International Journal of Marketing and Business Communication
7 (4) 2018, 1-11
http://publishingindia.com/ijmbc/

Devastating the Quality Time of TV Viewers by Encroachments of TV Advertisements in India

Muthusamy Sabesh Manikandan*, Ganesan Thangadurai, R. Manohar*****

Abstract

Television has brought about a revolution in everybody's lives, and has become an integral part of our lives. In fact, it is popular and indispensable only next to the basic necessities – food and shelter. The number of TV owned households in India increased to 183 million in 2017. Out of these 183 million households, 99 million households are in rural India and 84 million households in urban India, and the advertisements reaches about 75 per cent of the population through television. Certain television programs enjoy a viewership of more than 100 million. In India, the cable TV industry exploded in the early 1990s, when the broadcast industry was liberalized. Further it envisaged the entry of many foreign players viz., Star TV Network in 1991, MTV, and others. In 1992, Government of India liberalized its market by the way of new economic reforms and it opened-up avenues to the cable television. In this regard, TRAI regulated that the broadcasters are restricted to broadcast the advertisements on their channels to a maximum of 12 minutes in any given clock hour. However, the advertisements exceed the prescribed time limit, that is devastating the quality-viewing time. The study reveals that people in India will lose on an average 1.4 years over the span of their life time by the incursion of TV advertisements.

Keywords: TV Advertisements, TV Commercial Time, Viewer's Quality Time, Devastation of Time, Loss of Life

Introduction

Television has brought about a revolution in everybody's lives and become an integral part of our lives. In fact, it is popular and indispensable only next to the basic necessities – food and shelter, as well as the most important mass media tool in the digitalized era. It has a sophisticated advantage ahead of any other medium as it combines the visual and auditory stimulation, it is one of the most powerful means of mass communication and also imparts information, educates and entertains the people. Television creates a magic which allows us to watch the world from our drawing rooms that helps to create intense impressions in our minds. However, the fast-changing world of technology is reflected in the changing pattern of media consumption. The enhanced creativity of the advertising through interesting camera angles, realism and the combination of pictures and words is instantly exciting. Television advertisement establishes an intense corporate image. These qualities made the producers to shift their advertisements to TV media from any other media. It forms the largest segment of the Entertainment and Media Industry in India. Indians are consuming information and entertainment across media. Advertisements in India reach about 75 per cent of the population through television. Certain television programs enjoy a viewership of more than 100 million.

Commercial TV Advertisements

The term advertisement refers to '*public announcement*' (Beasley & Danesi, 2002). It is mainly used to communicate the business information to the present and prospective consumer, as well as provides information about the firm, features of its products, qualities, place, availability, benefits and different schemes offered etc.

* *Assistant Professor, Department of Economics, Ayya Nadar Janaki Ammal College (Autonomous), Sivakasi, Tamil Nadu, India. Email: sabeshmanikandan@gmail.com*
** *Assistant Professor, Department of Commerce, Ayya Nadar Janaki Ammal College (Autonomous), Sivakasi, Tamil Nadu, India. Email: gt.durai@gmail.com*
*** *Associate Professor, Post-Graduate, Department of Commerce (PG), Ayya Nadar Janaki Ammal Janaki College (Autonomous), Sivakasi, Tamil Nadu, India. Email: gt.durai@gmail.com*

Advertising messages are paid form by sponsors and viewed via various mass media.

The very first TV commercial appeared in 1941 during a baseball game on a local channel in New York for ten seconds[1]. Followed by the success of this advertisement, others such as Gimbel's Department Store, Pan American World Airways etc., fell into this new advertisement media. Moreover a significant change was made on TV advertising in 1950s. Successively the companies[2] began to sponsor the entire programs that displayed their products either directly or indirectly and this sponsored programs were gone out of fashion in the 1960s. At this juncture, a new model by the National Broadcasting Company (NBC)[3] which reshaped the commercial broadcasting format and philosophy that an hour-long program had nine minutes of advertising, with most commercials lasting between 30 and 60 seconds. It reveals that a single program could have between nine and eighteen sponsors (instead of one advertiser covering the entire program cost). By the 1990s, there were major change in television advertising that a typical hour-long program contained up to 19 minutes of advertising space. The broadcasters are capitalizing this circumstance by dumping the advertisements on viewers even though the audience were eager to enjoy their programs uninterruptedly, TV advertisements rapidly invaded into the viewers' time.

Review of Literature

Gurleen and Sukhmani (2011) indicated that 41.2 per cent respondents watch 3–5 hours of television. Further, they found 38.6 per cent of males and 43.7 per cent of females watch TV for 3–5 hours daily. Ravi and Devadas (2012) found that majority of the women belong to the age group of 18–28 followed by the 29–38 age groups. They indicated that the duration of TV viewing varies from more than eight hours a day and less than three hours a day respectively.

Aggarwal (1993) revealed that more than three fourth of the respondents watch cable TV keeping in view their convenience, 28 per cent are adolescents and 26.53 per cent youngsters take out special time. Further, he observed that 76.92 per cent of children and 84 per cent of adolescents prefer to watch T.V. in the evening. A majority of 60 per cent of the adolescents and 46.15 per cent of children were having the habit of watching TV in the late night to watch movies. Anjum (2004) found that a large number of the college and university students have their own access to cable TV. A vast majority of the youngsters spend 3–4 hours a day to watch cable television programs in Pakistan. Ahluwalia and Singh (2011) found in their study that on an average, children watch TV about 2 hours per day and most of them indulge in bedtime, in Punjab.

Saiganesh and Parameswaran (2012) revealed that most of the advertisements are watched in the prime time and the media charges to be appeared in prime time are also high. Audiences do watch the advertisements, if they are attractive and are welcomed by respondents.

Altas and Oztunc (2013) stated that watching the commercials depends on the choice of the viewer. Most of the television viewing takes place during "Prime Time", unfortunately many viewers wish to move to other channels when commercials start. The television viewers' demographic characteristics may indicate the likelihood of the zapping frequency.

Singh and Arora (1992) found that vital role of television programs especially in family planning, women's right, equality, dowry evils and environment improvement etc. It enhances the awareness more than action. Only those advertisements are effective which are small, lively and deals with youth's immediate psychological needs. Kumar (2002) revealed that majority of the respondents belongs to 13–15 years age group and respondents from 16 to 18 years age group used to watch TV at night. Majority of the respondents were heavy television viewers, preferred to watch television during their meals as compared to light television viewers. After the exposure to television 31.6 per cent of the respondents said that, they directly come home to watch television. Further, he indicated that 85.9 per cent of the respondents felt that television had positive contribution in their lives. Majority of male respondents

[1] Bulova watch was the first brand to air a legal TV commercial for 10 seconds in the afternoon of July 1, 1941 at a cost of $4.

[2] Kraft, Colgate, and General Electric were only a few of the companies that took advantage of this trend and sponsored their own shows.

[3] It is an American English language commercial broadcast television network, the NBC executive Sylvester "Pat" weaver came up with a novel solution that produce the show itself and sell brief spots (during the program break) to various advertisers.

as compared to female respondents said that television watching was substitute for loneliness. Chauhan (2001) found that there was a change in the sleeping timings, study timings, also the visiting, and the entertaining the guests as a result of TV watching habit.

Statement of the Problem

The growth of television and the TV watching in developing countries during the recent past has been extraordinary. Consequently TV watching is not only dominated the leisure time but also reduces the working hours. According to an estimate, there are 1.34 billion[4] TV households in the world (Tekcarta, 2017). Out of this, 53 per cent of the TV households were in Asia followed by 21 per cent were in European countries. Remaining 10 per cent, 9 per cent and 7 per cent of the TV households are in Caribbean countries, USA and African countries respectively. Similarly, the number of television sets in Asia has increased tremendously to 714 million in 2017 from 100 million during the 1980s. The various time use studies reveals that an American spent an average of 16 hour a week or 2.1 hour a day, in front of the TV (Bittman, 1998; Robinson & Godbey, 1999; Gershuny, 2000; Goodin, Rice, Bittman, & Saunders, 2005; Aguiar & Hurst, 2007). Similarly, on an average, Europen spend 226 minutes a day and it amounts to 297 minutes per day in USA. Yet the same trends can be observed for other industrialized countries[5].

India, the second largest television market with 168 million TV households after China. According to 2011 census, 47.2 per cent of the Indian homes are furnished with TV, but it was 36.1 per cent in 2001. A highest percentage of TV-ownership registered in Delhi (88 per cent) followed by Tamilnadu (87 per cent). The highest proportion of TV-ownership ranges in between 47.4 per cent (Manipur) and 88 per cent (Delhi). The below national average proportion ranges in between 47.2 (Dadra and Nagar Haveli) and 14.5 per cent as very low in Bihar. The number of TV owned households in India increased to 183 million in 2017. Out of these 183 million households, 99 million households are in rural India and 84 million households in urban India. The television industry in India was Rs. 588.3 billion in 2016. The subscription revenue growth at an annual growth rate of 16 per cent is expected to outpace the advertising revenue with annual revenue growth of 14 per cent, on account of improving monetization due to digitization.

In India, the cable TV industry exploded in the early 1990s, when the broadcast industry was liberalized. Further it envisaged the entry of many foreign players viz., Star TV Network in 1991, MTV, and others. In 1992, Government of India liberalized it markets by the way of new economic reforms and it opened-up avenues to the cable television. As a result, five new channels viz., MTV, STAR Plus, Star Movies, BBC and Prime Sports belonging to the Honk Kong based STAR TV gave a fresh breath of life to Indians. Similarly, the Sun TV (India) was launched as the first private channel in South India during the same period. Zee TV was the first private owned Indian channel to broadcast over cable. By 2001, HBO and History Channel were the other international channels to enter India. The paid Cable and Satellite subscriber base is expected to be Rs. 171 million by 2021, representing 84.23 per cent of TV households (KPMG, 2017). Under these circumstances the scope of TV commercial is mounting in a clock hour, therefore it invades in to the programs. Consequently viewers are persuaded to watch TV commercials and their quality watching time is also being exploited. Henceforth, TRAI[6] is an autonomous legal body which undertakes the responsibility to regulate the TV broadcasting and its commercials.

TRAI has notified the regulation of "Standards of Quality of Service"[7] that the duration of advertisements being carried in TV channels is closely related to the quality of viewing experience of the consumers which is akin to the quality service being offered by the service providers. In order to ensure the quality of service and the interests of the consumer protection, this regulation mandates the

[4] Tekcarta, 2017, https://www.nakono.com/tekcarta/databank/tv-households-total-number/

[5] Denmark, The Netherlands, Finland, Italy, Belgium, Sweden, Germany (East and West), Czechoslovakia, Great Britain, Norway, Poland, France, Yugoslavia, Bulgaria, Hungary, Canada, USA and Australia.

[6] Telecom Regulatory Authority of India (TRAI) was, thus, established with effect from 20th February 1997 by an Act of Parliament, called the Telecom Regulatory Authority of India Act, 1997.

[7] Standards of Quality of Service (Duration of Advertisements in Television Channels) (Amendment) Regulations, 2013 (3 of 2013).

broadcasters to restrict the duration of advertisements in their channels to a maximum of 12 minutes in any given clock hour[8] as prescribed in the existing rules[9].

Further, TRAI notified a significant limits on advertisements on television that only 12 minutes[10] of advertising on a broadcast channel in an hour which including house advertisement. Any shortfall in advertisements may not be carried over. The Time gap between advertisements breaks and programming should be at least 15 minutes, except if it is a live sporting event. In case it's a film being broadcasted, the break will be 30 minutes. During the live broadcast of a sporting event, advertisement only in breaks. It regulate that only the full screen advertising is allowed. No popups, part screen advertisement or drop down advertisements. With this background the present study made an attempt the analyse the encroachment of TV advertisements devastating the time by broadcasting the TV advertisement at a micro level experience in the selected villages of Sivkasi block in Virudhunagar District of Tamilnadu with the following objectives.

Objectives

- To examine the time incursion of TV Advertisements in the study area;
- To analyse the relationship among the socio-economic factors and the duration of the TV advertisements; and
- To find out the devastation of the time by the TV advertisements.

Nature and Scope of the Study

The present study examines the durations of TV commercials and the TV viewers time. The penetration of TV and its markets exploits quality of viewer's time. The impact of the TV advertisements, more specifically on the TV watching is dealt and analyzed by appropriate statistical tools. Hence, the present study is positive study in character. Moreover, the study examines the existences of the legal framework of the market economy as well as the consequences arises out of the liberalized legal system. The study extend its scope to find out the life time to be lost by the TV viewers.

Significance of the Study

Tamilnadu is the state which registered highest TV owners (87 per cent) next to New Delhi (88 per cent) in India. Hence, the study assumed that the households in Tamilnadu are homogeneous in nature. As the Government of Tamilnadu served television to the civil supply card holders and it also launched government cable TV service in the 2011, to entertain the people, the present study is conducted in the selected villages of Sivakasi block in Virudhunagar District of Tamilnadu, India as a sample unit. However, the findings of the study also associated with the earlier studies, in India and abroad. Hence, the findings of the study can be generalized subject to the characteristics of the TV viewers in India.

Methodology

The present study is descriptive in its nature and used both qualitative and quantitative data. The present study was conducted in the selected villages of Sivakasi block in Virudhunagar District of Tamilnadu, India. As the government of Tamilnadu has served TV at zero price to the stake holders of the civil supply cards, the present study considered the villages are homogeneous in character. Hence the simple random sampling technique was adopted to identify the study villages. A proportionate random sampling technique was adopted to identify and select the samples for this study. The survey was conducted on 150 sample respondents through interview schedule. The schedule consisted rank question, close-ended questions and a 5-point likert scale to elucidate the qualitative information from the respondents. Specifically, the schedule consists of the dairy of events on TV watching by applying recall technique. The data were collected personally in the field by serving time schedule, to make the validity on the watching time on television and viewers' pattern in the study area. Keeping in view of the study, the information collected through interview schedule was compiled, edited and tabulated based on its nature. Further, it was analyzed by suitable

[8] The clock hour means a period of sixty minutes commencing from 00.00 of an hour and ending at 00.60 of that hour. (example: 14.00 to 15.00 hours).

[9] Regulation 4 of the principal regulations shall be deleted.

[10] For regulation 3 of the Standards of Quality of Service (Duration of Advertisements in Television Channels) Regulations, 2012 (15 of 2012) (hereinafter referred to as the principal regulations).

statistical tools viz., percentages, frequencies and one-way ANOVA.

Analysis and Discussions

Keeping in view of the objectives of the study, collected information were processed and measured by systematic analysis to interpret meaningfully and to build proper understandings. The study analyses into four categories viz., (i) Penetration of TV in India, (ii) incursion of TV commercial, (iii) devastation of quality-viewing time, and (iv) statistical analysis of the viewers' time.

Television Penetration in India

The total market size of TV industry in India is Rs. 588 billion. The market has grew from Rs. 370 billion in 2012 to Rs. 588 billion in 2016 with a 8.03 per cent of annual growth rate. The share of subscription revenue continuously decreased from 66.21 per cent to 65.81 per cent in 2016. It was 67.38 per cent in 2013. The share of advertisement revenue increased to 34.19 per cent in 2016 from 33.79 per cent in 2012 (Table 1).

Table 1: Size of Television Industry in India

(Rs. in billion)

S. No.	*Year*	*Subscription*		*Advertisements*		*Total*	
		Revenue	*Growth (%)*	*Revenue*	*Growth (%)*	*Revenue*	*Growth (%)*
1	2012	245 (66.21)	-	125 (33.79)	-	370 (100)	-
2	2013	281 (67.38)	14.69	136 (32.68)	8.80	417 (100)	12.70
3	2014	320 (67.36)	13.88	155 (32.64)	13.97	475 (100)	13.91
4	2015	361 (66.60)	12.81	181 (33.40)	16.77	542 (100)	14.11
5	2016	387 (65.81)	7.20	201 (34.19)	11.05	588 (100)	8.49
	CAGR	7.92%		8.24%		8.03%	

Source: KPMG in India's analysis and estimates, 2017, 58.

The revenue generated through subscription had increased to Rs. 387 billion in 2016 from 245 billion in 2012 with 7.92 per cent of compound annual growth rate during the period from 2012 to 2016. Similarly the TV advertisement generated a revenue of Rs. 201 billion in 2016 with a compound annual growth rate of 8.24 per cent which was 125 billion in 2012.

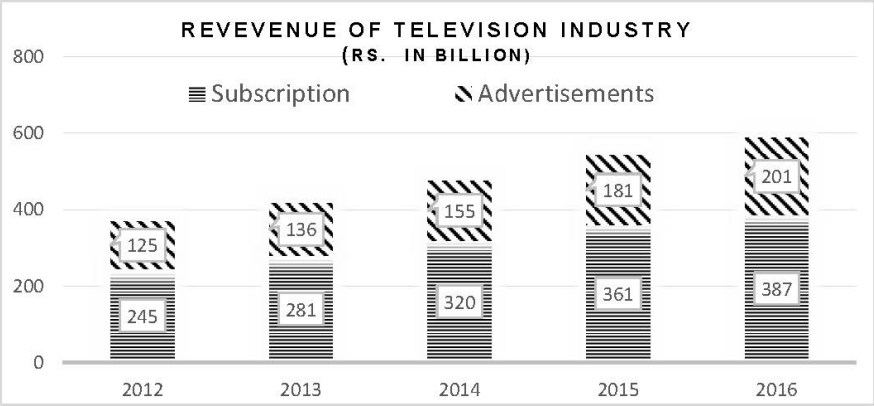

Fig. 1: Size and Growth of Advertising Revenue in India

The significance of the advertisement industry exhibited by comparing the components of its revenue pattern (Fig. 1). The growth rate of TV industry registered with 8.03 per cent between 2012 and 2016. The growth rate of revenue from subscription and TV advertisements registered 7.92 per cent and 8.24 per cent respectively during the same period of the study. It is obvious that the growth of TV advertisements grew than the market size as well as the subscription. It could be conclude that the TV advertisements accelerated the television industry in India.

Incursion of TV Commercials

A total of 857 television channels (399 News channels and 458 non-News channels) permitted to broadcast the channels in various languages at different states in India (TRAI, 2016). Of this, 15 per cent (147 channels) of the channels were listed by the TRAI that telecasting the TV advertisements by violating TRAI's regulation. Table 2 presents the descriptive analysis of excess TV advertisement time in India. The Pay Non-news and News Channels carrying advertisement more than 12 minutes per hour during prime hours.[11] It can be understand that the Pay Non-news channels and pay News channels carrying more than 12 minutes Advertisements in Television.

The Non-news pay channels telecasts advertisements between 12.07 minutes and 25.79 minutes per hour. On an average 14.50 (SD. 2.13) minutes per hour was intruded on the viewer's time and witnessed that the majority of the TV Channels were telecasting the advertising more than the standard time (the median was estimated at 13.50 minutes). Similarly the News pay channels which telecasts news round the clock carries a minimum of 12.08 and a maximum of 21.76 minutes of advertisements per hour, an average of 15.53 (SD. 2.64) minutes per hour was dumped on the viewer's quality time. Moreover, the median was estimated at 14.95 minutes witnessed that the majority of the TV Channels were telecasting the advertising more than the standard average prescribed time by TRAI in India. Further, the Chi-square (χ^2*=34.201, p=1.00*) test has been employed, it proved that there is no significant difference between the news channels and non-news channels in broadcasting advertisements.

Table 2: Descriptive Analysis of Excess TV Advertisement Time in India

Description	*2016*	
	Non-News Channels	***News Channels***
Mean	14.50	15.53
Median	13.85	14.95
Mode	16.01a	12.08a
Std. Deviation	2.13	2.64
Kurtosis	11.90	0.09
Std. Error of Kurtosis	0.45	0.94
Minimum	12.07	12.08
Maximum	25.79	21.76
χ^2	34.201	
p=	1.00	

Source: Computed from TRAI , 2016

Note: a. Multiple modes exist. The smallest value is shown

Devastation of TV viewers

In order to empirically address the basic hypothesis on incursion of TV advertisements, the collected data were computed according to the duration of advertisements in television channels regulations, 2012. The study examines the incursion of advertisements which exceeds the standard time. Devastating of Viewers time is figured by computing the difference between the standard TV advertisement time and the actual TV advertisement time rely on the Television (Table 3).

Life Time Lost = Average TV watching time per day x (ad time in clock hour – standard ad time) x (TV watching day in a week x total week per year) (average life expectancy – current age)

The study reveals that on an average 1.4 years of life time will be lose by the incursion of TV advertisements, through violating of the standards of advertisements by TRAI. The study also reveals that female will lose an average of 1.5 years and males an average of 1.2 years. It is inferred that female spends more time on watching TV at home. The age wise analysis depicts that the old age people will lose an average of 2.1 years in their rest of life.

[11] Prime hours refers to the time between 7.00 PM and 10.00 PM

Table 3: Devastation of Quality Time

	Total Ad time day	*Incursion time*	*Days last year*	*Days last life time*	*Time Ad life time days*
Sex of the Respondents					
Male	36.85 (16.76)	8.47 (7.37)	1.49 (1.59)	101.96 (108.98)	440.01 (304.30)
Female	45.40 (21.31)	10.50 (8.71)	1.94 (1.97)	132.30 (134.61)	576.93 (393.57)
Total	41.18 (19.61	9.50 (8.11	1.72 (1.80)	117.33 (123.17	509.39 (357.85
Age of the Respondents					
young age	41.67 (20.61	9.62 (8.43	1.73 (1.86)	118.48 (127.37)	517.92 (368.04)
middle age	40.21 (18.36	9.30 (7.63	1.67 (1.70)	113.97 (115.83)	490.93 (343.92)
old age	53.34 (24.52	11.34 (16.04	2.65 (3.74)	180.86 (255.77)	768.66 (507.09)
Total	41.18 (19.61	9.50 (8.11	1.72 (1.80)	117.33 (123.17)	509.39 (357.85)
Educational qualification of the Respondents					
illiterate	66.43 (29.95	18.43 (14.18	4.30 (3.31)	293.89 (226.07)	1059.41 (477.70)
School education	42.50 (21.08	10.77 (8.47	1.96 (1.92)	134.19 (131.33)	523.86 (381.38)
College Education	38.51 (14.47	7.49 (6.20	1.27 (1.23)	86.95 (84.24)	460.42 (272.96)
Professional education	28.89 (17.51	2.89 (4.38	0.35 (0.40)	23.60 (27.31)	365.35 (326.29)
Total	41.18 (19.61	9.50 (8.11	1.72 (1.80)	117.33 (123.17)	509.39 (357.85)
Occupation of the Respondents					
Professional	29.84 (6.74	2.84 (5.67	0.19 (0.38)	12.92 (25.84)	313.66 (104.96)
Government	39.62 (13.24	9.62 (7.11	1.88 (1.69)	128.44 (115.19)	517.06 (285.88)
Private	34.39 (13.21	6.83 (5.77	1.18 (1.10)	80.86 (74.96)	400.84 (242.85)
Business	38.18 (15.50	6.98 (5.83	1.05 (1.32)	71.77 (90.40)	390.74 (299.28)
Agriculture	41.90 (27.45	11.23 (10.37	1.73 (2.24)	118.19 (153.03)	473.61 (453.16)
Cooli	43.62 (17.47	11.83 (7.64	2.07 (1.63)	141.65 (111.30)	536.97 (298.66)
House wife	63.68 (28.79	15.68 (12.04	3.45 (2.91)	235.41 (198.95)	957.51 (518.15)
Total	41.18 (19.61	9.50 (8.11	1.72 (1.80)	117.33 (123.17)	509.39 (357.85)

	Total Ad time day	*Incursion time*	*Days last year*	*Days last life time*	*Time Ad life time days*
Income of the Respondents					
Low income	41.52 (20.09	9.58 (8.33	1.76 (1.84)	120.42 (125.91)	524.43 (361.70)
Middle income	33.58 (13.35	7.87 (4.87	0.77 (0.73)	52.46 (49.81)	204.79 (134.23)
higher income	42.54 (6.75	9.54 (4.90	1.80 (1.38)	123.34 (94.48)	519.77 (280.40)
Total	41.18 (19.61	9.50 (8.11	1.72 (1.80)	117.33 (123.17)	509.39 (357.85)

Source: Computed

Note: figures in parenthesis are refers to Standard Deviation

Analysis was also carried out based on the educational status of the respondents. The level of education makes people rational. Illiterates will lose on an average of 2.9 years of life time. Contradictory to this, people who are professionally educated will lose only 1 year of their life time which is very low as compared with school level education (1.4 years) and college level education (1.3 years). It could be concluded that there is a positive relationship between level of education and quality of life.

According to the occupation-wise analysis, the study exhibits that the respondents belongs to agriculture and coolie will lose an average of 1.3 years and 1.5 years respectively. The government employees will lose about 1.4 years, whereas the professionals will lose only 0.9 years as they could not find sufficient time to spend in front of television. People who are engaged in business and private concerns will lose around 1.1 years of their life by the encroachment of TV commercials.

It is interesting to note that the higher income group and lower income group lose 1.4 years. Contradictory to this the middle income group will lose only 0.6 years on average. The study concludes that the middle income group are chasing the opportunity for income they do not find much time to spend in front of TV.

Hypothesis Testing

The collected information was arranged based on the different categories for analysis. There is no significant difference in the TV watching time and the incursion of TV advertisement time among the different socio-economic category of the sample respondents.

Analysis of Variance (ANOVA)

A one-way analysis of variance (ANOVA) was employed to understand that whether mean scores of the TV commercial incursion time statistically differ among the different socio-economic groups in the study area. Further, Tukey post hoc test also considered to understand the significant differences among the various groups. The dependent variable is the time will lose by the respondents by TV Commercials. Hence, the sample respondents were grouped into three category viz., Young age group (upto 35 years); middle age group (35–60 years) and Old age group (60 years and above)

Table 4(a): Descriptive Analysis (Age wise Classification)

Age	*N*	*Mean*	*Std. Dev.*	*Std. Error*	*95% Confidence Interval for Mean*		*Min.*	*Max.*
					Lower Bound	*Upper Bound*		
Young age	82	118.48	127.37	14.07	90.50	146.47	0	632.99
Middle age	66	113.97	115.83	14.26	85.50	142.45	0	542.56
Old age	2	180.86	255.77	180.85	-2117.13	2478.84	0	361.71
Total	150	117.33	123.17	10.057	97.46	137.20	0	632.99

Table 4(b): ANOVA

Age	*Sum of Squares*	*df*	*Mean Square*	*F*	*Sig.*
Between Groups	8924.57	2	4462.28	.291	.748
Within Groups	2251549.77	147	15316.67		
Total	2260474.34	149			

The Table 4(b) shows that whether there is a statistically significant difference between the group means. It depicts that the significance value is 0.748 (i.e., $p = .748$), which is greater than 0.05. Therefore, statistically there is no significant difference in the mean year of life time will lose by the respondents due to watch TV advertisements. Further, the post hoc tests also confirms that there is no significant differences occurred between groups (Table 4(c)).

Table 4(c): Multiple Comparisons

Age	*Age*	*Mean Difference*	*Std. Error*	*Sig.*	*95% Confidence Interval*	
					Lower Bound	*Upper Bound*
young age	middle age	4.51	20.46	.974	-43.94	52.97
	old age	-62.37	88.57	.761	-272.08	147.34
middle age	young age	-4.51	20.47	.974	-52.97	43.94
	old age	-66.88	88.83	.732	-277.20	143.43
old age	young age	62.37	88.57	.761	-147.34	272.08
	middle age	66.88	88.83	.732	-143.43	277.20

There was no statistically significant difference between groups as determined by one-way ANOVA ($F = 2.91$, $p = .748$). A Tukey post hoc test revealed that the loss in life time of the respondents were statistically not significant across all the age group of young age (118.48 ± 127.37), middle age (113.97 ± 115.82) and old age group (180.85 ± 255.76).

Education plays an important role to attain the quality life and it transforms a person to live a better life and more importantly in a socially wellbeing. The study makes an analysis that whether the TV commercials affects quality viewers time in the study area (Table 5). The dependent variable is the time will lose by the respondents by TV Commercials. Hence, the sample respondents were grouped into four broad category viz., illiterates (unable to read or write), school education (up to H.Sc.), college education (both graduates and post graduates); and professionals (professional courses).

Table 5(a): Descriptive Analysis (Education-wise Classification)

Education	*N*	*Mean*	*Std. Dev.*	*Std. Error*	*95% Confidence Interval for Mean*		*Minimum*	*Maximum*
Illiterate	4	293.89	226.07	113.03	-65.84	653.61	0	542.56
School Education	87	134.19	131.33	14.08	106.20	162.18	0	632.99
College Education	53	86.95	84.24	11.57	63.73	110.17	0	361.71
Professional Education	6	23.60	27.31	11.15	-5.07	52.26	0	59.33
Total	150	117.33	123.17	10.06	97.46	137.20	0	632.99

Table 5(b): ANOVA

Days lost in life time	*Sum of Squares*	*df*	*Mean Square*	*F*	*Sig.*
Between Groups	251053.34	3	83684.45	6.080	.001
Within Groups	2009420.99	146	13763.16		
Total	2260474.34	149			

A one-way ANOVA was performed to test the hypothesis that the average time will be lost will be equal. Multiple comparisons were performed using the Tukey procedure. The average time lost is found to be different across sections, $F(3,146) = 6.080$, $p = 0.001$. Tukey multiple comparisons performed at a 0.05 significance level found that the average life loss is significantly higher than that for the between groups.

Table 5(c): Multiple Comparisons

Education	*Education*	*Mean Difference*	*Std. Error*	*Sig.*	*95% Confidence Interval*	
					Lower Bound	*Upper Bound*
Illiterate	School Education	159.70*	59.99	.042	3.79	315.61
	College Education	206.94*	60.83	.005	48.84	365.03
	Professional Education	270.29*	75.72	.003	73.48	467.09
School Education	Illiterate	-159.70*	59.99	.042	-315.61	-3.79
	College Education	47.24	20.44	.100	-5.88	100.36
	Professional Education	110.59	49.51	.119	-18.09	239.28
College Education	Illiterate	-206.94*	60.83	.005	-365.03	-48.84
	School Education	-47.23	20.44	.100	-100.36	5.88
	Professional Education	63.35	50.53	.594	-67.97	194.67
Professional Education	Illiterate	-270.29*	75.72	.003	-467.09	-73.48
	School Education	-110.59	49.51	.119	-239.28	18.09
	College Education	-63.35	50.53	.594	-194.67	67.97

*. The mean difference is significant at the 0.05 level.

From the results it is observed that there are statistically significant differences between the groups as a whole. The Table 5(c) shows that the multiple comparisons which groups differed from each other. The Tukey post hoc test is generally the preferred test for conducting post hoc tests on a one-way ANOVA. The table shows that there is a statistically significant difference in the life time lost between illiterates and school education ($p = 0.042$); between the illiterate and college education ($p = 0.005$) as well as between illiterate and professional education ($p = .003$).

However, there were no differences in the life time lost between School education and college education ($p = 0.100$); between School education and professional education ($p = .119$) as well as College education and professional education ($p = .594$).

Conclusion

Television becomes an integral part of our day to day lives and embellish every home. In India, a majority of 183 million households possess TV and the advertisements reach about 75 per cent of the population through television. The TV advertisements provides the market information and increases the competition, as a powerful means of mass communication. Despite, it is not only encroached the household viewers but also the revenue component. The incursion of TV commercials swallows the life of the people in developed as well as developing nations. Worldwide, over the span of an 80-year-long life (roughly the average life expectancy in the US and other developed nations), that's about 1.3 years of life time will lose by moving to channels. The same is also true for viewers in a dozen other countries, including Brazil, China, Germany, Mexico and South Africa and the consumers will spend 1 to 1.5 years on average during their lives.

The advertisements exceeds the prescribed the time limit which is devastating the quality-viewing time. The study reveals that people in India will lose an average 1.4 years over the span of their life time. By 2020, India will be the high demographic dividend nation in the world, as the average age of population would be 29 years, and it will be very low in USA (40 years), Europe (46 years) and Japan (47 years). It is keen to note that the young age group will lose 1.4 years. Yet the study alarms that the young age are more attracted and spend much time on watching TV. Moreover, they will lose their valuable life

time due to their ignorance and the effective supply of the TV commercials. On the other hand, the study bothers about the productivity of the young population which is most essential to sustain the economic development.

References

Aggarwal, V. B. (1993). Impact of cable TV on social life. *Communicator*, *3*, 7–12.

Aguiar, M., & Erik, H. (2007). Measuring leisure: The allocation of time over five decades. *Quarterly Journal of Economics*, *122*(3), 969–1006.

Ahluwalia, A. K., & Singh, T. V. (2011). Viewing habits amongst urban children. *Journal of Marketing Management*, *10*(1), 45–62.

Altas, D., & Hakan, O. (2013). An empirical analysis of television commercial ratings in alternative competitive environments using multinomial logit model. *Eurasian Journal of Business and Economics*, *6*(11), 39–51.

Anjum, Z. (2004). *Cable Television watching habits of youth in Pakistan*. Retrieved April 1, 2018 from http//pu.edu.pk/images/journal/english/previous_pdf/by%20Anjum%20%20Zia.pdf

Beasley, R., & Danesi, M. (2002). *Persuasive signs: The semiotics of advertising*. New York, NY: (P1) Mouton De Gruyter.

Bittman, M. (1998). The land of the lost long weekend? Trends in free time among working age Australians, 1974–1992. *Society and Leisure*, *21*(2), 353–378.

Chauhan, K. (2001). *Television and social transformation*. New Delhi: Swarup and Sons Publication.

Gershuny, J. (2000). *Changing times: Work and leisure in postindustrial society*. Oxford: Oxford University Press.

Goodin, R. E., Rice, J. M., Bittman, M., & Saunders, P. (2005). The time pressure illusion: Discretionary time versus free time. *Social Indicators Research*, *73*(1), 43–70.

Gurleen, K., E. R., & Sukhmani (2011). A study of T.V. viewership patterns Among Youngsters in Northern India. *Zenith International Journal of Multidisciplinary Research*, *1*(5), 141–160.

KPMG in India analysis, Industry discussions conducted by KPMG in India.

Kumar, S. (2002). *Social-Educational impact of television on high school students of Rohtak city*. Ph.D. thesis submitted to Department of Sociology M.D. University, Rohtak, 23–26, 36, 42–45, 48, 60–62, 423–430.

Page, D., & Crawley, W. (2001). *Satellite over South Asia: Broad casting, culture and the public interest*. New Delhi: Sage Publications.

Poggi, J. (2016). Retrieved April 4, 2018 from http://www.adageindia.in/media/flashback-friday-tvs-first-commercial-ran-75-years-ago-today/articleshow/53010809.cms

Ravi, B. K., & Devadas, M. B. (2012). TV pattern among women. *Communication Today*, *14*(2–3), 82–88.

Robinson, J. P., & Godbey, G. (1999). *Time for life: The surprising ways Americans use their time* (2nd ed.). University Park, PA: Pennsylvania State University Press.

Saiganesh, S., & Parameswaran, R. (2012). Avoidance behavior of audience towards television advertisements. *Asia Pacific Journal of Marketing & Management Review*, *1*(2), 92–99.

Singh, S., & Arora, S. (1992). Effect of television viewing upon youths of do on valley. *Indian Psychological Review*, *3*8(9–10), 21–26.

Tekcarta. (2017). *TV households, percent all households (68 countries)*. Retrieved March 4, 2018 from https://www.nakono.com/tekcarta/databank/tv-households-total-number/dt

Unnikrishnan, N., & Bajpai, S. (1996). *Impact of televisions advertising on children* (4th ed.). New Delhi: Sage Publication.