

The Impact of Electronic Word-of-Mouth on Online Impulse Buying Behavior: The Moderating role of Big 5 Personality Traits

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Abstract

Purpose of the paper: The purpose of this study is to investigate the moderating role of Big 5 personality traits in the relationship between electronic word-of-mouth and impulse buying behavior.

Design/methodology/approach: Data was gathered through self-administered questionnaire from a sample of 266 Chinese and Pakistani students who were online users and studying at various institutes located in the capital city Islamabad, Pakistan.

Findings: As hypothesized, impulsive buying behavior is significantly associated with electronic word-of-mouth and moderating effect of Big 5 personality traits was also substantiated. The data was analysed statistically using IBM SPSS Statistics 22 to find out correlation and regression analysis between study variables, reliability of research instrument, strength of relationship between independent and dependent variables, moderating effect of Big 5 personality traits in the relationship between electronic word-of-mouth and impulse buying behavior was also substantiated.

Research limitations/implications: Future researches may replicate our model with a larger sample size in order to enhance generalizability. It will be also fruitful to extend this research to various other online shopping environments.

Practical implications: Implication suggests that online retailers and designers of shopping websites should understand the importance of online social interactions in order to encourage consumers' online buying patterns. They should integrate elements of online social interaction, together with reviews that customer placed online on websites, buying pattern, history and sales volume on their websites for the transformation of eWOM.

What is original/value of paper: The social network paradigm and UGT are confirmed and validated by current study in online word-of-mouth context. This study stands as a pioneer that empirically scrutinize the moderating effect of these traits and reveals that online social interactions can strongly enhances consumers' purchase on impulse when individuals display the traits of i.e. extroversion, openness

Keywords: Electronic word-of-mouth (eWOM); Big 5 personality traits; Impulse buying behavior (IB); Online social networks (OSN); Ecommerce Pakistan

Background

How to get into and become near and dear in the customer's heart? This is a question which is very familiar and frequently makes the rounds among marketers. Businesses around the globe have changed in the internet era and are still being reshaped as more novel kinds of online trade models are developed to range ever more digitalized customers [1]. For businesses an online store may come up with better sales and marketing opportunities, by offering appropriate products and services. Word of mouth marketing (WOMM) or word-of-mouth marketing in social networking sites has turned out to be a prevailing communication method for current online users [2]. WOMM is from the beginning of time, with the mass adoption of new technologies and internet has magnified the scale at which we are able to share the things we love with friends and interact. The significance of word-of-mouth (WOM) marketing has long been an area of importance to practitioners and marketing research for various reasons. WOM marketing is considered as a mysterious strength, along with its special effects. Companies invested \$ 1.7 billion in WOM advertising in 2009 and are in its massive growth when most of the sectors were affected by financial crisis, and are likely to spend \$3.0 billion by 2015 with 14.3% average annually [3]. Word of mouth turned out to be the main area linked with the sales uplift. In recent years, technological advancements

have created new opportunities for consumers to interact with their existing social networks and also extend their circles by communicating with new members [4,5]. Internet serves as "conversations catalyst", significantly smoothing the process of consumer interconnectivity. Spontaneous emailing, referrals, virtual opinions platforms as managed through the website of a company are becoming modes to share views and information among consumers more easily than ever before.

Research Gap and Rationale of the Study

In recent years several approaches have been used by researchers to examine the phenomenon of eWOM, for example eWOM creation and dissemination [6] along with influence on buying [7]. For a number of years scholars have been encouraged to participate with

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further attentive inquiries into electronic word-of-mouth research [6-9]. Accordingly, researchers have studied problems, like; How eWOM adds value to organizations [10], the ability of eWOM to convince consumers [11], how it links with purchase intentions and decisions, antecedents of eWOM [12-15], outcomes of eWOM [16-18].

Even though there are several studies and substantial volume of literature on WOM, it is of significant to notify that eWOM is still under-researched domain and needs further inquiry [9]. However, past studies rarely focused on the issue whether Electronic Word-of-Mouth can have an impact on impulse buying behavior [19]. Shahjehan et al. [20] investigated the effect of personality traits on impulse buying and compulsive buying behavior but to the best of author knowledge there is not a single study that has investigated the relationship between eWOM and impulse buying, furthermore there is no research that has investigated the moderating effect of personality traits among eWOM and impulse buying. The moderating role of personality traits with job insecurity and strain has been studied by Katharina, Magnus and Johnny [21]. Mei-Fang Chen [22] also examined the moderating role of personality traits with Consumer attitudes and purchase intentions. Ulla Kinnunen et al. [23] also studied the moderating role of personality traits with Conflict and well-being at work. The present study is going to fill this gap to investigate the moderating role of personality traits with eWOM and impulse buying.

Problem Statement

There are optimal chances of growth in Ecommerce within Pakistan. QyanThykson; Managing Director of a German based company "Rocket Internet", stated that at present there are almost 30 million internet users within the country whereas the number of smart phone users approached to a total of 15 million. Retailers have started online marketing services in the country so as to benefit from a total of 25 million dollars volume retail market. Economic analysts have a view that 70% of the total online sales are being generated from 5 major cities of the country whereas the remaining 30% of these sales come from rest of the country. According to the report, Lahore has a prominent part in generating online retail sales as it accounts for almost a significant portion of 22% sales of total online retail business. Whereas ratio of total retail online sales in Karachi is 18%. Likewise Saikot, Faisalabad, Islamabad and Rawalpindi contribute 10% each to total online retail sales while rest 30% of the online business is carried out in the other parts of country. Economic experts state that Pakistan has a large users' market with currently 20 million consumers of broadband services, which in turn provides opportunity for the retailers to market and sale their products online. The online retail sales in the country are near to 25 million with prospects to increase in future. Keeping in view the prosperous future of online retail business, retailers have now decided to take advantage of Ecommerce. The aim is to form a reasonable and practically useful eWOM situation, which contains several perspectives that would identify how personality traits affect them. The findings of the study would provide a foundation for further investigations and help companies design their eWOM marketing strategies that encourage consumers to buy. Currently in Pakistan different online retailers are working to promote online purchasing with the help of social media. Sales of online retailers will have a flourishing sales volume through impulse buying. Present study suggests a possible solution to a problem about the effects of eWOM on impulse buying with moderating effect of personality traits of individuals on impulse buying and eWOM in Pakistan. Therefore, it is logical to state that studying the relationship between electronic word-of-mouth and impulsive buying and its outcomes is a critical step towards aligning online marketing practices

with individual specific needs and taking the advantage of their personality traits, with improved marketing strategies.

Theoretical Foundation

We argue that for explaining eWOM phenomenon, social network paradigm will be more influential and gives a strong theoretical basis. Social networks can be described as structural arrangements of people in a society, people's represents as points which are joined by line characterize relationships [24]. The paradigm suggested that these ties joined social actors [25] in the structural arrangement formed with two or multiple "nodes" of individuals using web or social network [26].

Moreover, the study also takes its theoretical foundations from uses and gratification theory [27]. Plenty of studies on internet [28,29] advocate that several drivers urge internet usage. Uses and gratification theory (UGT) supports this conception and is not new in internet context in fact; researchers applied UGT to explain internet usage from its early days [30-33]. It based on three main principles [34]: first, individual's behaviors are goal directed; secondly, they are active users of media; third, these users select media to gratify them as they are aware of their needs.

It has been shown that personality effects individual desires how an individual attains gratification [35]. A person's values, beliefs, motives and needs influence behaviors, like selection of media and usage, to fulfill set of psychological needs. Internet as a medium is aligned with three pillars of UGT so this study relies both on UGT as well as social network paradigm in hypotheses development. The present study is theoretically supported and maintained by these theories as it basically takes into account the networking (eWOM) and resulting behaviors in the form of dependent and independent variables.

Literature Review Electronic Word Of Mouth

Electronic word-of-mouth corresponds to most potential areas for research in marketing in this era. By separating the study of eWOM from traditional WOM, it is proposed that eWOM would also have a unique definition. While the simplest definition would be WOM transmitted over the Internet, some researchers have attempted to further separate the constructs. Vilpponen, Winter, and Sundqvist [36] defined viral marketing based on integrating network effect theories with word-of-mouth communication and concluded that viral marketing was "word-of-mouth communication in conditions where positive network effects prevail and where the role of the influencer is active due to positive network effects" (p. 66). They did not restrict viral marketing to computer mediated communication, and their study used viral marketing interchangeably with eWOM. Okazaki [37] went a step further and proposed that eWOM should be further classified as computer-based WOM (pcWOM) and mobile WOM (mWOM). For the purposes of this thesis, all forms of electronic WOM, whether via computers, mobile, or other electronic devices, are considered eWOM.

Characteristics that distinguish eWOM from traditional WOM include a lack of offline communication and typically unsolicited nature of information [38]. In addition, eWOM often occurs between strangers and can usually be anonymous [39]. A multi-level model of eWOM found that strong ties were more likely to aid awareness; perceptual affinity was most likely to increase interest; and demographic dissimilarity increased awareness, interest, and final decision and have impact on viral marketing [38]. Prendergast, Ko, and Yuen [40] found that traditional WOM theories of source similarity and attitudes toward the source were applicable to eWOM. Both factors were directly related to purchase intent and indirectly related to persuasiveness. Therefore,

while there is bound to be overlap between traditional WOM and eWOM, these types of WOM have enough discrepancies to warrant differentiation in research.

These conceptions vary in accordance with objectives of communication, platform and kind of message [41]. eWOM communications can be easily observed whenever consumer needs to seek suggestions for particular buying decision [42]. Furthermore, via internet, consumers are in position to find for more information scarcely on products or services, which accounts for resembles to them.

The buying impulse

Impulse purchase was the subject of several scholars who have examined it in consumer behavior perspective [43]. The reason behind this is not just due to its complexity but its increasing popularity among numerous ranges of products categories [44]. Impulse buying occurs when people experience an urge to buy a product, without a thoughtful consideration why and for what reason one needs the product. The urge is sometimes irresistible and consumers may therefore feel temporarily out of control and pay less attention to behavioral consequences. As affective rather than cognitive processes dominate impulse buying, decision making usually is short and spontaneous [45]. This implies that it normally occurs due to interaction of consumers with shopping environment. As a result, aside from consumer's internal memory; they can only extract information from the shopping environment. Thus it can be assumed that information available at store has important role and have more impact in planned buying [46].

In consumer research many complementary models of buying behavior are existing like hedonics, utility-maximization, decision making, and behavioral influence aspects [47]. Though, impulse buying is confirm to and related with complex hedonic psycho social motivations instead with rational, decision-making aspects in consumer behavior [48]. The impulse buying is unintentional, because the individual is not actively looking for particular goods and has no plans to buy and is not in the purchase operation and also had no pre shopping plans to purchase the item. This sort of buying is free of intentions, because the consumers have no plan and not actively thinking or purchasing for that product. The lack of intentions and planning to buy or being involuntary is compulsory for an impulse buying, but it doesn't sufficiently categorizing a base to buy on impulse [46,49]. Indeed, each impulse purchase is definitely unintentional, but any unintentional is not necessarily an impulse buying [50]. Limited amount of empirical studies have been published regarding online impulse buying. So it can be hypothesized that:

H1: Electronic word-of-mouth has a positive impact on impulse buying behavior.

Personality traits and the Big Five Model

Personality is described by Allport [51] "the dynamic structure within the person of those psychophysical arrangements that indicate his distinctive adjustments to surroundings", Hogan [52] described it as way of behavior, thought, and feelings that are depicted in diverse situations. Studies on consumer behavior shown that, product choice and brand preference can be predicted through individuals' personality [53,54]. With the introduction of internet personality traits have been used to study as predictors for online behavior. (BFM) big five model turned to be a very useful tool to examine particular behaviors on the internet.

Extraversions: assertiveness, friendliness, talkativeness and high amounts of emotional expression counts for extraversion in a person.

This personality trait is positively linked to impulsive buying behavior, as they are heavier user of internet [55], and they create eWOM content. Agreeableness personality comprises kindness, altruism, trust, affection, and other social behaviors that positively impacts on the ability of subjects to depict impulsive buying behaviors. Openness includes features like insight and imagination, high on this trait has wide range of interests, and also positively related with impulsive buying behavior.

Conscientiousness common features of this dimension include high levels of motivation to tell the truth and to share real experiences with others. An individual tend to be mindful of details and organized when scores high on conscientiousness. Silvera, Lavack and Kropp, [43] stated that individuals who have strong impulse buying tendencies are low in conscientiousness. Finally, Neuroticism is linked to behavior and cognition that are related with degree to experience distress. Previously researchers found the negative relationship among neurotic individuals and impulse buying [56], as due to low anxiety, depression, self-esteem they act as compulsive buyers [57]. Therefore it is supposed in current study that an individual scores high on neuroticism will have less impulse buying tendencies.

Logically personality traits moderates the relationship between eWOM and impulse buying behavior because extraversion, openness and agreeableness personals are usually confronted to internet and social media as they are outgoing talkative, broad-minded, appreciative, hence positively related to impulse buying. Therefore, if an individual scores high on extraversion, openness and agreeableness then it will strengthen the relationship between eWOM and impulse buying. And if an individual scores low on extraversion, openness and agreeableness then it will weakens the relationship between eWOM and impulse buying.

Furthermore, neuroticism and conscientiousness are negatively related to impulse buying as they have high levels of motivation to tell the truth and to share real experiences, low self-esteem, depression, anxiety usually act as compulsive buyers. Therefore, if individual scores high on neuroticism and conscientiousness then it will weakens the relationship between eWOM and impulse buying. On the basis of aforementioned discussion leads to the following hypothesis:

H2 (a): Extraversion moderate the relationship between eWOM and impulse buying in such way that the relationship will be stronger when individual is high on extraversion trait.

H2 (b): Openness moderate the relationship between eWOM and impulse buying in such way that the relationship will be stronger when individual is high on openness trait.

H2 (c): Agreeableness moderate the relationship between eWOM and impulse buying in such way that the relationship will be stronger when individual is high on agreeableness trait.

H2 (d): Conscientiousness moderates the relationship between eWOM and impulse buying in such way that the relationship will be weak when individual is high on conscientiousness trait.

H2 (e): Neuroticism moderates the relationship between eWOM and impulse buying in such way that the relationship will be weak when individual is high on neuroticism trait.

H2: Personality traits moderate the relationship between eWOM and impulse buying.

Conceptual Framework of the Study

Conceptual Framework of the Study is given in Figure 1.

Research Methodology

Population and sample size

In China and Pakistan, the internet population rapidly increases to turn million Internet users [2,58]. The users of the social networking site are disproportionately composed of college and university students and are characterized as better-educated and young [59-61]. Hence, the sample of a college and university student was considered suitable for the current study. Therefore, domestic and Chinese students in twin cities Islamabad and Rawalpindi who tend to buy online make up the population for this research.

Convenience sampling design was used to gather data as it is more quicker and economical way. Those who conveniently available to provide information were approached i.e. as due to busy students college timing it was difficult to get responses easily. Respondent's filled the survey questionnaire between September to October 2015. Offline questionnaires will be utilized for primary data collection. The survey questionnaires were distributed to the participants by the researchers. For the sake of guidance and help researchers were available during the time respondents were filling the forms. Participants were prescreened between the ages of 18 and 35 years old who have access to the Internet.

10 participants per item in the instrument were used to make an appropriate sample size as per 'Rule-of-10' [62,63]. Total 30 items in the instrument were utilized, as suggested by Arrindell current study should comprises a sample size of minimum 300 (30 X 10), but to test aforementioned moderated-regression model author wants to keep sample size up to 325.

Measures

To measure respondents' engagement in eWOM in their favorite social networking sites, opinion leadership, opinion seeking, and pass-along behavior were assessed. Opinion leadership and opinion seeking scales were adopted from Flynn, Goldsmith, and Eastman's [64]. Thirty-five items measuring buying impulsiveness were generated from a review of prior research of impulse buying phenomenology [64] and from extant literature on general measures of impulsiveness [65]. These items were pretested and refined through factor analysis and co-relational tests, were used to refine the measures across the study. A final eight-item measure of buying impulsiveness proposes

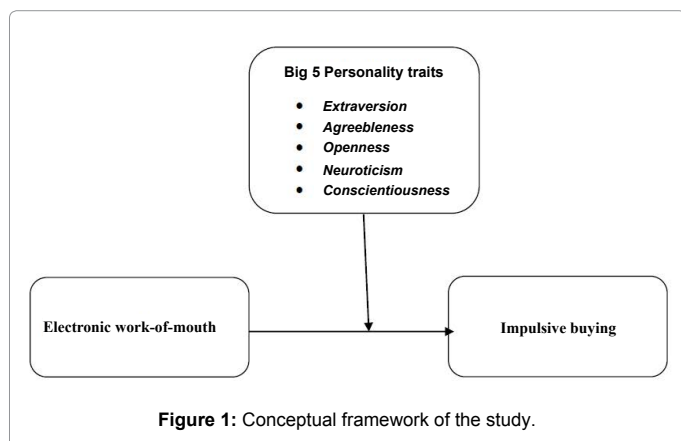


Figure 1: Conceptual framework of the study.

an acceptable model. Big five inventory BFI [66-68] 2 BFI items for each big 5 dimension: both high and low pole of each factor were represented that surface one true-scored and one false-scored item for each BFI scale.

Data Analysis and Discussion

Correlation analysis

We calculated for each variable's mean and standard deviation, and created a hypothesis test all the variables used in the correlation coefficient matrix. Mean, standard deviation, reliability, and for analysis of all the correlation between scales shown in Table 1. The whole structure of the variables analyzed using Cronbach alpha reliability scores, and tested Cronbach alpha values of all variables recommended [69,70], scores are Electronic word-of-mouth (0.755), impulse buying (0.786), Openness (0.737), Extroversion (0.602), Conscientiousness (0.919), and Neuroticism (0.943). Analysis of Table 1, we can see that Conscientiousness and Neuroticism are negatively correlated with Electronic word-of-mouth, impulse buying, Openness, Extroversion, and Agreeableness as $P < 0.01$ level, while all other variables are positively correlated with each other. The dataset had no issues of multicollinearity, because there is only one independent variable in the study which is electronic word-of-mouth.

Regression analysis

Main effect regression analysis (Electronic word-of-mouth): Table 2 shows the regression analysis between electronic word-of-mouth as independent variable and impulse buying as dependent variables. The result indicates that the electronic word-of-mouth had a significant effect ($p < 0.05$) on impulse buying ($\beta = 0.601$). The β value of H1 shows that one unit increase in electronic word-of-mouth would bring 60.1 percent increase in impulse buying. The result provided a sufficient evidence to support H1. The R^2 value of this model is (0.361) which means that independent variable has explained 36.1% variance in impulse buying.

Moderation regression analysis

Moderation with extroversion: In step 1 means of independent variable i.e. electronic word-of-mouth (EWOM), moderator variable i.e. Personality trait (Extroversion) entered together. In step 2 interaction term (EEWOM) of independent variable i.e. electronic word-of-mouth (EWOM), moderator variable i.e. Personality traits entered impulse buying (IMP) as dependent variable (Table 3).

Hypothesis 2(a) predicted that Extroversion moderates the relationship between Electronic word-of-mouth and Impulse buying such that it is stronger when an individual is highly extrovert. Results revealed that Extroversion was interacted with Electronic word-of-mouth significantly ($\beta = 0.436$, $p < 0.01$) to predict Impulse buying. Value of beta indicates that in case of higher level of Extroversion the Impulse buying will be even higher as a result. The interaction explained variance in Impulse buying ($\Delta R^2 = 0.041$, $p < 0.01$). By adding the interaction term the value of eWOM (0.161) and extroversion (0.051) are insignificant its means full moderation occurs.

Moderation with openness

In step 1 means of independent variable i.e. electronic word-of-mouth (EWOM), moderator variable i.e. Personality trait (Openness) entered together. In step 2 interaction term (OEWOM) of independent variable i.e. electronic word-of-mouth (EWOM), moderator variable

i.e. Personality traits entered impulse buying (IMP) as dependent variable (Table 4).

Hypothesis 2(b) predicted that openness will moderate the relationship between EWOM and Impulse buying such that it will be stronger when an individual is highly openness. Results revealed that openness was interacted with Electronic word-of-mouth significantly ($\beta=0.514$, $p<0.01$) to predict Impulse buying. Value of beta indicates that in case of higher level of openness the Impulse buying will be even higher as a result. The interaction explained variance in Impulse buying ($\Delta R^2=0.08$, $p<0.1$). By adding the interaction term the value of eWOM (0.000) and openness (0.000) are significant.

Moderation with agreeableness

In step 1 means of independent variable i.e. electronic word-of-mouth (EWOM), moderator variable i.e. Personality trait (Agreeableness) entered together. In step 2 interaction term (AEWOM) of independent variable i.e. electronic word-of-mouth (EWOM), moderator variable i.e. Personality traits entered impulse buying (IMP) as dependent variable (Table 5).

Hypothesis 2(c) predicted that agreeableness will moderate the relationship between Electronic word-of-mouth and Impulse

	MEAN	STD.D	EWOM	IMP	O	E	A	C	N
Ewom	3.3393	0.48369	(0.755)						
IMP	3.6147	0.56989	0.601(**)	(0.786)					
O	3.4192	0.69909	0.647(**)	0.688(**)	(0.737)				
E	3.5282	0.68416	0.527(**)	0.632(**)	0.630(**)	(0.602)			
A	3.3158	0.53895	0.613(**)	0.651(**)	0.614(**)	0.472(**)	(0.659)		
C	1.6259	1.16073	-0.638(**)	-0.772(**)	-0.590(**)	-0.730(**)	-0.495(**)	(0.919)	
N	1.1579	0.67115	-0.418(**)	-0.602(**)	-0.467(**)	-0.527(**)	-0.373(**)	0.686(**)	(0.943)

**Correlation is significant at the 0.01 level (2-tailed). N=266, alpha values in parenthesis.

Table 1: Mean, standard deviation, Reliability and correlations.

Model		Unstandardized Coefficients		Standardized Coefficients	T
		B	Std. Error	Beta	
1	(Constant)	1.251	0.196		6.397
	EWOM	0.708	0.058	0.601	

a. Dependent Variable: IMP

Table 2: Regression analysis of main effect of eWOM on job impulse buying.

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig	R ²	ΔR^2
		B	Std. Error	Beta				
1	(Constant)	0.874	0.179		4.878	0.000	0.498	
	EWOM	0.437	0.061	0.371	7.211	0.000		
	E	0.363	0.043	0.436	8.484	0.000		
2	(Constant)	2.659	0.408		6.518	0.000	0.539	0.041
	EWOM	-0.204	0.145	-0.173	-1.405	0.161		
	E	-0.270	0.138	-0.324	-1.963	0.051		
	EeWOM	0.221	0.046	1.162	4.825	0.000		

a. Dependent Variable: IMP.

b. Interaction term: (EeWOM).

c. N=266.

Table 3: Regression analysis of Extroversion moderation effect in the relationship between eWOM and impulse buying.

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig	R ²	ΔR^2
		B	Std. Error	Beta				
1	(Constant)	1.127	0.171		6.575	0.000	.515	
	EWOM	0.316	0.066	0.268	4.761	0.000		
	O	0.419	0.046	0.514	9.125	0.000		
2	(Constant)	-3.587	0.639		-5.613	0.000	0.602	0.088
	EWOM	1.812	0.206	1.538	8.808	0.000		
	O	2.020	0.215	2.478	9.412	.000		
	OeWOM	-0.495	0.065	-2.964	-7.604	0.000		

a. Dependent Variable: IMP.

b. Interaction term: (OeWOM).

c. N=266.

Table 4: Regression analysis of openness moderation effect in the relationship between eWOM and impulse buying.

buying such that it will be stronger when an individual is highly agreeableness. Results revealed that agreeableness was interacted with Electronic word-of-mouth significantly ($\beta=0.453, p<0.01$) to predict Impulse buying. Value of beta indicates that in case of higher level of agreeableness the Impulse buying will be even higher as a result. The interaction explained variance in Impulse buying ($\Delta R^2=0.112, p<0.1$). By adding the interaction term the value of eWOM (0.000) and agreeableness (0.000) are significant.

Moderation with neuroticism

In step 1 means of independent variable i.e. electronic word-of-mouth (EWOM), moderator variable i.e. Personality trait (Neuroticism) entered together. In step 2 interaction term (NEWOM) of independent variable i.e. electronic word-of-mouth (EWOM), moderator variable i.e. Personality traits entered impulse buying (IMP) as dependent variable (Table 6).

Hypothesis 2(d) predicted that neuroticism will moderate the relationship between Electronic word-of-mouth and Impulse buying such that it will be stronger when an individual is low neuroticism. Results revealed that neuroticism was interacted with Electronic word-of-mouth significantly ($\beta=-.426, p<0.01$) to predict Impulse buying. Value of beta indicates that in case of lower level of neuroticism the Impulse buying will be even higher as a result. The interaction explained variance in Impulse buying ($\Delta R^2=0.076, p<0.1$). By adding the interaction term the value of eWOM (0.004) and neuroticism (0.000) are significant.

Moderation with conscientiousness: In step 1 means of independent variable i.e. electronic word-of-mouth (EWOM), moderator variable i.e. Personality trait (conscientiousness) entered together. In step 2 interaction term (CEWOM) of independent variable

i.e. electronic word-of-mouth (EWOM), moderator variable i.e. Personality traits entered impulse buying (IMP) as dependent variable (Table 7).

Hypothesis 2(e) predicted that conscientiousness will moderate the relationship between Electronic word-of-mouth and Impulse buying such that it will be stronger when an individual is low conscientiousness. Results revealed that conscientiousness was interacted with Electronic word-of-mouth significantly ($\beta=-.655, p<0.01$) to predict Impulse buying. Value of beta indicates that in case of lower level of conscientiousness the Impulse buying will be even higher as a result. The interaction explained variance in Impulse buying ($\Delta R^2=0.045, p<0.01$). By adding the interaction term the value of eWOM (0.019) and conscientiousness (0.000) are significant.

Findings and Discussions

Primarily our results shows that electronic word-of-mouth, demonstrate important impacts on impulse buying behavior that is on higher level and have positive affect and these results are also consistent with the previous studies [69]. This suggests that the diffusion of high amount of such type of communication can increase consumer awareness regarding a product, and reduce consumer uncertainty. It also has a formative impact on consumer attitudes, behavior [70] suggests that consumers take eWOM into their account when going through purchasing decisions i.e. impulse buying. This leads to the conclusion that, individual who sometimes gratify themselves with social media may sometimes seek opinions and experience from past consumers, in order to reduce risk for buying decisions.

The moderating role of the personality traits has been investigated. It has been shown that from all the personality traits, all of them are playing significant moderating role as hypothesized. Among the Big

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig	R ²	ΔR^2
		B	Std. Error	Beta				
1	(Constant)	0.756	0.186		4.075	0.000		
	EWOM	0.380	0.066	0.323	5.783	0.000	0.489	
	A	0.479	0.059	0.453	8.117	0.000		
2	(Constant)	-7.432	0.967		-7.684	0.000		
	EWOM	2.855	0.294	2.423	9.715	0.000	0.601	0.112
	A	3.204	0.321	3.030	9.967	0.000		
	AeWOM	-0.811	0.094	-4.219	-8.591	0.000		

Dependent Variable: IMP.
 a. Interaction term: (AeWOM).
 b. N=266.

Table 5: Regression analysis of agreeableness moderation effect in the relationship between eWOM and impulse buying.

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig	R ²	ΔR^2
		B	Std. Error	Beta				
1	(Constant)	2.370	0.212		11.170	.000		
	EWOM	0.498	0.056	0.423	8.895	0.000	0.510	
	N	-0.361	0.040	-0.426	-8.958	0.000		
2	(Constant)	4.567	0.372		12.292	0.000		
	EWOM	-0.404	0.140	-0.343	-2.895	0.004	0.587	0.076
	N	-2.863	0.362	-3.372	-7.913	0.000		
	NeWOM	1.012	0.146	2.731	6.951	0.000		

a. Dependent Variable: IMP.
 b. Interaction term: (NeWOM).
 c. N=266.

Table 6: Regression analysis of Neuroticism moderation effect in the relationship between eWOM and impulse buying.

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig	R ²	ΔR ²
		B	Std. Error	Beta				
1	(Constant)	3.419	0.224		15.271	0.000		
	EWOM	0.215	0.059	0.183	3.675	0.000	0.615	
	C	-0.322	0.024	-0.655	-13.189	0.000		
2	(Constant)	4.546	0.285		15.928	0.000		
	EWOM	-0.217	0.092	-0.184	-2.355	0.019	0.660	0.045
	C	-1.108	0.136	-2.256	-8.139	0.000		
	CeWOM	0.318	0.054	1.412	5.860	0.000		

- a. Dependent Variable: IMP.
- b. Interaction term: (CeWOM).
- c. N=266.

Table 7: Regression analysis of Conscientiousness moderation effect in the relationship between eWOM and impulse buying.

Five personality traits, neuroticism is negatively correlated with both eWOM and impulse buying. Neuroticism (emotional instability), are less likely to display impulsive buying behaviors. This, again, may imply that neurotic individual experience anxiety did not spend considerable time thinking about electronic word-of-mouth communication for shopping impulsively, and therefore, experience the anxiety which leads to their behaviors. These results are in line with previous studies [55], as due to low anxiety, depression, self-esteem they act as compulsive buyers [56]. Conscientiousness is also negatively correlated with both eWOM and impulse buying. Individuals with high conscientiousness are mostly careful, with strong will and accurate goal [71]. Individual high in conscientiousness tend to be organized and mindful of details. This implies that individuals with high conscientiousness are doubtful to the network messages therefore, will not buy impulsively.

Result indicates that an individual with trait of openness moderates the relationship between eWOM and impulse buying. To engage in word-of-mouth communication activity as one who is more cultured, imaginative, original, curious, intelligent, broad minded and artistically sensitive are also more prone to display impulsive-buying behaviors. Seeing that those who possess the trait of Openness to Experience are more likely to have an extensive variety of interests and a willingness to pursue those interests through unusual means like unplanned buying [72]. Contributing to this require a certain level of openness and is normally driven by novelty seeking people. It may be that those who have high levels of Openness to experience are more interested in looking for new things than they are trying to figure out how things work. This outcome is in line with what was hypothesized. The fact that there are results that indicate extraversion has a positive influence on eWOM and impulse buying can be supported by the studies of Ross et al. These studies suggested that extraverts see online social networking sites as a supplement to their communication rather than a replacement. For example, individuals high on the trait of Extraversion were found to belong to significantly more groups in social media. Since extraverts are more involved in social activities [73], it is reasonable to assume that these individuals preserve ties to their groups, exchange opinions about product and services that have ultimate impacts on purchasing practices. As suggested this may change in the future as the richness and depth of this online tool keep expanding. This is congruent with the theory that the offline world slowly but definite shifts to an online environment [74-78]. We predicted that more agreeable individuals would have more online contact will further strongly moderate the relationship, also support this hypothesis. As such, this trait warrants attention in future research. In general this study both contradicts and acknowledges earlier findings by Muntinga et al. [54]. It offers

new insights in the question whether personality influences online behavior. What this in practice means for both scholars and marketing managers will be discussed further in managerial implications and future research.

Implications of the Study

Current study mainly contributes to the existing literature of computer-mediated communication in numerous ways. First, the social network paradigm and UGT are confirmed and validated by current study in online word-of-mouth context [79]. Big five Personality traits namely extraversion, agreeableness, openness, conscientiousness, and neuroticism are found to exert a significant moderating influence on electronic word-of-mouth. The relationships found between electronic word-of-mouth and impulsive buying in this research is also in line with prior studies [19]. Moreover, earlier studies on the effects of personality traits have shown that these traits play significant role in affecting consumers' "unplanned" behavior [20]. In this study, we show that the big five traits are also playing a key moderator role eWOM and consumers' "unplanned" behavior. From this viewpoint, this study stands as a pioneer that empirically scrutinize the moderating effect of these traits and reveals that online social interactions can strongly enhances consumers' purchase on impulse when individuals display the traits of i.e. extroversion, openness.

The practical implications of this study are of most interest for advertisers and marketers. The most important implication suggests that online retailers and designers of shopping websites should understand the importance of online social interactions in order to encourage consumers' online buying patterns [80-86]. They should integrate elements of online social interaction, together with reviews that customer placed online on websites, buying pattern, history and sales volume on their websites for the transformation of eWOM. Different customer groups with dissimilar traits use diverse platforms, and therefore marketers need to try to find channels, where their target groups are interacting. Our findings reveals the significance of personality traits and pinpoint the advantages coming out of it could be handy to managers who have to take decision regarding level of assets to be employed which amplify impulse buying [87-92].

Limitations and Opportunities for Future Research

Fundamentally, results of the study are cross sectional data based; a chance of more variation could be observed if data gathered was longitudinal. First, data gathered from college students in Pakistan with a sample size of 266. Future researches may replicate our model

with a larger sample size in order to enhance generalizability. It will be also fruitful to extend this research to various other online shopping environments. Second, present study only examines the effect of personality traits on electronic word-of-mouth and consumers' impulse buying. Future studies may include the part of marketer-generated stimuli into this model. With this perspective, researchers can study whether two forms of stimuli i.e. marketer-generated vs. consumer generated have dissimilar effects. Finally, buy impulsively i.e. dependent variable, was explained in 36.1% of variances. This warrant and proposes that there may be other significant factors that were not included in the model. Thus, further studies may undergo the effect of some other potential factors.

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