# Tracing the factors behind eWOM behaviour in Social Networking Sites (SNSs): An Innovative Experiment

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Abstract— Rapid growth in online social media usage have resulted in changes in consumers' behavioural pattern. What was known as Word of Mouth (WOM) a decade back, is now known as Electronic Word of Mouth (eWOM). Change in consumer behaviour and attitude alongside their increasing use of Social Media have great implications for business as the changed purchase intention and preferences of the consumers may affect firms. That's why worldwide research is going on to analyze consumers' behaviour in the perspective of online social media. As consumers' word of mouth is considered vital from the promotional perspective of the firms, researchers are engaged to identify and determine the factors that influence consumers' electronic word of mouth (eWOM) behaviour. Research on social media particularly social networking sites (SNSs) is still in its infancy and the answers to the questions like why consumers engage in eWOM through SNSs, what are the forms of eWOMs in SNSs, how the eWOM wave propagates through SNSs are still not answered properly. This paper takes an attempt in this regard to identify young students' (who are one of the most significant users of social media and social networking sites) motivational factors behind their engagement in eWOM through Social Networking Site (SNS). This paper is innovative in its objective, approach & methodology and unique in its results and potential future implications.

Keywords- Electronic Word of Mouth (eWOM), Social Media , Social Networking Sites (SNSs) , Consumer Behaviour, Factor Analysis.

#### I. INTRODUCTION

In the last twenty years, one of the most important inventions that drastically changed human life is the web technologies. One of the boons of web technologies is the communications revolution that took place silently but changed the way people interact with others. Communications revolutions have effects on social, socio economic & socio psychological sphere of human lives. Electronic commerce has taken an important place alongside the traditional commerce. Electronic social interactions through social media platforms are the new norms of socializing. From only a platform of meeting new people or interacting with others to the most

preferred platform for hang out & shopping: online social media have come a long way rapidly within a very short period of time. Social Networking Sites (SNSs) like Facebook, Orkut, Twitter, LinkedIn etc. are now the part & parcel of consumers' life and they spend sizeable amount of their daily life online in these social media platforms. It is beyond any doubt that this digital age has transformed people's lives. Aksoy, Riel, & Kandampully cite Bennett (2013) in providing the following astonishing but true statistics regarding social media:

- Registered users are estimated as one billion in Facebook, 517 million in Twitter, 400 million in Google+ and 75 million in LinkedIn.
- Every day more than 500 million users put "likes" on Facebook & 471 million users tweet in Twitter.
- 40 percent of these users also confess that they socialize more on Facebook than physically face-to-face manner and 92 percent of users re-tweet contents which they find interesting.
- In terms of mobile device usage, in 91 percent of cases, consumers access internet for the purpose of engaging in social activities through social media platforms ([1], [2]).

Aksoy, Riel, & Kandampully also observe that , Facebook has become the most sought after social media platform for brand marketing for 83 percent of firms and over 60 percent of marketing managers believe that in their marketing campaigns , social media have become an important part[1]. When the whole world is moving towards adopting online social media as the most important discovery of twenty first century, how India can ignore the importance of online social media in transforming business and people's lives. So, research work like this paper is the need of the hour to understand the dynamics of online social media to help business become more competitive and effective in future.

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# II. LITERATURE REVIEW

The words & phrases 'Word of Mouth (WOM)'. Word of Mouth (eWOM)' 'WOM 'Electronic Communications', 'WOM Marketing', 'WOM Advertising' have been defined in numerous ways. The Cambridge Dictionaries Online gives the definition of WOM as the process of telling people one's knowledge about a particular product or service usually because one thinks it is good and wants to encourage other people to try it [3]. Dictionary.com defines WOM as an informal oral communication [4]. Merriam-Webster defines WOM as oral communication & traces the first known use of the word 'Word of Mouth' to circa 1553[5]. Thefreedictionary.com gives the definition of WOM spoken form of communication as informal oral communication [6].Businessdictionary.com defines WOM communications as an interpersonal referral communication which includes referral information of product. service or company & which depends heavily on the credibility of the source of that information [7]. Before the advent of web 2.0 and social media, researchers realized the importance of WOM in a competitive marketing scenario ([8]-[12]). WOM has been defined in the early literature as an informal way of communication between persons through which informal information (regarding products or services etc.) exchange takes place ([8], [9]). The most well-defined and extensive definition of electronic word-of-mouth (eWOM) available in the literature is given by H-Thurau, Gwinner, Walsh &Gremler. They define eWOM "Any positive or negative statement made by potential, actual, or former customers about a product or company, which is made available to a multitude of people and institutions via the Internet" [13]. Over the past few years, research on WOM and eWOM has changed drastically in terms of objective, methodology & implications and all these developments support the smooth transition from the concept of WOM to the broader concept of eWOM and this transition has great future implications not only for the academia but also for the practitioners & firms([14]-[21]). Investigating the motivations behind social media usage and transmission of eWOM is a much talked about area where lots of research work are being carried out worldwide([24]-[28]). As increasing impact of social media on the way consumers are connected to other consumers & the way the firms wish to connect with their existing and potential customers has changed the concept of C2C and B2C communication and that's why it is high time to incorporate the concept of CDI in social media communication. Blazevic et al strongly argue in favour of online scalability of CDI to include social media platforms and social networking sites (SNSs) [24]. Study on identifying the nature of electronic word of mouth(eWOM) in social networking sites (SNSs), the factors behind transmission of eWOM in SNSs & how eWOM in SNSs are affecting consumers' purchase decision making in particular and consumer behaviour in a broader concept are absent.

# III. RESEARCH FRAMEWORK & METHODOLOGY

# A. Research Objective

The objective of this study is to identify the factors behind the consumers' transmission of eWOM in a Social Networking Site (SNS) i.e. to find out why people engage themselves in sharing and spreading product, service or company related information to other persons through SNS.

#### B. Research Framework

In a social networking site how consumers engage in eWOM behaviour is a challenging question. Due to absence of prior literature on tracing the origin & nature of consumers' eWOM behaviour in SNSs , assumptions based on experience & common sense have been used extensively in research design. For this study, Facebook has been used as the Social Networking Site because Facebook is the most popular social networking medium today. In Facebook , when a person sees an advertisement regarding a product, service, company or anything like movies etc. and any other campaign ( both commercial & nonprofit) , he or she indulges in any of the following seven activities :

- Activity I: He or she 'Like' the ad i.e. he or she clicks on the 'Like' button
- Activity II: He or she makes a 'Comment' on the ad i.e. he or she expresses his or her views on the ad
- Activity III: He or she 'Share' the ad i.e. he or she clicks on the 'Share' button & 'Share' it on 'His or her on timeline'
- Activity IV: He or she 'Share' the ad i.e. he or she clicks on the 'Share' button & 'Share' it on 'a friend's timeline'
- Activity V: He or she does a combination of Activity I, Activity II & Activity III
- Activity VI: He or she does a combination of Activity I, Activity II & Activity IV
- Activity VII: He or she does nothing i.e. he or she has no response towards the advertisement.

In this experiment it has been assumed that when a person is engaged in any of the first six above mentioned activities (i.e. any of Activity I, Activity II, Activity III, Activity IV, Activity V, Activity VI) he or she is engaged in eWOM behaviour i.e. he or she is spreading eWOM or he or she is involved in the transmission of electronic word of mouth. As researchers believe that in the social media context, non verbal communications are also part of eWOM, so it can be rightly assumed that Activity I, Activity III & Activity IV are eWOM behaviour because through these activities users are expressing themselves non verbally. So, if the factors on the basis of which people decide whether they will engage in any of the first six activities mentioned above (i.e. any of Activity I, Activity II, Activity III, Activity IV, Activity V or Activity VI) can be identified, the research objective of this study will be fulfilled.

# C. Research Design

As the objective of the study is to identify the underlying dimensions or factors that decide the eWOM behaviour of persons in social networking sites (SNS), primary data are of main importance. Another important decision is to select the target audience from whom the primary data are needed to be

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collected. Students are the largest professional group in Facebook & the students command a sizeable market share in electronic commerce. So, undergraduate students within age range between 18 to 21 & who are pursuing professional degree course have been selected as the target audience for survey and subsequent data collection for this study. A set of seven statements indicating users' perceptions on giving 'Like' or leaving a 'Comment' or sharing the ad was formed on the basis of Social Networking Sites(SNSs) users' common behaviour as well as on the basis of common sense judgement as seven unique variables for statistical analysis. As the objective is to identify underlying dimensions or factors that explain the correlations among the set of variables, Common Factor Analysis or Principal Axis Factoring technique, which is an interdependence technique in which an entire set of interdependent relationships is examined, is used.

# D. Research Methodology

As it is important that in case of Common Factor Analysis or Principal Axis Factoring, the variables be appropriately measured on an interval or ratio scale, a 7 point Likert type balanced interval scale(1= strongly disagree, 7 = strongly agree) is used. The respondents were asked to indicate their degree of agreement with seven different statements in terms of the 7 point scale. The following seven different statements represent seven unique variables:

- $V_1 \rightarrow$  The number of 'LIKES' received by the 'AD' is not so important.
  - $V_2 \rightarrow$  Attractiveness of the 'AD' is important
- $V_3 \rightarrow I$  shall consider the total number of comments received by the 'AD'
- $V_4 \rightarrow$  Whether my friends commented or not on an 'AD' are important
- $V_5 \rightarrow$  The number of 'LIKES' given by friends to the 'AD' is important.
- $V_6 \rightarrow$  I shall consider the quality of the comments received by the 'AD'

# $V_7 \rightarrow$ Appropriateness of the 'AD' is important

Data were collected in personal interviews with all respondents either in their places of study or at their homes. A total of eighty respondents were interviewed. Respondents were selected form one institute but from different stream in a completely randomized nature. The author himself conducted the interviews. The author spoke to the students personally & informed them of the purpose of the study & requested them to participate. After rejecting ten entries for missing values or wrong entries a total of seventy entries were found to be complete in all respect for subsequent analysis. Two software packages SPSSTM & statistiXLTM are used for the purpose of data analysis & the output from these two software packages are used as results in the data analysis section of this paper. After analyzing the result of the Factor Analysis, the extracted factors are identified and explained and the consequent implications have been discussed.

# IV. ANALYSIS, INTERPRETATION & DISCUSSION

# A. Testing the applicability & appropriateness of the factor analysis

The analytical process of Factor Analysis is based on a matrix of correlations among the variables involved in the process. So, for testing the applicability and appropriateness of the factor analysis, it is necessary to examine the correlation matrix properly. It can be assumed that null hypotheses is  $H_0$  = variables are uncorrelated in the population or the population correlation matrix is an identity matrix and alternate hypotheses is  $H_a$  = correlation matrix is not an identity matrix. It is necessary to reject the null hypotheses in order to establish that the result of the factor analysis is applicable and appropriate in this experiment. In order to test the null hypotheses both physical and statistical observations should be made [31].

#### 1) Physical Observation:

Physical observation of the correlation matrix (ref. Table I) which has been obtained from SPSS output of the factor analysis involving the variables  $V_1$  to  $V_7$  reveals that all the diagonal items (symbolized as grey shade in Table I) of the correlation matrix are 1 but all the off-diagonal items are not zero and among these items, 18 items (37 %)( underlined in Table I) have values close to zero, 17 items (34.69 %) have values in between 0 and 1 and six items (12%) have high values close to 1. So from physical observation it is clear that the correlation matrix (ref. Table I) is not an identity matrix. [30]. The Anti Image Correlation (AIC) Matrix shows the Measures of Sampling Adequacy (MSA) for each individual item on the diagonal. In AIC, the negatives of the partial correlations between pairs of items are presented as the off diagonal items. In order to prove the factorability of the correlation matrix, the MSA values on the diagonal of the AIC matrix should be large and the values of the negatives of the partial correlations should be small. Physical observation of the Anti Image Correlation (AIC) matrix (ref. Table II) which has been obtained from SPSSTM output of the factor analysis involving the variables  $V_1$  to  $V_7$  reveals that the MSA values (all the diagonal items symbolized as grey shade in Table II) are high and the values of the off diagonal items are low except two items (symbolized in bold and underlined in Table II) [29].

# 2) Statistical Observation:

Formal statistics are available for appropriateness of the factor model and these are the Bartlett's test of sphericity & the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy. In Bartlett's test of sphericity, a large value of the test statistic will favour the rejection of the null hypothesis. In Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy, small values of KMO statistic proves that the correlations between pairs of variables can't be explained by other variables and that factor analysis may not be appropriate. Generally a value varies between 0 and 1, and values closer to 1 are better and theoretically a value larger than 0.5 is desirable which is called Kaiser's (1974) "middling" criteria but in practice a value of .6 is a suggested minimum. Table III shows the SPSSTM output of KMO and Bartlett's Test. The approximate Chi Square statistic is 154.005 with 21 degrees of freedom which shows the appropriateness

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of the factor analysis. Table III also shows the value of KMO statistics which is 0.652 and it also suggests the appropriateness of the factor analysis. As the determinant of the correlation matrix is not zero (ref. Table I), the output of the factor analysis is appropriate from computational point of view. So from physical observation, it is clear that the correlation matrix is not an identity matrix and that's why the null hypotheses can be rejected. From the statistical observation it is clear that the factor analysis can be considered as an appropriate technique for this experiment ([29]-[37]).

TABLE I. THE CORRELATION MATRICES

	TABLE I : Correlation Matrix								
	$oxed{V_1} oxed{V_2} oxed{V_3} oxed{V_4} oxed{V_5} oxed{V_6} oxed{V_7}$								
$V_1$	1.00	.083	076	211	357	100	.124		
$V_2$	.083	1.00	026	018	.056	.003	.216		
$V_3$	076	026	1.00	.671	.213	.651	.058		
$V_4$	211	018	.671	1.00	.182	.854	065		
$V_5$	357	.056	.213	.182	1.00	.169	.152		
$V_6$	100	.003	.651	.854	.169	1.00	062		
$V_7$	.124	.216	.058	<u>065</u>	.152	<u>062</u>	1.00		
Determinant = .096									

TABLE II. THE ANTI IMAGE CORRELATION (AIC) MATRICES

Table II :Anti-image Correlation Matrix								
	<i>V</i> <sub>1</sub>	$V_2$	<b>V</b> <sub>3</sub>	V <sub>4</sub>	<i>V</i> <sub>5</sub>	<b>V</b> <sub>6</sub>	V <sub>7</sub>	
<i>V</i> <sub>1</sub>	.443	072	092	.244	.377	159	157	
$V_2$	072	.513	.069	.000	055	039	201	
<b>V</b> <sub>3</sub>	092	.069	.845	301	129	190	118	
<i>V</i> <sub>4</sub>	.244	.000	301	.642	.050	<u>742</u>	.025	
<i>V</i> <sub>5</sub>	.377	055	129	.050	.561	065	190	
<b>V</b> <sub>6</sub>	159	039	190	<u>742</u>	065	.657	.075	
<i>V</i> <sub>7</sub>	157	201	118	.025	190	.075	.443	

TABLE III RESULTS OF BTS & KMO STATISTIC

Table III : KMO and Bartlett's Test						
Kaiser-Meyer-Olkin Measure of Sampling Adequacy652						
Bartlett's Test of Sphericity	154.005					
	21					
	Sig.	.000				

# B. Determining the number of factors & their usability

The communalities indicate the amount of variance in each variable that can be explained by the factors. Initial communalities are estimates of the variance in each variable accounted for by all components or factors. External communalities indicate the proportion of each variable's variance that can be explained by the retained factors. Variables with high values are well represented in the common factor space, while variables with low values are not well represented [35]. In Table IV, all values in the 'Extraction'

column are high except for  $V_2$  which indicates that the extracted components represents the variables well in the common factor space except for  $V_2$  (symbolized in bold and grey shade in Table IV).

TABLE IV. THE COMMUNALITIES

TABLE IV : Communalities								
$egin{array}{ c c c c c c c c c c c c c c c c c c c$							$V_7$	
Initial	.215	.057	.495	.768	.203	.748	.114	
<b>Extraction</b> .502 <b>.097</b> .534 .882 .419 .835 .439								

Eigenvalues are the variances of the factors or the amount of variance in the original variables accounted for by each component. Table V gives the eigenvalues. The first factor will always account for the most variance and so has the highest Eigen value and the next factors will account for as much of the left over variance as it can, and so each successive factor will account for less and less variance. This '% of variance' column shows the percent of total variance accounted for by each factor. The 'cumulative %' column gives the % of variance accounted for by the first n components. The third row shows a value of 73.040 which means that the first three factors (symbolized in bold and grey shade in Table V) together account for 73.040 % of the total variance (ref. Table V). In Table VI, the number of rows in this panel of the table corresponds to the number of factors retained or the extracted components. In this approach only factors with Eigen values greater than 1.0 are retained as the factors with variance less than 1.0 are no better than a single variable because due to standardization each individual variable has a variance of 1.0. So, the first three factors have been retained (ref. Table VI). The values in the Table VI are calculated in the same way as the values in the Table V, except that here the values have been calculated on the basis of the common variance. The values in Table VI are always lower than the values in Table V (symbolized as bold and italicized in Table VI), because they are based on the common variance, which is always smaller than the total variance (ref. Table V & VI). The values in the Table VII shows the distribution of the variance after the varimax rotation. Varimax rotation attempts to maximize the variance of each of the extracted factors, so the total amount of variance accounted for is redistributed over the extracted factors but the varimax rotation maintains the cumulative % of the variation explained by the extracted components (symbolized as bold and underlined in Table VII). A Scree plot is a plot of the eigenvalues against the number of factors. The shape of the plot is used to determine the optimum number of factors which are needed to be extracted. Typically the plot has a distinct break between the steep slopes of factors and this gradual trailing off is referred to as scree. Experimental evidence shows that the point at which the scree begins denotes the optimum number of factors. In this approach the optimum number of factors which are needed to be extracted is determined in such a way that the cumulative percentage of variance extracted by the factors reaches a satisfactory level. Though the exact level of variance which is satisfactory depends upon the problem, However it is recommended that the factors extracted should account for at least 60 percent of the variance. From the scree plot (ref. Fig. 1), it is evident that from the third factor on, the line is almost flat i.e. each successive factor is accounting for smaller and smaller amounts of the total variance, so the scree begins from third factor. Also from the table V, it is clear that the first three components have an Eigen value greater than 1 and it is also clear that the first three components explain 73% variance which is satisfactory.

TABLE V. THE INITIAL EIGENVALUES

Table V : Initial Eigenvalues								
Factors	Total	% of Variance	Cumulative %					
1	2.582	36.889	36.889					
2	1.292	18.461	55.351					
3	1.238	17.689	73.040					
4	.819	11.695	84.734					
5	.560	7.993	92.727					
6	.372	5.318	98.046					
7	.137	1.954	100.000					

Table VIII contains two tables, the reproduced correlations in the top part and the residuals in the bottom part. The reproduced correlation matrix is the correlation matrix based on the factors which have been extracted. The results of the factor analysis to be proper and usable the values in the reproduced correlation matrix should be as close to the values in the original correlation matrix as possible i.e. the residual matrix, which contains the differences between the original and the reproduced matrix, should be close to zero. The numbers on the diagonal of the reproduced correlation matrix (symbolized as bold and grey shaded in Table VIII) are same as the Communalities table in the column labeled Extracted (ref. Table IV). In the residual part of the Table VIII, there are 12 items (symbolized as bold and grey shaded) having values greater than 0.02 but less than equal to 0.05.

TABLE VI. EXTRACTION SUMS OF SQUARED LOADINGS

Factors	Table VI: Extraction Sums of Squared Loadings					
ractors	Total	% of Variance	Cumulative %			
1	2.331	33.306	33.306			
2	.729	10.409	<u>43.716</u>			
3	.649	9.271	<u>52.987</u>			

There are seven items (symbolized as bold and underlined) having values greater than 0.01 but less than 0.02. So, there are 0 (.0%) non redundant residuals with absolute values greater than 0.05(ref. Table VIII). Now as the reproduced matrix is quite similar to the original correlation matrix, then it can be said that the factors that have been extracted account for a good deal of the variance in the original correlation matrix, and these few factors are good in representing the original data([34]-[37]).

TABLE VII. ROTATION SUMS OF SQUARED LOADINGS

Table VII: Rotation Sums of Squared Loadings								
Factors	Total	% of Variance	Cumulative %					
1	2.218	31.687	31.687					
2	.839	11.992	43.679					
3	.652	9.308	52.987					

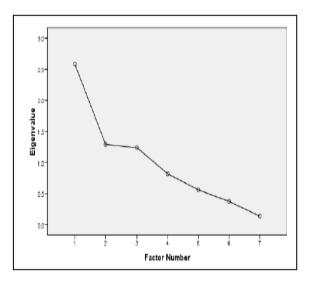


Figure 1. A Scree Plot depicting the variation of Eigen values across components

# C. Interpretation of the identified factors

Interpretation of factors is done by identifying the variables that have large loadings on the same factor and that factor can then be interpreted in terms of the variables that load high on it and this can be done by analyzing the rotated factor matrices. The second method of interpretation is to plot the variables using the factor loadings as coordinates. Variables at the end of an axis are those that have high loadings on only that factor, and hence properly describe the factor. Variables that are situated near the origin have small loadings on both the factors. Variables that are not situated near any of the axes are related to both the factors.

The rotated factor matrix table contains the rotated factor loadings, which represent how the variables are weighted for each factor but also the correlation between the variables and the factor and so as these are correlations, possible values range from -1 to +1. Now the correlations that are 0.3 or less should be ignored from the analysis point of view because these are not meaningful for consideration. In the rotated factor matrix (Ref. Table IX), variables  $V_3$ ,  $V_4$ ,  $V_6$  have high loadings on factor I and that's why factor I should be interpreted in terms of the variables  $V_3$ ,  $V_4$ ,  $V_6$ .

Table VIII: Reproduced Correlations								
		<i>V</i> <sub>1</sub>	$V_2$	<i>V</i> <sub>3</sub>	V <sub>4</sub>	V <sub>5</sub>	V <sub>6</sub>	V <sub>7</sub>
	<i>V</i> <sub>1</sub>	.502	.083	098	186	357	107	.129
ion	<i>V</i> <sub>2</sub>	.083	.097	.023	036	.055	019	.205
rrelat	$V_3$	098	.023	.534	.669	.190	.655	.049
ced Co	<i>V</i> <sub>4</sub>	186	036	.669	.882	.210	.852	075
Reproduced Correlation	$V_5$	357	.055	.190	.210	.419	.159	.159
Re	<i>V</i> <sub>6</sub>	107	019	.655	.852	.159	.835	046
	<i>V</i> <sub>7</sub>	.129	.205	.049	075	.159	046	.439
	<i>V</i> <sub>1</sub>		001	.022	025	.000	.007	005
	$V_2$	001		050	<u>.017</u>	.001	.022	<u>.011</u>
ı	$V_3$	.022	050		.002	.023	004	.008
Residual	<i>V</i> <sub>4</sub>	025	<u>.017</u>	.002		028	.002	.009
R	<i>V</i> <sub>5</sub>	.000	.001	.023	028		<u>.010</u>	007
	<i>V</i> <sub>6</sub>	.007	.022	004	.002	.010		<u>015</u>
	<i>V</i> <sub>7</sub>	005	<u>.011</u>	.008	.009	007	<u>015</u>	

So, this factor may be labeled as 'Comment Factor'. Similarly, variables  $V_1$  and  $V_5$  have high loadings on factor II and that's why factor II should be interpreted in terms of the variables  $V_1 \& V_5$ . Therefore, this factor may be interpreted 'Perceived Liking Factor'. Lastly, the variable  $V_7$  has high loading on factor III. It is also noteworthy to analyze that apart from  $V_7$  no other variable has a loading greater than or equals to 0.5 and the variables  $V_1, V_2, V_5$  have loadings having very close values (0.225, 0.311 & 0.662). Among the variables  $V_1, V_2, V_5$ , the variable  $V_2$  has the highest loading (i.e. 0.311) and that's why it should be assumed that factor III should be interpreted in terms of the variables  $V_2 \& V_7$ (symbolized as bold and grey shaded). Again, it is evident that the variable  $V_1$  has high loading on factor II and medium loading on factor III and this is same for variable  $V_5$  ( high loadings have been indicated through bold & grey shade and medium loadings have been indicated through bold and underline ). So, it can be said that the variable  $V_1$  &  $V_5$  have direct and strong impact on factor II and indirect and overlapping effect on factor III. A plot of the factor loadings confirms this interpretation (Ref. Fig.2, Fig.3, and Fig.4). From the Fig. 2, it can be seen that the variables  $V_3$ ,  $V_4$ ,  $V_6$  are at the ends of the horizontal axis that represents Factor I, with variables  $V_1$  and  $V_5$  are situated at the end of the vertical axis ( that represents Factor II) but in opposite direction and variables  $V_2 & V_7$  are situated near the origin and so neither factor I nor factor II is associated with these variables.

TABLE IX. REPRODUCED CORRELATIONS

Table IX : Rotated Factor Matrix								
	Factors							
	I	II	III					
<i>V</i> <sub>1</sub>	064	669	.225					
V <sub>2</sub>	003	020	.311					
<i>V</i> <sub>3</sub>	.718	.108	.088					
V <sub>4</sub>	.921	.159	096					
<i>V</i> <sub>5</sub>	.149	.592	<u>.216</u>					
<i>V</i> <sub>6</sub>	.911	.057	049					
<i>V</i> <sub>7</sub>	017	.031	.662					

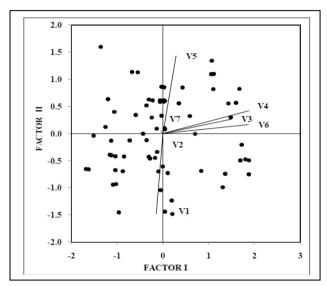


Figure 2. The Factor Plot between Factor I and Factor II.

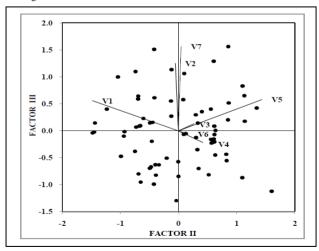


Figure 3. The Factor Plot between Factor II & Factor III

From the Fig. 3, it can be seen that the variables  $V_2 \& V_7$ are at the end of the vertical axis that represents Factor III and also the variables  $V_1$  and  $V_5$  are situated at the end of the vertical axis ( that represents Factor II) but in opposite direction. It is quite interesting to note that in fig. 4, the variables  $V_3$ ,  $V_4$ ,  $V_6$  are at the ends of the horizontal axis that represents Factor I and the variables  $V_2 \& V_7$  are at the end of the vertical axis that represents Factor III, but the variables  $V_1$ and  $V_5$  (circled in grey shade) are situated midway in between the origin and the end of the vertical axis that represents Factor III that means the variables  $V_1$  and  $V_5$  have secondary effects on factor III. On the basis of this analysis, Factor III can be identified as 'Relevancy of the 'AD' Factor' but as the variables  $V_1$  and  $V_5$  have secondary effects on factor III, it should not be wise to label Factor III as 'Relevancy of the 'AD' Factor'. Instead Factor III can be interpreted as 'Relevancy of the 'AD' with a trace of Perceived Liking Factor" .It can be summarized that the students think that there are three factors on the basis of which they decide whether they will share any advertisement on their own timeline or on their friends' timeline in Facebook: Comment Factor, Perceived Liking Factor and lastly Relevancy of the 'AD' with a trace of Perceived Liking Factor. Fig. 2, 3 & 4 have been obtained from statistiXL<sup>TM</sup> output.

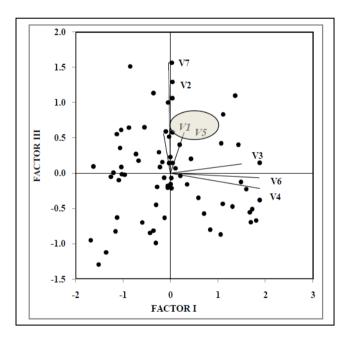


Figure 4. The Factor Plot between Factor I & Factor III

# V. LIMITATIONS & FUTUTE DIRECTIONS

In this experiment it has been assumed that when a person is engaged in any of the first six activities (i.e. any of Activity I, Activity II, Activity III, Activity IV, Activity V, Activity VI) mentioned in the research framework section, he or she is engaged in eWOM behaviour i.e. he or she is spreading eWOM or he or she is involved in the transmission of electronic word of mouth. This assumption may not be 100% percent valid in the sense that the dynamics of eWOM may not be as simple as assumed in this study. Proper path of eWOM

wave propagation and sequence of activities involved in eWOM transmission through social networking sites (SNSs) are not very clearly known and discovered till now. The time dependability of the identified factors are required to be found out and so a longitudinal study would be better to examine the variability of the factors with time so that a more comprehensive conclusion can be made. From the output of the factor analysis it can be seen that the total variances explained by the three indentified factors is 73.040 % which is enough to be suitable for empirical study but it is also true that in rest of 26.96 % variances there may exist some hidden factors which cannot be traced by this study and for that the number of participants as well as number of variables should be increased in future empirical investigation. Experts believe that as a general rule, a minimum of 10 observations per variable is necessary to avoid computational difficulties in factors analysis. In the current study seventy observations are analyzed and seven variables are used (7 X 10 =70) i.e. this study maintains the minimum standard. As experts favour in taking large sample size of 500 & greater to make the results of the factors analysis to be stable and reliable[37], future study should incorporate larger sample size. The secondary effects of the variables  $V_1$  and  $V_5$  on factor III should be examined properly in future studies. Despite all these limitations, this paper will have great impact on future studies on eWOM through SNSs as this paper presents innovative approach and attempts to walk through untraveled path & ventured into untrodden territory of research.

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