

2018-04-21

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**Advertisements on Facebook: Identifying the persuasive elements in the  
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**Abstract**

The main objective of this study is to develop the scale items of consumers' attitudes toward Facebook advertisements and to theorize consumers' attitudinal behaviour. To undertake this study, a research assistant was appointed, who is also an active member of Facebook, to introduce a message about the product Samsung Tab S, and to pass it to other members of their network. From this experiment, different members of their network participated in generating, passing, and receiving messages to develop a preliminary structured perception which was converted to generate scale items to

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measure attitude. Then an independent empirical study was conducted among members of a social network to verify and validate these scale items and their underlying constructs. From the findings in this study, it is identified that attitudes toward social network advertisement, i.e., any effort to communicate messages about products among network members, who are also consumers of different products, is formed and persuaded by hedonic motivation (HM), source derogation (SD), self-concept (SC), message informality (MI), and experiential messages (EM).

**Keywords:** Advertisement, Facebook, Facebook Marketing, Consumer Attitude, Behavioral Attitude, Social Network Advertisement

## **Introduction**

Trying to communicate with consumers through social media is very common nowadays. Several researchers (Dwivedi et al., 2015; Kapoor et al., 2017; Shareef et al., 2017a) have attempted to understand the effectiveness of social media marketing or viral marketing. In social media, members try to communicate with or circulate personal opinion and experience about any products among their peers through their network loop. This mass communication can enhance product acceptability and create group opinion. Researchers, nowadays, termed this informal promotional function as viral marketing, i.e., social media advertisement (Chu, 2011; Shareef et al., 2017a). This research has conceptualized viral marketing or social media advertisement as the non-commercial proactive product promotion among peers through any Internet based social media network (Hayes & King, 2014).

Several researchers (Dwivedi et al., 2017abc; Kapoor et al., 2016) have explored consumers' behavioural attitudes toward viral marketing; however, they used only several technology adoption models as a theoretical framework. To identify and theorize consumers' behaviour for viral marketing, a comprehensive framework is of utmost importance which essentially should include technology adoption behaviour, marketing aspects, cognitive decision-making process, and psychological behaviour.

Therefore, the objective of this study is to develop the scale items of consumers' attitudes toward viral marketing or social media advertisements and to theorize consumers' attitudinal behaviour through a comprehensive theoretical framework. More precisely, this current research is engaged in deriving the driving forces which persuade Facebook members, who are also prospective consumers, to develop favourable attitudes toward any product. So, although the findings of this study are to reveal the critical factors which shape consumers' attitudes toward viral marketing, it also leads to an understanding of the effectiveness of viral marketing through measuring consumers' attitudes about social media advertising.

Behavioural learning theory (Bloch & Marsha, 1983; Ertmer & Newby, 1993; Nord and Peter, 1980) postulates that consumers vigorously attempt to learn from external events. As such, marketers generate advertisements to transfer their intended meaning to the prospective consumers about product promotion so that consumers will learn about the competitive advantage of the product and will be influenced to grow behavioural intention. Under this context, consumers' learning capability, scope, and habits are substantially governed by the marketers' competence to communicate with the consumers with effective advertising (Chu, 2011; Ducoffe 1995; Schulze *et al.*, 2014; Shareef *et al.*, 2015). Another concept of consumers' behavioural capability which is explained by cognitive learning theory (Nicosia, 1966) recommends that any intended significance of the advertisement might be not accepted by the consumers. It reflects that, while generating any product promotional advertisement, marketers may have an intention to transfer a certain concept about the product to the customers, but there is always a possibility that consumers may interpret it quite differently. Consumers may be tempted to conceive the implied meaning of any advertisement completely from a different perspective which may be subversive to the image of the product (Greenwald, 1968; Nicosia, 1966; Shareef et al., 2017b). Therefore, understanding consumers' mental ability, pattern, scope, and way of thinking is a potential tool for the marketers to develop and implement any product promotional activities. Marketers have attempted to propagate consumers' exposure, attention, and positive perception about an advertisement for intended meaning, but understanding consumers' psychological

traits is a fertile area to cultivate in this context (Logan *et al.*, 2012; Pelling & White, 2009; Shareef *et al.*, 2015; Taylor *et al.*, 2011).

After receiving a product promotional message like an advertisement, consumers' response to this can be varied. Consumer response models (Greenwald, 1968; Nicosia, 1966), outline that customers may not be interested in exposure, or pay attention, and thus, may not learn from the advertisement. Another response can be characterized by exposure, attention, and learning from the intended messages from marketers, but they may not be persuaded and could actually have an entirely negative exposure perspective. Alternatively, some consumers will be willing to be exposed, attentive, and learn from the implied meaning. And thus, will be persuaded.

This variation in behavioural pattern has long been investigated by many marketing researchers ( Kim & Ko, 2012; Logan *et al.*, 2012; Pelling & White, 2009; Shareef *et al.*, 2016); however, for recent viral marketing, i.e., social media advertisement, consumers' perceptions —their cognitive, affective, and behavioural attitudes are developed in quite different ways (Logan *et al.*, 2012; Pietro & Pantano, 2012; Schulze *et al.*, 2014). The scholarly articles of viral marketing or social media advertisement quite firmly acknowledged that, due to differences in emotional affiliation, patterns of interaction, social group formation, generating, sending, passing-on, and receiving of messages, and ways of thinking from a cognitive perspective — social network marketing through advertisement is substantially different from traditional advertisement in terms of consumers' exposure, attention, and persuasion. In social networks like Facebook, active members of any network loop, either professional or informal, are typically engaged in sharing their views, generating any new message, passing-on any opinion to other members of this loop, and seeking opinions which can be persuasive (Hayes & King, 2014). However, this internal brainstorming type of communication occurs in a non-commercial way which gives the impression of informal communication. This informal information sharing fundamentally develops and diffuses higher credibility as the authentication of the message (Akar & Topcu, 2011; Chu, 2011; Hayes & King, 2014; Kim & Ko, 2012). Members of Facebook

joining in a specific loop of friends and colleagues also share their views about any product from their personal experience which can be deemed to be non-commercial and real. Therefore, there is an explicit research gap in understanding how consumers develop and pursue their favourable attitude toward viral marketing. However, in social media, the information generation by any members of a network starts up a new avenue for the prospective consumers, who are basically members of that loop, to get different opinions which ultimately act as the primary source of information for them to create attitudes toward the product and ultimately, to buy (Kim & Ko, 2012; Logan et al., 2012). Investigating and conceptualizing the measuring items which are responsible for consumers' attitudinal development in viral marketing has potential importance both for practitioners and academics. The findings of this research will certainly contribute in understanding consumers' behavior for social media marketing or viral marketing which is significantly different from traditional views.

The next section describes the research design of this exploratory study which includes methodology and data collection procedures. Then, the statistical analysis section is illustrated, followed by the results and discussion section. Theory development and managerial implications are explained in the following section. Conclusions and future research concepts including the limitations of this study are finally presented.

## **Theoretical Background**

Shedding light on the research outcome of several scholarly articles working on consumers attitude toward viral marketing (Chu, 2011; Kim & Ko, 2012; Logan et al., 2012; Pietro & Pantano, 2012; Schulze et al., 2014), it is explicitly recognized that members of any social network of a particular loop are very interested in gaining peers' opinions about any product from their consumption experience.

### *Distinctiveness of Viral Marketing*

However, in this aspect, these members are not eager to receive any commercial views from their private network; rather they give much more priority to informal information

which is created completely non-commercially by their informal peers (Kim & Ko, 2012; Logan et al., 2012). Therefore, promotional marketing or any advertisement in Facebook created by either informal members of the network or injected by marketers, has significant differences from traditional Internet based marketing in creating exposure, attention, and attitude for persuasion. For marketers promoting products or services through Facebook, it has the potential to urge and stimulate consumers' behaviour to instigate their positive attitude towards the advertisement, then learn and be persuaded.

#### *Theoretical base of Existing Literature*

To date, all the potential research studies working on identifying consumers' attitudes towards viral marketing in social networks have attempted to formalize consumers attitudes for adoption from the basis of the traditional behavioural models like the technology adoption model (TAM) (Davis, 1989), theory of planned behaviour (TPB) (Ajzen, 1991), diffusion of innovation (DOI) theory (Rogers, 1995), unified theory of acceptance and use of technology (UTAUT) (Venkatesh et al., 2003), social cognitive theory (SCT) (Bandura, 1986), and the motivational model (MM) (Vallerand, 1997) etc.

#### *Consumer Behavior for Social Media Members*

However, Hayes & King (2014) used social exchange theory (Homans, 1958) to understand expected value in any exchange between parties for information giving and seeking. Members of social network exchange information for a particular reason (Hayes & King, 2014; Ho & Dempsey, 2010), and this exchange, as per research, should be informal. Several researchers (Chu, 2011; Kim & Ko, 2012; Shareef et al., 2017a) argued that consumers' perception, attitude, and behaviour as members of social network have substantially different patterns while giving, passing, and seeking product information. So, in the context of social network advertisement, formation of consumers' behaviour and functions of attitude should be investigated as an exploratory study, so as to enable marketers to formulate social promotional marketing, thereby modeling consumers' new behaviour of brainstorming, interaction, and

communications. Hence, the objective of this current study is to develop the scale items of consumers' attitudes toward Facebook advertisements to theorize consumers' attitudinal behaviour.

### *Grounded Theory for Viral Marketing*

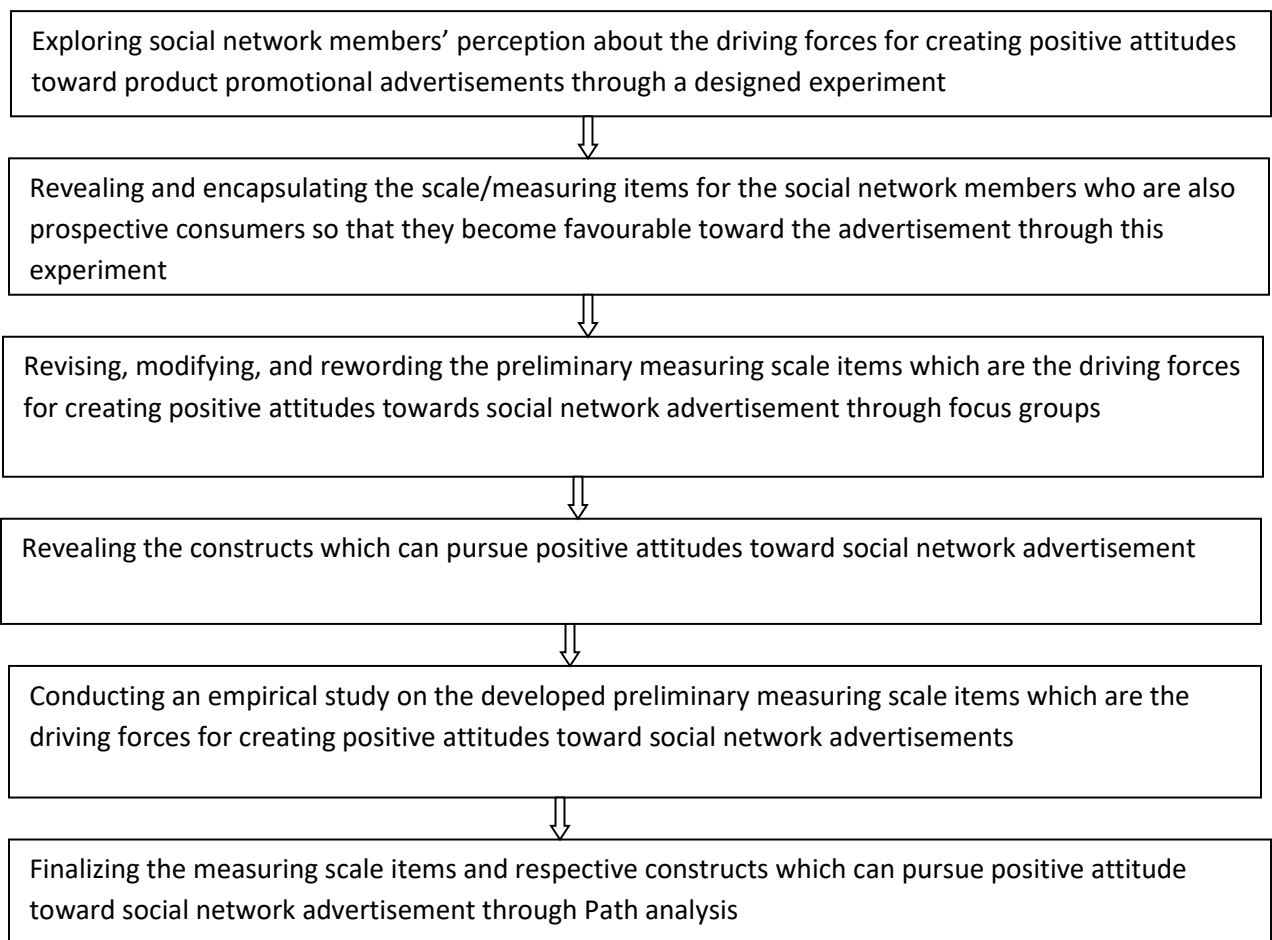
Existing researchers of viral marketing engaged in developing adoption behaviour are dependent on identifying constructs shedding light on traditional technology adoption theories. This current study, however, attempts to explore scale items of attitude to recognize the functions of attitude from the beginning. Therefore, this study is not devoted to test an established theory and postulate the behavioural constructs for pursuing attitude; rather it is experimenting to formulate any grounded theory to conceptualize the factors that may persuade consumers to generate their own attitudes towards a particular social network advertisement. Since any effect of social media advertisement might be substantially different from regular consumer behavior for a traditional product promotional effort, this study is not designed based on an established theoretical framework. Rather, the current research is attempting to explore and theorize a general concept of viral marketing reflecting consumers' opinions investigated through extensive empirical study. This research aims to encapsulate a new concept to understand epistemological and ontological paradigms of consumers' attitudes toward Facebook promotional marketing. Under this rationale, it is justified to develop a grounded theory about consumers' attitudes toward viral marketing, because, in grounded theory, we generally focus on organizing and postulating a possible concept based on collected data of respective sample's opinion (Allan,2003).

### **Research Methodology**

This research was designed to reveal consumers opinions through exploratory investigation. The study primarily attempts to capture social network members' opinions on how they pursue their attitudes from positive perceptions when products are promoted to them through their social network loop.



The methodology followed here is consistent with marketing research which is engaged in identifying certain plausible behaviors of consumers using exploratory methods. This methodology includes i) exploring consumers perception through a designed experiment and identifying the measuring items of their attitude, ii) Then a systematic empirical study is conducted to verify the scale items to measure the underlying constructs and theorize cause-effect relationship among the constructs of behavioral attitude. The flow chart (Figure 1) below is followed to reveal the measuring items of possible constructs which can track consumers' attitudes toward viral marketing in Facebook.



**Figure 1: Flow Chart of the Research Design**

This study was designed to understand and reveal the attitudes of members of a particular network loop of Facebook toward a particular promotional advertisement

who are also actual consumers. Respondents for this study were chosen from active members of Facebook for this research and are representative of the actual population. These members are also genuine prospective consumers who often use social networks as the source of information collection for any product.

### *Experiment and Quantitative Study*

An advertisement about Samsung Galaxy Tab S was generated formally by a marketing company; however, it was introduced as an informal communication in this network through a designated research assistant (an active member of this social network) specially tasked with operationalizing this process. Since then, this research has taken the aggregate value of the responses following a similar process, while all the respondents' names, including the initiator's name, were kept anonymous. The original message was: "I bought a Samsung Galaxy Tab S last week. It is the best tablet that I have owned. It runs things smoothly. It is moderately a gaming tablet. I like how it handles Real Racing 3 and helps me with my schoolwork. It is great for watching shows and movies when I installed Kodi and Mobdro on it".

This dedicated member then passed this message to all the peers of this network pretending that it was his own opinion. This apparently self-generating, passing, and receiving of advertisements among the connected members of this Facebook network were communicated for one week. A total of 265 members proactively and reactively participated in this opinion generating process about the product, although the number of members in this social network was much higher than 265. After one week, a mail was distributed among those 265 members who participated in this message sharing the experiment through Facebook. They were asked to state five to ten reasons regarding how people may be persuaded to develop their positive attitudes toward this promotional advertisement. They were instructed to reveal the importance of those reasons in response to the effect that the advertisement had generated in their social network loop in the case of Samsung Galaxy Tab S. The members were also requested to send their perceptions to a specific email address.

From careful observation, understanding, and analysis of the statements of the 265 social network members, it was found that many respondents used several same or similar driving forces as the pursuance factor to develop an attitude towards the mentioned advertisement. They used sometimes different words to denote the same meaning or significance. To reveal similar meanings for the sake of categorization, a focus group consisting of three university professors and three managers actively involved in online marketing from Bangladesh was formed. When the sources of positive attitudes were classified, compared, and categorized by the focus group, generic characteristics and significance were considered to identify and develop preliminary scale items measuring driving forces for attitudes toward social network advertisement, viz., first order reflective indicators as dimensions of positive attitudes.

Finally, the focus group captured 54 measuring items from the conceptual meanings of the scales proposed by the respondents. With these 54 scale items, a questionnaire was prepared including five more questions to measure the dependent construct attitude toward the advertisement. These five questions about attitude were taken from published literature about advertisements (see, Homer, 1990; Huang *et al.*, 2010; Laczniaak & Muehling, 1993) with revisions.

### *Empirical Study*

From the same network loop, telephone numbers of five hundred members were collected. (From that Facebook network, 265 members participated in the experiment phase by sharing that message). These five hundred members were selected from this social network randomly. To keep cultural homogeneity, all the members who were selected are living in Bangladesh. It is worth to mention that in Bangladesh, interacting in social network like Facebook through their Smartphone is very popular (Shareef et al., 2017a). After collecting telephone numbers of the members of this social network, this newly developed questionnaire was then distributed among those five hundred members of the social network through their email with a request to respond through a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). These members of this network were asked to answer if they have seen different promotional

advertisements in their social network, perceive this informal message sharing related to product promotion positively, and are actual buyers of many products after gathering knowledge from peers of their social network. The respondents were also requested to send their perceptions to a specific email address. A total of 317 members filled out the questionnaire reflecting insights about their attitudes in response to the effect of any product promotional message generated and shared among members in their social network loop.

### **Concept Development through Statistical Analysis**

Exploratory factor analysis (EFA) was conducted on the preliminary 54, measuring items using principal component analysis as the extraction method and varimax rotation as the rotation method. The breaks-in-Eigen values criterion ( $>1$ ) was used to determine the number of factors to retain.

A series of iterations were then used, each involving elimination of items with low loadings ( $<.45$ ) on all factors; high cross loadings on more than one factor; and a factor analysis of the remaining item. EFA is a strong tool for theory development based on an exploratory study and also for validity measurement (Stevens, 1996). The EFA result retained a total of 5 factors with 36 measuring items for those five constructs. To measure attitudes, the dependent variable, all the five scale items were retained. In the EFA, 18 items were removed that had a loading factor of less than .45 or cross-loaded on more than one component. Simultaneously, the correlation matrix of the 54 items were verified to understand the reason of low or cross loading. The items that are cross loaded in more than one factor are strongly correlated with items loaded under both factors. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was examined as a basis of fitness. Kaiser (1974) argued that if the KMO is less than 0.5, factor analysis is inappropriate. In this study, the KMO value was 0.911. This indicates the acceptance of factor analysis. The Bartlett Sphericity test is also significant at the level of 0.000.

### *Reliability and Validity Assessment*

Construct validity is very important for exploratory investigation (Bagozziet al., 1991) and examining convergent and discriminant validity for construct validity is a challenging aspect of this kind of social network study. These components have serious and confusing influences on empirical research and can yield totally misleading conclusions as the driving forces (Bagozziet al., 199; Cambell & Fiske, 1959). The reliability of all the independent and dependent variables was thoroughly verified by Cronbach's alpha (Cronbach, 1951). Since the coefficient alpha for the five independent and one dependent variables scored in the range from 0.833 to 0.964, the variables have reliability (Nunnally & Bernstein, 1994). This exploratory study has also conducted a confirmatory factor analysis (CFA) to finalize the validity and acceptance of the scale items of the respective constructs. All the five independent variables and one dependent variable with scale items showed an over-identified model and satisfied both the requirements of the CFA and were loaded on the respective constructs over 0.50 except seven measuring items of independent variables. At this point, the cut off value was set to remove any item as 0.50 (Kline, 2005). Any scale item loaded less than 0.50 is not contributing significant variance to form the construct and thus, can be removed (Kline, 2005). Therefore, those seven items were removed. Final accepted scale items of the five independent variables to form attitudes toward social network advertisement satisfied the minimum cut-off point requirements (Fornell & Larcker, 1981; Kline, 2005). In this way, convergent validity is confirmed, as the retained scale items for each construct have average variances extracted (AVE) for each factor and measuring items of at least 0.50 (Fornell & Larcker, 1981). Discriminant validity among the five constructs was also verified as the largest shared variance between these factors is lower than the least AVE value for each factor and its measures (Espinoza, 1999). So, finally, five independent constructs were selected with 29 measuring items and one dependent variable with five measuring items (Shown in Appendix A).

The focus group formed previously, examined the scale items under each construct, and then, finally, based on the collective meaningful significance of all the measuring items

under each construct, provided the following names with the number of measuring items shown in Table 1. A multicollinearity problem was also verified by investigating Variance Inflation Factor (VIF) values that range from 1.33 to 2.01 (much less than 10). These values imply that there is no severe multicollinearity (Allison, 1999; Netter *et al.*, 1996).

**Table 1 Construct of Attitude toward Advertisement**

Construct	Number of Measuring Items
Hedonic Motivation (HM)	4
Source Derogation (SD)	5
Self-Concept (SC)	6
Message Informality (MI)	6
Experiential Message (EM)	8
Attitude Toward Advertisement (AA)	5

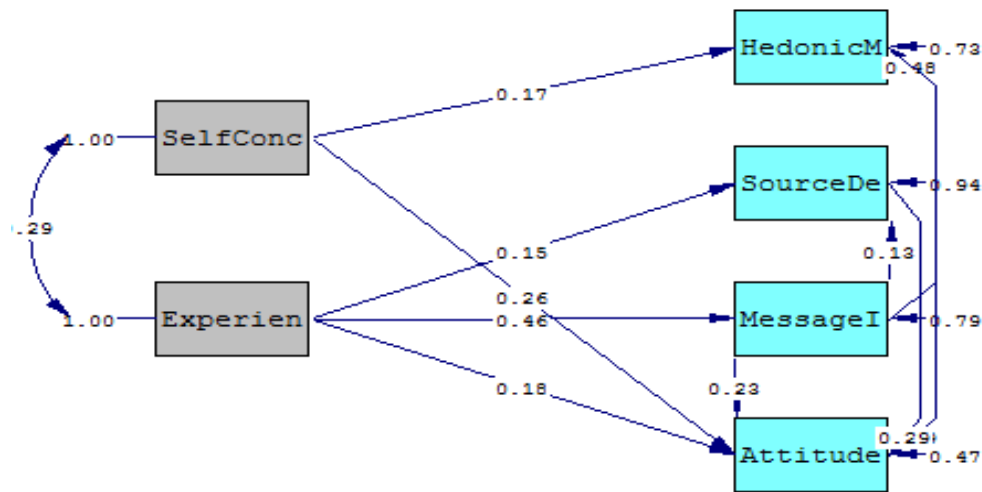
### **Statistical Verification of Causal Relationship by Path Analysis**

This study used LISREL for the Path Analysis. As all the independent and dependent variables were measured through the Likert Scale 1-5, data gathered from this empirical study is not perfectly continuous. Therefore, a structural measurement through SEM by maximum likelihood (ML) is not appropriate for this type of data (Kline, 2005, p.219). Five independent variables to pursue attitudes toward advertisements on Facebook are revealed in this study. As an exploratory study, the research initially hypothesized direct cause and effect relations of the mentioned five independent variables, namely hedonic motivation (HM), source derogation (SD), self-concept (SC), message informality (MI), and experiential message (EM) with attitude toward advertisement (AA). Literature on marketing and consumer behaviour for accepting viral marketing

on social networks (Chu, 2011; Kim & Ko, 2012; Logan *et al.*, 2012; Pietro & Pantano, 2012; Schulze *et al.*, 2014), supports the hypothesis that message informality (MI) and experiential message (EM) have relations with source derogation (SD) in addition to their direct causal relations with attitude toward advertisements (AA). For the analysis element in this study, 6 X 6-correlation matrix is applied.

The path diagram exhibits both the unstandardized and standardized regression weights (factor loadings) of the independent variables on attitude toward advertisement (AA). Values of the unstandardized factor loadings estimate the change in the dependent variable for unit change on the respective independent variable given the effects of other independent variables are constant. After the first iteration, the research found Chi-Square statistic 6.29, df. 2, p-value 0.04301, and root mean square error of approximation (RMSEA) 0.082. Therefore, the model did not fit well with the prescribed cause-effect relations for the encapsulated data. The analysis suggested certain modification indices to improve the model fitness. In addition to the direct relations of self-concept (SC) and message informality (MI) with attitude toward advertisements (AA), they have causal effect relations with hedonic motivation (HM). Experiential message (EM) also relates to message informality (MI) in addition to its direct causal relationship with attitudes toward an advertisement (AA). From the theoretical perspective of marketing literature and behavioural theories, we deliberated over those proposed relations. This research also examined the correlations of those newly proposed relations. From both theoretical backgrounds and sample relations, this study found it was justified in adding those causal relations in the model with several error covariance. Then the model was run again. This time, all the model fitness indices are reasonably good as listed in Table 2. The standardized path coefficients, Chi-Square statistic, degree of freedom (df), p-value, and RMSEA are shown in Figure 1A (at 0.05 level) and 't' values in Figure 1B. The five significant variables combined explained 51.9% ( $R^2 = 0.519$ ) of variances on attitude toward advertisement (AA). For an exploratory study in social science, this amount of variance explained by the independent variables is quite satisfactory (Kline, 2005).

The  $\chi^2$  statistic 7.34 (df = 4), p-value 0.11901, RMSEA (.051) indicate that the null hypothesis of the model is reasonably a good fit with the sample, or at least cannot be rejected (Browne *et al.*, 1993; Hu & Bentler, 1999; Kline, 2005, pp. 133-144). Other fit measures such as comparative fit index (CFI), normed fit index (NFI), and goodness of fit index (GFI), adjusted goodness of fit index (AGFI), relative fit index (RFI), root mean square residual (RMR), and incremental fit index (IFI) indicate that the model fit compares reasonably with the literature (Churchill, 1979; Segarset *al.*, 1993; Chau, 1997; Kline, 2005, pp. 133-144). There is no single recommended fit measure for the Path analysis. The recommended values in literature and the findings are shown in Table 2.



Chi-Square=7.34, df=4, P-value=0.11901, RMSEA=0.051

**Figure 1A Attitude toward Social Network Advertisement (regression values)**



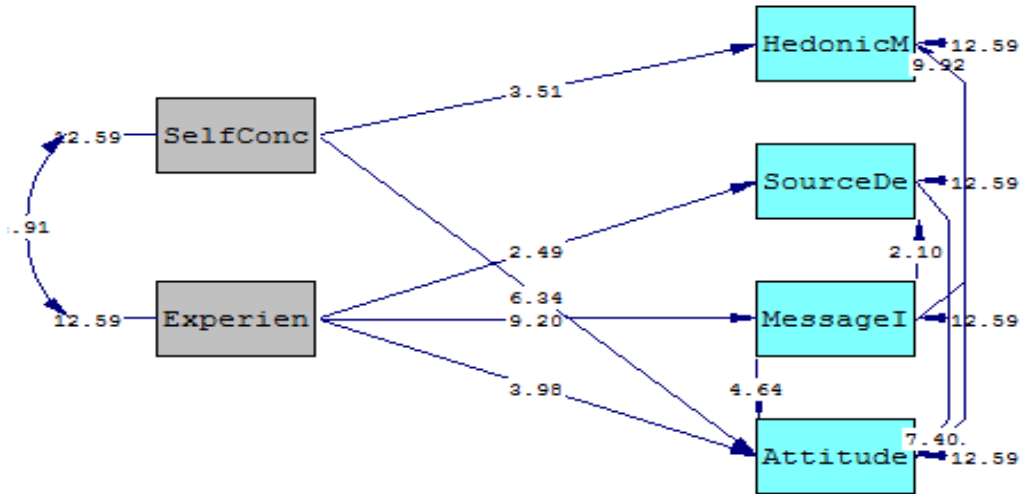


Figure 1B Attitude toward Social Network Advertisement ('t' values)

Table 2: Fit Measures from Path Analyses

Fit Measures	Recommen ded Values	Attitude toward Advertisement
Chi-square ( $\chi^2$ )	$p \geq 0.05$	7.34 (p= 0.11901)
Degree of Freedom (DF)		4
$\chi^2/DF$	$\leq 3.0$	1.835
Root Mean Square Residual (RMR)	$\leq 0.05$	0.0334
Comparative Fit Index (CFI)	$\geq .90$	0.993
Goodness of Fit Index (GFI)	$\geq .90$	0.992
Adjusted Goodness of Fit Index	$\geq .80$	0.96
RMSEA	$< 0.06$	0.051
Normed Fit Index (NFI)	$\geq .90$	0.984
Incremental Fit Index (IFI)	$\geq .90$	0.993
Relative Fit Index (RFI)	$\geq .80$	0.941

All of the five variables are found to have significance and to positively pursue attitudes toward advertisements. The total variances are explained in pursuing attitudes toward advertisements with a result of 51.9 percent. Therefore, this research can finally claim that these five variables are the desired driving factors for social network members to be persuaded by creating positive attitudes toward social network advertisement. Final variables and their measuring items are shown in Appendix A.

## Results and Discussions

Although researchers generally agree that method bias has the potential to affect the results of a single-method study, no consensus exists about the seriousness of such biases (Malhotra *et al.*, 2006). However, to reduce the effect of method bias in the findings, the data was collected and finalized from two separate empirical studies, one to collect the scale items and another to validate the measuring items. The researchers also edited, corrected, and revised the scale items through an expert focus group which can reduce the effect of bias of participants, instrument, and procedure (Burton-Jones, 2009). According to the model, attitude toward product promotional message or information, i.e., advertisement in social network like Facebook is persuaded by the following five factors as depicted in the following equation:

$$Attitude = 0.190*HedonicM + 0.294*SourceDe + 0.226*MessageI + 0.259*SelfConc + 0.180*Experien$$

Attitude toward advertisement in social network is modeled through the following hypotheses shown in Table 3.

**Table 3: Formation of Attitude: Direct and Indirect Relations**

Independent Construct	Hypothesis	Dependent Construct	Loading value
Hedonic Motivation	H <sub>1</sub> : Hedonic motivation enhances consumers' perception of positive attitude		0.19

(HM)	toward advertisement in social network		
Source Derogation (SD)	H <sub>2</sub> : Source derogation enhances consumers' perception of positive attitude toward advertisement in social network		0.294
Self-Concept (SC)	H <sub>3</sub> : Self-concept enhances consumers' perception of positive attitude toward advertisement in social network  H <sub>3a</sub> : Self-concept enhances consumers' perception of hedonic motivation toward advertisement in social network		0.259  0.17
Message Informality (MI)	H <sub>4</sub> : Message informality enhances consumers' perception of a positive attitude toward advertisement in social network  H <sub>4a</sub> : Message informality enhances consumers' perception of hedonic motivation toward advertisement in social network  H <sub>4</sub> : Message informality enhances consumers' perception of source derogation toward advertisement in social network	Attitude toward Advertisement (AA)	0.226  0.479  0.129
Experiential Message (EM)	H <sub>5</sub> : Experiential message enhances consumers' perception of positive attitude toward advertisement in social network  H <sub>5a</sub> : Experiential message enhances consumers' perception of message		0.18  0.459

	informality toward advertisement in social network  H <sub>5b</sub> : Experiential message enhances consumers' perception of source derogation toward advertisement in social network		0.153
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Attitudes toward social network advertisement, i.e., any effort to communicate messages about products among network members who are also consumers of different products is formed and persuaded by hedonic motivation (HM), source derogation (SD), self-concept (SC), message informality (MI), and experiential message (EM). Values of the unstandardized factor loadings estimate the change in the dependent variable for unit change on the respective independent variable, if the effects of other factors are constant. Suppose source derogation (SD) has a loading factor equal to 0.294; a unit positive change on source derogation causes a 0.294 unit positive change on perception of attitude toward advertisements on social networks when the effects of all other four critical factors (independent variables) remain constant. Similarly, effects of other four constructs on attitudes toward advertisements (AA) can be explained.

Findings also suggested that self-concept contributes in forming hedonic motivation for attitude toward advertisements (AA). Experiential message contributes in forming message informality and source derogation for attitude toward advertisements (AA). Similarly, message informality contributes in forming hedonic motivation and source derogation for attitude toward advertisements (AA).

### **Theory Development**

In this section, findings from empirical study will be explained and justified in light of existing literature and behavioural theories to develop grounded theory.

### *Hedonic Motivation*

Marketing researchers (Atulkar & Kesar, 2017; Hughes & Palen, 2009; Kahn, 1995; Logan *et al.*, 2012; Nisara & Prabhakar, 2017; Pietro & Pantano, 2012; Shareef *et al.*, 2015) working on online consumer behaviour have showed that enjoyment or fun is a prevalent factor for consumers to accept this kind of media. However, marketers do not have agreement on the argument that consumers, while evaluating any advertisement, search for any kind of entertainment from the content and context of advertisements. On the other hand, researchers (Hughes & Palen, 2009; Logan *et al.*, 2012; Pietro & Pantano, 2012; Shareef *et al.*, 2015) working on social network promotional marketing strategy, recommended that for exposure, attention, and positive perception about viral marketing, either formal or informal, the potential priority for consumers should be entertainment or enjoyment. They also found from extensive empirical studies among different segments of consumers who are active members of social networks, that hedonic motivation is an essential prerequisite to being persuaded about any product's promotional message, generated and received through the social network.

This study (See Figure 1A/1B) also identified that, for social network advertisements, consumers pay attention if the message is embedded within entertainment. Without enough hedonic motivation consumers might not be exposed, pay attention, and develop positive perceptions toward the advertisement. So, for viral marketing, hedonic motivation essentially and predominantly includes fun and entertainment that social media members receive by sharing any product promotional experience with their peers. This finding is also supported by the theory of prospective gratification (LaRose *et al.* 2001). The extended concept of unified theory of acceptance and use of technology (UTAUT2) (Venkatesh *et al.* 2012) asserts that consumers are eager to avail of hedonic motivation, a view also supported by (Dwivedi *et al.*, 2016). Based on the scale items shown in Appendix A, the concept hedonic motivation (HM) can be defined here as *the degree of emotional entertainment members perceive in generating, passing, and receiving any product related information from their social network.*

*Source Derogation (SD)*

Cognitive learning theory suggests that consumers typically try to interpret the message sent by the marketers before making any final decision on whether they would be persuaded or not. Cognitive response models argue that, when any product advertisement is communicated with the consumers, they might learn from the implied meaning of the message proposed by the marketers or they might not learn. Even after learning, they might be persuaded to create positive attitudes toward the product or not. This entire cycle of motivation about any advertisement substantially depends on the source of message externally, i.e., who is functionally presenting the message to the prospective consumers. Several scholarly articles on promotional marketing (Bampo *et al.* 2008; Hinz *et al.* 2014; Van der Lans *et al.* 2010; Schulze *et al.*, 2014) analyzing the effect of advertisement and how consumers evaluate advertisements, clearly identified that the impact of advertisements on consumers' minds potentially depends on source derogation. According to schema theory (Aronson *et al.*, 2012; Bartlett, 1932), consumers are prompted to pursue mental orientation depending on the situational effect of the message, which is significantly controlled by source derogation. Social network researchers who conducted research on viral marketing (Logan *et al.*, 2012; Pietro & Pantano, 2012; Schulze *et al.*, 2014) advocate for the credibility of the source of advertisements. They revealed from empirical studies that consumers are very aware about the message initiator and presenter of the message in social networks rather than the content of the messages.

Findings of this study postulated that members of a social network become persuaded by any product promotional message in their loop if it is shared from their peers (See Figure 1A/1B). Therefore, this grounded theory reflects that source derogation, i.e. identity of the originator of the primary message about product experience is an important predictor to pursue positive attitudes toward social network advertisements. This construct reflecting the underlying concept of the corresponding measuring items can be illustrated here as *the degree to which members of social network provide importance in perceiving trustworthiness to the source member in their network who is initiating the message.*

### *Self-Concept (SC)*

This dimension of personal characteristics is analyzed by several marketing researchers (Dwivedi *et al.*, 2016; Rook 1985; Sirgy, 1982) and they streamlined compatibility of personality with cognitive and affective functions of attitude. Shedding light on social cognitive theory (Bandura, 1986), consumers are tempted to observe external stimulus like advertisements of products and are tempted to replicate this behaviour according to their mental ability to perform this behaviour. This mental ability differs consumer to consumer and it is directly correlated with personal traits. Reception approach (Cunningham & Finn, 1996) of mass media theory recognizes the compatibility of personal characteristics with selection of media and its credibility perception. Theory of planned behaviour (TPB) (Ajzen, 1991) recommended that consumers develop their attitudes reflecting certain beliefs which are congruent with their ritual phenomenon. Dwivedi *et al.* (2016) revealed the importance of personal characteristics in pursuing and accepting virtual mediums which resemble close connections with social network behaviour.

Respondents in this study explicitly showed their ritual compatibility with social network advertisements and were effectively persuaded. All the members of the network loop where the message of product promotional experience was initiated did not participate in this continuous sharing and interacting process (265 members participated). So, the grounded theory of development of attitude for viral marketing essentially includes personal compatibility with social media behaviour, i.e., self-concept. Self-Concept (SC) can be conceptualized based on the measuring items shown in Appendix A as *the degree to which a social network member is intrinsically motivated to evaluate congruence of their own personality-related traits with generating, passing, and receiving any product related information from the network to be persuaded.*

### *Message Informality (MI)*

According to schema theory, consumers' mental ability to evaluate any information depends on the situational cognition. For social network behaviour like Facebook

interaction, members are actively participating in generating, passing, and receiving messages from peers in that network loop. Consequently, one generic and heuristic urge of social network members in conjunction with exposure, attention, and positive perception about any product related promotional message is its informality (Akar & Topcu, 2011; Chu, 2011; Kim & Ko, 2012). Researchers who are working on viral marketing in social networks encapsulated that members of any social network are highly congruent with the credibility of the message. However, for social network consumers, behavioural attitude about credibility of message is substantially aligned with the non-commercial nature of the message as it is supposed to be generated from their informal peers (Lee *et al.*, 2011). Many prospective consumers who are engaged in social network surf their network loop to get voluntary messages from their informal references; this kind of message is highly regarded as credible to persuade them to purchase the product (Hughes & Palen, 2009; Pelling & White, 2009).

According to the findings of this study, informality of the shared message is one of the driving forces for the peers to be persuaded (See Figure 1A/1B). So in this current research, the grounded theory of development of attitude for viral marketing has captured the essence of informality of promotional messages, i.e., non-commerciality in the context and content about any product as the foundations to develop consumers' attitude and be persuaded. Message Informality (MI) concept is defined in this study reflecting the underlying measuring items shown in Appendix A as *the degree of motive of the non-commerciality of the initiator to generate the product related message and communicate this with the peers of that social network.*

### *Experiential Message (EM)*

Behavioural learning theory and cognitive learning theory, although rhetorically contradictory in their foundational belief about development of consumers belief to interpret any advertisement, both agree on the issue that any product related message if it is initiated from consumers' real experience can easily pursue consumers to learn, positively evaluate, and be persuaded by the intended meaning. If we look at the theory of planned behaviour, it is quite evident that consumers' behavioural intention is highly motivated by subjective norm. Now, from the conceptual paradigm of experiential



message, any real consumption related information from the peers of a social network basically is intended to act as a subjective norm (Ajzen, 1991; Akar & Topcu, 2011; Chu, 2011; Hughes & Palen, 2009; Pelling & White, 2009). Marketing researchers have long realized that the presence of online has created an excellent avenue for them to pursue prospective consumers by communicating with the real experience of those consumers who have used the product personally. Reflecting the theoretical essence of social cognitive theory, it is quite evident that consumers' behavioural interest to replicate any observable behaviour largely depends on the credibility of the information (Ducoffe, 1995; Shareef *et al.*, 2015).

Findings of this study have revealed that, since an experiential message has that quality to easily impart the impression of replication as it is a real consumption experience from non-commercial peers, it has high power to persuade members of social networks to develop positive attitudes about the product (See Figure 1A/1B). So, the grounded theory of development of attitude for viral marketing conceptualized in this research has revealed that members of any social network are prone to accept any product related message as credible, if it is initiated and passed on to them from their peers who have practical experience of using the product. This study has conceptualized experiential message (EM) as *the degree of past experience of the initiator of any product related message in the social network to buy and consume the product personally*.

Now, collectively, the above mentioned five constructs, which are measured through the 29 scale items can pursue members of social network who are also prospective consumers to generate a positive attitude toward advertisements in that network loop.

### **Managerial Implications**

If we look at the generic formation of those five constructs pursuing social network members' attitudes toward advertisements, it is explicitly evident that the potential contributor for consumers to be persuaded is not the content of the message; rather the

context of the message is substantially directing and motivating them to develop positive perceptions, specifically for any promotional marketing in social networks like Facebook. Traditional marketing literature is highly congruent with the content of the message. Marketing literature focused on behavioural learning theory, observational theory, and cognitive learning theory to evaluate how consumers learn from any promotional marketing like advertisements. These theories acknowledged that consumers learn from external stimulus or based on internal capability; however, for both cases the content of the message is imperative in persuading and creating favourable attitudes toward advertisements (Akar & Topcu, 2011; Chu, 2011; Kim & Ko, 2012). For social network advertisements, members of any network who are prospective consumers can learn and be persuaded by the context of messages, especially if the essence of the message is based on the initiator generating a non-commercial image of the message reflecting the source who is generating it. However, social network members' personal image, and compatibility to learn from their networks is also prevalent in ensuring persuasion. Broadly, we have categorized three factors for perspective consumers to be persuaded in social network advertisements: i) Product related messages should be entertaining as members surf the network for emotional benefit, ii) Messages should be generated in the social network from their peers, iii) Social network members have specific personal traits which should be compatible with the structure of the message to promote the product.

Shedding light on the foundations of attitude development (Howard & Jagdish, 1969; Robertson, 1974; Roloff, 1981; Zajonc, 1968), this study reveals that, for the formation of overall attitudes toward social network advertisements, consumers are dependent on cognitive components, affective components, and behavioural components. Hedonic motivation and message informality support affective components of attitude. Source derogation and experiential messages are the driving forces for creating cognitive functions of attitudes, and Self-concept is the overarching effect of the behavioural component of attitude. Therefore, social network members can learn about any product from the network, create positive perceptions, and become persuaded in terms of

favorable attitudes in terms of the three components of generic attitude; cognitive, affective, and behavioural or conative.

Literature on social network promotional marketing or viral marketing (Chu, 2011; Kim & Ko, 2012; Logan et al., 2012; Pietro & Pantano, 2012; Schulze et al., 2014), illustrates that consumers search for intrinsic motivation related to the entertaining quality of the message while being exposed, paying attention, and finally, being persuaded. Interestingly, this entertaining component of the message does not depend on the message statement, its structure and organization; but on the fun generated and circulated by peers while they are also informally participating in receiving, modifying, editing, and passing on this message. So, here the concept lies on the paradigm that this brainstorming message is not solely claimed by any single member, but rather that all the members of the social network unanimously endorse the outcome of the final message. In this way, they are getting intrinsic motivation for this message which resembles hedonic motivation. Researchers on general social networks like Facebook, YouTube, Twitter etc. (Chatterjee, 2001; Shareef et al. 2016) and on the marketing of social network behaviour for accepting product promotional information or advertisements (Hayes & King, 2014) have acknowledged that those people, who are highly involved in social networks, are eager to collect product related information from their network loop, preferably initiated by network members. So, users of social networks have unique characteristics to learn about any product. Researchers identified that network members are more eager to be persuaded if the message is initiated by their own loop members. Therefore, accumulating the three broad conceptual paradigms of attitude development forces in social networks in a single statement, this study claims from the grounded theory (Social Media Consumer Attitude Development----SM-CAD) that social network advertisements should have non-commercial and post-consumption value:

*Consumers will be willingly exposed, attentive, learn, and be persuaded if any product related message generated and circulated in the social network is*

*developed by any peer of the network who is without any commercial target generating and sharing this message based on post-consumption experience.*

However, some other peers of that network might contribute and share their own opinion to formulate the final message and circulate it among members, so that all the members can contribute towards the concept development of any product.

This finding provides enormous benefits for marketers in terms of the future of advertising. Marketers know that following traditional methods to motivate consumers in any social network might not always be effective; sometimes, it can create irritation among network members who are also prospective consumers. If secretly they can motivate any informal member of social networks to initiate and launch any product related information, this can then be an effective strategy for social network advertisements. This grounded theory (SM-CAD) has a potential contribution to make in the existing literature of viral marketing. It has explicitly postulated how marketers can focus on shaping and pursuing consumers' favorable attitudes towards their products. This will provide them with an excellent opportunity to generate a new avenue for product promotional efforts which is significantly different from traditional ways of circulating advertisements.

However, in this case, an important tradeoff is required involving the control of the member of any social network to freely initiate any product related information after consumption, and the absolute freedom to initiate this solely from their own judgment. If it is too controlled, the message can lose its informal nature and other members of that network might not be interested to learn and be persuaded. On the other hand, if the appointed network member is provided with complete freedom, the effect can be adverse as the member can create negative concepts about the product. Therefore, the results from this study have significant implications. This grounded theory is also rooted in the conceptual discourse of social exchange theory. Consumers willingly and spontaneously accept the message in their social media network loop reflecting peers' experience about any products, if they perceive they can get genuine pre-purchase and

pre-consumption experience. In that case, they will be motivated and willingly and spontaneously share their similar experiences in future to support and develop a unified opinion to facilitate other peers' behavioral attitude. This finding of the current study is clearly supported by the phenomenon of social exchange.

## **Conclusions**

This research aimed to identify how active social network members create their attitudes and can be persuaded by any product related advertisement displayed in their network. More precisely, this current research is engaged in deriving the driving forces which persuade Facebook members, who are also prospective consumers, to develop favorable attitudes toward any product. This study has significant importance as current research on viral marketing by capturing consumers' attitudes toward advertisements in social networks used traditional technology related behavioural theories. However, on the other hand, researchers working on social networks have acknowledged that social network members differ significantly in pursuing their behaviour and forming attitudes toward any product related message from traditional consumers who might learn and be persuaded from traditional advertisements. These researchers also asserted that social network members are frequently engaged in surfing their network page and interacting to receive product related information from their peers. Obviously, their behavioural patterns and personal compatibility to receive any advertisement and evaluate its credibility differs substantially from traditional consumer behaviour. So, investigating the behavior of consumers who are operating on Facebook may need new theory development methodology to understand consumers' behavioural attitudes and its antecedent driving forces. In this context, this research is designed as an exploratory study to reveal the driving forces which contribute in forming and pursuing consumers' favourable attitudes toward social network advertisement.

This study has designed its methodology to explore the measuring items for pursuing positive attitudes toward social network advertisements. A research assistant appointed to work on this study who is also an active member of Facebook introduced a message

about a Samsung Tab S product and passed it to other network members. Then, different members of that network participated in message generation, modification, passing, and receiving to compose a final structured opinion to develop their attitude. After this brainstorming of the product promotional message, the members of that network were communicated with through telephone and requested to respond about the driving forces which pursue them to create positive attitudes about the product promotional message in their network. Respondents showed several pursuing factors for generating favourable attitudes toward this social network advertisement, and sent information to the researcher through a specific email address. After capturing the measuring items from the Facebook members, a Focus group reviewed this. These were given generic meaning and were categorized. Thorough statistical analysis was conducted to encapsulate the final measuring items and the relevant reflective constructs. In this way, five constructs with twenty-nine measuring items were identified. These are: hedonic motivation, self-concept, source derogation, message informality, and experiential message. Members of social networks who are also prospective consumers are interested in being exposed to messages, learn about same, and finally, be persuaded to create favorable attitudes if they find intrinsic and extrinsic motivation from the five constructs outlined above in this new study.

### **Future Research Directions and Limitations**

This research is exploratory in nature. As a result, it has several limitations which can be investigated gradually in future studies. This empirical study was conducted only in one network loop of Facebook which might have clustered characteristics. Future researchers can investigate this same study in different countries to capture opinions of different groups which might have different segmenting characteristics. The message in this study was generated by one member of the network who was artificially appointed by a marketing group. Complete voluntary service cannot be warranted by this procedure. Future research can explore the same findings following different procedures. The product advertised here in the social network is a gaming console. For different products, consumers might have significantly different behaviours and

attitudes. For instance, the level of the pursuing effect of hedonic motivation and self-concept might vary for different types of advertisements containing different information and indicating other types of products which are used completely for different purposes. It might also depend on the nature of the social group. For generalization, these issues should be examined by future researchers.

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## APPENDIX A

### Questionnaire and Factor Loading of the Measurement Items from the CFA

Item	Loading
<b>Message Informality (MI)</b>	
MI1. I provide more priority to receive informal message related to product from my peers than any commercial message displayed in my Facebook network	0.667
MI2. I am interested in viewing any product related information if it is initiated by my network members	0.601
MI3. I feel more interest about any product if I receive informal information about the product from my network members	0.722
MI4. I like to receive informal messages about any product from my Facebook network	0.555
MI5. I like to view informal messages about any product from my Facebook network	0.521
MI6. I do not like to receive any commercial messages about any product	0.745

Item	Loading
from my Facebook network	
<b>Experiential Message (EM)</b>	
EM1. I like to receive any message related to a product through my Facebook network if it is initiated by someone who has experience to buy that product	0.870
EM2. I like to receive any message related to a product through my Facebook network if it is initiated by someone who has experience to use that product	0.854
EM3. I like to view any message related to a product through my Facebook network if it is initiated by someone who has experience in buying that product	0.711
EM4. I like to view any message related to a product through my Facebook network if it is initiated by someone who has experience to use that product	0.743
EM5. I feel interest about any product if I receive any information about the product from a peer in Facebook network if that person has real experience of buying the product	0.689
EM6. I feel interest about any product if I receive any information about the product from a peer in Facebook network if that person has real experience of using the product	0.590
EM7. Before buying any product I prefer to get information about real buying experiences of that product from my network members in Facebook	0.556
EM8. Before buying any product I prefer to get information about real consumption experience of that product from my network members in Facebook	0.512
<b>Hedonic Motivation (HM)</b>	
HM1. Receiving product related information from my Facebook network is fun	0.842

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HM2. Passing product related information among my Facebook network members is fun.	0.783
HM3. I feel enjoyment if I receive any product related information from my Facebook network members	0.798
HM4. I feel enjoyment in viewing product related information from my Facebook network members	0.801
<b>Source Derogation (SD)</b>	
SD1. Who is first initiating the product related information in my Facebook network is important for me to receive it	0.588
SD2. Who is first initiating the product related information in my Facebook network is important for me to view it	0.654
SD3. Who is first initiating the product related information in my Facebook network is important for me to trust it	0.885
SD4. Source of product related information in Facebook is important for me to be persuaded	0.712
SD5. To believe any product related information received from my Facebook network, I always try to identify the source of information	0.801
<b>Self-Concept (SC)</b>	
SC1. I feel compatible to receive product related information from my peers in my Facebook network	0.752
SC2. I feel compatible to view product related information from my peers in my Facebook network	0.750
SC3. I feel adherence with receiving product related information through my Facebook network	0.587
SC4. I feel adherence with viewing product related information through my Facebook network	0.519
SC5. My personal behaviour is congruent with receiving product related information from my peers in my Facebook network	0.675
SC6. My personal behaviour is congruent with viewing product related	0.666

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information from my peers in my Facebook network	
<b>Attitude Toward Advertisement (AA)</b>	
AA1. I like to receive product information in my Facebook	0.703
AA2. I like to view product information in my Facebook	0.743
AA3. I collect product related information from my peers in Facebook	0.743
AA4. I prefer promotional marketing in Facebook	.812
AA5. I am interested to communicate any message related to product information with my Facebook network members	0.785