree graph) of the results of a clustering procedure in which the vertical axis consists of the objects or individuals and the horizontal axis consists of the objects or individuals and the horizontal axis consists of the number of clusters formed at each step of the procedure.

significantly across the clusters and those that could predict membership in a particular attitude cluster.

For checking the validity of clusters, out of the total sample of 873 respondents, two sub-samples of equal size of 435 each were drawn. K-means clustering procedure was applied separately upon both of them with strikingly similar results as shown in Table 5, thereby establishing the validity of the clusters formed.

Based upon above discussion; clusters have been formed as shown in Table 6. It shows the segments of respondents differing by attitudes toward advertising, based upon the results of K-Means Clustering. It shows that 45 per cent of the respondents belong to cluster-1 and has favourable attitude toward advertising in general (3.63). 55 per cent of the respondents belonging to cluster-2 have highly favourable (4.28) attitude toward advertising in general.

Members of cluster-1 agree that advertisements have some benefits for economy (3.77) and they do get a little

enjoyment and pleasure (3.42) out of advertisements. But they feel that advertising is harmful for society (3.43). They do not agree that advertising results in lower prices (2.38) and they neither agree nor disagree (3.03) that advertising helps in improving the quality of life. Based upon these features, this cluster has been given a label – ‘Ad Avoiders’.

Members of cluster-2 strongly agree (4.29) that advertising is good for the economy. Though they agree that advertisements have harmful implications for society (3.54) and sometimes advertisements are manipulative (3.42), yet they think that advertisements result in lower prices (3.37) of goods/services. They strongly agree that advertising gives them hedonic pleasure (4.02) and helps them in improving the quality of their life (4.01). Based upon these features, this cluster has been given the label – ‘Ad Lovers’.

TABLE 8:Results of t-test

S. No	VARIABLES	Mean Score		t-test	p-value	Sig.
		Ad Avoiders	Ad Lovers			
	I consider advertisements unwelcome interruptions. (intrusion)	3.31	3.27	0.566	0.571	Not Sig.
	I often seek out the advice of my friends regarding which brand to buy (peer group influence)	3.35	3.58	- 3.501	0.000	p<0.01
	My parents and I talk about things we see or hear advertised (parental influence)	3.46	3.80	- 5.669	0.000	p<0.01
	Advertising is not an important issue for me, and I am not bothered about it (salience)	3.17	3.02	2.013	0.044	p<0.05
	I ask my parents for advice about buying things (parental influence)	3.46	3.70	- 3.600	0.000	p<0.01
	I spend a lot of time talking with my friends about products and brands (peer group influence)	2.66	3.14	- 6.286	0.000	p<0.01

Cluster membership has been used as a variable to run cross tabs with demographic and other ordinal variables (Media Exposure and Advertisement Exposure) and chi-square test has been applied to see if cluster membership is significantly associated with any of these variables. Results in this respect are shown in Table 7. Secondly, Independent samples t-test has been applied to psychographic and behavioural variables to find out any significant differences in means of the two clusters, results of which are shown in Table 8.

Table 7 shows that none of the demographic variables except family type and religion are significantly associated

with the lifestyle clusters formed on the basis of attitude toward advertising in general. It is observed that ‘Ad Lovers’ are more likely to belong to the joint family.

Higher percentage of Sikhs is ‘Ad Avoiders’ whereas higher percentage of Hindu and Muslims is ‘Ad Lovers’. Many of the variables related to Media Exposure and advertisement exposure are significantly associated with the clusters. Higher percentage of ‘Ad Lovers’ (56.2%) watches T.V. in comparison with ‘Ad Avoiders’ (43.8%). There is also a significant association between cluster membership and exposure to news, entertainment, educational, and music channels. In all cases, it can be

observed that higher percentage of 'Ad Lovers' watch these channels. However, in case of reading field specific magazines, 'Ad Avoiders' are higher in percentage than 'Ad Lovers' and this association is significant at 5% level of significance. In case of advertisement exposure variables, it can be seen that the exposure of 'Ad Lovers' is more to all types of advertisements in comparison with 'Ad Avoiders' and this association is significant for all types of media except Internet. 60.2 per cent of those who buy products after watching advertisements are 'Ad Lovers' which indicates that 'Ad Avoiders' are less likely to buy products after watching the advertisements and this association is also significant at 0.01 level. The reason is also obvious, as about 70 per cent of 'Ad Avoiders' have experienced that product does not confirm the promise made in the advertisement. However, experience of 'Ad Lovers' is totally opposite. It indicates that one of the factors responsible for consumers' favourable or unfavourable attitude toward advertising is the genuineness of claims made in the advertisements which gets substantiated when consumer purchases and uses the product after getting influenced by its advertisement. If the product does not fulfill the promise made in the advertisement, the consumer turns 'Ad Avoider'.

Table 8 shows that there is no significant difference in mean attitude of 'Ad Avoiders' (3.31) and 'Ad Lovers' (3.27) so far as intrusiveness of advertisements is concerned. Both segments mildly agree that advertisements are unwelcome interruptions. Advertising salience is significantly different for two segments. 'Ad Avoiders' agree (3.17) that advertisement is not an important issue for them and they are not bothered about it. On the other hand, 'Ad Lovers' neither agree nor disagree (3.02) with the statement. Mean scores for 'peer group influence' and 'parental influence' variables are also significantly different. 'Ad Avoiders' do not spend time with their friends in discussing about products/brands and they rarely seek the advice of friends regarding which brand to buy. On the contrary, the buying decision of 'Ad Lovers' is influenced by their peer group. Similarly, buying decision of 'Ad Lovers' is more likely to be influenced by parental communication as compared to 'Ad Avoiders'. 'Ad Lovers' also discuss more about advertisements (3.80) with their parents as compared to 'Ad Avoiders' (3.46) and these differences are significant at 0.01 level.

CONCLUSION

Based upon above discussion, two segments; 'Ad Avoiders' (45%) and 'Ad Lovers' (55%); have been identified with a unique profile of consumers belonging to these segments.

'Ad Avoiders' are less favourable toward advertising. They agree that advertisements are good for economy and they also get some pleasure and enjoyment out of advertisements but they think that advertising is harmful for the culture and value system of society. They do not agree that advertising results in lower prices or helps in improving the quality of life by raising the standard of living or resulting in better products for the public. People in nuclear families or belonging to Sikh religion are more likely to be part of this segment. They do not like watching television and even if they watch T.V., their exposure to news, entertainment, educational and music channels is very low. They tend to read magazines specific to their field only. They do not take interest in advertisements on T.V, radio, newspaper and other media. They do not buy the product after watching the advertisements. Advertisement is not an important issue for them and they are not bothered about it. They do not spend much time with their friends in discussing about products/brands and rarely seek the advice of their friends regarding which brand to buy. They avoid discussing products and advertisements with their parents.

'Ad Lovers' are more favourable toward advertising. They strongly feel that advertising is good for economy as it provides information and promotes competition. They agree that advertising may manipulate and may have harmful effects for society but they also think that advertising lowers the prices of goods. They get a lot of amusement, entertainment, enjoyment and pleasure out of advertisements. They strongly believe that advertisements help them improve the quality of life by communicating about better and suitable products to them. People in joint families or belonging to Hindu or Muslim religion are more likely to be part of this segment. They love to watch T.V. They expose themselves more to news, music, entertainment and educational channels. They take active interest in advertisements on T.V., radio, newspaper and other media. They normally buy the products after watching the advertisements. They buy products after discussion with their friends and parents. They enjoy discussing the advertisements with their friends and parents.

The knowledge about these unique segments of consumers of North India can be used by the marketers to target them effectively.

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