Repercussion of Personal Traits on the Overall Attitude about Online Advertisements – Empirical Forethoughts among Teenagers in Tamil Nadu, India

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Abstract
Online advertisements are a type of advertisement that is broadcasted on the internet. In contrast to traditional advertising, online advertisements establish an interactive communication. Now-a-days, teenagers are frequently using the internet either for educational purposes or at least for entertainment. When the teenagers come across these online advertisements, their attitude about the advertisements is very important for the success of the advertisements. Hence, the present study analyses the overall attitude of teenagers about online advertisements based on gender, educational qualifications and age. To capture the responses from the teenagers being respondents of the study, a well-structured questionnaire was administered to 2500 respondents with a yielding rate of 80.04 % (2001 usable Questionnaires). The various factors such as general perception, advertising utility, indignity, price perceptions and regulation were captured on a five point scale and further classified into three groups namely favorable, neutral and unfavorable based on the total score. The geographical area of Tamil Nadu State in India was used as the sampling area. The questionnaire was administered in person to students in identified schools and colleges all over Tamil Nadu. Also, Snowball Sampling Technique was used to collect data from respondents who are stationed far away from the researcher. The data used for the purpose of this study were collected for a period of 6 months from 1st July 2014 to 31st December 2014. The collected data were subjected to statistical analysis using Frequency analysis, Chi-Square test, and regression analysis. It was found from the study, that the respondents do not differ in their attitude about online advertisements based on gender, educational qualifications and age.
Keywords: Internet, Online, Advertisements, Attitude, Teenagers

1. Introduction

There is an increasing rate of Internet usage among children and teenagers due to social networking and entertainment. On the other hand, companies globally as well as India have moved to web-based markets and make this a critical issue for investigation. Children and Teenagers are increasingly accessing (often unsupervised) the Internet (Harding, 2004) as they read online text in their homes, schools, libraries and cafes. A recent Kaiser Foundation survey of 8-18-year-old found the average amount of time spent online (excluding schoolwork) in a 'typical day' increased from 27 minutes in 1999 to 99 minutes in 2009, and playing video games increased from 26 minutes to 73 minutes over the same period (Rideout *et al,* 2010). As stated above, in 2007 Australian children (8-17 years) were spending about one and quarter hours online every day. A 2008 US survey found that 71.1% of 6-11-year old had accessed the Internet in the past 30 days, and more than half (57.0%) of these children had accessed the Web 'because advertising drove them there' (Kelly, 2009). But, there is limited research on the nature and extent of advertising to children and teenagers via the Internet in India. Hence, the present study focuses on the attitude of the teenagers about online advertisements based on their personal traits such as gender, age and educational qualifications.

2. Methodology

The present paper is an empirical 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 July 2014 to 31st December 2014.

2.1 Statement of the Problem
92% of the internet users in India are teenagers and the success of online advertisements solely depend on the attitude of these teenagers about online advertisements. The teenagers differ from each other based on their

gender, age and educational qualifications. As a result their attitude to online advertisements might differ based on their personality traits. Hence, the present research problem was stated to answer the following research questions:

- What is the overall attitude of teenagers on online advertisements?
- Is there an influence of gender, age and educational qualifications on the teenagers' attitude about online advertisements?
- Can there be a combined effect of gender, educational qualifications and age on the teenagers' attitude about online advertisements?

2.2 Objectives

- To analyze teenagers' opinion on the various factors influencing online advertisements based on their personal traits
- To identify the individual influence of the teenagers' personal traits on attitude towards online advertisements
- To establish a model for the combined influence of the teenagers' personal traits on attitude towards online advertisements

2.3 Sampling Technique

The geographical area of Tamil Nadu state was used as the sample area. The main reason for choosing Tamil Nadu is the researcher is stationed here and there is more teenagers who access internet. The Questionnaire was administered in person to students in identified schools and colleges all over Tamil Nadu. 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 2500 respondents with a yielding rate of 80.04 % (2001 usable Questionnaires).

2.4 Statistical Tools applied for analysis

The techniques used for analysis are Cross Tabulation, Chi-Square test, ANOVA and regression analysis.

3. Analysis and Interpretation

The personal factors such as gender, educational qualifications and age may influence the attitude of the respondents about online advertisements. To test the influence of the personal factors on attitude about online advertisements cross tabulation, chi-square test and regression analysis were performed.

3.1 Influence of gender on factors affecting attitude towards online advertisements

To discern the influence of gender on the factors influencing attitude towards online advertisements, cross tabulation was done along with chi-square test. The results are tabulated in subsequent tables:

Table 1: Cross tabulation of Gender on the factors affecting attitude towards online advertisements

Opinion		Gender		Total	Chi-Square (Sig at 5% level)
		Male	Female		
General perception	Low	118	97	215	0 .366 df=2 p=0.833
	Neutral	931	774	1705	
	High	47	34	81	
	Total	**1096**	**905**	**2001**	
Advertising utility	Low	312	288	600	3.419 df=2 p=0.181
	Neutral	743	578	1321	
	High	41	39	80	
	Total	**1096**	**905**	**2001**	
Indignity	Low	18	22	40	1.596 df=2 p=0.450
	Neutral	815	665	1480	
	High	263	218	481	
	Total	**1096**	**905**	**2001**	
Price perception	Low	445	385	830	1.465 df=2 p=0.481
	Neutral	302	254	556	
	High	349	266	615	
	Total	**1096**	**905**	**2001**	
Regulation	Low	207	178	385	1.080 df=2 p=0.583
	Neutral	805	648	1453	
	High	84	79	163	
	Total	**1096**	**905**	**2001**	

Table 1 represents the cross tabulation of gender on the various factors influencing attitude towards online advertisements. The chi-Square values for all the factors are insignificant at 5% level which imply that there is no significant difference in the attitude of the respondents based on their gender. Also majority of male respondents (445) show low opinion on price perception towards online advertisements. Similarly, majority of the female respondents (385) have low opinion on price perception towards online advertisements. Subsequently, majority of the male respondents are neutral about the other factors such as General perception (931), Advertising utility (743), Indignity (815), and regulation (805) that affect attitude towards online advertisements. The same trend is seen in case of female respondents also. Majority of the female respondents are neutral about the other factors such as General perception (774), Advertising utility (578), Indignity (665), and regulation (648) that affect attitude towards online advertisements.

3.2 Influence of educational qualifications on factors affecting attitude towards online advertisements
To study the influence of educational qualifications on the factors affecting attitude towards online advertisement, cross tabulation and chi-square tests were done. The results are tabulated in Table 2 below:

Table 2: Cross tabulation of Educational qualifications on the factors affecting attitude towards Online Advertisements

Opinion		Educational Qualifications		Total	Chi-Square (Sig at 5% level)
		School	College		
General perception	Low	102	113	215	13.986 df=2 p=0.001
	Neutral	703	1002	1705	
	High	19	62	81	
	Total	824	1177	2001	
Advertising utility	Low	231	369	600	2.541 df=2 p=0.281
	Neutral	559	762	1321	
	High	34	46	80	
	Total	824	1177	2001	
Indignity	Low	9	31	40	8.139 df=2 p=0.017
	Neutral	601	879	1480	
	High	214	267	481	
	Total	824	1177	2001	
Price perception	Low	166	219	385	12.741 df=2 p=0.002
	Neutral	616	837	1453	
	High	42	121	163	
	Total	824	1177	2001	
Regulation	Low	166	219	385	17.469 df=2 p=0.000
	Neutral	616	837	1453	
	High	42	121	163	
	Total	824	1177	2001	

Table 2 portrays the cross tabulation of educational qualifications on the various factors affecting attitude towards online advertisements such as General perception, Advertising utility, Indignity, Price perception and regulation. The chi-Square values for General perception (13.986; p=0.001), Indignity (8.139; p=0.017), Price perception (12.741; p=0.002) and regulation (17.469; p=0.000) are significant depicting that the general opinion on the various factors affecting online advertisements differ significantly based on educational qualifications. The chi-Square value of advertising utility (2.541; p=0.281) is insignificant for 2 degrees of freedom stating that the general opinion of the respondents do not differ significantly based on educational qualifications. It is interesting to note that irrespective of educational qualifications, majority of the respondents have neutral opinion on all the factors affecting attitude towards online advertisements. Majority of the respondents have neutral opinion on General perception (male=703, female=1002), Advertising utility (Male=559, female=762), Indignity (male=601, female=879), price perception (male=616, female=837) and regulation (male=616, female=837).

3.3 Influence of age on factors affecting attitude towards online advertisements
Consequently, the influence of age on the various factors affecting attitude were analyzed. For this purpose, the respondents were grouped into two based on their age. The first group consisted of respondents below 15 years of age and the next group comprised of respondents above 15 years. Then, the various factors affecting attitude towards online advertisements were cross tabulated against age and chi-square test was performed.

Table 3: Cross tabulation of Age on the factors affecting attitude towards online advertisements

Opinion		Age		Total	Chi-Square (Sig at 5% level)
		Less than 15	More than 15		
General perception	Low	81	134	215	8.233 df=2 p=0.016
	Neutral	526	1179	1705	
	High	17	64	81	
	Total	624	1377	2001	
Advertising utility	Low	178	422	600	0.933 df=2 p=0.627
	Neutral	421	900	1321	
	High	25	55	80	
	Total	624	1377	2001	
Indignity	Low	7	33	40	5.957 df=2 p=0.050
	Neutral	452	1028	1480	
	High	165	316	481	
	Total	624	1377	2001	
Price perception	Low	286	544	830	9.187 df=2 p=0.010
	Neutral	149	407	556	
	High	189	426	615	
	Total	624	1377	2001	
Regulation	Low	119	266	385	13.955 df=2 p=0.001
	Neutral	475	978	1453	
	High	30	133	163	
	Total	624	1377	2001	

Table 3 depicts the cross tabulation of age against various factors affecting attitude towards online advertisements. The chi-square value is significant for the factors indignity (5.957; p=0.00), price perception (9.187; p=0.000) and regulation (13.955; p=0.000) at 5% level of significance. The significant chi-square value portray that there is a significant difference in the opinion of the respondents about indignity, price perception and regulation of online advertisements based on their age. But the insignificant Chi-square value for general perception and advertising utility depict that the respondents do not differ in their opinion on these factors based on age. Further, majority of the respondents have only neutral opinion on all the factors affecting attitude towards online advertisements.

3.4. Relationship between personal factors and attitude towards online advertisements
To analyze the relationship between the various personal factors such as gender, educational qualifications and age and the attitude towards online advertisements, regression was applied. Regressions with each of the personal factors are presented below.
3.4.1 Relationship between Gender and Attitude towards online advertisements
To identify the relationship between gender and attitude towards online advertisements, regression analysis was performed. The results are tabulated in subsequent tables.

Table 4 Model Summary of regression on gender and attitude towards online advertisements

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.034	0.001	0.001	0.28

a Predictors: (Constant), Gender

From table 4, it is very clear that there is very less correlation between gender and attitude (R=0.034) and the R^2 value of 0.001 depict that the model can be relied only 0.1%. Further, the ANOVA results are presented in Table 5.

Table 5 ANOVA of Gender on Attitude towards online advertisements

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.177	1	0.177	2.344	0.126
	Residual	151.217	1999	7.565E-02		
	Total	**151.394**	**2000**			

a Predictors: (Constant), Gender; b Dependent Variable: Attitude

The $F_{(1,1999)}$ value (2.344;p=0.126) is insignificant stating that the model is not a good fit of the data. Further, the independent variable (gender) is not statistically significant to predict the dependant variable (Attitude). The regression coefficients are presented in Table 6.

Table 6 Regression Coefficients for the model of gender on Attitude

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.945	0.019		102.558	0.000
	Gender	-1.891E-02	0.012	-.034	-1.531	0.126

a Dependent Variable: Attitude

The table 6 depicts the regression coefficient of the independent variable (gender) on the dependent variable (attitude). The regression equation is Attitude = 1.945 – 0.001891(Gender)

Further, the 't' value is insignificant (t=-1.531; p=0.126) depict that gender cannot be significant in predicting the attitude towards online advertisements among the respondents.
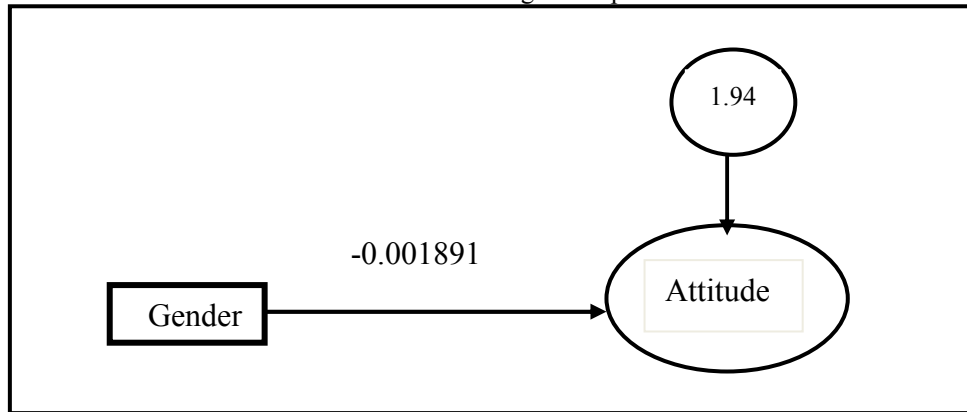

Figure 2: Influence of gender on Attitude

To test whether educational qualifications is a deciding factor for predicting the attitude towards online advertisements, regression analysis was done. The results are reported in subsequent tables.

Table 7 Model Summary of regression on educational qualifications and Attitude towards online advertisements

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.037	0.001	0.001	0.28

a Predictors: (Constant), Educational qualifications

From Table 7 it can be extracted that the correlation between educational qualifications and attitude towards online advertisements is very low (R=0.037). The R^2 value of 0.001 portrays that the model can be relied only 0.1%. The ANOVA results are presented in Table 8.

Table 8 ANOVA results of educational qualification on attitude towards online advertisements

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.209	1	0.209	2.758	0.097
	Residual	151.186	1999	7.563E-02		
	Total	151.394	2000			

a Predictors: (Constant), Educational qualification; b Dependent Variable: Attitude

Table 8 depicts insignificant F value ($F_{(1,1999)}$=2.758; p=0.097) states that the model is not a good fit of the data. Further, the independent variable (educational qualification) is not statistically significant to predict the dependant variable (Attitude). The regression coefficients are presented in Table 9.

Table 9 Regression Coefficients of Educational qualification on Attitude

Model		Unstandardized Coefficients		Standardized Coefficients		t	Sig.
		B	Std. Error	Beta			
1	(Constant)	1.885	0.021			90.736	0.000
	Educational qualifications	2.074E-02	0.012	0.037		1.661	0.097

a Dependent Variable: Attitude

The table 9 depicts the regression coefficient of the independent variable (educational qualifications) on the dependent variable (attitude). The regression equation is as follows:

Attitude = 1.885 + 0.002074(Educational qualification)

Further, the 't' value is insignificant (t=1.661; p=0.097) depict that educational qualifications of the

respondents cannot be significant in predicting the attitude towards online advertisements among the respondents.
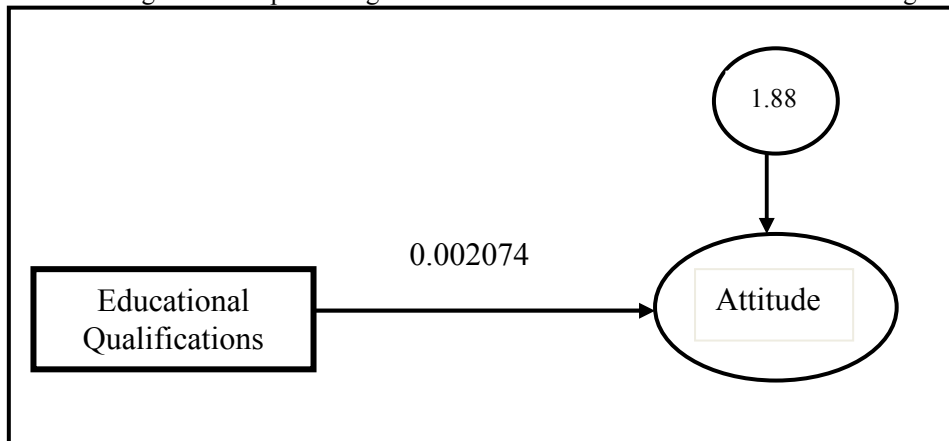

Figure 3: Influence of Educational qualifications on Attitude

To test whether age of the respondents is a deciding factor for predicting the attitude towards online advertisements, regression analysis was done. The results are reported in subsequent tables.

Table 10 Model Summary of regression on age and Attitude towards online advertisements

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.034	0.001	0.001	0.28

a Predictors: (Constant), Age

From Table 10 it can be inferred that the correlation between age and attitude towards online advertisements is very low (R=0.034). The R^2 value of 0.001 portrays that the model can be relied only 0.1%. The ANOVA results are presented in Table 11.

Table 11 ANOVA results of age on attitude towards online advertisements

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.170	1	0.170	2.248	0.134
	Residual	151.224	1999	7.565E-02		
	Total	151.394	2000			

a Predictors: (Constant), Age; b Dependent Variable: Attitude

Table 19 depicts insignificant F value (F $_{(1,1999)}$ =2.248; p=0.134) states that the model is not a good fit of the data. Further, the independent variable (age) is not statistically significant to predict the dependant variable (Attitude). The regression coefficients are presented in Table 12.

Table 12 Regression Coefficients of age on Attitude

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.884	0.023		81.082	0.000
	Age	1.990E-02	0.013	0.034	1.499	0.134

a Dependent Variable: Attitude

The table 12 depicts the regression coefficient of the independent variable (age) on the dependent variable (attitude). The regression equation is as follows:

$$Attitude = 1.884 + 0.001990 \ (Age)$$

Further, the 't' value is insignificant (t=1.499; p=0.134) depict that age of the respondents cannot be significant in predicting the attitude towards online advertisements among the respondents.
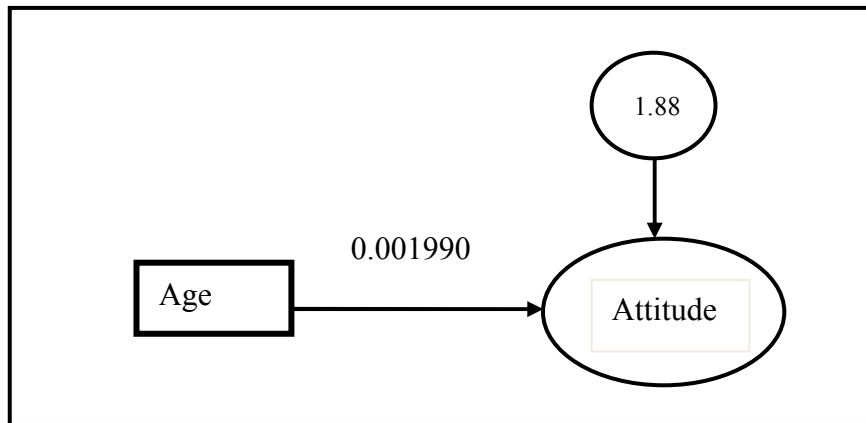
Figure 4: Influence of Age on Attitude towards online advertisements

3.4.2 Regression analysis of personal factors with attitude towards online advertisements

Multiple regression analysis was performed with the personal factors such as Gender, Age and educational qualifications towards attitude on online advertisements. The results are tabulated in subsequent tables.

Table 13 Model Summary of regression on personal factors and Attitude towards online advertisements

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.050	0.002	0.001	0.27

a Predictors: (Constant), Age, Gender, Educational qualifications

From Table 13 it can be depicted that the correlation between personal factors and attitude towards online advertisements is very low (R=0.050). The R^2 value of 0.002 portrays that the model can be relied only 0.2%. The ANOVA results are presented in Table 14.

Table 14 ANOVA results of personal factors on attitude towards online advertisements

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.373	3	0.124	1.643	0.177
	Residual	151.022	1997	7.562E-02		
	Total	151.394	2000			

a Predictors: (Constant), Age, gender, educational qualifications; b Dependent Variable: Attitude

Table 14 depicts insignificant F value ($F_{(1,1999)}$=1.643; p=0.177) states that the model is not a good fit of the data. Further, the independent variables (gender, educational qualifications and age) are not statistically significant to predict the dependant variable (Attitude). The regression coefficients are presented in Table 15.

Table 15 Regression Coefficients of personal factors on Attitude

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.909	0.030		63.404	0.000
	Gender	-1.790E-02	0.012	-0.032	-1.447	0.148
	Educational qualifications	1.483E-02	0.021	0.027	0.704	0.481
	Age	6.527E-03	0.022	0.011	0.292	0.770

a Dependent Variable: Attitude

The table 15 depicts the regression coefficient of the independent variables (gender, educational qualifications and age) on the dependent variable (attitude). The regression equation is as follows:

Attitude = 1.909-0.00179 (Gender) + 0.0014 (Educational qualifications) + 0.000652 (Age)

Further, the 't' value for the dependent variable (gender) is insignificant (t=-1.447; p=0.148) depict that gender of the respondents cannot be significant in predicting the attitude towards online advertisements among the respondents. Similarly, the 't' value for the dependent variable (educational qualifications) is insignificant (t=0.704; p=0.481) depict that educational qualifications of the respondents cannot be significant in predicting the attitude towards online advertisements among the respondents. The 't' value for the dependent variable (age) is insignificant (t=0.292; p=0.770) depict age of the respondents cannot be significant in predicting the attitude towards online advertisements among the respondents.
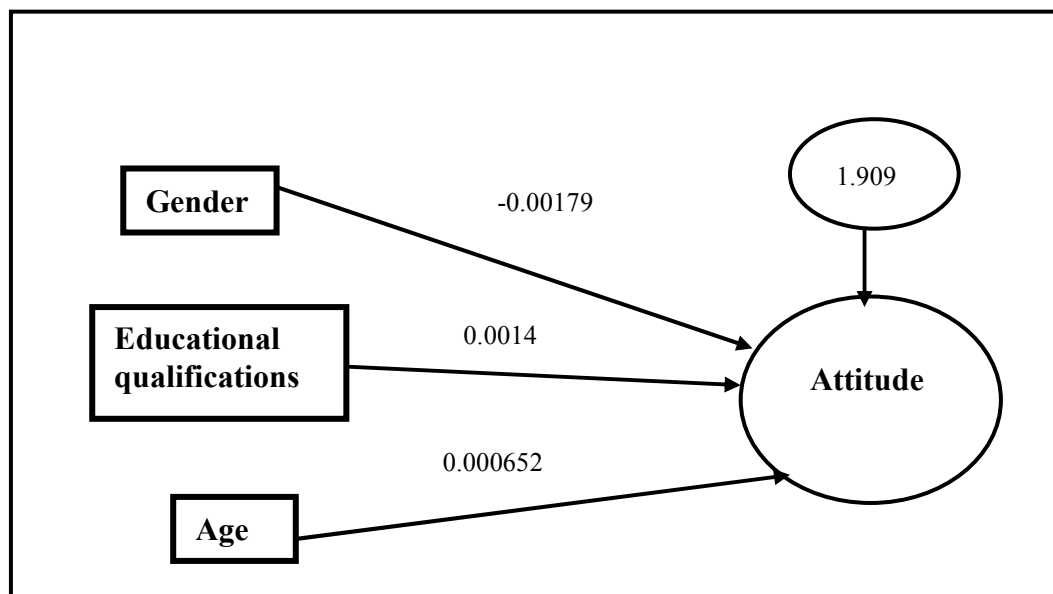
Figure 5: Regression model of attitude from personal factors

4. Conclusion

The study conducted for this paper work is a preliminary work to analyze the attitude about online advertisements among teenagers. It has revealed an in-depth relationship between the personal traits of the teenagers and their attitude towards online advertisements. In general, there is no difference in the attitude of the teenagers towards online advertisements based on gender or age or educational qualifications. As they cannot differentiate between the good and bad about advertisements, most of the teenagers have neutral opinion about online advertisements. Further, the combined relationship between gender, educational qualifications and age reveals a better understanding of the influence of personal traits on the attitude towards online advertisements. Although, the present study has provided a wide insight about the attitude of the teenagers about online advertisements, opinion and perception are not constant and vary from time to time.

References

- Harding, J. (2004) Learning from Pre-school Magazines, Young Consumers, 6, 30-37. http://dx.doi.org/10.1108/17473610510814390
- Kaiser Family Foundation (2006) It's Child's Play: advergaming and the online marketing of food to children, Education and Health, 24(3), 44-45.
- Rideout, V.J., Foehr, U.G. & Roberts, D.F. (2010) Generation M2 Media in the Lives of 8- to 18-Year-Olds. Menlo Park, CA: Henry J. Kaiser Family Foundation.
- Kelly, A.M. (2009) Five Things You Should Know about Kids and the Internet. 10 February. http://www.mediapost.com/publications/index.cfm?fa=Articles.showArticle&art_aid= 100062 (accessed 28 April 2010).

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