

# Does Culture Matters in Intersection of Individual's Personality and Social Media Engagement?

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**Keywords:** Internet, Social Media Marketing, Online Engagement, Personality, Facebook, Neo-Pi-R, Brand Management, Consumer Behavior.

**Abstract:** Personality traits of consumers may be important elements in the increasingly user-generated web for the engagement in this participatory media. Previous studies suggest three personality traits- extraversion, neuroticism and openness to experience- are related to uses of social applications like Facebook. The aim of current research is to evaluate the factors affecting consumer's social media engagement in terms of liking, commenting and sharing behavior on Facebook brand fan pages, and to evaluate the mediating role of interaction modes and to analyze the moderating role of culture, on relationship between personality traits and engagement behavior of consumers. Data was collected from 748 fans of 15 Facebook brand fan pages of five fast food brands operating in three different countries. Structural equation modelling was used to test the hypothesis. Results revealed that modes of interaction significantly mediate the relationship between personality traits and social media engagement behaviors. While culture moderates this relationship. Results showed the highest impact of personality traits on social media engagement in UK than Australia, while their impact in lowest in USA. It is suggested that consumers of different countries having same personality traits respond differently to Facebook brand page post, specifically when considering the Facebook functions of individual.

## 1 INTRODUCTION

The motivation of consumers to use social media is not only to reach products or services, but they also want to engage themselves with companies and other consumers to attain valuable insight about products and companies. Communications among consumers and company's own communications are the sources of consumer reach. This novel system of social media engagement enables organizations to extract value from existing and potential consumers as an opportunity. Social media engagement includes a wide range of specific behaviors and activities such as liking, commenting and sharing of brand pages on social media that can be used as measure of social media engagement (Coulter et al., 2012; Van Doorn et al., 2010).

Facebook has been embraced by brands as a key marketing determinant to drive engagement, brand commitment, loyalty, recommendation and awareness (Malhotra et al., 2013; Rohm et al., 2013). Consumers are able to interact directly with brands

through these brand pages by liking, commenting and sharing of brand page posts. Thus, Facebook users post thousands of comments on brand post that provide a platform of social media dialogue which solicit information easily, better understand consumer and gain feedback (Malhotra et al., 2013). Therefore, organizations adopt social media marketing as integral part of their marketing and public relation campaigns.

Moreover, the relationship between Facebook behavior and personality traits has yet to be tested empirically. Past studies had highlighted that personality can be a most relevant variable in formulating social media and internet behavior (Amichai-Hamburger, 2002). Previous studies have established three personality traits (extroversion, neuroticism and openness to experience) that affect digital consumer behavior (Amichai-Hamburger, 2002; Ross et al., 2009; Zywicka and Danowski, 2008). In addition, this study incorporates the shyness into model as a personality trait and sharing behavior as a Facebook fan engagement.

In this research, we investigate the relationship between four personality traits and consumer's liking, commenting and sharing behaviors on Facebook. Furthermore, we also investigate the relationship between personality traits and number of Facebook friends of respective consumers. Moreover, two different interaction modes are also included in our framework that consumer exhibit on Facebook behavior. Furthermore, the present study incorporates culture into the model as moderator that effect on the relationship between personality traits and Facebook fan engagement. We believe that the findings of our research may highlight the understanding of personality traits that enforce consumers to like, comment or share on brand fan pages on Facebook, thus guiding managers of social media fan pages to enhance the effectiveness of their social media strategies internationally related to brand engagement.

## 2 LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

### 2.1 Consumer Engagement

It can be elaborated as "behaviors that go beyond simple transactions, and may be specifically defined as a customer's behavioral manifestations that have a brand focus, beyond purchase, resulting from motivational drivers" (Van Doorn et al., 2010). It involves all types of behaviors beyond loyalty behaviors (Libai, 2011) and sometimes denoted as uppermost form of loyalty (Roberts and Alpert, 2010). According to Brodie et al., (2011), consumer engagement and marketing concept are consumer-centric approaches as both of them focus on consumers and their need to engage with them.

Consumer engagement and relationship marketing concept are also sharing some common grounds. Commitment and trust are the heart of relationship marketing (Morgan and Hunt, 1994), which are compulsory for conversion of any interaction into relationship. Similarly, establishment and maintenance of commitment and trust is facilitated by consumer engagement that drives consumer to be engaged with company or brand (Sashi, 2012). Moreover, in addition to Brodie et al. (2011) and Sashi (2012); (Van Doorn et al., 2010) also concluded that consumer engagement can contribute in formation of advanced levels of commitment and trust between companies and consumers and can be involved in structuring of

strong emotional links in relational exchange. Prior research also suggests that consumer engagement enhances the relationship quality between consumer and brand by providing higher satisfaction in relationship (Coulter et al., 2012). Therefore, it is concluded that for the assurance of high-quality enduring relationship with consumers, companies are able to understand the factors of consumer engagement.

### 2.2 Modes of Interaction

Existing well-known connections can be reached by using social networks that depend on user intention. This intention can be elaborated via interaction mode on social networking sites (SNSs) of the user. Consumer behavior can be affected by these interaction modes, holding important implications for consumer engagement understanding on platforms of social network (Zhao et al., 2008). Because of this we include consumer's mode of interaction as mediator variables in our conceptual framework in relationship between consumer engagement and personality traits.

Literature defines two interaction modes in which users of social media operate, "broadcasting" (BO) and "communicating" (CO) (Underwood et al., 2011). BO is a "one-to-many" style of interaction while CO is a "one-to-few" or "one-to-one" type of interaction. In the first mode, users pretend to indorse themselves to the people of large networks (Pempek et al., 2009). Impression management is the primary concerns of people who use this mode (Walther, 1996). While, on the other hand, CO mode is more private and produce high quality interaction with already known individuals. They want to be less visible and only interact with close-knit individuals. They have quality interaction with online communities of small size on regular bases (Skinstad, 2008). Thus, we postulate that:

H1. BO is positively related to (a) liking, (b) commenting, (c) sharing behavior and (d) number of friends on Facebook.

H2. CO is (a) positively related to liking behavior on Facebook and negatively related to (b) commenting and (c) sharing behavior, and (d) number of friends on Facebook.

### 2.3 Personality Traits

In this growing popularity of internet usage, literature shows that the Five-Factor Model is the most commonly used model for examining personality influence on internet usage (Ehrenberg et al., 2008; John and Srivastava, 1999; Angela Hausman et al.,

2014). Former researchers have discussed three personality traits and investigated the relation of two modes of interaction with two Facebook behaviors liking and commenting (Angela Hausman et al., 2014). The present study incorporate shyness in addition to NEO (Neuroticism-Extraversion-Openness) Personality Inventory (NEO PI-R form S) (Costa and McCrae, 1992) into the model as a personality trait.

Extraversion (EX) describes a person's ability to experience positive emotions and his/her tendency to be sociable (Butt and Phillips, 2008). According to Amichai-Hamburger et al., (2002), extrovert is a person who is friendly and seeks company, acts on impulse and desires excitement, whereas introvert is a reflective and quiet individual who does not feel comfortable in large social events and prefer his/her own company. Extroverted individuals have many connections with others via Facebook groups (Ross et al., 2009), social networking sites (Zywica and Danowski, 2008), and take dominant and central position in networks of friendship (Wehrli, 2008). Facebook communication features that individuals use are positively related to level of extraversion. While, few features of Facebook are used by introverts (Ryan and Xenos, 2011). Thus, introverts might prefer one-to-one mode of interaction with already known individuals to elude high levels of social interaction and contact. Thus, we formulate following hypothesis:

H3. Level of EX is (a) positively related to BO and (b) negatively related to CO.

The neurotic (NE) individual is a worrisome, anxious person who responds to every type of stimuli and overly emotional (Ross et al., 2009). Research proved that neurotic persons use internet for the reduction of loneliness and have limited interaction to only known persons (Butt and Phillips, 2008). High neurotic persons have high control in information as they prefer to control what type of information they have to spread (Butt and Phillips, 2008). High neurotic individuals are more nervous in social gathering, so that they prefer small social network of known individuals (Wehrli, 2008). Thus, it can be expected that they would prefer communicating interaction mode by interacting with only known individual (one-to-one relationship) for the reduction of loneliness. Based on the above discussion we postulate:

H4. Level of NE is (a) negatively related to BO and (b) positively related to CO.

According to McCrae and Costa (1987) openness to experience (OE) represents a person's readiness to be intellectually curious, to study alternative methods and enjoy creative hobbies. They love extensive

diversity of interests and ready to follow them (Butt and Phillips, 2008). Furthermore, these high OE trait individuals like to use and share more features and information with others (Amichai-Hamburger and Vinitzky, 2010). They would show risk-taking social behavior to satiate their curiosity with the large unknown audience in social media (Ross et al., 2009). These individuals are more prone to post on Facebook wall of others (Ross et al., 2009) to enhance interaction with large number of individuals (Carpenter et al., 2011). Thus, we formulate the following conjecture:

H5. Level of OE is (a) positively related to BO and (b) negatively related to CO.

Shyness (SHY) is characterized by inhibition of normal social behaviors and nervous responses (e.g., discomfort, tension, aversion of stare) in presence of others (Buss, 1980). This type of anxiety and shyness may also be obvious in online interaction. Previous researches showed insignificant results for the internet communication tool (e.g., chat rooms, e-mail and instant messaging) usage by shy individuals (Madell and Muncer, 2006). According to them, shyness is neither a barrier nor boost high utilization of online communication. The above discussion support the notion that shyness may facilitate online engagement. Therefore, we postulate:

H6. Level of SHY is (a) negatively related to BO and (b) positively related to CO.

## 2.4 Moderating Effect of Culture

Prior researches had identified that culture impacts consumer's decision making process and information seeking (Mangold and Smith, 2012; McGuinness et al., 1991) but no research available in literature shows the cultural difference impact on relationship between personality traits and modes of communication, and social media engagement and modes of interaction.

For the cultural differences variable of our model we used Geert Hofstede theory. Based on the Hofstede's theory, we have selected three culturally similar countries Australia (AUS), United Kingdom (UK) and United States of America (USA) for evaluation of cultural difference impact on consumer engagement on social networks. These countries have almost same scores in uncertainty avoidance and power distance dimensions as Dawar et al., (1996) proved that these dimensions of Hofstede's framework impact information exchange behavior of consumers.

Other dimensions also have matching scores in all three countries. Research proves that using theoretical aspects based similar countries, improve reliability

and increase generalizability (Alden et al., 1993; Sivakumar and Nakata, 2001). We propose that Cultural differences (country/location) play a moderating role among the relationship of personality traits, modes of interactions, brand fan engagement and number of Facebook friends (figure 1).

Based on the above discussion we postulate the following hypothesis:

H7a: Culture moderates the relationship between EX and (a1) BO and (a2) CO.

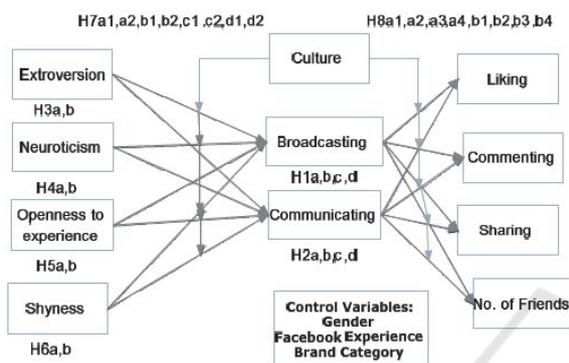


Figure 1: Theoretical Framework.

H7b: Culture moderates the relationship between NE and (b1) BO and (b2) CO.

H7c: Culture moderates the relationship between OE and (c1) BO and (c2) CO.

H7d: Culture moderates the relationship between SHY and (d1) BO and (d2) CO.

H8a: Culture moderates the relationship between BO and (a1) liking, (a2) commenting, (a3) sharing and (a4) number of Facebook friends.

H8b: Culture moderates the relationship between CO and (b1) liking, (b2) commenting, (b3) sharing and (b4) number of Facebook friends.

### 3 METHOD

#### 3.1 Sampling and Procedure

To study the moderating and mediating effect of mode of interaction and culture on the relationship between personality traits and social media engagement, an online survey was conducted among AUS, USA and UK adults from May to July 2015. Participants were selected from the 15 Facebook brand fan pages of five companies operating in aforementioned three countries. To assure more accurate representation of brand based country population, and to overcome the limitation of using

online surveys, this particular sample is based on two census variables gender and age. This procedure is authenticated by former researches (Bennett and Iyengar, 2008; Vavreck, 2007; Gil de Zúñiga and Valenzuela, 2009). We randomly matched 3000 respondents (200 from each Facebook fan page) to these demographic characteristics. These selected respondents were personally contacted on Facebook and sent the survey's URL. This invitation provides estimated time to respondents for survey completion and monetary incentive information that is given as reward for participation. First invitation was sent on May 18, 2015 and four reminders were sent in the following eight weeks to improve response rate. The last reminder was sent on July 13, 2015. A total 748 respondents filled the survey with the response rate of 24.9%, which fall within an acceptable response rate for online survey (Batinic et al., 2002; Sax et al., 2003). Fifty-eight percent were male and 42% were female, having an average age of 24.68 years (SD= 8.6).

#### 3.2 Measure

The five-point Likert scales (5= "strongly agree" and 1= "strongly disagree") were used from the former studies for the measurement of personality traits, interaction modes and engagement behaviors. This study used three dimensions of revised NEO Personality Inventory (NEO-PI-R from S) (Costa and McCrae, 1992). Shyness was measured via the Revised Cheek and Buss Shyness Scale (RCBS-13)(Cheek and Buss, 1981). Score range from a minimum of 13 (very non-shy) to a high of 65 (very shy). Interaction modes were measured by using the items based on the study of (Underwood et al., 2011). Engagement behaviors (liking and commenting) were measured by using the items based on (Angela Hausman et al., 2014). Following the method of (Angela Hausman et al., 2014), a three-item scale was developed to ask participants about their Facebook behavior in regard to sharing.

### 4 DATA ANALYSIS

#### 4.1 Analytical Approach, Data Screening, and the Measurement Model

Data was analysed by using SPSS and AMOS 7.0. At first, measurement model was estimated using confirmatory factor analysis (CFA) by following two-

step approach of (Anderson and Gerbing, 1988). Structural equation modelling was applied after accessing the adequacy of measurement model to identify the model fitting and to study the causal relationships. The structure of variables in the model proposed by current research was assessed by conducting CFA using maximum likelihood estimation with 748 cases collected. After the model was analysed for construct validity, unidimensionality, and reliability, the results showed that the model fit the data well (chi-sq= 1132.413, df= 953,  $p < 0.001$ , RMSEA = 0.02, CFI= 0.993, NFI= 0.955, IFI= 0.993). Cronbach's alpha was used to test the internal consistency reliability- how consistently individuals responded to the items within a scale- of each composite construct and its value ranged from 0.81 to 0.95 for all constructs, indicating the existence of reliability.

The measurement model of current research consisted of nine multiple-item latent variables (extroversion, neuroticism, openness to experience, shyness, broadcasting mode of interaction, communicating mode of interaction, liking, commenting and sharing brand fan page). Each of them was then tested by CFA and showed a good model-fit. Based on a good-fitted measurement model, composite reliability (CR) - used to measure consistency of individual's response to the items within a scale- supported the construct reliability as CR values are greater than the value of 0.60 (CR ranging from 0.82 to 0.93) (Fornell and Larcker, 1981) and (Bagozzi and Yi, 1988). Furthermore, average variance extracted (AVE) values ranging from 0.57 to 0.64, exceeded the threshold value of 0.50 recommended by (Fornell and Larcker, 1981). Based on it discriminant validity have been achieved because each construct's AVE was greater than the squared correlation among constructs. Therefore, it can be concluded that the instrument had proper discriminant and convergent validity.

## 4.2 Structural Model

There was a potential problem of the occurrence of common method variance (CMV) as all the measures were self-reported by the same respondents. CMV was tested by utilizing CFA. According to (Podsakoff et al., 2003), CMV does not appear to be a serious threat if fit of the one-dimensional model is worse than that of the measurement model. And results prove the same, therefore, the issue of CMV is of less concern in this study.

Unobserved characteristics of brand category and difference in opinion of different gender might lead

to difference in explained variables across different countries. Therefore we control for brand categories and gender. It might be that high Facebook experience fans of brand pages may respond differently as compare to low experience users. So that, we control for Facebook experience while applying measurement model. Controlling these variables may effectively reduce experimental errors as they could have some unpredictable influences on intention to use Facebook and fan pages. The results gathered after using structural equation modelling showed a good fit ( $\chi^2=1660.640$ , df= 148,  $p < 0.001$ , RMSEA = 0.07, CFI= 0.914).

## 4.3 Mediating Effect

Table-1 show the results that provide support to all the hypothesized relationships except H2a, H3a, H5a and H5b. The results showed that broadcasting interaction mode was positively related to all engagement modes liking ( $\beta=0.367$ ,  $p < 0.001$ ), commenting ( $\beta=0.384$ ,  $p < 0.001$ ) and sharing ( $\beta=0.397$ ,  $p < 0.001$ ), and number of friends on Facebook ( $\beta=0.372$ ,  $p < 0.001$ ). On the other hand communicating interaction mode had a negative relationship with all engagement modes liking ( $\beta=-0.398$ ,  $p < 0.001$ ), communicating ( $\beta= -0.385$ ,  $p < 0.001$ ), sharing ( $\beta= -0.349$ ,  $p < 0.001$ ), and number of friends on Facebook ( $\beta= -0.364$ ,  $p < 0.001$ ). Relationship between communicating mode of interaction and liking was proposed positive (H2a) and result oppose this hypothesis. Thus, H1a, H1b, H1c, H1d, H2b, H2c and H2d were all supported.

Table 1: Structural Model Results of Mediation Analysis.

	Standardized estimates	t-value
EX → BO	0.058	1.468
EX → CO	-0.132**	-3.177
NE → BO	-0.122**	-3.169
NE → CO	0.18***	4.443
OE → BO	0.066	1.695
OE → CO	-0.074	-1.805
SHY → BO	-0.648***	-19.346
SHY → CO	0.507***	14.43
BO → LK	0.367***	9.094
BO → COMT	0.384***	9.624
BO → SH	0.397***	9.625
BO → NOF	0.372***	8.942
CO → LK	-0.398***	-9.863
CO → COMT	-0.385***	-9.647
CO → SH	-0.349***	-8.474
CO → NOF	-0.364***	-8.757

\* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$

Results regarding personality traits and interaction modes showed that neuroticism and shyness were negatively related to broadcasting interaction mode ( $\beta = -0.122$ ,  $p < 0.01$ ;  $\beta = -0.648$ ,  $p < 0.001$ ). Moreover, extroversion was found to have negative relationship with communicating interaction mode ( $\beta = -0.132$ ,  $p < 0.01$ ) while, neuroticism and shyness were positively related ( $\beta = 0.18$ ,  $p < 0.001$ ;  $\beta = 0.507$ ,  $p < 0.001$ ) with communicating mode of interaction. Therefore, these results provided support for H3b, H4a, H4b, H6a, and H6b.

#### 4.4 Moderating Effect

Invariance analysis of different groups was applied to test the moderating effects of culture (Jurowski and Gursoy, 2004), and used the procedure of (Han et al., 2010, Han et al., 2013, Bell and Menguc, 2002). Participants of three countries were divided into three pairs (AUS-USA, AUS-UK and USA-UK) to conduct pair wise invariance analysis of group difference. Initially for every pair, the structural models were estimated without across-group constraints (i.e. unconstrained models). Then, cross-group constraints (i.e. constrained model) where the parameter estimates for each pair country groups were constrained to be equal. Finally a  $\chi^2$  test comparing the unconstrained and constrained models was used to detect moderating effects. A significant  $\chi^2$  difference between the unconstrained models suggests that there are some differences between each pair group countries in terms of Facebook fan page engagement behavior. The findings show H8a2, H8a3 and H8a4 were supported fully for three pairs of countries, while H7a1, H7b1, H7c1, H7c2, H7d1, H7d2, H8a1, H8b2, H8b3 and H8b4 were reveal partial support. Moreover, H7a2, H7b2 and H8b1 were not supported (Table 2). To be more specific, this study's proposed model varies in three countries (AUS, USA and UK) with respect to personality traits and Facebook brand fan page engagement. First, culture partially moderates the relationship between all personality traits and BO. Second, culture partially moderates the relationship between OE and SHY, and CO while, it did not moderates the relationship between EX and NE, and CO. Third, culture fully mediates the relationship between BO and Facebook fan page engagement in terms of COMT and SH, and NOF while, it partially moderates the relationship between BO and LK. Forth, culture partially mediates the relationship between CO and Facebook fan page engagement in terms of COMT and SH, and NOF while, it did not mediates the relationship between CO and LK. Based on the presentation of the results

in this section, the next section discusses some of the implications of the results and contributions of the present study to the literature.

## 5 DISCUSSION AND IMPLICATION FOR MANAGERS

To narrow the gaps in the literature, this study incorporates the shyness into model as personality trait and sharing behavior as Facebook fan engagement. Furthermore, the present study incorporates culture into the model as moderator that effect on the relationship between personality traits and social media engagement. The results of the data analysis generally support the present study's proposed framework. Modes of interactions mediate the relationship between personality traits and Facebook fan engagement. In addition, shyness is an important personality trait that effect on online engagement. Most important, the results of this study confirm that culture significantly moderates the relationship between personality traits and Facebook fan engagement. This study findings are consistent with previous research; nevertheless, there are some issues worth further discussion.

For the main model before considering culture as moderating variable, the results of this study show that mode of interaction mediates the relationship between personality traits and social media engagement. Previous literature has consistently supported this idea (Angela Hausman et al., 2014), while (Correa et al., 2010, Ross et al., 2009) investigated the direct relationship between personality traits and individual's behavior at social media.

Literature shows that extraversion has inconsistent relationship with different uses of internet (Hamburger and Ben-Artzi, 2000, Correa et al., 2010). In addition, mediating role of modes of interaction proved by (Angela Hausman et al., 2014) that consumers pursue differential benefits on social media (Facebook) depending on their interaction mode. Our findings suggest that it is related to the fact that consumers of the different countries may pursue different benefits on social media (e.g., Facebook) depending on their interaction mode. As far as the social benefits are concerned (one-to-many communication on brand's fan page), broadcasters might appreciate as they are more inclined to like, comment and share but this might not work for communicators at all. Therefore, managers of the

brands may need to study the interaction mode of their consumers before formulating strategies about social benefits for users on Facebook. But, ignoring users with communicating interaction mode completely is not a wise strategy.

Individual's personality can be projected through Facebook profile pages and postings (Ehrenberg, 2013). Managers of brands can utilize these methods in identifying their user's personality and categorize them as communicators and broadcasters using the significant relationships suggested by the present study even in different cultures. Moreover, information obtained from this kind of personality assessment using behavior on Facebook could be helpful for managers of the brands those formulate psychographics and demographics -based segmentation strategy for Facebook (Shaer, 2013), especially for different cultures.

Table 2: Culture Moderating Effects: Results of Multiple Group Analysis.

	AUS	USA	UK	$\Delta\chi^2$ AUS - USA	$\Delta\chi^2$ AUS -UK	$\Delta\chi^2$ UK- USA
	Std. Estimate s	Std. Estimate s	Std. Estimate s			
EX → BO	0.20 ***	-0.05	0.19 ***	7.15 ***	0.01	6.67 ***
EX → CO	0.13 ***	-0.13 **	-0.19 **	0	0.45	0.46
NE → BO	0.32 ***	-0.07	-0.14 **	6.05 **	3.9 **	0.49
NE → CO	0.29 ***	0.14 **	0.19 **	2.24	0.9	0.16
OE → BO	0.14 **	-0.03	0.25 ***	3.01 *	1.49	7.33 ***
OE → CO	-0.17 **	-0.01	-0.09	2.75 *	0.65	0.47
SHY → BO	-0.29 ***	-0.85 ***	-0.36 ***	60.3 0***	0.65	37.6 6***
SHY → CO	0.35 ***	0.63 ***	0.36 ***	13.5 0***	0.02	6.26 **
BO → LK	0.36 ***	0.19 **	0.58 ***	2.42	7.6 ***	18.2 3***
BO → COMT	0.49 ***	0.15 **	0.65 ***	10.7 2***	4.93 **	30.0 4***
BO → SHR	0.46 ***	0.19 **	0.63 ***	7.34 ***	5.75 **	25.1 7***
BO → NOF	0.48 ***	0.1	0.60 ***	10.0 6***	2.73 *	20.2 5***
CO → LK	0.43 ***	-0.47 ***	-0.32 ***	0.27	1	2.23
CO → COMT	0.33 ***	-0.55 ***	-0.25 ***	5.90 **	0.8	11.6 4***
CO → SHR	-0.36 ***	-0.46 ***	-0.23 ***	0.64	1.79	4.22 **
CO → NOF	-0.35 ***	-0.51 ***	-0.24 ***	4.60 **	1.21	9.17 ***
*p<0.10, **p<0.05, ***p<0.01						

Based on the findings of the current research, managers of the brands can formulate Facebook brand fan page post strategy to generally invite and boost broadcasters. More specifically, they can design same Facebook posts for AUS and UK but different for USA to invite and to encourages broadcasters. For example, as self-promotion and self-expression in more visible way are significant aims for broadcasters (Underwood et al., 2011). Moreover, managers of the brands may place more interactive posts that ask for input from their users, or that enforce them to spread their emotions and opinions, which are significant for broadcaster's need of self-presentation. Managers of the brands must have to keep in mind while formulating the international Facebook fan page post strategy that broadcasters have high engagement behavior in terms of likes, comments and shares in UK followed by AUS and USA. By offering opportunity of self-promotion such as controversial discussion topics and contests on Facebook fan page, so they can get broadcaster's attention and make them like, comment and share their own posts. More vivid and interactive posts can help brands to engage more broadcasters on Facebook fan page. Managers of the brands should keep in mind while formulating international brand fan page post strategy that broadcasters love to engage more in sharing behavior followed by commenting and liking in all three countries. So that, while segmenting their Facebook users based on their valence and type of comments and using the insights and information obtained from these comments, they should have to keep in mind that the comments may only reflect a group of consumers with specific personality traits and interaction mode in all three countries. Therefore, they should be aware of this caution while formulating their segmentation strategies, as they may exclude communicating interaction mode individuals.

Success of social media strategies lies in consumer engagement. The performance of the social networking site to brands is limited without active likers, commenters and sharers. Therefore, managers of the brands should have to encourage and facilitate such behavior for active engagement of their social media users to maximize their benefits.

## 6 LIMITATIONS AND FUTURE GUIDELINES

Although the findings of current research provide meaningful implications for Facebook fan

engagement, some limitations regarding the model's external validity are addressed here. First, the issue of external validity is a concern in developing studies with online samples. Although online samples were considered as appropriate for the online engagement study, a broader range from diverse groups of respondents is suggested for future studies. Second, only three personality factors are considered from Big Five personality model as important determinants of personality. Although this study include shyness in addition to extroversion, neuroticism and openness to experience, extended model including all determinants of Big Five model and shyness is suggested for future studies. Third, the present study did not consider the real-world behavior of consumers. However, this is less of a concern for considerable empirical evidence for the fundamental relationship between intention to behave and actual behavior (Taylor and Todd, 1995; Venkatesh and Morris, 2000). Fourth, the present study did not consider the impact of age groups on explained variables. However, future studies may test current model with different age group respondents to see if the results will hold. Finally, while we agree with (Angela Hausman et al., 2014; Sashi, 2012) that more studies are needed on social media engagement of consumers, it is also important to understand the financial impact of heavily discussed engagement behaviors on brands fan pages. Therefore, it would be useful and critical for the managers of the brands to understand if such behaviors (liking, commenting and sharing) results in high probability of sale of same brand products of by the customers who liked, commented or shared the brand posts on Facebook fan page.

In conclusion, the present study strengthens our views with empirical results and fills the gap in social media fan engagement literature. The empirical findings are supportive of the inclusion of shyness as personality traits into the model. Moreover, moderating role of culture incorporates a sound contribution in the literature of social media fan engagement. Overall, in spite of its limitation, this research is an important step in understanding the factors and motives affecting consumer's Facebook behavior and social media engagement in different cultures, and it provides fruitful insights for managers of the brands intending to utilize Facebook as part of their promotion mix strategy.

## REFERENCES

- Alden, D. L., Hoyer, W. D. & Lee, C. 1993. Identifying global and culture-specific dimensions of humor in advertising: A multinational analysis. *The Journal of Marketing*, 64-75.
- Amichai-Hamburger, Y. 2002. Internet and personality. *Computers in Human Behavior*, 18, 1-10.
- Amichai-Hamburger, Y. & Vinitzky, G. 2010. Social network use and personality. *Computers in human behavior*, 26, 1289-1295.
- Amichai-Hamburger, Y., Wainapel, G. & Fox, S. 2002. "On the Internet No One Knows I'm an Introvert!": Extroversion, Neuroticism, and Internet Interaction. *CyberPsychology & Behavior*, 5, 125-128.
- Anderson, J. C. & Gerbing, D. W. 1988. Structural equation modeling in practice: A review and recommended two-step approach. *Psychological bulletin*, 103, 411.
- Angela Hausman, D., Kabadayi, S. & Price, K. 2014. Consumer-brand engagement on Facebook: liking and commenting behaviors. *Journal of Research in Interactive Marketing*, 8, 203-223.
- Bagozzi, R. P. & Yi, Y. 1988. On the evaluation of structural equation models. *Journal of the academy of marketing science*, 16, 74-94.
- Batinic, B. E., Reips, U.-D. E. & Bosnjak, M. E. 2002. *Online social sciences*, Hogrefe & Huber Publishers.
- Bell, S. J. & Menguc, B. 2002. The employee-organization relationship, organizational citizenship behaviors, and superior service quality. *Journal of retailing*, 78, 131-146.
- Bennett, W. L. & Iyengar, S. 2008. A new era of minimal effects? The changing foundations of political communication. *Journal of Communication*, 58, 707-731.
- Brodie, R. J., Hollebeek, L. D., Juric, B. & Ilic, A. 2011. Customer engagement: conceptual domain, fundamental propositions, and implications for research. *Journal of Service Research*, 1094670511411703.
- Buss, A. H. 1980. *Self-consciousness and social anxiety*, Freeman.
- Butt, S. & Phillips, J. G. 2008. Personality and self reported mobile phone use. *Computers in Human Behavior*, 24, 346-360.
- Carpenter, J. M., Green, M. C. & Laflam, J. 2011. People or profiles: Individual differences in online social networking use. *Personality and individual differences*, 50, 538-541.
- Cheek, J. M. & Buss, A. H. 1981. Shyness and sociability. *Journal of personality and social psychology*, 41, 330.
- Correa, T., Hinsley, A. W. & De Zuniga, H. G. 2010. Who interacts on the Web?: The intersection of users' personality and social media use. *Computers in Human Behavior*, 26, 247-253.
- Costa, P. T. & McCrae, R. R. 1992. Normal personality assessment in clinical practice: The NEO Personality Inventory. *Psychological assessment*, 4, 5.
- Coulter, K. S., Gummerus, J., Liljander, V., Weman, E. & Pihlström, M. 2012. Customer engagement in a Facebook brand community. *Management Research Review*, 35, 857-877.
- Dawar, N., Parker, P. M. & Price, L. J. 1996. A cross-

- cultural study of interpersonal information exchange. *Journal of International Business Studies*, 497-516.
- Ehrenberg, A., Juckes, S., White, K. M. & Walsh, S. P. 2008. Personality and self-esteem as predictors of young people's technology use. *CyberPsychology & Behavior*, 11, 739-741.
- Ehrenberg, R. 2013. Science & society: What a Facebook 'like' reveals: Researchers predict personal traits using social media data. *Science News*, 183, 14-14.
- 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. & Valenzuela, S. 2009. Disentangling facebookers: A snapshot of social network site users in the United States. *Facebook and philosophy. Open Court Publishing*.
- Hamburger, Y. A. & Ben-Artzi, E. 2000. The relationship between extraversion and neuroticism and the different uses of the Internet. *Computers in Human Behavior*, 16, 441-449.
- Han, H., Hsu, L.-T. J. & Sheu, C. 2010. Application of the theory of planned behavior to green hotel choice: Testing the effect of environmental friendly activities. *Tourism Management*, 31, 325-334.
- Han, Y. J., Nunes, J. C. & Drèze, X. 2013. Signaling status with luxury goods: The role of brand prominence. *International Retail and Marketing Review*, 9, 1-22.
- John, O. P. & Srivastava, S. 1999. The Big Five trait taxonomy: History, measurement, and theoretical perspectives. *Handbook of personality: Theory and research*, 2, 102-138.
- Jurowski, C. & Gursoy, D. 2004. DISTANCE EFFECTS ON RESIDENTS' ATTITUDES TOWARD TOURISM. *Annals of Tourism Research*, 31, 296-312.
- Libai, B. 2011. Comment: the perils of focusing on highly engaged customers. *Journal of Service Research*, 14, 275-276.
- Madell, D. & Muncer, S. 2006. Internet communication: An activity that appeals to shy and socially phobic people? *CyberPsychology & Behavior*, 9, 618-622.
- Malhotra, A., Malhotra, C. K. & See, A. 2013. How to create brand engagement on Facebook. *MIT Sloan Management Review*, 54, 18-20.
- Mangold, W. G. & Smith, K. T. 2012. Selling to Millennials with online reviews. *Business Horizons*, 55, 141-153.
- McCrae, R. R. & Costa, P. T. 1987. Validation of the five-factor model of personality across instruments and observers. *Journal of personality and social psychology*, 52, 81.
- Mcguinness, N., Campbell, N. & Leontiades, J. 1991. Selling machinery to China: Chinese perceptions of strategies and relationships. *Journal of International Business Studies*, 187-207.
- Morgan, R. M. & Hunt, S. D. 1994. The commitment-trust theory of relationship marketing. *the journal of marketing*, 20-38.
- Pempek, T. A., Yermolayeva, Y. A. & Calvert, S. L. 2009. College students' social networking experiences on Facebook. *Journal of Applied Developmental Psychology*, 30, 227-238.
- Podsakoff, P. M., Mackenzie, S. B., Lee, J.-Y. & Podsakoff, N. P. 2003. Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of applied psychology*, 88, 879.
- Roberts, C. & Alpert, F. 2010. Total customer engagement: designing and aligning key strategic elements to achieve growth. *Journal of Product & Brand Management*, 19, 198-209.
- Rohm, A., D. Kaltcheva, V. & R. Milne, G. 2013. A mixed-method approach to examining brand-consumer interactions driven by social media. *Journal of Research in Interactive Marketing*, 7, 295-311.
- Ross, C., Orr, E. S., Sasic, M., Arseneault, J. M., Simmering, M. G. & Orr, R. R. 2009. Personality and motivations associated with Facebook use. *Computers in human behavior*, 25, 578-586.
- Ryan, T. & Xenos, S. 2011. Who uses Facebook? An investigation into the relationship between the Big Five, shyness, narcissism, loneliness, and Facebook usage. *Computers in Human Behavior*, 27, 1658-1664.
- Sashi, C. 2012. Customer engagement, buyer-seller relationships, and social media. *Management decision*, 50, 253-272.
- Sax, L. J., Gilmartin, S. K. & Bryant, A. N. 2003. Assessing response rates and nonresponse bias in web and paper surveys. *Research in higher education*, 44, 409-432.
- Shaer, M. 2013. Want to really know people? Take a look at their Facebook 'likes.'. *The Christian Science Monitor*.
- Sivakumar, K. & Nakata, C. 2001. The stampede toward Hofstede's framework: Avoiding the sample design pit in cross-cultural research. *Journal of international business studies*, 555-574.
- Skinstad, M. Facebook: A digital network of friends. 24th conference of the nordic sociological association, 2008. 1-14.
- Taylor, S. & Todd, P. A. 1995. Understanding information technology usage: A test of competing models. *Information systems research*, 6, 144-176.
- Underwood, J. D., Kerlin, L. & Farrington-Flint, L. 2011. The lies we tell and what they say about us: Using behavioural characteristics to explain Facebook activity. *Computers in Human Behavior*, 27, 1621-1626.
- Van Doorn, J., Lemon, K. N., Mittal, V., Nass, S., Pick, D., Pirner, P. & Verhoef, P. C. 2010. Customer engagement behavior: theoretical foundations and research directions. *Journal of Service Research*, 13, 253-266.
- Vavreck, L. 2007. The exaggerated effects of advertising on turnout: The dangers of self-reports. *Quarterly Journal of Political Science*, 2, 325-343.
- Venkatesh, V. & Morris, M. G. 2000. Why don't men ever stop to ask for directions? Gender, social influence, and their role in technology acceptance and usage behavior. *MIS quarterly*, 115-139.
- Walther, J. B. 1996. Computer-mediated communication impersonal, interpersonal, and hyperpersonal interaction. *Communication research*, 23, 3-43.

- Wehrli, S. 2008. Personality on social network sites: An application of the five factor model. *Zurich: ETH Sociology (Working Paper No. 7)*.
- Zhao, S., Grasmuck, S. & Martin, J. 2008. Identity construction on Facebook: Digital empowerment in anchored relationships. *Computers in human behavior*, 24, 1816-1836.
- Zywica, J. & Danowski, J. 2008. The faces of Facebookers: Investigating social enhancement and social compensation hypotheses; predicting Facebook™ and offline popularity from sociability and self-esteem, and mapping the meanings of popularity with semantic networks. *Journal of Computer-Mediated Communication*, 14, 1-34.

