ORIGINAL ARTICLE

RELATIONSHIP BETWEEN SOCIAL FACTORS AND THE FACTORS AFFECTING EFFECTIVENESS OF ADVERTISEMENTS IN PRINT AND ELECTRONIC MEDIA – AN ANALYTICAL STUDY

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Abstract:

Advertisement is a communication whose purpose is to inform potential customers about products and services and how to use and obtain them. Every major medium is used to deliver these messages including: television, radio, movies, magazines, newspapers and internet. It is often placed by an advertising agency on behalf of a company. Advertisements influence our lives in many unsuspecting ways because of rapid changes in the macro environment. These days advertising is regarded as a paid form of non-personal presentation of ideas, goods and services by an identified sponsor testing or evaluation of advertising effectiveness refers to the managerial exercise aimed at relating the advertising results to the established standards of performance and objectives so as to assess the real value of the advertising performance.

INTRODUCTION

Advertisements are presented to large audience through various means called advertising media. The types of media for advertisement are endless ranging from banner and balloons to online and mobile advertising different types of messages may require different media (S.H.H. kazmi and Satish K. Batra, 2006). Thus, the types of media from which the advertisers can choose include the following:

Print media – Newspapers, Magazines, Journals, yellow Pages and Newsletters.
Electronic Media – Radio, Television, Web, E-Mail and mobile phones, Outdoor media – film, hoardings and Balloons.
These different types of media do have a different balance of the three factors of advertising – Everyday culture, entertainment and information delivered in an ethical way (Sally Ford Hutchinson and Annie Rothwell, 2002). Although, these media related factors determines the effectiveness of advertisements, several other factors from the point of view of the audiences such as their socio-economic characteristics, behavioural changes etc influences to a greater extent. Thus, this paper focuses on the relationship between social factors of the audience and the effectiveness of the advertisements in print and electronic media.

REVIEW OF LITERATURE

There are numerous works pertaining to advertising research which are reviewed and the results supports the current research on the effectiveness of advertisements in print and electronic media. Initially, Jack.M. Mogg (1974) has devised a mathematical model for assessing media effectiveness by means of network flow graphs. As per his mathematical model, network flowgraphs provide a formalized approach to judgemental assessment of media effectiveness. It is also logically consistent because it is based upon

well established mathematical concept. Although it may seem realistic, subjective direct assessment of media effectiveness is essential for successful conclusions.

Whereas, Howard (1989) explored the role of advertising content in advertising effectiveness and argued that more the pleasure, arousal and dominance in the advertising content, more will be its effectiveness. Thus, advertising will be more effective if it creates pleasure and arousal among the consumers. However, the studies by Berthon et al. (1996) suggested that Media effectiveness should be evaluated according to the objective of the advertisement presented in the media. However, some media may be effective for generating attention towards a product; others may be more effective for persuasion. Hence, different media are suited for specific tasks depending on the objective of the advertisement campaign.

Also, Chia-Ching Tsai and Ming-Hung Tsai (2006) investigated the impact of message framing and involvement on advertising effectiveness. They found that negatively framed messages were more effective than positively framed messages under high involvement conditions, but reverse outcomes had been obtained under low involvement conditions. Further, Herbjorn Nysveen and Einar Breivik (2006) compared the effectiveness of internet advertisements (pop-ups), print advertisements (posters) and radio advertisements. Their results indicate that both advertising media and the relative quality of the advertisements presented in the various media influence the effectiveness of the advertisements. Also, Internet and posters were found to be a more effective advertising media than radio.

Thus, the critical review of these literatures served the strong foundation for formulation of the present research problem and framing the objectives of the study which are elaborated in the following methodology part.

METHODOLOGY

The present study is an analytical study using primary data to investigate the objectives and testing the hypotheses. A well-structured questionnaire was used to collect the primary data. The data used for the purpose of this study were collected for a period of 6 months from 1st January 2012 to 31st June 2012.

STATEMENT OF THE PROBLEM

There are various factors which decide the effectiveness of advertisements in print and electronic media. The factors such as Reachability, understandability, Attractiveness, Attention, promptness to follow, real time demonstration and appearance of celebrity have different levels of influence in the effectiveness of advertisements in print and electronic media. The social factors of the audience such as age, gender, educational qualification, etc., are also plays an important role in deciding the effectiveness of advertisements in print and electronic media. Hence, the present research problem was stated to answer the following research questions:

Do the factors influencing effectiveness of advertisements in print and electronic media differ to a great extent?
Whether the social factors play a significant role among the factors influencing effectiveness of advertisements in print and electronic media?

OBJECTIVES OF THE STUDY

To analyze socio-economic characteristics of the respondents
To compare the factors influencing effectiveness of advertisements in print and electronic media.
To study the influence of gender on factors influencing effectiveness of advertisements in print and electronic media.

SAMPLING TECHNIQUE

The geographical area of Dharmapuri District was used as the sample area. The main reason for choosing Dharmapuri District is that it has equal number of urban and rural customers. The Questionnaire was administered in person randomly to a majority of respondents in the study area after oral confirmation that they are the audience for at least two of the media under study. Also, Snowball Sampling Technique was used to collect data from respondents who are stationed far away from the researcher. On this basis the questionnaire was administered to 180 respondents with a yielding rate of 83.3 % (150 usable Questionnaires).

STATISTICAL TOOLS APPLIED FOR ANALYSIS

The techniques used for analysis are Frequency analysis, Chi-Square test, Wilcoxon signed rank test, Mann Whitney U test

ANALYSIS AND INTERPRETATION

The results from statistical analysis are tabulated and interpreted. The objective wise analyses are presented in this section of the chapter.

Objective 1: Analysis on Socio-economic characteristics of the respondents

The various socio-economic characteristics of the respondents including age, gender, marital status, nature of family, monthly income, educational qualifications and area of residence were subjected to statistical analysis and the results are tabulated.

TABLE 1 AGE GROUP-WISE CLASSIFICATION OF THE RESPONDENTS

Sl.No	Age	Frequency	Percentage	Cumulative Percentage	Chi-Square (Sig at 5% level)
1	Below 35 years	66	44.0	44.0	
2	35 – 45 years	19	12.7	56.7	63.000
3	45-55 years	33	22.0	78.7	df=4
4	55-65 years	22	14.7	93.3	p=0.000
5	Above 65 years	10	6.7	100.0	
	Total	150	100.0		

It is clear from Table 1 that 44% of the respondents are under 35 years of age, 12.7% are between 35 and 45 years of age, 22% of them are between 45 and 55 years of age, 14.7% of them are between 55 and 65 years of age and 6.7% of the respondents are above 65 years. Thus, majority of the respondents belong to the age group of below 35years. Further, the test of significance using Chi-Square test (Chi-Square = 63; df=4; p=0.000) revealed that the respondents differ significantly based on age.

TABLE 2 GENDERWISE CLASSIFICATION OF THE RESPONDENTS

Sl.No	Gender	Frequency	Percent	Cumulative Percent	Chi-Square (Sig at 5% level)
1	Male	107	71.3	71.3	27.307
2	Female	43	28.7	100.0	df=1
	Total	150	100.0		p=0.000

It is evident from Table 2 that, 71.3% of the respondents are male and the remaining 28.7% of them are female. Thus, the majority of the respondents are male. Further, the chi square test (Chi-Square = 27.307;df=1;p=0.000) reveals that the respondents differ significantly by gender.

TABLE 3 AREA OF RESIDENCE WISE CLASSIFICATION OF THE RESPONDENTS

Sl.No	Area of Residence	Frequency	Percent	Cumulative Percent	Chi-Square (Sig at 5% level)
1	Rural	101	67.3	67.3	96.160 $df=1$ p=0.000
2	Urban	49	32.6	100.0	
	Total	**150**	**100.0**		

It is proved from Table 3 that 67.3% of the respondents reside in rural areas and the remaining 32.6% of the respondents reside in urbanized areas. Thus majority of the respondents are from rural areas. Further, there is a significant difference in the respondents according to their place of residence as depicted by the significant chi-square value (96.160;p=0.000;df=1).

TABLE 4 CLASSIFICATIONS OF THE RESPONDENTS BASED ON THEIR EDUCATIONAL LEVEL

Sl.No	Educational Level	Frequency	Percent	Cumulative Percent	Chi-Square (Sig at 5% level)
1	Upto School level	24	16.0	16.0	73.800 $df=4$ p = 0.000
2	UG	30	20.0	36.0	
3	PG	70	46.7	82.7	
4	Professional	13	8.7	91.3	
5	Others	13	8.7	100.0	
	Total	**150**	**100.0**		

It can be inferred from table 4 that 16% of the respondents have completed only their school education, 20% of them have completed their UG degrees, 46.7% of the respondents have completed their PG degrees and 8.7% of the respondents have completed their professional degrees. Thus, majority of the respondents have completed PG degrees. The test of significance using Chi-square test (Chi-Square=73.80;df=4;p=0.000) reveals that there is a significant difference in the respondents according to their educational qualifications.

Objective 2: To compare the factors influencing effectiveness of advertisements in print and electronic media

To analyze this objective, Wilcoxon signed rank test, were used and the results are tabulated below.

TABLE 5 COMPARISON ON FACTORS INFLUENCING EFFECTIVENESS OF ADVERTISEMENTS IN PRINT AND ELECTRONIC MEDIA

Electronic Media-Print media	Ranks	N	Mean Rank	Sum of Ranks	Result	Z	Asymp. Sig. (2-tailed)
Reachability	Negative Ranks	51	53.93	2750.50	Electronic media<Print media	-.433	0.000
	Positive Ranks	51	49.07	2502.50	Electronic media >Print media		
	Ties	48	-	-	Electronic media=Print media		
	Total	150	-	-			
Understandability	Negative Ranks	61	41.22	2514.50	Electronic media<Print media	-1.995	0.000
	Positive Ranks	29	54.50	1580.50	Electronic media >Print media		
	Ties	60	-	-	Electronic media=Print media		
	Total	150	-	-	-		
Attractive ness	Negative Ranks	67	50.19	3362.50	Electronic media<Print media	-1.964	0.000
	Positive Ranks	38	57.96	2202.50	Electronic media >Print media		
	Ties	45	-	-	Electronic media=Print media		
	Total	150	-	-	-		
Attention	Negative Ranks	68	63.99	4351.00	Electronic media<Print media	-.388	0.000
	Positive Ranks	61	66.13	4034.00	Electronic media >Print media		
	Ties	21	-	-	Electronic media=Print media		
	Total	150	-	-	-		
Promptness to follow	Negative Ranks	45	42.22	1900.00	Electronic media<Print media	-2.349	0.000
	Positive Ranks	56	58.05	3251.00	Electronic media >Print media		
	Ties	49	-	-	Electronic media=Print media		
	Total	150	-	-	-		
Real-time demonstration	Negative Ranks	67	47.11	3156.50	Electronic media<Print media	-.830	0.000
	Positive Ranks	50	74.93	3746.50	Electronic media > Print media		
	Ties	33	-	-	Electronic media=Print media		
	Total	150	-	-	-		
Appearance of celebrity	Negative Ranks	61	48.84	2979.00	Electronic media<Print media	-1.172	0.000
	Positive Ranks	55	69.22	3807.00	Electronic media > Print media		
	Ties	34	-	-	Electronic media=Print media		
	Total	150	-	-	-		

Table 5 presents the comparative analysis of the importance of different factors influencing effectiveness of advertisements in Print and Electronic media. Reachability is equally important in influencing effectiveness of advertisements in both Print and Electronic media as Number of negative (51) and positive rank (51) with a slight deviation in the mean ranks. Further, reachability is significant in influencing effectiveness of advertisements in print and electronic media as indicated by the significant 'z' value (-.433;p=0.000).

The factor understandability has higher influence on the effectiveness of advertisements in print media than electronic media as the number of negative ranks (61) are more than the number of positive

ranks (29). Further, understandability is significant in influencing effectiveness of advertisements in print and electronic media as indicated by the significant 'z' value (-1.995;p=0.000).

Similarly, the factor attractiveness has higher influence on the effectiveness of advertisements in print media than electronic media as the number of negative ranks (67) are more than the number of positive ranks (38). Further, understandability is significant in influencing effectiveness of advertisements in print and electronic media as indicated by the significant 'z' value (-1.964;p=0.000).

The factor attention has higher influence on the effectiveness of advertisements in print media than electronic media as the number of negative ranks (68) are more than the number of positive ranks (61). Further, attention is significant in influencing effectiveness of advertisements in print and electronic media as indicated by the significant 'z' value (-0.388;p=0.000).

On the other hand, the factor promptness to follow has higher influence on the effectiveness of advertisements in electronic media than print media as the number of negative ranks (45) is lesser than the number of positive ranks (56). Further, promptness to follow is significant in influencing effectiveness of advertisements in print and electronic media as indicated by the significant 'z' value (-2.349;p=0.000).

But, the factor real time demonstration has higher influence on the effectiveness of advertisements in print media than electronic media as the number of negative ranks (67) are more than the number of positive ranks (50). Further, real time demonstration is significant in influencing effectiveness of advertisements in print and electronic media as indicated by the significant 'z' value (-0.830;p=0.000).

Similarly, the factor appearance of celebrity has higher influence on the effectiveness of advertisements in print media than electronic media as the number of negative ranks (61) are more than the number of positive ranks (55). Further, appearance of celebrity is significant in influencing effectiveness of advertisements in print and electronic media as indicated by the significant 'z' value (-1.172;p=0.000).

Objective 3: To study the influence of gender on factors influencing effectiveness of advertisements in print and electronic media

To test the objective to study the influence of gender on factors influencing effectiveness of advertisements in print and electronic media Mann Whitney U test was used and the results are tabulated below:

TABLE 6 INFLUENCE OF GENDER ON THE VARIOUS FACTORS OF EFFECTIVENESS OF ADVERTISEMENTS IN PRINT AND ELECTRONIC MEDIA

Factors	Gender	N	Electronic Media		Print media	
			Mean Rank	Sum of Ranks	Mean Rank	Sum of Ranks
Reachability	Male	107	79.87	8546.00	74.50	7971.00
	Female	43	64.63	2779.00	78.00	3354.00
	Total	150	-	--	-	-
Understandability	Male	107	82.68	8846.50	79.25	8479.50
	Female	43	57.64	2478.50	66.17	2845.50
	Total	150	-	-	-	-
Attractiveness	Male	107	74.10	7928.50	75.90	8121.00
	Female	43	78.99	3396.50	74.51	3204.00
	Total	150	-	-	-	-
Attention	Male	107	74.85	8008.50	78.99	8451.50
	Female	43	77.13	3316.50	66.83	2873.50
	Total	150	-	-	-	-
Promptness to follow	Male	107	72.22	7727.50	73.23	7835.50
	Female	43	83.66	3597.50	81.15	3489.50
	Total	150	-	-	-	-
Real time demonstration	Male	107	70.41	7534.00	74.54	7976.00
	Female	43	88.16	3791.00	77.88	3349.00
	Total	150	-	-	-	-
Appearance of celebrity	Male	107	76.26	8159.50	70.97	7593.50
	Female	43	73.62	3165.50	86.78	3731.50
	Total	150	-	-	-	-

Table 6 presents the Mann Whitney U test results on the influence of gender over factors influencing effectiveness of advertisements in print and electronic media. It is clear from the table that Male

respondents (Mean rank=79.87) have opined that reachability to be a more important factor in electronic media than the female respondents (Mean rank= 64.63) as depicted by the mean ranks. But, female respondents (mean rank=78.00) have stated that reachability to be a more important factor in print media than the male respondents (Mean rank= 74.50) as depicted by the mean ranks.

The same trend is seen in the case of Understandability also. It is clear that Male respondents (Mean rank=82.68) have opined that reachability to be a more important factor in electronic media than the female respondents (Mean rank= 57.64) as depicted by the mean ranks. On the other hand, male respondents (mean rank=79.25) have stated that reachability to be a more important factor in print media than the female respondents (Mean rank= 66.17) as depicted by the mean ranks.

On the other hand, female respondents (Mean rank=78.99) have opined that attractiveness to be a more important factor in electronic media than the male respondents (Mean rank= 74.10) as depicted by the mean ranks. But, male respondents (mean rank=75.90) have stated that attractiveness to be a more important factor in print media than the female respondents (Mean rank= 74.51) as depicted by the mean ranks.

The same trend is seen in the case of the factor attention. Female respondents (Mean rank=77.13) have opined that attention to be a more important factor in electronic media than the male respondents (Mean rank= 74.85) as depicted by the mean ranks. But, male respondents (mean rank=78.99) have stated that attention to be a more important factor in print media than the female respondents (Mean rank= 66.83) as depicted by the mean ranks.

In the case of promptness to follow female respondents (Mean rank=72.22) have opined that promptness to follow to be a less important factor in electronic media than the male respondents (Mean rank= 83.66) as depicted by the mean ranks. Similarly, Female respondents (Mean rank=81.15) have opined that promptness to follow to be a more important factor in print media than the male respondents (Mean rank= 73.23) as depicted by the mean ranks.

The same trend is seen in the case of the factor real time demonstration. Female respondents (Mean rank=88.16) have opined that real time demonstration to be a more important factor in electronic media than the male respondents (Mean rank= 70.41) as depicted by the mean ranks. Similarly, Female respondents (Mean rank=77.88) have opined that promptness to follow to be a more important factor in electronic media than the male respondents (Mean rank= 74.54) as depicted by the mean ranks.

Finally, Male respondents (Mean rank=76.26) have opined that appearance of celebrity to be a more important factor in electronic media than the female respondents (Mean rank= 73.62) as depicted by the mean ranks. But, female respondents (mean rank=86.78) have stated that appearance of celebrity to be a more important factor in print media than the male respondents (Mean rank= 70.97) as depicted by the mean ranks.

The test of significance of the influence of gender over factors determining effectiveness of advertisements in Print and Electronic media is presented in table 4.26.

TABLE 7 TEST OF SIGNIFICANCE ON THE INFLUENCE OF GENDER TOWARDS FACTORS DETERMINING THE EFFECTIVENESS OF ADVERTISEMENTS IN PRINT AND ELECTRONIC MEDIA

Media	Factors	Mann-Whitney U	Wilcoxon W	Z	Asymp. Sig. (2-tailed)
Electronic media	Reachability	1833.000	2779.000	-1.997	.046
	Understandability	1532.500	2478.500	-3.240	.001
	Attractiveness	2150.500	7928.500	-.632	.000
	Attention	2230.500	8008.500	-.295	.000
	Promptness to follow	1949.500	7727.500	-1.520	.000
	Real time demonstration	1756.000	7534.000	-2.310	.021
	Appearance of celebrity	2219.500	3165.500	-.348	.000
Print media	Reachability	2193.000	7971.000	-.475	.000
	Understandability	1899.500	2845.500	-1.705	.008
	Attractiveness	2258.000	3204.000	-.181	.000
	Attention	1927.500	2873.500	-1.585	.000
	Promptness to follow	2057.500	7835.500	-1.036	.000
	Real time demonstration	2198.000	7976.000	-.446	.000
	Appearance of celebrity	1815.500	7593.500	-2.161	.031

The z scores and p value for the factors reachability (z=-1.987;p=0.046), understandability (z=-3.240;p=0.001), attractiveness (z=-0.632;p=0.000), attention (z=-0.295;p=0.000), promptness to follow (z=-1.520;p=0.000), real time demonstration (z=-2.310;p=0.021) and appearance of celebrity (z=-0.348;p=0.000) reveals that all the factors determining effectiveness of advertisements in electronic media are significantly influenced by gender.

Similarly, the z scores and p value for the factors reachability (z=-0.475;p=0.000), understandability (z=-1.705;p=0.008), attractiveness (z=-0.181;p=0.000),attention (z=-1.585;p=0.000), promptness to follow (z=-1.036;p=0.000), real time demonstration (z=-0.446;p=0.000) and appearance of celebrity (z=-2.161;p=0.031) reveals that all the factors determining effectiveness of advertisements in print media are significantly influenced by gender.

FINDINGS AND IMPLICATIONS

· It is found that, gender influences the factors reachability, Understandability, attractiveness, attention, promptness to follow, real time demonstration and appearance of celebrity for effectiveness of advertisements in print and electronic media. But, there is no high level of influence among the female respondents. Hence it is suggested to develop advertisements which also influence the female audiences of both print and electronic media.

· Further, the male respondents are not influenced very much by the advertisements in print media. Hence, it is suggested that the advertisements in print media should be given with attractive caption and colorful layout so as to attract the male readers of the print media.

· Also, it is found that, reachability is equally important in influencing effectiveness of advertisements in both Print and Electronic media. Hence, it is suggested that the advertisements can be given in either media based on the nature of product.

· They present study reveals that advertisements in electronic media are more understandable and hence it is suggested to develop advertisements in electronic media which are more understandable, attentive and attractive along with real time demonstration and celebrity appearance.

· Finally, it is found that all the factors influence the effectiveness of advertisements in electronic media but to a lesser extent to print media. Hence, a detailed study on the factors that captures attention of the respondents towards advertisements in print media should be performed.

CONCLUSION

Thus, the present study reveals that gender influences the factors such as reachability, understandability, attractiveness, attention, promptness to follow, real time demonstration and appearance of celebrity for effectiveness of advertisements in print and electronic media. Further, the study also reveals that the advertisements are more effective in electronic media than the print media. The electronic media is more attentive and an interactive medium for audience. However, the advertisements in print media can be used as an evidence and or reference source for recalling and recognizing of advertisements at any point of time while decision for purchase of the product.

REFERENCES

·Berthon. P., L. F. Pitt and R. T. Watson (1996), The World Wide Web As An Advertising Medium, Journal of Advertising Research, 36(1), pg. 43-55.
·Chia-Ching Tsai, Ming-Hung Tsai(2006), The Impact of Message Framing and Involvement on Advertising Effectiveness - The Topic of Oral Hygiene as an Example, The Journal of American Academy of Business, Cambridge, 8(2) pg. 222-226.
·Herbjorn Nysveen and Einar Breivik (2005), The influence of media on advertising effectiveness A comparison of internet, posters and radio, International Journal of Marketing Research Vol. 47 (4) pg.383-386.
·Howard. J. (1989), Consumer Behavior in Marketing Strategy, Englewood Cliffs, NJ:Prentice Hall.
·Jack.M. Mogg & Ben M. Enis, (1974), Assessing media effectiveness via Network Flowgraphs, Journal of Advertising, 3, 000003, pg.35.
·S.H.H. Kazmi and Satish K. Batra, (2006), Advertising and Sales Promotion, Excel Books, New Delhi. pg. 13-18; 280-281; 287-288; 326-327.
·Sally Ford Hutchinson and Annie Rothwell (2002), The Public perception of Advertising in today's society, a report on the findings from a research study prepared for the advertising standards authority, London.