

### Social Media in Virtual Marketing

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1 March 2015

Online at https://mpra.ub.uni-muenchen.de/69868/ MPRA Paper No. 69868, posted 9 March 2016 17:20 UTC

# Social Media in Virtual Marketing: Antecedents to Electronic Word of Mouth Communication

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#### **Abstract**

Social media usage in the world and especially in Pakistan has a high growth due to which it (social media) has a potential of becoming an effective marketing tool. Despite its comparatively low cost and significance, marketers are not effectively utilizing social media. Thus the aim of this study is to measure the influence (effect) of four social variables: social capital, trust, homophily and interpersonal influence on electronic word of mouth (eWOM) communication. The sample size for the study is 300 and preselected enumerator's collected the data from the leading shopping malls of the city.

Although the scales and measures adopted for this study have been earlier validated in other countries, however the same were re-ascertained on the present set of data. After preliminary analysis including normality and validity the overall model was tested through Structural Equation Model (SEM). This was carried out in two stages - initially CFA for all the constructs was ascertained which was followed by CFA of the overall model.

Developed conceptual framework was empirically tested on the present set of data in Pakistan which adequately explained consumer attitudinal behavior towards electronic word of mouth (eWOM) communication. Three hypotheses failed to be rejected and one was rejected. Trust was found to be the strongest predictor of electronic word of mouth (eWOM) communication, followed by homophily and social capital. Interpersonal influence has no relationship with electronic word of mouth (eWOM) communication. The results were consistent to earlier literature. Implication for markers was drawn from the results.

Keywords: eWOM, social capital, trust, homophily and interpersonal influence, social media

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#### 1. Introduction

Social marketing networks due to their popularity and a high growth trend have become an important communication medium (S. Li & Li, 2014). But still marketers world over and in Pakistan are not utilizing them efficiently and effectively (Khan & Bhatti, 2012). Social media is not a substitute to traditional advertising medium, as traditional medium is still required to create interest and induce trial (Chu & Choi, 2011) (S. Li & Li, 2014).

Social media coupled with electronic word-of-mouth (eWOM) communication is very effective and efficient in changing consumers' attitude and behavior towards a product and/or brand (Zhang, Craciun, & Shin, 2010). As compared to word-of-mouth communication(WOM) communication, electronic word-of-mouth (eWOM) advertising is faster, swifter and has a global reach (Gil de Zúñiga, Jung, & Valenzuela, 2012). In view of its significance from marketing perspective, it is important to investigate the determinants that affect electronic wordof-mouth (eWOM) communication (Aiello et al., 2012) (M. Y. Cheung, Luo, Sia, & Chen, 2009). Thus the aim of this study is to measure the effect of amophily, social capital, interpersonal influence and trust on electronic word-of-mouth communication (eWOM) by extending the conceptual framework developed by Chu (2009) in a non-western environment like Pakistan.

The rest of the paper is structured as follows; initially electronic word-of-mouth (eWOM) is discussed followed by discussions

on the relationships depicted in the conceptual framework. Subsequently, methodology is discussed followed by results containing SEM model and other requried output. After discussion and conclusion sections limation, and implications for marketers are discussed.

#### 2. Literature Review

## 2.1. Electronic Word-of-mouth (eWOM) Communication

Marketers and social scientists pay special attention to interpersonal communication as it significantly changes consumer attitude and behavior (C. M. Cheung & Thadani, 2010). A bulk of literature is available on the power of word-of-mouth (WOM) communication and its effects on brand image, brand loyalty and purchase intention (Bauernschuster, Falck, & Woessmann, 2011) (Gil de Zúñiga et al., 2012). With the advent and popularity of social media, it has also become a medium for the word-ofmouth (WOM) communication more commonly known as electronic word-of-mouth (eWOM) (C. M. Cheung & Thadani, 2010). Electronic word-of-mouth (eWOM) communication refers to all the comments, opinions communicated by current, past or potential users through social media (Hennig-Thurau, Gwinner, Walsh, & Gremler, 2004).

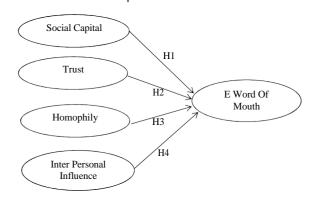
Traditional word-of-mouth (WOM) and electronic word-of-mouth (eWOM) communication although have some common attributes, but they differ significantly in several aspects (C. M. Cheung & Thadani, 2010). The communication process in electronic-word-of-mouth (eWOM) communica-

tion is swifter and effective than traditional word-of-mouth (WOM) communication. Additionally, the interaction in traditional word-of-mouth(WOM) communication is restricted to a small group, whereas in electronic word-of-mouth (eWOM) the audience is large and global (Steffes & Burgee, 2009). The impact of electronic word-ofmouth (eWOM) communication is stronger due to its accessibility. Additionally, the text based communications remains on the internet archives for a longer period (Hung & Li, 2007) (Sen & Lerman, 2007). Another important aspect of electronic word-of-mouth (eWOM) communication is that it can be easily measured and documented (Chatterjee, 2001). In case of traditional word-of-mouth (WOM) communication, the creditability of the senders can be established whereas no such provision is available in electronic word-of-mouth (eWOM) communication (C. M. Cheung & Thadani, 2010).

#### 2.2. Conceptual Framework

Previous section contains a comparative discussion on word-of-mouth (WOM) and electronic word-of-mouth (eWOM) communications. In the following sections a portion of the conceptual framework developed by Chu (2009) has been used in Pakistan's scenario. (Refer to Figure 2.1). The relationships of social capital, trust, homophily and interpersonal relationships with electronic word-of-mouth (eWOM) communications and derived hypotheses are discussed in the following section.

Figure 2.1
Conceptual Framework



#### 2.2.1. Social Capital and Electronic Wordof-mouth (eWOM)

Social capital refers to social relationships of all the individuals who access social social media sites (Gil de Zúñiga et al., 2012). It is inclusive of bondage and linkage (Chu & Kim, 2011). Higher intensity of bondages and linkages (social capital) has a stronger influence on electronic word of (eWOM) communication (Chu & Kim, 2011) (Stephen & Lehmann, 2008). Social media in essence is a social community mainly used for enhancing business, personal and social life (Oh, Labianca, & Chung, 2006) (Putnam, 1993). The shared norms, exchange of ideas by friends (social capital) through social media affects electronic word-of-mouth (eWOM) communication (Bauernschuster et al., 2011) (Bearden & Etzel, 1982a) (Coleman, 2000). While measuring the effect of social capital on electronic word-of-mouth (eWOM) communication, it was found that the relationship of of senders and receivers significantly affects the consumer attitude and behavior in general and particularly towards a brand or/and product (M. Y. Cheung et al., 2009) (Kiecker &

Cowles, 2002) (Park & Kim, 2009). Additionally, this relationship also affects consumer's pre and post evaluation of products and brands (Goldenberg, Libai, & Muller, 2001) (Litvin, Goldsmith, & Pan, 2008) (Price & Feick, 1984). Others while elaborating on the effect of social capital on electronic world of mouth (eWOM) communication observed that social media helps their users to fulfill their needs such as validating information, building and maintaining social relationships (Chu & Kim, 2011) (Stephen & Lehmann, 2008). Thus it has been hypothesized:

H1: Social capital positively effects electronic word-of-mouth communication (eWOM).

## 2.2.2. Trust and Electronic Word-of-mouth (eWOM) Communication

Trust is an another critical variable that promotes electronic word-of-mouth (eWOM) communication on social media sites (Chu, 2009a). In the context of trust, users expect that social media sites will provide an honest, creditable and cooperative interaction (P. P. Li, 2007) (Rahn & Transue, 1998).

Several studies while exploring the effect of trust on electronic word-of-mouth (eWOM) communication suggested that a higher level of trust between consumers and social media leads to more interactive communication (Chu, 2009a) (Pigg & Crank, 2004) (Wasko & Faraj, 2005). Trust towards a social media site plays a significant role in attracting consumers for dissemination of information and knowledge, which in essence is electronic word-of-mouth (eWOM) communication

(Leonard & Onyx, 2003). Consequently these interactions enhance the creditability of social media sites which means a higher effect on electronic word (eWOM) communication (Nahapiet & Ghoshal, 1998) (Robert Jr, Dennis, & Ahuja, 2008). Consumers past experience with a social site also plays a critical role in developing and maintaining trust with it (Jansen, Zhang, Sobel, & Chowdury, 2009). Literature also suggests that trust on social media plays a key role in promoting electronic word-of-mouth (eWOM) communication (Chu, 2009a) (Wasko & Faraj, 2005). Thus the following hypothesis has been generated.

H1: Trust has a positive effect on electronic word-of-mouth communication (eWOM).

## 2.2.3. Homophily and Electronic Word-of-mouth (eWOM)

Homophily is an another antecedent that effects electronic word-of-mouth (eWOM) communication on social media (Kawakami, Kishiya, & Parry, 2013). In essence it is the level of similarity between message receiver, sender and social media (Kawakami et al., 2013) (Kwak, Lee, Park, & Moon, 2010). Homophilous consumers, more often than not, voluntarily provide personal information with the objective of developing social networking with individuals that have similar needs, social life style, and consumption behavior (Aiello et al., 2012) (M. Y. Cheung et al., 2009). Consequently, they feel more conformable in exchanging advices and information which of course is an electronic word of (eWOM) communication. Social media forums such as research, health and entertainments have played a significant role in promoting the relationship of homophily and electronic word of (eWOM) communication (Brown & Reingen, 1987) (Dellande, Gilly, & Graham, 2004) (Feldman & Spencer, 1965).

Studies on this relationship found that that perceptual homophily has a positive effect and demographic homophily has a negative effect on electronic word-of-mouth (eEOM) communication (Gilly, Graham, Wolf-inbarger, & Yale, 1998). Other studies, while investigating the influence of homophily on electronic word-of-mouth (eWOM) communication found that the creditability and homophily are the two fundamental aspects which consumers consider for selecting social forum (Wang, Walther, Pingree, & Hawkins, 2008)

Social networking sites thus are able to attract homophlious consumers with common interests for conveying product information and creating electronic word-of-mouth eWOM communication (Thelwall, 2009). Literature also suggests that social media users with a higher level of perceived homophily will have a stronger participation and effect on electronic word-of-mouth (eWOM) communication (Chu & Choi, 2011) (Chu & Kim, 2011). Thus it has been postulated that:

H3: Homophily positively effects electronic word-of-mouth communication (eWOM).

## 2.2.4. Interpersonal Influence and Electronic Word-of-mouth (eWOM)

Researchers since decades have suggested that interpersonal influences significantly affect consumer's decision making. Thus interpersonal influence also affects consumer behavior through social media (Bearden & Etzel, 1982b) (D'Rozario & Choudhury, 2000). Interpersonal influence could be normative or informative. Normative consumers are influenced by the peer groups, whereas informative consumers seek information from the experts prior to making their purchase decision (Deutsch & Gerard, 1955).

Consumer vulnerability to interpersonal influence (Bearden & Etzel, 1982b) plays a significant role in explaining social relationships and electronic word-of-mouth (eWOM) communication (Chu, 2009a) (McGuire, 1968). Normative and informative influence despite being two different constructs affect electronic word-of-mouth (eWOM) behavior on social media sites, collectively and individually (Chu, 2009a). Informative consumers are generally attracted to those social media sites which transmit informative values, whereas normative consumers prefer those social media sites which promote relationship and social networking (Laroche, Kalamas, & Cleveland, 2005).

Thus both normative and informative influence affects electronic word (eWOM) communication on social networking sites. Literature also suggests that both informative and normative consumers utilize networking sites as a media for electronic word (eWOM) communication (Chu, 2009a) (Laroche et al., 2005). Thus it can be argued that:

H4: Interpersonal influence positively effects electronic word-of-mouth communica-

tion (eWOM).

#### 3. METHODOLOGY

The conceptual framework developed and discussed in earlier section comprised of four exogenous models which are social capital, trust, interpersonal influence, and homophily, and one endogenous model electronic word-of-mouth (eWOM). The methodology adopted for testing the model is discussed in the following sections.

#### **Procedure**

The data was collected by preselected enumerators though mall intercepts method. This procedure was adopted as the consumers who congregate to malls were the target audience. The questionnaire for the survey was self-administered. Initially, a pretest of the questionnaire was carried out to see the wording, flow of the questions and to check social desirability issue. Social desirability issue is an imported issue in the Asian context, and if not pretested could adversely affects the results. Based on the inputs received, required rectifications were made. Additionally, the enumerators attended a training session in which the objectives and purpose were explained to them and their queries were also attended. The responded who participated in pretests were not part of the main survey.

#### Sample

Three hundred and thirty respondents of all groups were approached and 300 responded on voluntary basis. The response rate was 90%. The sample size was higher than the minimum sample size suggested by some for studies based on Structural Equa-

tion Modeling. (Anderson & Gerbing, 1988). Additionally for undefined population the suggested sample size is 285 (Kline, 2005). Thus 300 sample size used in this study is appropriate. In terms of gender 180(60%) were male and 120 (40%) were female and their age ranged from 19 to 60 years (M = 22.25, SD = 2.78). In terms of marital status, 120 (40%) were single and 180 (60%) were married. In terms of profession, 90 (30%) were students, 210 (70 %) were employed. In terms of education, 90 (30%) had education up to secondary school certificate (SSC), 105 (35%) had a higher education certificate (HSC), 75 (25%) had bachelor's degrees, and the rest 45 (15%) had at least master's degree.

#### **Measures:**

#### **Social Capital Scale:**

Social capital refers to social relationships in social media sites (Gil de Zúñiga et al., 2012). Social capital scale in this study is based on two factors: bridging social capital (three items) and bonding social capital (three items) all taken from the social capital measure developed by Chu (2009). Reliabilities for social capital in previous research was .87, and for bonding social capital was .84 (Chu, 2009b). The respondents rated the statements on a scale of seven (very high agreement) and one (very low agreement). Average mean score of the six items reflects respondent's level of social capital.

#### **Trust Scale**

Trust refers to expectation of honest and cooperative behavior that conforms to the

norms of the community (Rahn & Transue, 1998). Trust measure (scale) for this paper has been adopted from trust measure (scale) developed by Chu (2009). The reliability of the trust measure was 0.93 (Chu, 2009b). The respondents rated the statements on a scale of seven (very high agreement) and one (very low agreement). Average mean score of the six items reflects respondent's level of trust scale.

#### **Homophily Scale:**

Homophily refers similarity and traits and attributes between individuals who interacts with each other (Aiello et al., 2012). Homophily scale in this study has four factors attitude, background and morality, and appearance. In all there were eight items in homophily scale two from each factor, all adopted from the measure(scale) developed by Chu (2009). The reliability of the homophily scale ranged 0.85 to 0.89 (Chu, 2009b). The respondents rated the statements on a scale of seven (very high agreement) and one (very low agreement). Average mean score of the eight items reflects respondent's level of homophily.

#### **Interpersonal Influence**

Influence of others refers to normative (peers) and informative (experts) influences on consumers attitude and behavior. (Bearden & Etzel, 1982b) (D'Rozario & Choudhury, 2000). Interpersonal influence scale for this study has been adopted from from the measure (scale) developed by (Chu, 2009b). The scale for this study has two factors which are informative (three items) and normative (three items). Reliability of the

Interpersonal influence in previous research ranged 0.94 to 0.94 (Chu, 2009b). The respondents rated the statements on a scale of seven (very high agreement) and one (very low agreement). Average mean score of the eight items reflects respondent's level of interpersonal influence.

#### Electronic Word-of-mouth (eWOM) Scale

Electronic word-of-mouth (eWOM) for the present study has three factors which are opinion leadership, opinion seeking and pass along behavior with six items all taken from the measure developed by Chu (2009). Reliability of the Electronic word-of-mouth (eWOM) ranged 0.68 to 0.93 (Chu, 2009b). The respondents rated the statements on a scale of seven (very high agreement) and one (very low agreement). Average mean score of the eight items reflects respondent's level of electronic word-of-mouth (eWOM) communication.

#### **Data Analysis Technique**

Two software SPSS-v19 and AMOS-v18 have been used in this study. The former has been used for reliability, descriptive and normality analyses and the later for testing the endogenous model and derived hypotheses (D. Byrne, London, & Reeves, 1968) (Caballero, Lumpkin, & Madden, 1989). The benefit of using Structural Equation Model (SEM) is that it has the capacity for assessing theories and testing derived hypotheses simultaneously (Hair Jr, Black, Babin, Anderson, & Tatham, 2010). The fitness of the model was improved based on the following criteria: Standardized Regression Weight of latent variables ≥ 0.40; Standardized Residual

Covariance < 2.58 and Modification Index < 10 (Barbara M Byrne, 2013) (Joreskog & Sorbom, 1988).

#### **Fit Measures**

In this study we have reported six indices for measuring the fitness of SEM model. Two indices were selected from absolute category, three from relative and another two from parsimonious (Refer to Table-4.1)

#### 4. RESULTS

### Descriptive and Reliability of Initial Constructs

Normality of the data was ascertained through standardized Z-Score. All the three hundred cases were within the acceptable range of  $\pm$  3.5 (Huang, Lee, & Ho, 2004). Sub-

sequently descriptive analyses were carried for ascertaining internal consistently and univariate normality. Summarized results are presented in Table-4.2.

Table-4.2 shows that reliably of social capital was the highest ( $\alpha$ = 0.96, M= 3.48, SD= 1.06) followed by electronic word-of-mouth (eWOM) ( $\alpha$ =.94, M= 3.6, SD= 1.03), inter personal influence ( $\alpha$ =.0.92, M= 3.70, SD= 0.88), homophily ( $\alpha$ =.89, M= 3.58, SD= 0.96) and trust ( $\alpha$ =.88, M= 3.55, SD= 0.04). Since these reliabilities are greater than 0.70, therefore internal consistency on the present set of data is established (Leech, Barrett, & Morgan, 2005). Skewness and Kurtosis values ranged between  $\pm$ 3.5, which further reinforces that constructs fulfill the requirement

## Table 4.1 Fit indices reported in this study

Categories	Absolute		Relative			Parsimonious	
Fit Indices	χ2	χ 2/df	CFI	NFI	IFI	PNFI	PCFI
Criteria	Low	< 5.0	> 9.0	> 0.9	> 0.95	> 0.50	>0.50

Note.  $\chi$  2 = Chi Square;  $\chi$  2/df= Relative Chi Sq; CFI= Comparative Fit Index, NFI- Normed Fixed

Index; IFI= Incremental Fixed Index, PNFI= Parsimonious Fit Index, PCFI is Parsimonious Fit Index.

# Table 4.2 Descriptive and Reliability of Initial Constructs

Measures	Mean	Std. Dev.	Skewness	Kurtosis	Variance	Reliability
Social Capital	3.48	1.06	-0.70	-0.28	1.12	0.96
Trust	3.55	0.84	-0.71	0.84	.70	0.88
Homophily	3.58	0.96	-0.40	2.40	.93	0.89
Inter Per. Influence	3.70	0.88	-0.82	0.58	.78	0.92
Elect. Word of Mouth	3.60	0.92	-1.03	0.68	.85	0.94

of univariate normality (B.M Byrne, 2001) (Hair Jr et al., 2010).

#### **Bivariate Correlation**

Inter item correlation was carried out to check whether the variables are separate and distinct concepts or not. The summarized results depicted in Table 4.3 show that none of the inter-item correlation is greater than 0.90 (Kline, 2005) thus indicating that all the variables/ constructs used in this study are separate and distinct and do not have Multicollinearity issues.

#### **Construct Validity**

Construct validity is necessary if instrument developed in one country is adopted and administered in other country (Bhardwaj, 2010). Since the instrument used in this study has also been adopted therefore construct validity has been ascertained through convergent and discriminant validity (Bhardwaj, 2010). CFA results (Refer to Table 4.5) show that most of indices outputs exceed prescribed criteria. Additionally the factor

loading of all indicator variables loading are at least 0.40 (Refer to Figure 4.2). Thus it is inferred that the data fulfill convergent validity requirements (Hsieh & Hiang, 2004) (Shammout, 2007).

Uniqueness of the variables was tested through Discriminant validity (Hair et al. 2010) by comparing the square root of average variance extracted (AVE) with the square correlation coefficient. The summarized results depicted in Table 4.4 show that the values of average variance extracted is lesser than square of all possible pairs of constructs therefore the variables are unique and distinct (Fornell & Larcker, 1981)

1) Diagonal entries show the square-root of average variance extracted by the construct (2) Off-diagonal entries represent the variance shared (squared correlation) between constructs

#### **Confirmatory Factor Analysis**

In CFA the factors and items (indicators)

		Table 4.3				
		Correlation				
	SC_T	IN_T	T_T	HT_T	EW_T	
Social Capital	1.00					
Int. Influence	0.46	1.00				
Trust	0.55	0.61	1.00			
Homophily	0.47	0.48	0.58	1.00		
Electronic Word of Mouth	0.63	0.54	0.70	0.71	1.00	
**. Correlation is significant at the 0.01 level (i-tailed)						

are tested based on theory therefore it is also known as a test for measuring theories (Hair et al, 2006, p. 747). The summarized CFA results of the four constructs are presented in Table 4.4.

Table 4.5 above shows that the fit indices exceed the prescribed criteria. Additionally, factor loading of indicator variables are greater than 0.40 and standardized residu-

als are below ±2.58 confirming the fitness of each CFA model (Hair Jr. et al., 2007).

#### **Overall Model**

The tested model has four exogenous variables including social capital, trust, homophily, and interpersonal influence and one endogenous variable electronic word-of-mouth communication (eWOM) (Refer to Figure 4.1)

## Table 4.4 Discriminant Validity

	SC_T	IN_T	T_T	HT_T	EW_T
Social Capital	0.75				
Int. Influence	0.21	0.81			
Trust	0.30	0.37	0.82		
Homophily	0.22	0.23	0.34	0.81	
Elect Word of Mouth	0.40	0.29	0.49	0.50	0.74

#### **Confirmatory Factor Analysis**

	-			-				
	Absolute			Relative			Parsimonious	
	<b>x</b> 2	<b>x</b> 2/df	DOF(p)	CFI	NFI	IFI	PNFI	PCFI
Social Capital	5.058	5.058	1(0.025)	0.980	0.960	0.980	0.325	0.327
Trust	4.979	2.490	2(0.083)	0.990	0.984	0.990	0.328	0.330
Homophily	4.216	2.198	2(0.121)	0.995	0.990	0.995	0.330	0.335
Int. Influence	6.751	3.376	2(0.034)	0.992	0.992	0.992	0.330	0.331
e.Word of Mouth	28.612	5.772	5(0.006)	0.997	0.973	0.997	0.586	0.589
Criteria	Low	< 5.0	n/a	> 9.0	> 0.9	> 0.95	> 0.50	>0.50

Note.  $\chi$  2 = Chi Square;  $\chi$  2/df=; DOF(p)= Degree of Freedom and probability, CFI= Comparative Fit Index, NFI- Normed Fixed Index; IFI= Incremental Fixed Index, PNFI= Parsimonious Fit Index, PCFI is Parsimonious Fit Index.

#### Final SEM Model

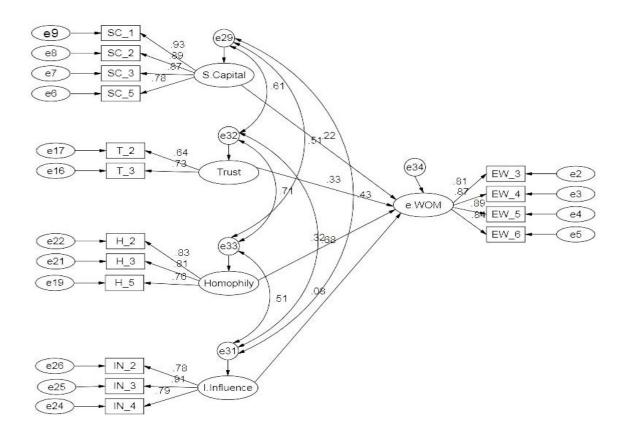


Figure 4.1 for the overall model shows that each factor loading of each observed variable is atleast 0.40 and standardized residual are within the range of  $\pm 2.58$  (Hair Jr., Anderson, Tatham, & Black, 2007). Additionally all the fit indices exceed the prescribed criteria as discussed in the following paragraph.

The Chi Square value ( $\chi 2$  = 175.325, DF = 94, p= 0.003 < .05), is significant, and  $\chi 2$ / df (relative) was 1.865 < 5. These results meet the absolute criteria. Relative fit in-

dices are also within the prescribed limit ( CFI = 0.975 > 0.900; and NFI = 0.948 > 0.900 and IFI = 0.975 > = .95). Parsimony Adjusted Normed Fit Indices are also meet the prescribed criteria (PNFI = 0.743 > 0.50 and PCFI = 0.764 > 0.50. Thus the CFA results confirms that the overall hypothesized model is a good fit.

#### **Hypothesized Results**

The summarized SEM output in the context of regression weight is depreciated in Table 4.6.

Table 4.6 shows that trust (M= 4.71, SD= 1.55, SRW= 0.512, CR= 2.640, P= 0.008< 0.01) was the strongest predictor of electronic word-of-mouth (eWOM) communication (3.60, SD= 0.92), followed by homophily (M= 3.58, SD= 0.96, SRW= 0.241, CR= 2.54, P=0.001< 0.01) and social capital (M= 3.48, SD= 1.06, SRW= 0.175, CR= 3.157, P= 0.002< 0.01). The relationship between internal personal influence (M= 3.70, SD= 0.88, SRW= 0.061, CR= .667, P= 0.505> 0.05) and electronic word-of-mouth communication (M= 3.60, SD= 0.92) was rejected.

## 5. DISCUSSION AND CONCLUSION Discussion

The hypothesized results and how it compares with the earlier literature/studies are discussed in the following section.

Hypothesis (one) on the effect of social capital (M= 3.48, SD= 1.06) and electronic word-of-mouth (eWOM) communication (M= 3.60, SD= 0.92) failed to be rejected (SRW= 0.1.75, CR= 3.157, P= 0.011> 0.05). This finding is consistent to earlier literature. For example several studies while validat-

ing the effect of social capital on electronic word-of-mouth (eWOM) communication, found that the relationship of of senders and receivers significantly affects the consumer attitude and behavior in general and particularly towards a brand or/and product (M. Y. Cheung et al., 2009) (Kiecker & Cowles, 2002) (Park & Kim, 2009). Additionally, studies suggested that the relationship of social capital and electronic world of mouth (eWOM) also affects consumer's pre and post evaluation of products and brands (Goldenberg et al., 2001) (Litvin et al., 2008) (Price & Feick, 1984). Others while elaborating on the effect of social capital on electronic world of mouth (eWOM) communication observed that social media helps their users to fulfill their needs such as validating information, building and maintaining social relationships (Chu & Kim, 2011) (Stephen & Lehmann, 2008)

Hypothesis (two) on the effect of trust (M= 3.55, SD= 0.84) and electronic word- of-mouth (eWOM) communication (M= 3.60, SD= 0.92) failed to be rejected (SRW= 0.512, CR= 2.640, P= 0.008<.05) which is consistent to earlier literature. For example

Table 4.6	
Summary of Hypothesized Relation	nships

	Relationship		SRW	SE	CR	Р
S. Capital	>	eWOM	.175	.055	3.157	.002
Trust	>	eWOM	.512	.194	2.640	.008
Homophily	>	eWOM	.241	.095	2.546	.011
I. Influence	>	eWOM	.061	.091	.667	.505
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<sup>\*</sup>Standardized Regression Weight

several studies while validating the effect of trust on electronic word-of-mouth (eWOM) communication suggest that a higher level of trust between consumers and social media leads to more meaning full interaction, (Chu, 2009a) (Leonard & Onyx, 2003) (Pigg & Crank, 2004) (Wasko & Faraj, 2005). Consequently these interactions enhance the creditability of social media sites which means a higher effect on electronic word (eWOM) communication (Nahapiet & Ghoshal, 1998) (Robert Jr et al., 2008). Studies also suggest that consumes past experience with a social site also plays a critical role in developing and maintaining trust and promoting electronic word-of-mouth (eWOM) communication (Chu, 2009a) (Jansen et al., 2009) (Wasko & Faraj, 2005)

Hypothesis (three) on the effect of homophily (M= 3.58, SD= 0.96) and electronic word-of-mouth (eWOM) communication (M= 3.60, SD= 0.92) failed to be rejected (SRW= 0.241, CR= 2.546, P= 0.011<.05. This finding is consistent to earlier studies and literature. For example studies on this relationship found that that perceptual homophily has a positive effect and demographic homophily has a negative effect on electronic word-of-mouth (eEOM) communication (Gilly et al., 1998). Studies while investigating the effect of homophily on electronic wordof-mouth (eWOM) communication found that the creditability and homophily are the two fundamental aspects which consumers consider for selecting social forum (Thelwall, 2009) (Wang et al., 2008). Studies also found that media users with higher level of

perceived homophily will have a stronger participation and effect on electronic word-of-mouth (eWOM) communication (Chu & Choi, 2011) (Chu & Kim, 2011).

Hypothesis (four) on the effect of interpersonal influence (M= 3.70, SD= 0.88) and electronic word-of-mouth (eWOM) communication (M= 3.60, SD= 0.92) was rejected (SRW= 0.61, CR= 0.667, P= 0.505>.05. This finding is contrary to the literature and earlier studies. Studies and literature suggests that consumer vulnerability to interpersonal influence (Bearden & Etzel, 1982b) plays a significant role in explaining social relationships and electronic word-of-mouth (eWOM) communication (Chu, 2009a) (McGuire, 1968). Literature also suggest that both normative and informative influence affect electronic word (eWOM) (Chu, 2009a) (Laroche et al., 2005).

#### 6. Conclusion

This model on antecedents to electronic word-of-mouth (eWOM) communication empirically tested through SEM will help the in understanding consumers attitude and behavior towards this new medium of communication. This new medium and especially electronic word-of-mouth (eWOM) has brought challenges and opportunities to the marketer. Of the four hypotheses three failed to be rejected and one was rejected. Trust was found to be the strongest predictor of electronic word-of-mouth (eWOM) communication, followed by homophily and social capital. Interpersonal influence has no relationship with electronic word-of-mouth (eWOM) communication.

#### **Implications for Marketers**

Three of the social factors social capital, amophily, and trust have positive impact on the electronic word-of-mouth (eWOM) communication. Thus the marketer must concentrate in developing social networking sites which are able to attract homophhlious consumers with common product interests (Thelwall, 2009). Since this is not possible with one social media site so they should develop hyperlinks of different forums to induce participation and exchange of information which lead to social capital (bonding and linkages). Different hyperlinks of different forum will help the diversified consumers to attract homophilous consumers. The more individuals go on these social sites the

trust and creditability will also increase(Chu, 2009b) (Khan & Bhatti, 2012)

#### **Limitation and Future Research**

This study was limited to higher income group of Karachi. Individual's behavior in the context of social capital, amophily, trust and interpersonal relationship may vary from demographic which could be incorporated in future studies. This study is restricted to the effect of social variables on electronic word-of-mouth (eWOM) communication. Future studies could measure the effect of the variables used in this study on attitude and behavior towards brands, product category and advertisements. Incorporation of culture and multi-cultural study could also be explored.

#### References

- Aiello, L. M., Barrat, A., Schifanella, R., Cattuto, C., Markines, B., & Menczer, F. (2012). Friendship prediction and homophily in social media. ACM Transactions on the Web (TWEB), 6(2), 1-20.
- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. Psychological Bulletin, 103(3), 411.
- Bauernschuster, S., Falck, O., & Woessmann, L. (2011). Surfing Alone. The Internet and Social Capital: Evidence from an Unforeseeable Technological Mistake. SOEP WP, 392.
- Bearden, W. O., & Etzel, M. J. (1982a). Reference group influence on product and brand purchase decisions. Journal of consumer research, 183-194.
- Bearden, W. O., & Etzel, M. J. (1982b). Reference group influence on product and brand purchase decisions. Journal of Consumer research, 9(3), 183-194.
- Brown, J. J., & Reingen, P. H. (1987). Social ties and word-of-mouth referral behavior. Journal of consumer research, 14(3), 350-362.
- Byrne, B. M. (2001). Structural Equation Modeling wih AMOS Basic Concepts, Application and Programming New Jersey: Lawerence Erlbaum Associates.
- Byrne, B. M. (2013). Structural equation modeling with AMOS: Basic concepts, applications, and programming. Canada: Routledge.
- Byrne, D., London, O., & Reeves, K. (1968). The effects of physical attractiveness, sex, and attitude similarity on interpersonal attraction1. Journal of personality, 36(2), 259-271.
- Caballero, M. J., Lumpkin, J. R., & Madden, C. S. (1989). Using physical attractiveness as an advertising tool: An empirical test of the attraction phenomenon. Journal of Advertising Research.
  - Chatterjee, P. (2001). Online reviews: do consumers use them? Advances in consumer research, 28, 129-133.
- Cheung, C. M., & Thadani, D. R. (2010). The effectiveness of electronic word-of-mouth communication: A literature analysis.
- Cheung, M. Y., Luo, C., Sia, C. L., & Chen, H. (2009). Credibility of electronic word-of-mouth: informational and normative determinants of on-line consumer recommendations. International Journal of Electronic Commerce, 13(4), 9-38.
- Chu, S.-C. (2009a). Determinants of Consumer Engagement in Electronic Word-of-Mouth in Social Networking Sites. (Phd Degree PHD Dissertation), The University of Texas at Austin, USA.
- Chu, S.-C. (2009b). Determinants of Consumer Engagement in Electronic Word-of-Mouth in Social Networking Sites. (PhD PhD Thesis), The University of Texas at Austin.
- Chu, S.-C., & Choi, S. M. (2011). Electronic word-of-mouth in social networking sites: a cross-cultural study of the United States and China. Journal of Global Marketing, 24(3), 263-281.
- Chu, S.-C., & Kim, Y. (2011). Determinants of consumer engagement in electronic word-of-mouth (eWOM) in social networking sites. International Journal of Advertising, 30(1), 47-75.
- Coleman, J. S. (2000). Social capital in the creation of human capital. LESSER, Eric L. Knowledge and Social Capital. Boston: Butterworth-Heinemann, 17-41.
  - D'Rozario, D., & Choudhury, P. K. (2000). Effect of assimilation on consumer susceptibility to interpersonal

influence. Journal of Consumer Marketing, 17(4), 290-307.

Dellande, S., Gilly, M. C., & Graham, J. L. (2004). Gaining compliance and losing weight: the role of the service provider in health care services. Journal of Marketing, 68(3), 78-91.

Deutsch, M., & Gerard, H. B. (1955). A study of normative and informational social influences upon individual judgment. The journal of abnormal and social psychology, 51(3), 629.

Feldman, S. P., & Spencer, M. C. (1965). The Effect of Personal Influence on the Selection of Consumer Services: Center for regional studies.

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. Journal of Marketing research, 39-50.

Gil de Zúñiga, H., Jung, N., & Valenzuela, S. (2012). Social media use for news and individuals' social capital, civic engagement and political participation. Journal of Computer-Mediated Communication, 17(3), 319-336.

Gilly, M. C., Graham, J. L., Wolfinbarger, M. F., & Yale, L. J. (1998). A dyadic study of interpersonal information search. Journal of the Academy of Marketing Science, 26(2), 83-100.

Goldenberg, J., Libai, B., & Muller, E. (2001). Talk of the network: A complex systems look at the underlying process of word-of-mouth. Marketing letters, 12(3), 211-223.

Hair Jr, J., Black, W., Babin, B., Anderson, R., & Tatham, R. (2010). Multivariate data analysis New Jersy: Pearson Education.

Hair Jr., J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (2007). Multivariate data Analysis (6th Ed.). New Jersey: Prentice Hall International, Inc.

Hennig-Thurau, T., Gwinner, K. P., Walsh, G., & Gremler, D. D. (2004). Electronic word-of-mouth via consumer-opinion platforms: What motivates consumers to articulate themselves on the Internet? Journal of interactive marketing, 18(1), 38-52.

Hsieh, Y. C., & Hiang, S. T. (2004). A study of the impacts of service quality on relationship quality in search-experience-credence services. Total Quality Management and Business Excellence, 15(1), 43-58.

Huang, J. H., Lee, B. C. Y., & Ho, S. H. (2004). Consumer attitude toward gray market goods. International Marketing Review, 21(6), 598-614.

Hung, K. H., & Li, S. Y. (2007). The influence of eWOM on virtual consumer communities: social capital, consumer learning, and behavioral outcomes. Journal of Advertising Research, 47(4), 485.

Jansen, B. J., Zhang, M., Sobel, K., & Chowdury, A. (2009). Twitter power: Tweets as electronic word of mouth. Journal of the American Society for Information Science and Technology, 60(11), 2169-2188.

Joreskog, K. G., & Sorbom, D. (1988). Prelis. A Program for Multivariate Data Screening and Data Summariztion. User's Guide. Chicago, Scientific Software International.

Kawakami, T., Kishiya, K., & Parry, M. E. (2013). Personal word of mouth, virtual word of mouth, and innovation use. Journal of Product Innovation Management, 30(1), 17-30.

Khan, S. A., & Bhatti, R. (2012). Application of social media in marketing of library and information services: A case study from Pakistan. Webology, 9(1), 1-8.

Kiecker, P., & Cowles, D. (2002). Interpersonal communication and personal influence on the Internet: A framework for examining online word-of-mouth. Journal of Euromarketing, 11(2), 71-88.

- Kline, T. (2005). B, Sulsky, LM, & Rever-Moriyama, SD (2000). Common method variance and specification errors: A practical approach to detection. Journal of Psychology, 134, 401–421.
- Kwak, H., Lee, C., Park, H., & Moon, S. (2010). What is Twitter, a social network or a news media? Paper presented at the Proceedings of the 19th international conference on World wide web.
- Laroche, M., Kalamas, M., & Cleveland, M. (2005). "I" versus "we": How individualists and collectivists use information sources to formulate their service expectations. International Marketing Review, 22(3), 279-308.
- Leech, N. L., Barrett, K. C., & Morgan, G. A. (2005). SPSS for intermediate statistics: Use and interpretation: Lawrence Erlbaum Assoc Inc.
- Leonard, R., & Onyx, J. (2003). Networking through loose and strong ties: an Australian qualitative study. Voluntas: International Journal of Voluntary and Nonprofit Organizations, 14(2), 189-203.
- Li, P. P. (2007). Social tie, social capital, and social behavior: Toward an integrative model of informal exchange. Asia Pacific Journal of Management, 24(2), 227-246.
- Li, S., & Li, J. (2014). Web and social media dynamics, and evolutionary and adaptive branding: theories and a hybrid intelligent model. Paper presented at the 13th international conference on artificial intelligence, knowledge engineering and data bases, , Poland.
- Litvin, S. W., Goldsmith, R. E., & Pan, B. (2008). Electronic word-of-mouth in hospitality and tourism management. Tourism management, 29(3), 458-468.
- McGuire, W. J. (1968). Personality and susceptibility to social influence. In E. F. Borgatta & William W. Lambert (Eds.), Handbook of personality theory and research (pp. 1130-1187). Chicago: Rand McNally.
- Nahapiet, J., & Ghoshal, S. (1998). Social capital, intellectual capital, and the organizational advantage. Academy of Management Review, 23(2), 242-266.
- Oh, H., Labianca, G., & Chung, M.-H. (2006). A multilevel model of group social capital. Academy of Management Review, 31(3), 569-582.
- Park, D.-H., & Kim, S. (2009). The effects of consumer knowledge on message processing of electronic word-of-mouth via online consumer reviews. Electronic Commerce Research and Applications, 7(4), 399-410.
- Pigg, K. E., & Crank, L. D. (2004). Building community social capital: The potential and promise of information and communications technologies. The Journal of Community Informatics, 1(1).
- Price, L. L., & Feick, L. F. (1984). The role of interpersonal sources in external search: an informational perspective. Advances in consumer research, 11(1), 250-255.
- Putnam, R. (1993). The prosperous community: social capital and public life. The american prospect, 13(Spring), Vol. 4. Available online: http://www.prospect.org/print/vol/13 (accessed 7 April 2003).
- Rahn, W. M., & Transue, J. E. (1998). Social trust and value change: The decline of social capital in American youth, 1976–1995. Political Psychology, 19(3), 545-565.
- Robert Jr, L. P., Dennis, A. R., & Ahuja, M. K. (2008). Social capital and knowledge integration in digitally enabled teams. Information Systems Research, 19(3), 314-334.
- Sen, S., & Lerman, D. (2007). Why are you telling me this? An examination into negative consumer reviews on the web. Journal of interactive marketing, 21(4), 76-94.
- Shammout, A. B. (2007). Evaluating an Extended Relationship Marketing Model for Arab Guests of Five-Star Hotels. (PhD Dissertation), University Melbourne, Victoria

- Steffes, E. M., & Burgee, L. E. (2009). Social ties and online word of mouth. Internet Research, 19(1), 42-59.
- Stephen, A. T., & Lehmann, D. R. (2008). Recipient characteristics and product-related-transmission: the role of social capital. Available at SSRN 1150996.
- Thelwall, M. (2009). Homophily in myspace. Journal of the American Society for Information Science and Technology, 60(2), 219-231.
- Wang, Z., Walther, J. B., Pingree, S., & Hawkins, R. P. (2008). Health information, credibility, homophily, and influence via the Internet: Web sites versus discussion groups. Health Communication, 23(4), 358-368.
- Wasko, M. M., & Faraj, S. (2005). Why should I share? Examining social capital and knowledge contribution in electronic networks of practice. MIS quarterly, 35-57.
- Zhang, J. Q., Craciun, G., & Shin, D. (2010). When does electronic word-of-mouth matter? A study of consumer product reviews. Journal of Business Research, 63(12), 1336-1341.