

Who's Chatting?: Interplay between Personality and WhatsApp Use

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ABSTRACT

Smartphone-based messaging applications have shown phenomenal growth with the proliferation of the internet coupled with the high penetration of smartphones into masses. The current study is an attempt to understand the relationship between the individuals' personality and their use of WhatsApp, a popular smartphone-based messaging application in Indian context. For personality assessment the study takes Big Five Inventory. A questionnaire consisting items on individual WhatsApp use and Big Five Inventory was administered to students in an Indian University. Multiple regression and logistic regression revealed significant relationships between personality and WhatsApp usage and use of its different inbuilt functions.

Keyword: WhatsApp, Big Five Personality Factors; Social Networking Sites, Computer-Mediated Communication, Smartphone

INTRODUCTION

Riding high on the rise in the number of internet users and high sales of smartphones, messaging applications like WhatsApp, Viber, Wechat are becoming popular among the smartphone users. The acquisition of popular messaging app WhatsApp by social networking giant, Facebook for a whopping amount of \$19 billion (Lunden, 2014) signifies the popularity and importance of these new age messaging applications. The smartphone-based messaging applications are a blend of traditional short messaging service (SMS) and social networking sites to varying extent. While users can send instant message through these applications, they can make users' groups, profiles etc. in these applications. Thus, apart from sending messages users can use these applications to express their personality through profile creation, uploading profile pictures, setting status etc.

These applications are a special class of information system (IS) and representational emerging mode of computer-mediated communication (CMC). As new and growing applications, messaging applications require academic study to better understand their proliferation

phenomenon. India provides ideal settings for such a study as there is a dearth of literature regarding the use of CMC in India and the use of the Internet is growing but still in gestation phase. India with 117 million users, is the third largest country in terms of the smartphone users and the user base is expected to grow at a rate of 45% in the year 2014 (Rai, 2014). This study endeavors to contribute to the understanding of new CMC applications in an emerging economy.

WhatsApp

WhatsApp is a cross-platform mobile messaging application that can run on Android, iPhone, Blackberry, Windows phone, and Nokia. The application allows sending and receiving messages without having to pay for SMS. Apart from exchanging text messages, users can exchange images, audio and video messages. It allows users to create groups of users. Users can upload their picture and may share it either with everyone, with their WhatsApp contacts or with nobody. The application allows a way to self-express through a status which a user can share either with nobody, with his/her contacts added to WhatsApp or with everyone. Application has a feature

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that shows the last time a user was online on WhatsApp 'last seen at'. The users can share his/her 'last seen at' with contacts added to WhatsApp, with everyone or with nobody.

The application offers more functions than traditional SMS. Group creation, photo, audio video sharing, status sharing, real time chat in groups sharing of last time a user was active on application are the features that differentiate WhatsApp from SMS. On the other hand, the functions provided by WhatsApp are not as wide as provided by standard SNS like Facebook. For example, on Facebook, you have a dedicated wall, on which you can share status, picture, video links publicly which can be seen by everybody having an account on Facebook. WhatsApp does not provide such function. Further, user groups on SNSs are more interest-based (or theme-based) like a group of research scholars from India. In contrast groups on WhatsApp are primarily motivated by an intention to have conversations with people whose phone number we have got in contact list and who is using WhatsApp. The application has limited functions for self-presentation as compared to SNS. The application is primarily communicative rather than a platform for impression management, which is the case with the most of SNSs.

Acquired by SNS giant Facebook in February, 2014, as of April, 2014, WhatsApp has more than 500 million regular and active users globally, resulting in sharing of more than 700 million photos and more than 100 million videos every single day (WhatsApp Blog, 2014).

Personality and CMC

Personality and its impact on human behaviour have been of immense interest to the researchers and academicians. IS (information system) researchers have tried to understand the relationship between individuals' personality and CMC use. Particularly, researchers have studied the relationship between personality and Internet use (e.g., Swickert, Hittner, Harris, & Herring, 2002; Tosun & Lajunem, 2010; Landers & Lounsbury, 2006), SNSs use (e.g., Amichai-Hamburger & Vinitzky, 2010; Correa, Hinsley, & de Zúñiga, 2010; Muscanell & Guadagno, 2012), mobile use (e.g., Phillips, Butt, & Blaszczyński, 2006), SMS use (e.g., Beydokhti, Hassanzadeh, & Mirzaian, 2012).

Big Five Personality Factor

Big Five Personality Factor model, also known as 'five factor model', is probably the most dominant model of personality structure in contemporary personality psychology (Haslam, 2007) however cross-cultural studies offer partial support to Big Five approach (Kalat, 2011) but Costa & McCrae (2008) argue that because traits are functions of biology, and human beings have a common genome, the structure of personality ought to be universal.

Big Five is an empirical generalisation about covariation of personality traits and consists of a hierarchical organisation of personality traits in terms of basic dimensions. These dimensions are: extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience (McCrae & John, 1992).

Extraversion is probably most validated personality trait (Sanaktekin & Aydin, 2010) and represents an individual's level of sociability and outgoingness (Muscanell & Guadagno, 2012). Neuroticism reflects a person's tendency to experience psychological distress and high levels of the trait are associated with a sensitivity to threat (Ross, Orr, Sisic, Arseneault, Simmering, & Orr, 2009). Neuroticism ranges from being poised, calm at one end to nervous and being anxious at the other (Baron, 2010). Agreeableness refers to friendly, considerate, and modest behaviour and comprises the facets of trust, straightforwardness, altruism, compliance, modesty and tender-mindedness (Chamorro-Premuzic, 2013). People high on agreeableness are hard working, punctual, ambitious, careful and dependable (Karl, Peluchette, & Schlaegel, 2010)

Conscientiousness is related to being self-disciplined, responsible, and archiving (Coon & Mitterer, 2010). Openness to experience represents the tendency to engage in intellectual activities and experience new sensations and ideas (Chamorro-Premuzic, 2013). People high on this dimension enjoy thought provoking films and books, modern art, and unusual music (Kalat, 2011).

Extraversion and CMC

Extraversion, along with neuroticism and openness to experience is most studied dimension of big five framework in the context of online social interaction

(Correa *et al.*, 2010). Amichai-Hamburger, Wainapel, & Fox (2002) concluded that the Internet in general provided a great opportunity to introverts to express themselves and thus to make for their lack of interaction in real life. Similarly, Landers & Launsbury (2006) found a negative relationship between extraversion and internet use. Some studies have found contradictory results. E.g., Amichai-Hamburger & Vinitzky (2010) and Wang, Jackson, Zhang, & Su (2012) found that extraverts were more likely to have a higher number of friends on the Internet and social networking sites. Correa *et al.* (2010) found that extraverts used social media more frequently than the introverts. Extraversion was found positively related to belonging to Facebook groups (Ross *et al.*, 2009) also extraverts were found to be members of more groups than the introverts. The reason behind such behaviour may be because extraverts use these applications for supplementing their offline interactions. Various studies have been conducted to study the relationship between extraversion and use of specific features of social networking sites. Muscanell & Guadagno (2012) found that extraversion predicted the likelihood of posting photographs on Facebook. Extraverts were found to be updating their Facebook status more frequently than the introverts.

WhatsApp is basically phonebook contacts-based messaging application, thus resulting in offline to online communication. Given the lack of anonymity in WhatsApp communication, it is logical to assume that people use this application to extend their offline interaction rather than substituting for the lack of social interaction in face-to-face situations. Thus, the study posits following hypotheses:

- H1:** Extraversion is positively related to WhatsApp use.
- H2:** Extraversion is positively related to user groups joined on WhatsApp.
- H3:** Extraversion is positively related to uploading real picture on WhatsApp.
- H4:** Extraversion is positively related to sharing of profile picture on WhatsApp.
- H5:** Extraversion is positively related to sharing of status on WhatsApp.
- H6:** Extraversion is positively related sharing 'last seen at' on WhatsApp.

Neuroticism and CMC

The research on the relationship between neuroticism and the Internet and social networking sites have produced varied results. Ross *et al.* (2009) found no relationship between neuroticism and posting personal information on Facebook and use of communicative features of Facebook. On the contrary, Ehrenberg, Juckes, White, & Walsh (2008) found that individuals high on neuroticism were more likely to use SNSs and instant messaging (IM) and more addicted to mobile phone use. Beydokhti *et al.* (2012) confirmed the relationship between addiction to text messaging and neuroticism. However, Muscanell & Guadagno (2012) did not find any relationship between neuroticism and use of SNSs. Amichai-Hamburger & Vintzky (2010) found that people high on neuroticism were more likely to post their photos on their Facebook profile as compared to people low on this dimension. So, this study posits that:

- H7:** Neuroticism is positively related to WhatsApp use.
- H8:** Neuroticism is positively related to posting original photos on WhatsApp.

Conscientiousness and CMC

Along with other dimensions of Big Five, the research on the relationship between conscientiousness and communicative media use has produced mixed results. Landers & Lounsbury (2006) found a negative relationship between conscientiousness and internet use while Ryan & Xenos (2011) found a negative relationship between conscientiousness and uploading photos on SNSs. Muscanell & Guadagno (2012) found that individuals high on conscientiousness were more likely to report sending private messages. Amichai-Hamburger & Vinitzky (2010) found that individuals with a high score on this dimension were more likely to have a higher number of friends on Facebook but less likely to upload their pictures. Moore & McElory (2012) found that conscientiousness was not related to the time spent on Facebook as well as with a number of friends or number of photos on Facebook. So this study posits:

- H9:** Conscientiousness is negatively related to uploading original photos on WhatsApp
- H10:** Conscientiousness is positively related to WhatsApp use.

Agreeableness and CMC

Hughes, Rowe, Batey, & Lee (2012) observed that most of the studies failed to establish a relationship between agreeableness and Internet usage. Landers & Lounsbury (2006) found a negative relationship between agreeableness and Internet usage and pointed out that behaviour on the Internet, including email & instant messaging (IM) chatting did not require an individual to be high on agreeableness. Muscanell & Guadagno (2012) found that agreeableness was negatively related to instant messaging in case of females while for males agreeableness did not play a significant role in IM behaviour. So, the study posits:

H11: Agreeableness is negatively related to WhatsApp use.

Openness to Experience and CMC

Many of the research studies conducted have failed to establish the relationship between openness and social networking sites (e.g., Wilson, Fornasier, & White, 2010; Ryan & Xenos, 2011; Moore & McElroy, 2012). The reason for such findings may lie in the fact that SNSs are there for quite a long time and as such do not represent a new experience for users. As Internet and smartphone usage are still young and rapidly expanding phenomenon in India, smartphone-based messaging applications present relatively new experience for users and people high on this dimension are expected to use these messaging applications more than the people with low score on this dimension. Moreover, it is expected that people open to new experience would post their original picture on WhatsApp. The study posits:

H12: Openness to experience is positively related to WhatsApp use.

H13: Openness to experience is positively related with original picture uploading behaviour on WhatsApp.

METHODS

Participants

Participants for the study were 228 postgraduate students and research scholars enrolled in a Central University in India. The resultant population sample consisted of 137

(60%) males and 91 (40%) females. Participants were aged between 22 and 30 ($M=24.2$, $SD=2.05$).

Measures

Personality

To measure personality dimensions, the Big Five Personality Inventory (BFPI, John, Naumann, & Soto, 2008) consisting of 44 items, was used. The BFPI, a self-report inventory consists of statements on five dimensions of Big Five Personality is measured on 5-point Likert scale. The scale displayed a good level of internal consistency with cronbach's alpha ranging from .83 to .91 (Table 1).

Table 1 Factor analysis of Big factor personality items and corresponding Cronbach's alpha.

WhatsApp and Functions Use

Due to lack of relevant measures of WhatsApp use, a scale was developed. The WhatsApp use was measured by two-item scale evaluated by participants on 5-point Likert scale. The scale also measured the use of privacy functions of WhatsApp. Picture, status and 'last seen at' sharing behaviour were measured with options: with none, with contacts only, with everyone.

RESULTS

Before testing the hypotheses, factor analysis was conducted on Big Five Personality Inventory. Each item loaded on corresponding factor. Each factor showed a good level of reliability. The factor loadings and corresponding alpha coefficients are displayed in Table 1. Factor scores based on regression were calculated for each factor along with the WhatsApp use. Multiple regression (Table 2) was conducted to test the relationship between WhatsApp use and personality dimensions. Overall, five personality dimensions predicted 43% of variance in WhatsApp use. Individually, none of the dimensions except extraversion ($\beta=.647$, $p<.05$) was found significant predictor of WhatsApp use.

Binary logistic regression (Table 3) was conducted to assess whether five personality dimensions significantly predicted whether or not WhatsApp users post their original picture. When all five dimensions were considered together, they significantly predicted the

original picture posting behaviour of individual ($x^2(5) = 60.12, p < .001$). Individually, extraversion ($\beta = .42, p < .05$) and conscientiousness ($\beta = .47, p < .05$) were positively related while openness ($\beta = -1.34, p < .01$) was negatively related to original picture sharing behaviour. Neuroticism and agreeableness were not found significant predictors.

Binary logistic regression (Table 4) was conducted to test the association between personality dimensions and whether or not an individual joined chat groups on WhatsApp. All personality factors considered together did not significantly predict the group joining behaviour ($x^2(5) = 7.24, P > .05$). Individually, none of the personality factors significantly predicted whether or not an individual would join a chat group.

A multinomial logistic regression (Table 5) was conducted to test the relationship between profile picture sharing behaviour of WhatsApp users and personality traits. Overall, five personality factors significantly predicted the profile picture sharing behaviour, $x^2(10) = 49.16, p < .001$. Individually, openness to experience, $x^2(2) = 8.4, p < .05$, conscientiousness, $x^2(2) = 18.04, p < .001$ and neuroticism $x^2(2) = 23.08, p < .001$ had a significant effect on the profile picture sharing. Conscientiousness ($\beta = 1.12, p < .05$) and neuroticism ($\beta = -1.34, p < .05$) significantly predicted whether an individual shared his/her profile with everyone against sharing it with nobody.

Multinomial logistic regression (Table 6) was conducted to test whether personality factors predicted the 'last seen at' sharing behaviour of WhatsApp users. All personality factors considered together emerged as significant predictors, $x^2(10) = 129.91, p < .001$. Individually, all factors ($p < .01$) predicted 'last seen at' sharing behaviour. Agreeableness ($\beta = .54, p < .05$), openness ($\beta = .69, p < .01$) and neuroticism ($\beta = .86, p < .01$) were significant predictors of 'last seen at' sharing with contacts against 'last seen at' sharing with nobody. Extraversion ($\beta = 1.15, p < .001$), openness ($\beta = 1.85, p < .001$) and conscientiousness ($\beta = 1.08, p < .001$) were significant predictors of 'last seen at' sharing with everyone against 'last seen at' sharing with nobody.

Multinomial logistic regression (Table 7) was conducted to test whether personality traits predicted whether an individual shared his/her 'status' on WhatsApp. Personality traits taken together significantly predicted status-sharing behaviour ($x^2(10) = 80.09, p < .001$). All

personality traits except neuroticism ($x^2(2) = 3.01, p > .05$) significantly predicted the status-sharing behaviour. No factor significantly predicted ($p > .05$) predicted sharing of status with contacts against the sharing status with none. Only conscientiousness ($\beta = .89, p < .05$) significantly predicted sharing of status with everyone against sharing of status with none.

DISCUSSION

The purpose of the current study was to examine the relationship between personality traits of Big Five model and use of smartphone-based messaging application, WhatsApp. Overall, all personality factors taken together predicted 43% of variance in WhatsApp use. Surprisingly, none of the personality traits were found to be significant predictors of whether an individual would join a users' group on WhatsApp or not. The findings support hypothesis H1 that extraversion is positively related to WhatsApp use. The result is supported by previous studies related to SNSs use and extraversion (e.g., Amichai-Hamburger *et al.*, 2008; Amiel & Sergent, 2004; Wang *et al.*, 2012). The result reinforces the Tosun & Lajunen (2010) finding that the extraverts use online social applications as a means of social extension. H2 suggesting the positive relationship between extraversion and group joining behaviour of users was not supported.

The result is contrary to previous findings between extraversion and users groups on SNSs (e.g., Ross *et al.*, 2009). The reason behind such behaviour may be that the groups on SNSs and users' groups on WhatsApp differ in their functionality. The groups on WhatsApp are primarily for chatting while groups on SNSs are interest-based. H3 suggested the positive relationship between extraversion and original picture posting on WhatsApp was supported by the observation. The result is supported by similar studies on picture posting on SNSs (e.g., Muscanell & Guadagno, 2012; Wang *et al.*, 2012). However, the display picture on WhatsApp may not be seen as way of impression management as it is seen in SNSs thus leading to rejection of H4 which suggested a positive relationship between extraversion and sharing of profile picture with everyone over sharing it with none. H5 suggesting a positive relationship between extraversion and status sharing and H6 suggesting a positive relationship between extraversion and sharing of 'last seen at' both were not found significant. The reason for such behaviour may be that WhatsApp is primarily a chat application and thus

users may not find it useful for self-promotion through sharing status and 'last seen at'.

Concerning neuroticism and WhatsApp use, H7 suggested a positive relationship between neuroticism and WhatsApp use. The hypothesis was not supported. The result is not surprising as previous studies on messaging in SNSs (Ryan & Xenos, 2011; Muscanell & Guadagno, 2012) have demonstrated similar results. Contrary to H8, neuroticism was not positively related to posting original picture on WhatsApp. The result is not surprising given the limited usability of the WhatsApp profile as a means of self-expression.

Contrary to H9, conscientiousness was not found positively related to WhatsApp use. Previous studies were unable to find the relationship between use of SNSs and conscientiousness (Moore & McElroy, 2012) as well as the use of private messaging and conscientiousness (Ross *et al.*, 2009). The reason for such result may be due to the cautious nature of people high on conscientiousness. H10, suggesting the negative relationship between conscientiousness and posting an original picture on WhatsApp was not supported. Surprisingly, the results demonstrated a positive relationship between conscientiousness and posting original picture. As users on WhatsApp contacts are the individuals known in real life, conscientious users may find it attractive and safe to upload their original picture despite their cautious nature.

H11 suggested negative relationship between agreeableness and WhatsApp use. The hypothesis was not supported. The result is consistent with Wang *et al.* (2012)'s finding for SNSs use and agreeableness. Ross *et al.* (2009) too did not find agreeableness related to use of any features of Facebook.

H12 suggested the positive relationship between openness to experience and use of WhatsApp. The hypothesis was not supported. The reason for such result may be that in today's world where technology is changing at very fast pace people are getting used to with new technology within a short period of time. WhatsApp is comparatively a new communication platform, but it seems that it is not new and challenging enough to attract individuals high on openness dimension to use it more frequently. For the same reason, contrary to H13, openness to experience was found negatively related to posting an original picture on WhatsApp.

LIMITATIONS AND FUTURE RESEARCH

Current study intended to examine the relationship between personality and WhatsApp use. The study suffers from some limitations. First, the sample for the study was taken from an Indian University. So the generalisation of findings observed in this study to other age groups is somewhat questionable and thus requires further investigation in similar and different settings. Second, the study used self-reported measures for both WhatsApp use and personality and thus may have resulted in method bias. So, future research studies with more objective measures can be conducted to understand the relationship. Third, the study measures personality as predictors of WhatsApp use. Other factors like motivation (Amiel & Sargent, 2004; Alhabash, Chiang, & Huang, 2014), privacy concerns (Stieger, Burger, Bohn, & Voracek, 2013), culture (Kim, Sohn, & Choi, 2011; Al-Gahtani, Hubona, & Wang, 2007), self-efficacy (Whitty & McLaughlin, 2007), loneliness (Shaw & Gant, 2002; Morahan-Martin & Schumacher, 2003; Amichai-Hamburger & Ben-Artzi, 2003), gender (Muscanell & Guadagno, 2012), and the prior experience with the application use may play the role of moderators, as evident from past research studies in CMC. Research combining these multiple factors can be conducted to better understand the use of WhatsApp. A research controlling the effect of these factors may present a clearer picture. Further, research can be conducted to understand the reasons of WhatsApp addiction. Also, the interaction of personality factors with each other may influence the use of CMC. A study considering the interaction of personality factors and its impact on WhatsApp use may be conducted.

CONCLUSION

Overall, this study contributes to the understanding of the relationship between the emerging communication platform of smartphone-based messenger and Big Five personality factors. Most of the hypotheses from previous studies in fields of SNSs and Internet communications were not supported. There are two reasons for such contrary results, First, smartphone based messaging applications are distinct class of CMC. There is difference between the nature of these applications and SNSs and traditional text based SMS. Second, the previous studies were substantially conducted in western cultural setup.

Table 1: Factor Analysis of Big Factor Personality Items and Corresponding Cronbach's Alpha

<i>Item</i> (<i>I see myself who...</i>)	<i>α</i>	<i>Extraversion-n</i>	<i>Agreeableness-s</i>	<i>Conscientiousness-s</i>	<i>Neuroticism-m</i>	<i>Openness to experience</i>
Is talkative	0.911	0.854				
Is reserved		0.884				
Is full of energy		0.76				
Generates a lot of enthusiasm		0.76				
Tends to be quite		0.829				
Has an assertive personality		0.699				
Is sometimes shy, inhibited		0.723				
Is outgoing, sociable		0.702				
Tends to find fault with others	0.879		0.78			
Is helpful and unselfish with others			0.728			
Starts quarrels with others			0.676			
Has a forgiving nature			0.644			
Is generally trusting			0.574			
Can be cold and aloof			0.595			
Is considerate and kind to almost everyone			0.514			
Is sometimes rude to others			0.574			
Likes to cooperate with others		0.791				
Does a thorough job	0.854			0.668		
Can be somewhat careless				0.654		
Is a reliable worker				0.454		
Tends to be disorganized				0.772		
Tends to be lazy				0.48		
Perseveres until the task is completed				0.656		
Does things efficiently				0.67		
Makes plans and follows through with them				0.433		
Is easily distracted			0.653			
Is depressed, blue	0.846				0.851	
Is relaxed, handles stress well					0.551	
Can be tense					0.643	
Worries a lot					0.735	
Is emotionally stable, not easily upset					0.564	
Can be moody					0.766	
Remains calm in tense situations					0.617	
Gets nervous easily					0.735	

Is original, comes up with new ideas	0.83				0.675
Is curious about many different things					0.666
Is ingenious, a deep thinker					0.629
Has an active imagination					0.393
Is inventive					0.446
Values artistic, aesthetic experience					0.402
Prefers work that is routine					0.45
Likes to reflect, play with ideas					0.595
Has few artistic interests					0.54
Is sophisticated in art, music, or literature					0.653

Table 2: Multiple Regression Between Five Personality traits and WhatsApp use

	<i>Unstandardized Coefficients</i>		<i>Standardized Coefficients</i>	<i>t</i>	<i>Sig.</i>
	<i>B</i>	<i>Std. Error</i>	<i>Beta</i>		
(Constant)	5.84E-17	0.051		0	1
Extraversion	0.647	0.051	0.647	12.765	0
Agreeableness	-0.077	0.051	-0.077	-1.52	0.13
Openness	-0.007	0.051	-0.007	-0.138	0.89
Conscientiousness	-0.05	0.051	-0.05	-0.996	0.321
Neuroticism	0.039	0.051	0.039	0.77	0.442

Note: $R^2 = .429$, $Adj R^2 = .416$

Table 3: Binary Logistic Regression Between Personality Traits and Original Picture Uploading on WhatsApp

	<i>B</i>	<i>SE</i>	<i>p</i>	<i>Odd Ratios</i>
Extraversion	0.421	0.2	0.035	1.523
Agreeableness	-0.081	0.187	0.663	0.922
Openness	-1.336	0.246	0	0.263
Conscientiousness	0.468	0.194	0.016	1.596
Neuroticism	0.395	0.21	0.059	1.485
Constant	-1.841	0.233	0	0.159

Note: $R^2 = .23$ (Cox & Snell), $.36$ (Nagelkerke); $\chi^2(5) = 60.119$, $p < .05$

Table 4: Binary Logistic Regression Between Personality Traits and Group Joining on WhatsApp

	<i>B</i>	<i>SE</i>	<i>p</i>	<i>Odd Ratios</i>
Extraversion	-0.292	0.171	0.088	0.747
Agreeableness	-0.065	0.162	0.69	0.937
Openness	-0.249	0.164	0.129	0.78
Conscientiousness	-0.152	0.166	0.36	0.859
Neuroticism	0.157	0.164	0.336	1.17
Constant	-1.351	0.169	0	0.259

Note: $R^2 = .03$ (Cox & Snell), $.05$ (Nagelkerke); $\chi^2(5) = 7.24$, $p > .05$

Table 5: Multinomial Regression Between Personality Regression and Profile Picture Sharing, Taking 'Shared with None' as the Reference Category

		<i>B</i>	<i>Std. Error</i>	<i>Sig.</i>	<i>Odd Ratios</i>
'Shared with contacts' Vs 'shared with none'	Intercept	3.236	0.511	0	
	Extraversion	-0.307	0.341	0.367	0.735
	Agreeableness	0.075	0.341	0.825	1.078
	Openness	-0.121	0.289	0.677	0.886
	Conscientiousness	0.475	0.394	0.228	1.608
	Neuroticism	-0.651	0.436	0.136	0.522
'Shared with everyone' Vs 'shared with none'	Intercept	2.348	0.525	0	
	Extraversion	-0.098	0.359	0.784	0.906
	Agreeableness	-0.068	0.365	0.852	0.934
	Openness	0.388	0.329	0.239	1.473
	Conscientiousness	1.12	0.421	0.008	3.064
	Neuroticism	-1.34	0.455	0.003	0.262

Note: $R^2 = .19$ (Cox & Snell), $.25$ (Nagelkerke), $.14$ (McFadden); $\chi^2(10) = 49.16$, $p < .001$

Table 6: Multinomial Regression Between Personality Traits and 'Last Seen at' Sharing, Taking 'Shared with None' as Base Category

		<i>B</i>	<i>Std. Error</i>	<i>p</i>	<i>Odd Ratios</i>
'Shared with contacts' Vs. 'Shared with none'	Intercept	0.948	0.229	0	
	Extraversion	0.381	0.231	0.098	1.464
	Agreeableness	0.54	0.205	0.008	1.717
	Openness	0.687	0.215	0.001	1.987
	Conscientiousness	0.094	0.188	0.618	1.098
	Neuroticism	0.859	0.212	0	2.36
'Shared with everyone' vs. 'Shared with none'	Intercept	-0.035	0.289	0.905	
	Extraversion	1.115	0.27	0	3.051
	Agreeableness	-0.153	0.246	0.534	0.858
	Openness	1.847	0.309	0	6.344
	Conscientiousness	1.077	0.263	0	2.936
	Neuroticism	0.041	0.257	0.874	1.042

Note: $R^2 = .43$ (Cox & Snell), $.49$ (Naglekerke), $.27$ (McFadden), $\chi^2(10) = 129.91$, $p < .001$

Table 7: Multinomial Regression Between Personality Traits and Status Sharing on WhatsApp, Taking 'Shared with None' as Reference Category

		<i>B</i>	<i>Std. Error</i>	<i>Sig.</i>	<i>Odd Ratios</i>
Shared with contacts Vs. Shared with none	Intercept	2.984	0.463	0	
	Extraversion	-0.528	0.376	0.16	0.59
	Agreeableness	-0.13	0.359	0.718	0.878
	Openness	-0.099	0.291	0.733	0.906
	Conscientiousness	0.321	0.385	0.404	1.378
	Neuroticism	-0.639	0.398	0.108	0.528

Shared with Everyone Vs. Shared with none	Intercept	2.506	0.47	0	
	Extraversion	0.403	0.38	0.289	1.496
	Agreeableness	0.628	0.377	0.096	1.874
	Openness	0.549	0.321	0.087	1.732
	Conscientiousness	0.886	0.397	0.026	2.424
	Neuroticism	-0.711	0.408	0.081	0.491

Note: $R^2 = .3$ (Cox & Snell), $.37$ (Nagelkerke), $.22$ (McFadden), $\chi^2(10) = 80.09$, $p < .001$

The difference between western and Indian culture is more than obvious. This difference between culture leads to the difference in socialisation and social interaction in two cultures. This difference may be a reason for the people with same personality behaving differently when using CMC.

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