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# **Relationship between Homophily and E-Wom in Social Networking Sites**

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#### **ABSTRACT**

Online social networking sites offer a powerful platform for the spread of word of mouth electronically. To any user, there is a known group of people linked to a social network, who can influence others in their network, related to purchase or another kind of decisions. The three behavioural dimensions prominently highlighted in past literature about eWOM are information pass along behaviour, opinion giving and seeking behaviour. Social relationships, which signify interaction between two or more individuals, are important for understanding electronic word of mouth (eWOM) behaviour among people. In order to study the association between social relationships and eWOM in online social network websites, one of the social relationships of homophily has been selected. Social similarity carries an important role in online social networks. A connection or a person is considered as a node in online social networks and similar nodes tend to connect more as compared to dissimilar nodes, i.e. people with similar characteristics tend to be more inclined to associate with people who share identical or similar characteristics. Keeping the same in mind homophily has been considered, to study its relationship with electronic word of mouth in online social network sites.

Keywords: Electronic word of mouth, homophily, online social network sites, social relationships.

#### 1. INTRODUCTION

A few years ago, the internet was just a one-way communication platform that facilitated bounded interactions through emails. But, the arrival of online social networks like Facebook has brought a shift in the scenario. Online social networks differ from traditional media for its model of the consumer-to-consumer networking. Consumer to consumer (C2C) communication through online social network sites helps in spreading the

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message in word of mouth fashion i.e. at a fast pace from one person to another (who are online). The prominence of electronic word of mouth (eWOM) in the online environment has augmented several folds than before to marketers, owing to the advent of online social networking websites as an influential platform for the spread of electronic word of mouth. The interactive nature of online social network sites, empowers an individual to generously share and seek opinions from other peer group members about any service/product experiences, affecting an individual's brand choice behaviour and sales of goods and services (Goldsmith & Horowitz, 2006).

There are known people linked to an online social network site to any user, who can influence an individual in his/her, purchase or any other kind of decisions (Lis & Neßler, 2014). (Knappe & Kracklauer, 2007) conducted a study on people who use social networking sites and found that most respondents supported that their social networking links i.e. peers, act as a source of information during buying decision process. Word of mouth was found to be a crucial source of motivation in the procurement of domestic goods, and guidance by peer group/consumers about a product or service exercises a greater influence than any other form of marketer-generated information (Alreck & Settle, 1995). This scenario highlights a need to study the association between social relationships and C2C electronic word of mouth.

Social relationships signify interaction between two or more individuals. Social relationship variables, in case of online social networking websites are important for understanding electronic word of mouth (eWOM) behavior among people. Electronic word of mouth offers explicit information, interactivity and empathetic listening, but the distance between the source of communication and the receiver is much lower than distance in marketer induced communications. In order to study the association between social relationships and eWOM (Electronic word of mouth) in online social network websites one of the social relationships of homophily was selected. Homophily is important for the study of social relationships because it acts as a major factor in information exchange among peers (Gilly, et. al., 1998). It has been observed that as the intensity of homophily increases among people, so do the likelihood of information exchange.

#### 2. LITERATURE REVIEW

This part consists of review of literature related to components of homophily and electronic word of mouth.

### 2.1. Homophily

Homophily simply signifies that affinity leads to connection or association (McPherson, et. al., 2001). As per the study by (Monge & Contractor, 2003) people are more likely to interact with others, when they share comparable traits. The study further summarized that an individual tends to categorize oneself and others in terms of age, gender, marital status or education, etc., and one user's such classifications to distinguish among similar and dissimilar others. If a person finds someone more similar to oneself, then he or she is more likely to indulge in communication or in simple terms sense of similarity decreases communication hesitation (Ibarra, 1992), (Chu, 2009). Decrease in communication apprehension is an important parameter to initiate a conversation in virtual democracy i.e. in online social world. Consumers create virtual communities in online social networking sites to communicate with like-minded people (Goldenberg, Barak, & Muller, 2001). Social similarity acts as an important parameter in online social networks. On any online social networking site, a connection or a peer is considered as a node and similar nodes incline to connect more

as equated to dissimilar nodes, i.e. people with related physiognomies tend to be more inclined to link with people, who share these characteristics (Aggarwal, 2011). The basic idea is that individuals who are homogeneous in terms of age, ethnicity or status etc. are highly likely to interact with each other as compared to ones who are dissimilar in such respects. Keeping this in mind, homophily has been considered as a factor to study its effect on electronic word of mouth (eWOM) in online social networking sites. On an online social network site, when similar beings become friends, this will be symbolized as the effect of homophily (Zafarani, Abbasi, & Lui, 2014). This can be denoted with age-old saying that birds of a feather flock together (McPherson, et. al., 2001). At an individual level, homophily can be segregated into three types. The first type of homophily is status based homophily. Homophily based on status comprises of socio-demographic dimensions like age, ethnicity, gender, religion etc. The second type of homophily is characterized by acquired homophily. Acquired homophily comprises of dimensions like level of education, marital status, occupation, financial situation etc. The third type of homophily is called value homophily. Value homophily symbolizes common interests within persons and includes a wide variety of internal states that shape an individual's behavioral orientation (Lazarsfeld & Merton, 1954). Many of the researchers noted this differentiation in late 90's and early 2000.

# 2.2. eWOM in Online Social Networking Sites

As per (Hennig, et. al., 2004), sharing of product or service or brand-related information by past, current or potential customers via the online mode, i.e. using internet comprises of electronic word of mouth (eWOM). The influential power of eWOM can be witnessed in the study conducted by (Senecal & Jacques, 2004), where it was found that people who consulted others online for recommendations have a higher tendency to purchase a product or service as compared to those who have not referred to or consulted anybody. In a study conducted by Feick & Price (1987), three prominent behavioural dimensions related with electronic word of mouth (eWOM) in online social networking sites, i.e. information pass along behaviour, opinion giving behaviour and opinion seeking behaviour were observed. People, who act as opinion leaders and try to influence the behaviour of the people who follow them, reflect opinion-giving behaviour. Individuals who indulge in passing content received from other peers in their networks or may be outside of their online network characterize information pass along behaviour. An individual asking for the opinion of others in his or her online social networking site platform denotes opinion-seeking behaviour. Sun, et. al., (2006) described eWOM in online social networking sites to encompass of opinion leadership activities along with opinion seeking and information or content pass along behaviour. Based on past literature, for the purpose of this study, eWOM in online networks was studied considering all above stated three variables of opinion giving, opinion seeking and information pass along. It is also noteworthy that an individual who acts as an opinion leader in an online social networking site can also act as an opinion seeker or the state could be vice-versa (Turcotte, et. al., 2015).

There are 355 million active internet users in India (Doshi, 2017). Moreover, India has the maximum number of Facebook Users in the world of nearly 241 million (Statista, 2017). These two data points provide a strong base for the present study. The widespread social interactions among multiple consumers on the online social networking sites have been creating an information-rich environment. Users or non-users of a product or service can painlessly and rapidly publish their opinions or thoughts related to any product or service or any marketing idea over online social networking sites. This is the prime reason that online

social networking sites play a noteworthy role in circulation and dispersal of marketing information and acts as a major source of eWOM (Thelwall, 2009). It is significant for marketers to have superior learning about the homophilious individuals over online social network sites in order to understand about how social contacts with high homophily engage in the eWOM behaviour.

#### 3. RESEARCH METHODOLOGY

The present study was a two-phased study that started with exploratory qualitative research using focus groups to trace out and minimize the possible number of components of the homophily and was followed by an extensive quantitative study.

#### 3.1. Measures

In order to get qualitative inputs for the purpose of framing questionnaire, exploratory qualitative research using focus group was completed to discover which components of homophily and eWOM actually mattered to social network site users. For the purpose of same 3 focus groups were conducted based on the framework of Krueger (1994). Focus group interviews were conducted in three cities in Punjab (a state of India) i.e. Mohali. Amritsar and Jalandhar. During these focus groups, a set of predefined questions were asked of the participants. Considering the output of focus groups and borrowing items from prior literature the instrument for the quantitative study was finalized. Further based on review of literature, few items for homophily part of the scale were adapted from the work of (Yuan & Gay, 2006) and Chu (2009) and for eWOM part few items were adapted from the work of (Kwak & Kang, 2009); (Conroy & Narula, 2010).

A total of 9 items in the scale comprising of status, acquired and value homophily and 19 items comprising of opinion giving, opinion seeking and information pass along behaviour for the brand were finalized. The instrument was submitted to five academicians for evaluation. After making the corrections as suggested in the instrument by the academic experts, and considering the purview of this study, a revised instrument was shared with the same five academic experts for re-evaluation. Upon confirmation of appropriateness from the experts, a pilot study was initiated. Based on the data collected for the purpose of the pilot study, using PASW Statistics software, the reliability of the instrument was found to be more than 0.79.

#### 3.2. Sample and Procedure

Primary data in the form of the responses from online social networking site users was obtained with the help of widely used and well-known method of a sample survey, utilizing structured questionnaire. The study sample consisted of one thousand social networking site users (i.e. from Facebook). Snowball sampling technique was used for the identification of sample from the population under study. The sample unit in the study comprised of any individual who is having an account on Facebook, otherwise, there was no limitation as to who can take the survey.

## 3.3. Administration of the Instrument

The final instrument was administered using the web-based questionnaire survey method. For online data collection, the service of surveymonkey.com was used. The link to the survey was shared initially through the Facebook account of the researcher. Connections (friends) in researcher's Facebook network were also

requested to share the survey link from their profiles. The activity of sharing the link for data collection from the researcher's network and from the network of the friends was repeated after every 24 hours.

#### 4. FINDINGS AND ANALYSIS

In order to study the relationship between homophily and happening of eWOM in online social networking sites, the technique of stepwise regression was applied. Stepwise regression assessed the relationship between the dependent variable i.e. electronic word of mouth and the independent variable of homophily. Initially, a Stepwise regression was applied to find the influence of homophily on the occurrence of opinion giving in social networking sites.

Table 4.1 Step-wise regression for opinion giving behaviour

Model	V ariable	β	$R^2$	Adjusted R <sup>2</sup>	Significance
1	First Regression: (Dependent variable: Opinion giving behavior)	_	0.21	0.20	_
	Similar Interests	0.145	_	_	0.000
	F = 21.496				
2	Second Regression: (Dependent variable: Opinion giving behavior)	_	0.33	0.31	-
	Similar Interests	0.113	_	_	0.001
	Similar Gender	0.112	_	_	0.001
	F = 16.789				

Considering the output obtained from table number 4.1, as per the second model, homophily in terms of interests and gender emerges as predictors to opinion giving behaviour in online social networking sites and account for 31 percent ( $R^2 = 0.31$ , P < 0.05). Opinion giving is affected by the components of status homophily and value homophily. Acquired homophily has no influence over occurring of brand-related eWOM over social networking sites.

In this section, a stepwise regression was applied to find the influence of components of interpersonal influence on the occurrence of opinion seeking in social networking sites.

Table 4.2 Step-wise regression for opinion seeking behaviour

Model	Variable	β	$R^2$	Adjusted R <sup>2</sup>	Significance
1	First Regression: (Dependent variable: opinion seeking behavior)	_	0.38	0.37	_
	Similar Age	0.194	_	_	0.000
	F = 38.952				
2	Second Regression: (Dependent variable: Information pass along behavior)	_	0.52	0.50	_
	Similar Age	0.137	_	_	0.000
	Similar Marital Status	0.131	_	_	0.000
	F = 27.091				

(Contd...)

Model	Variable	β	$R^2$	Adjusted $R^2$	Significance
3	Third Regression: (Dependent variable: Information pass along behavior)	-	0.59	0.56	_
	Similar Age	0.126			0.000
	Similar Marital Status	0.105			0.003
	Similar Interests	0.092			0.005
	F = 20.770				

Considering the output obtained from table number 4.2, in the third model, the similarity in age, marital status and interests emerge as predictors to opinion seeking behaviour in online social networking sites and account for 56 percent ( $R^2 = 0.56$ , P < 0.05) of the explained variance. Opinion seeking behaviour is affected by components of all the three types of homophily under study i.e. status homophily, acquired homophily and value homophily.

In the third run, a stepwise regression was applied to find the influence of components homophily on the occurrence of information pass along behaviour in social networking sites.

Table 4.3 Step-wise regression for pass along behaviour

Model	Variable	В	R2	Adjusted R <sup>2</sup>	Significance
1	First Regression: (Dependent variable: Information pass along behavior)	-	0.48	0.48	-
	Similar Interests	0.220	_	_	0.000
	F = 50.735				
2	Second Regression: (Dependent variable: Information pass along behavior)	-	0.61	0.59	-
	Similar Interests	0.179	_	_	0.000
	Similar Marital Status	0.120	_	_	0.000
	F = 32.483				

This time it was the similarity in the interest and marital status which emerged as predictors to brand-related information pass along behaviour in social networking sites, which accounted for 59 percent ( $R^2 = 0.59$ , P < 0.05) of the total explained variance. Brand related information pass along behaviour is affected by the components of acquired homophily and value homophily. Status homophily has no influence over occurring of brand-related eWOM over social networking sites.

To further understand the moderating influence of age on susceptibility to homophilic influence in predicting the occurrence of brand-related electronic word of mouth, stepwise regression analysis was run. The results have been depicted in Table 4.4.

The demographic variable of age acts as a predictor of the occurrence of a brand-related electronic word of mouth by users on social networking sites. The  $\beta$  value for age was found to be negative when its moderation was calculated with each of the independent variables under study. This leads to the conclusion that as the age of the user increases over the online social networking platforms, their involvement in the electronic word of mouth creation due to the influence of social relationship of homophily decreases.

Table 4.4
Beta value of Age as a Moderator

Dependent Variable	Independent Variable	Moderator	В
Opinion seeking behaviour	Age Similarity	Age	-0.115
	Marital Status Similarity		-0.124
	Interest Similarity		-0.127
Pass along behaviour	Interest Similarity		-0.104
	Marital Status Similarity		-0.107
Opinion giving behaviour	Interest Similarity		-0.092
	Gender Similarity		-0.090

#### 5. DISCUSSION AND IMPLICATIONS

The increase in the number of people using online social networking sites has made it compulsory for marketers to rethink their communication strategies. Increase in the socialization activities by individuals over the online social networks present a great opportunity for marketers to engage in peer-to-peer communication with past, present or potential customers and as a result, enhance their brand-related eWOM. This study of the relationship between variables of homophily and electronic word of mouth on online social networking sites suggested that eWOM is influenced by the status homophily, acquired homophily and value homophily. Overall, stepwise regression analysis supported the view that different components of homophily aids as an influential driver affecting brand related electronic word of mouth in online social network websites. It has been found that when users in online social networking websites are more susceptible to value homophily, they are more likely to engage in opinion seeking, opinion giving and information pass along behaviour. The users who are more susceptible to acquired homophily, are more prone to engage in opinion seeking and information pass along behaviour in online social networking sites. When an individual is found to be more susceptible to status homophily, the chances are high for this individual to engage in brand-related opinion seeking and opinion giving behaviour over social networking websites. Value homophily influence leads to increased likelihood of eWOM (electronic word of mouth) in social networking sites as compared to status homophily and acquired homophily. The age of an individual makes an impact on the brand-related electronic word of mouth creation. There is an inverse relationship between age of the online social network site users and occurrence of a brand-related electronic word of mouth, keeping in view the social relationship of homophily. This result indicates that young individuals over online social network platforms are more susceptible to share opinions or seek opinions or indulge in the behaviour of information pass along for the brands related content over online social networks.

#### 6. LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

The research did not take into account the gender status of the respondents in the study as the sample comprised of 340 female and 660 male respondents. This uneven number of gender responses could have influenced a gender-wise result. The gender status would have helped in understanding the susceptibility of occurrence for eWOM based upon the influence of homophily among the male and female population. The focus of this study was limited only to the online social network site of Facebook. Lastly, the influence of other social relationships like interpersonal influence or trust on brand-related eWOM also needs to be studied.

Though through an extensive review of literature an effort to assimilate all obtainable literature was made, yet understanding may have been reserved by the visualization of the researcher.

#### 7. CONCLUSION

The online social networking site platforms in India are likely to grow further in years to come. Online social networking site platforms offer a medium to spread the brand-related word of mouth electronically. Due to a high degree of interactivity, online SNS enable individuals to profusely give and seek, and pass along information about a brand or any service or product experiences. This sharing of information affect consumers' brand choice behaviour and sales of goods and services. Marketers need to understand the relationship between the social relation of homophily and the sharing of kind of eWOM by users over OSNS (Online social networking Sites). This study of the relationship between variables of homophily and electronic word of mouth on social networking sites suggested that eWOM is influenced by homophily in terms of similarity of interests, gender, age and marital status. This study further helps in validating that social relationship of homophily affects brand related eWOM but adds to the theory that as the age of OSNS users increases the degree of homophilic influence on eWOM decreases.

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