

Facebook, YouTube and Instagram: Exploring Their Effects on Undergraduate Students' Personality Traits

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Abstract

Research presented in this article examines the effects of social media usage on Norman's (1963) five-factor personality traits. Drawing upon the Five-Factor Model of personality traits, a research model that examines the effect of social media on personality traits was developed. The validated model provides evidence of the effects of Facebook, YouTube and Instagram usage on Extraversion,

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Conscientiousness, Agreeableness, Neuroticism and Openness to Experience.

In the rapid emergence of Web 2.0 technology, social media has become a central issue for discussion and investigation. The current trend in social media usage provides evidence that the technology has become more important in students' life (Creighton, Foster, Klingsmith & Withey, 2013). People use social media for various reasons; to communicate, interact, update/remind each other, socialize, share and search for information and knowledge, collaborate, and also for entertainment and leisure. It is a common situation in the public and also private venues to see people use monopod to 'selfie' their own photos and instantly upload on their pages, or reading online newspaper, e-book and blogs, playing video games, watching movies, or chatting via instant messaging, by using laptops, tablets, smartphones or other devices. In fact, users of social media were found to be addicted to mobile text messaging (Sultan, 2014) and social networking sites (Akter, 2014).

In Malaysia, it is reported that the age group of 20 to 24 years leads other age groups in terms of household Internet usage (21.4%) (Malaysian Communications and Multimedia Commissions, 2014). The highest number of Malaysian Facebook users falls under the group between 18 and 24 which are 4.5 million (Socialbakers, 2013) and Facebook continues to maintain its rank as the top social networking site used by Malaysians. Recent statistics on Malaysian Facebook users revealed that 45.5 percent of the total population in the country are Facebook users;

hence this makes Malaysia ranked the 8th in Asia and 21st place in the world (Borneo Post Online, 2013). These statistics indicate that the demand for social media in Malaysia is escalating.

The significance of studies concerning social media and personality is increasing, however only limited research into social media use in relation to personality traits were done (Ozguven & Mucan, 2013; Hunt & Langstedt, 2014). The existing literature on social media usage and its effects on university students' personality in Malaysia are also limited. Personality has been found to be an important factor influencing human behaviours and choices, thus it is necessary to examine the effects of social media towards human personality (Yoo & Gretzel, 2011). Previous research focused on the relationships between or effects of personality traits on the adoption of social media (Amichai-Hamburger, Wainapel & Fox, 2002; Amichai-Hamburger & Vinitzky, 2010; Correa, Hinsley & de Zuniga, 2010; Moore & McElroy, 2012; Ryan & Xenos, 2011; Yoo & Gretzel, 2011) but not vice versa. Furthermore, most of the research on social media usage largely focused on social networking sites (Correa, Hinsley & de Zuniga, 2010).

This study adopts the Five-Factor Model (FFM) based on the psychological theory which can explain patterns of technological use (Butt & Phillips, 2008). The FFM is originated by the work of Norman (1963) in the studies of natural language trait terms (McCrae & John, 1991). It is generally acknowledged as relevant and valid dimensions of personality in various fields of research (De Raad, 2000; Gelissen & de Graaf, 2006; Goldberg, 1993; Sultan, 2014). The model comprises of five broad personal-

ity dispositions (based on Gelissen & de Graaf, 2006; Moore & McElroy, 2012; Yoo & Gretzel, 2011). *Extraversion* is defined as a person who possesses characteristics as approachable, sociable, cheerful, friendly, lively, optimistic, energetic, active and talkative; while *Agreeableness* indicates a person with trustful, honest, tolerant, god-natured, forgiving and soft-hearted. In addition, *Conscientiousness* means a person is responsible, efficient, organized, productive, thorough, achievement-oriented, self-disciplined and well-informed; *Neuroticism* relates to anxious and upset, unable to control anger and low self-esteem; while *Openness* to experience indicates those who are explorative or imaginative, creative, appreciate artistic values, willing to try new things, can easily adapt to changes, open to different ideas or opinions. Hence, the purpose of the present study is to examine whether Five-Factor Model (FFM) of personality traits can be affected by

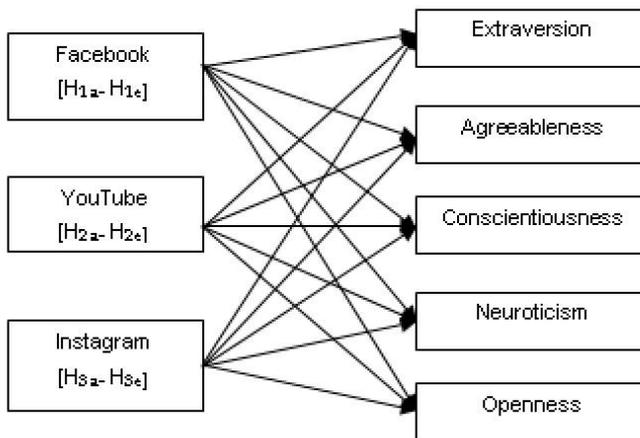


Figure 1. Research model

the usage of social media. Hypotheses and research model (Figure 1) center on the idea that personality traits will likely be affected by the usage of Facebook, YouTube and Instagram.

Hypotheses

The hypotheses proposed are as follows:

- H_{1a} Actual usage of Facebook has direct positive effect on Extraversion.
- H_{1b} Actual usage of Facebook has direct positive effect on Conscientiousness.
- H_{1c} Actual usage of Facebook has direct positive effect on Agreeableness.
- H_{1d} Actual usage of Facebook has direct positive effect on Neuroticism.
- H_{1e} Actual usage of Facebook has direct positive effect on Openness.
- H_{2a} Actual usage of YouTube has direct positive effect on Extraversion.
- H_{2b} Actual usage of YouTube has direct positive effect on Conscientiousness.
- H_{2c} Actual usage of YouTube has direct positive effect on Agreeableness.
- H_{2d} Actual usage of YouTube has direct positive effect on Neuroticism.
- H_{2e} Actual usage of YouTube has direct positive effect on Openness.
- H_{3a} Actual usage of Instagram has direct positive effect on Extraversion.
- H_{3b} Actual usage of Instagram has direct positive effect on Conscientiousness.
- H_{3c} Actual usage of Instagram has direct positive effect

on Agreeableness.

H_{3d} Actual usage of Instagram has direct positive effect on Neuroticism.

H_{3e} Actual usage of Instagram has direct positive effect on Openness.

Personality Traits and Social Media

There have been various research studies focusing on personality traits and their relation to social media. Personality traits, comprise of extraversion, conscientiousness, agreeableness, neuroticism and openness, are perceived as important in determining the usage of and effects to the social media.

Extrovert and Social Media

Early studies on individuals' online activities with regards to personality traits found that extraversion was positively related to social media use (Bai, Zhu & Cheng, 2012; Correa, Hinsley & de Zuniga, 2010; Jenkins-Guarnieri, Wright & Hudiburgh, 2012) and mobile use (Butt & Phillips, 2008). Those high in extraversion were not as heavy Internet users as their more introverted, more neurotic counterparts (Amichai-Hamburger, Wainapel & Fox, 2002) but they have the motive to share online entertainment knowledge with others (Teh, Yong, Chong & Yew, 2011). Facebook users tend to be more extraverted (Ryan & Xenos, 2011) and more likely to use the communicative function of social networking sites (Wang, Jackson, Zhang & Su, 2012). Extraversion also has an effect on online political engagement particularly via Facebook (Quintelier & Theocharis, 2013) and photo sharing (Hunt & Langstedt, 2014).

Neuroticism and Social Media

Early studies also found those high in emotional stability (low in neuroticism) were not as heavy social media users as their more introverted counterparts (Amichai-Hamburger, Wainapel & Fox, 2002; Correa, Hinsley & de Zuniga, 2010). In other words, the studies revealed that individuals with high neuroticism were more likely to use social media. Those who are classified as neurotic are more likely to use the feature of status update as a way of self-expression (Wang, Jackson, Zhang & Su, 2012). Individuals with higher levels of neuroticism have the motive to share online entertainment knowledge with others (Teh, Yong, Chong & Yew, 2011). In terms of blogging, people who are high in neuroticism are likely to be bloggers (Guadagno, Okdie & Eno, 2008). The neuroticism relationship was moderated by gender; women who are high in neuroticism are more likely to be bloggers whereas there was no difference for men. Neuroticism is positively related to the proportion of one's angry blogs (blogs making people angry) (Bai, Zhu & Cheng, 2012). Frequency of Facebook use and preferences for specific features were also shown to vary as a result of certain characteristics, such as neuroticism, loneliness, shyness and narcissism (Ryan & Xenos, 2011). However, Hunt and Langstedt (2014) found a contrast result in which neurotic individuals are less likely to use photo sharing tools.

Openness to experience and Social Media

Several researchers found a positive relationship between openness and social media usage (Correa, Hinsley & de Zuniga, 2010; Guadagno, Okdie & Eno, 2008; Quintelier & Theocharis, 2013; Teh, Yong, Chong & Yew, 2011;

Wang, Jackson, Zhang & Su, 2012). In contrast, individuals with a strong openness personality trait are less likely to share online entertainment knowledge. Research on social networking sites and narcissism which were conducted by Bergman and Fearington (2011), Buffardi (2008) and Kinney, Kelly and Duran (2012) indicated that attitude toward being open about sharing information about oneself was significantly related to frequency of using Facebook and Twitter to provide self-focused updates. People using social media are generally open to new experiences and have higher levels of life satisfaction (Ozguven & Mucan, 2013). Bachrach, Kosinski, Graepel, Kohli and Stillwell (2012) discovered that openness is positively correlated with number of users' likes, group associations and status updates on Facebook which paralleled to the openness characteristics such as seeking new things and ideas, and also sharing with their friends.

Agreeableness and Social Media

Individuals with high level of agreeableness tend to make more comments on others' profiles (Wang, Jackson, Zhang & Su, 2012), while only small effects of agreeableness were observed on online political engagement particularly via Facebook (Quintelier & Theocharis, 2013). Butt and Phillips (2008) found that the disagreeable person spent more time messaging using Short Message Service (SMS), however, later study by Zhou and Lu (2011) revealed that agreeableness could influenced perceived usefulness of mobile commerce adoption. Agreeable people undertake impression management to a greater extent than other people (Cox, 2010) which suggests that people high in this trait will be more selective in what images and

messages they allow to represent them (Hunt & Langstedt, 2014).

Conscientiousness and Social Media

Facebook users tend to be less conscientious and socially lonely, than non-users (Ryan & Xenos, 2011). Previous studies by Ross, Orr, Sisic, Arseneault, Simmering and Orr (2009) found support that conscientiousness could influence use of Facebook behavior, while Zhou and Lu (2011) found that trust and perceived usefulness of mobile commerce adoption could be influenced by conscientiousness. Similarly, Ozguven and Mucan (2013) also found that conscientious people use social media more frequently and share more in the social media. In addition, Hunt and Langstedt (2014) support previous studies in which they found that conscientiousness is positively predicted photo messaging for the motive of relationship maintenance. Bachrach et al. (2012) found conscientiousness to have a negative relationship with the number of likes and group membership in Facebook, but positively related to the number of uploaded photos. They conclude that conscientious people are less eager to show their appreciation for an object or a group, and they might think that using Facebook is a waste of time and a distraction from other activities such as work and thus tend to like fewer objects and join fewer groups.

Method

Participants

Participants (N= 382; 72.3% female) were students at a public university in the northern part of Malaysia. The average age of the sample was 21.69 years (SD= 3.14).

The sample was 73.8% Malay, 15.2% Chinese, 7.3% Indian, 2.6% Sabah/Sarawak ethnic, and approximately 1% reported another ethnicity.

Design and Procedure

The study employed a cross-sectional survey using self-administered printed and online questionnaire which was distributed among university students who are active users of social media. By using a snowball sampling technique, students were identified initially in several lecture rooms, and were asked to fill in the questionnaire and distribute the questionnaire to their friends who were also using wired devices and/or mobile phones to access the social media. Online questionnaires were also distributed to the social networking users, i.e. Facebook. The population of this study is students in one of the public universities in Malaysia. The selections of subject being studied have been carried out based on active use of social media in everyday life.

Questions on social media usage were adapted from Curtis, Edwards, Fraser, Gudelsky, Holmquist, Thornton and Sweetser (2010), Lenhart, Purcell, Smith and Zickuhr (2010) and Yoo and Gretzel (2011). In addition, to measure the Big Five personality traits or the Five-Factor Model, items for each factor were adopted from the International Personality Item Pool (Golberg, 1999; International Personality Item Pool, n.d.). The questionnaire consists of three parts. Part A pertains to the demographic profiles of the respondents, while Part B on the profiles of social media usage, particularly on ownership of ICT devices, types of social media being used, frequency of social media usage, and purpose of using social media. Part C consists of

50 items from the Big Five personality traits, namely Extraversion, Openness, Agreeableness, Conscientiousness and Neuroticism. The instrument was tested on a pilot group of 50 students via online survey website. After analyzing their responses with an SPSS statistics program, the Cronbach's alpha for the personality traits was found to be 0.77, which suggested strong internal consistency (Cohen, 1998; Hair, Black, Babin & Anderson, 2010).

Questionnaires received for this study are numbered before the insertion of data into SPSS 19 statistical software. Descriptive statistics was used to describe the participants' demographic profile (gender, race, age, marital status, monthly income, and monthly telephone and Internet expenses). In addition, all exogenous variables (usage of social media), and endogenous variables (personality traits) were analyzed using descriptive statistics. The statistical analysis testing of the overall measurement model, structural modeling, and hypotheses testing employed the multivariate statistical analysis of the second generation of Structural Equation Modeling (SEM) through the use of AMOS 19 software.

The overall measurement model was developed to cover all the constructs described. In this phase, the evaluations of the constructs were made based on convergent validity, discriminant validity, and nomological validity each construct and also reliability for each construct. Matching accuracy of the overall measurement model is also based on the matching accuracy of conventional indicators. Most commonly used fit indices are *Comparative Fit Index* (CFI) (Byrne, 2001; Hair, Black, Babin & Anderson, 2010; Kline, 2005; Schumacker & Lomax, 2004) and *Parsimony Normed Fit Indices* (PNFI) (Garson, 2009) are

widely used indices in SEM to assess the relative improvement in fit to the model. *Incremental Fit Indices* (IFI) and *Parsimony Fit Indices* (PFI) were used with a Root Mean Square Error of Approximation (RMSEA) index (Byrne, 2001; Kline, 2005; Schumacker & Lomax, 2004) and Standardized Root Mean Square Residual (SRMR) (Hu & Bentler, 1999) to assess the proposed model's overall goodness of fit. Hypotheses testing were carried out on all direct relationships to determine the significance influence of exogenous variables (independent variables) on the endogenous variable (dependent variable). Test results will be shown based on the correlation coefficient (based on unstandardized regression, standard error, and standardized regression - β), T-value (based on the CR) and significant at the 95% confidence level ($p < 0.05$).

Results

Model Development

The model was assessed for evaluating the psychometric properties of the measurement model in terms of reliability, convergent validity, discriminant validity, and nomological validity. The reliability of the constructs was assessed by considering composite reliability and Cronbach's alpha. Construct reliability for all of the factors in the measurement model, both composite reliability and Cronbach's alpha, were above 0.30, an acceptable threshold suggested by Hair, Black, Babin and Anderson (2010), Nunnally (1994) and Straub (1989) respectively. The model was re-specified in order to achieve the goodness-of-fit (GOF) index. As shown in Table 1, after re-specification process, the model is acceptably fit with all the values are

within the suggested fit values. This shows that the model fits the data adequately.

Construct Validity

Construct validity was evaluated by examining the factor loadings within the constructs as well as the correlation between the constructs (Anderson & Gerbing, 1988). Even though the factor loadings on many of the constructs were unsatisfactory, but because the model is fit, then this provides evidence of satisfactory item convergence on the

Table 1

Summary of Goodness-of-Fit

Fit Indices	Values Before Model Re-specification	Values After Model Re-specification
<u>Chi-square (χ^2)</u>		
Chi-square (p-value)	3483.365 (p=.000)	201.094 (p=.000)
Degrees of Freedom (df)	1165	94
<u>Absolute Fit Indices</u>		
Relative Chi-square, χ^2/df (CMIN/DF)	2.990	2.139
Root Mean Square Error of Approximation (RMSEA)	0.072	0.055
Standardized Root Mean Square Residual (SRMR)	0.1017	0.0518
<u>Incremental Fit Indices</u>		
Comparative Fit Index (CFI)	0.449	0.926
<u>Relative Fit Indices</u>		
Tucker-Lewis Index (TLI)	0.421	0.905
<u>Parsimony Fit Indices</u>		
Parsimony Normed Fit Index (PNFI)	0.342	0.682

intended constructs (i.e. ranged between 0.37 and 0.88). In addition, factor loading value of 0.3 is acceptable for sample size of more than 350 in order to get the practical sig-

Table 2
Reliability, Average Variance Extracted (AVE) and Discriminant Validity of Personality Model

Personality Traits	Item	Factor Loading	CR	AVE	N	O	C	A	E
N	NEU5	.51	0.673	0.411	0.641				
	NEU6	.73							
	NEU8	.50							
	NEU9	.56							
	NEU10	.63							
O	OPN1	.72	0.676	0.417	0.278	0.646			
	OPN2	.49							
	OPN4	.70							
C	CON2	.56	0.698	0.438	0.206	0.528	0.662		
	CON4	.76							
	CON8	.66							
A	AGR3	.80	0.684	0.426	0.049	0.416	0.578	0.653	
	AGR5	.56							
	AGR7	.58							
E	EXT5	.37	0.568	0.427	0.177	0.010	0.190	0.452	0.654
	EXT7	.88							

N-Neuroticism; O-Openness; C-Conscientiousness; A-Agreeableness; E-Extraversion

nificant (Hair, Black, Babin & Anderson, 2010).

To assess the discriminant validity, the study used the square root of the AVE and cross loading matrix (Igarria, Guimaraes & Davis, 1995; Barclay, Higgins & Thompson, 1995). According to Barclay, Higgins and Thompson (1995), the model is assessed to have acceptable discriminant validity if the square-root of the AVE of a

construct is larger than its correlation with other constructs. The results are detailed in Table 2 with the square roots of the AVEs shown in the main diagonal of the table. The off diagonal elements represent the correlations among the latent variables. Table 2 indicates that the discriminant validity of the latent variables was met, which means that all of the latent variables are different from each other.

As suggested by Atuahene-Gima (2005), the discriminant validity of the measures has also been cross-checked through a series of confirmatory factor analyses for each pair of constructs and cross loading matrix (Barclay, Higgins & Thompson, 1995). In each test, the $\Delta\chi^2$ (1 df) for the constrained model were found to be sig-

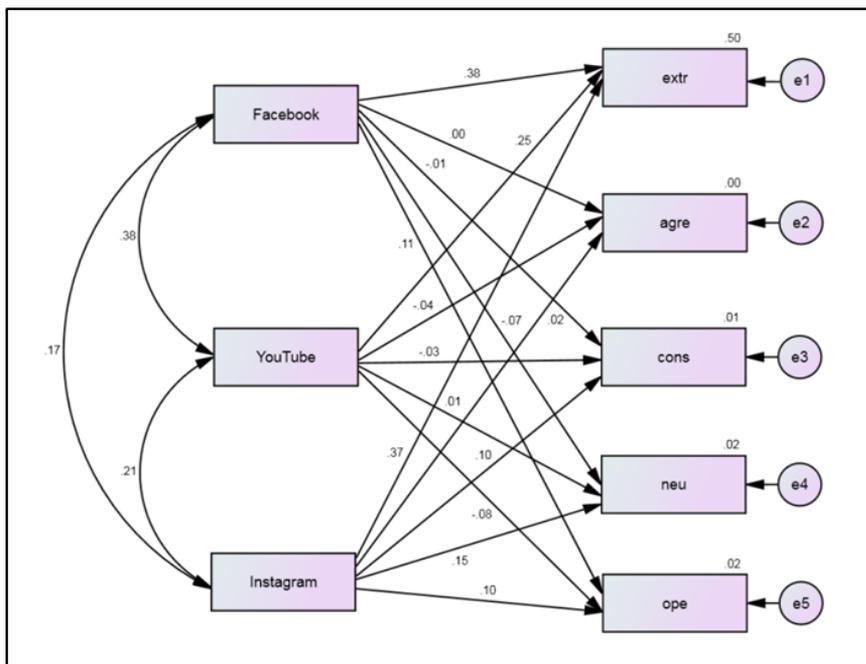


Figure 2. Path analysis of the effects of Facebook, YouTube and Instagram on personality traits

nificantly greater than the unconstrained model, thus showing the adequate discriminant validity.

The hypotheses were tested by using path analysis. Facebook, YouTube and Instagram are assumed to have direct positive effect on the five-factor personality traits. As can be viewed in Figure 2 and Table 3, actual usage of Facebook has direct positive effects on Extraversion ($\beta=.38, p<.001$) and Openness to Experience ($\beta=.11, p<.01$). However, actual usage of Facebook has direct negative effect on Neuroticism ($\beta=-.074, p<.001$) and Conscientiousness ($\beta=-.01, p<.01$), while no effect to Agreeableness ($\beta=.00, p<.01$). Actual usage of YouTube has direct positive effects on Extraversion ($\beta=.25, p<.001$) and Neuroticism ($\beta=.01, p<.001$), while negative effects on Conscientiousness ($\beta=-.03, p<.01$), Agreeableness ($\beta=-.04, p<.001$) and Openness ($\beta=-.08, p<.01$). Actual usage of Instagram has direct positive effect on all the personality traits; Extraversion ($\beta=.37, p<.001$), Agreeableness ($\beta=.02, p<.01$), Conscientiousness ($\beta=.10, p<.01$), Neuroticism ($\beta=.15, p<.001$) and Openness ($\beta=.10, p<.001$). Hypotheses testing provide evidence that for Facebook usage, only H_{1a} and H_{1e} were supported, while for YouTube, H_{2a} and H_{2d} were supported. All hypotheses for Instagram (H_{3a} - H_{3e}) were supported. The nomological validity of the proposed model can be assessed by observing the R^2 values of the endogenous constructs (Santosa, Wei & Chan, 2005). Hence, the model, as shown in Figure 2 explains 50% of the variance (R^2) of the effect of Facebook, YouTube and Instagram usage on Extraversion alone. The R^2 value for the relationship exceeded the minimum required value of 0.10 as suggested by Falk and Miller (1992). The results specify significant relationships between social media usage with personality

Table 3
Summary of Hypotheses Testing Results

Hypothesis Statement	β	Result
H _{1a} Actual usage of Facebook has direct positive effect on Extraversion.	0.38	Supported
H _{1b} Actual usage of Facebook has direct positive effect on Agreeableness.	0.00	Not supported
H _{1c} Actual usage of Facebook has direct positive effect on Conscientiousness.	-0.01	Not supported
H _{1d} Actual usage of Facebook has direct positive effect on Neuroticism.	-0.074	Not supported
H _{1e} Actual usage of Facebook has direct positive effect on Openness to Experience.	0.11	Supported
H _{2a} Actual usage of YouTube has direct positive effect on Extraversion.	0.25	Supported
H _{2b} Actual usage of YouTube has direct positive effect on Agreeableness.	-0.04	Not supported
H _{2c} Actual usage of YouTube has direct positive effect on Conscientiousness.	-0.03	Not supported
H _{2d} Actual usage of YouTube has direct positive effect on Neuroticism.	0.01	Supported
H _{2e} Actual usage of YouTube has direct positive effect on Openness to Experience.	-0.08	Not supported
H _{3a} Actual usage of Instagram has direct positive effect on Extraversion.	0.37	Supported
H _{3b} Actual usage of Instagram has direct positive effect on Agreeableness.	0.02	Supported
H _{3c} Actual usage of Instagram has direct positive effect on Conscientiousness.	0.10	Supported
H _{3d} Actual usage of Instagram has direct positive effect on Neuroticism.	0.15	Supported
H _{3e} Actual usage of Instagram has direct positive effect on Openness to Experience.	0.10	Supported

traits, consistent with underlying theory and previous research findings (Amichai-Hamburger, Wainapel & Fox, 2002; Amichai-Hamburger & Vinitzky, 2010; Correa,

Hinsley & de Zuniga, 2010; Moore & McElroy, 2012; Ryan & Xenos, 2011; Yoo & Gretzel, 2011; Warren, Sulaiman & Jaafar, 2014) thus indicating nomological validity.

Discussion

As proved by previous studies (Gosling, Augustine, Vazire, Holtzman & Gaddis, 2011; Ross et al., 2009; Wilson, Fornasier & White, 2010), social media usage had influenced users in different personality dimensions. Results revealed that Facebook, YouTube and Instagram have direct positive effects on Extraversion ($\beta=0.38$, $\beta=0.25$ and $\beta=0.37$). Hence, frequent usage of Facebook, YouTube and Instagram would affect users to become more extroverts. Extraversion which means that of a person who possesses characteristics as approachable, sociable, friendly, lively, optimistic and energetic proved to be affected by the usage of Facebook, YouTube and Instagram, which is paralleled to the previous findings (Correa, Hinsley & de Zuniga, 2010; Wang, Jackson, Zhang & Su, 2012). Various features that suits users' requirement provided in Facebook are mainly the reasons why people love to use Facebook and somehow continue to use it for a long time. Extroverts are more likely to use the communicative functions of Facebook, including status update, comment, and add more friends. Extroverts might also use YouTube frequently for entertainment and/or to increase their online visibility. Moreover, the opportunities provided by YouTube for uploading one's work, such as video clip, short video, tutorial et cetera would have affected the students to become more confident, socialized, optimistic, active and talkative, hence make them more extroverts. This is also true for Instagram where it provides spaces for users to

upload and share photos, update their status and get themselves more invisible and famous. Thus, frequent usage of Instagram would also make people becoming more extroverts.

The current research also found that actual usage of YouTube and Instagram have direct positive effects on Neuroticism ($\beta=.01$ and $\beta=.15$). This means that frequent usage of YouTube and Instagram would affect students' emotional stability. This might be true since people are free to give comments and feedback on YouTube and Instagram, thus these features could make them more anxious and upset, unable to control anger and lower their self-esteem. The finding of this research is in line with Moore and McElroy (2012).

Actual usage of Facebook and Instagram have direct positive effects on Openness ($\beta=.11$ and $\beta=.10$). Openness indicates those who are explorative or imaginative, creative, appreciate artistic values, willing to try new things, can easily adapt to changes, open to different ideas or opinions. Openness is associated with looking for new experiences, therefore Ross, Orr, Sisic, Arseneault, Simmering and Orr (2009) stressed that this might be the reason why open individuals try out new means of communication such as Facebook and Instagram on the first place. Although this finding is in contrast to Moore and McElroy (2012) who found the openness to have no significant effect on either Facebook usage, this study proves that open individuals were influenced by the use of Facebook and Instagram. University students, at their age, are known to be more explorative, imaginative, creative, willing to try new things, and they can also easily adapt to changes and open to different ideas or opinions. By using Facebook and In-

stagram, they get new ideas from others, become more creative in their postings and sharing, and learn to adapt to changes online.

Actual usage of Instagram has direct positive effects on Agreeableness and Conscientiousness ($\beta=.02$ and $\beta=.10$). Agreeableness indicates a person with most trustworthy, honest, tolerant, good-natured, forgiving and soft-hearted. Therefore, when relate to the social media usage, agreeableness person get affected when they use Instagram frequently. In addition, agreeable person can easily get along with their virtual friends, welcome new virtual friendships and trust their virtual friends. People who are low in agreeableness principally selfish, uncooperative, and not afraid to be self-centered (Costa & McCrae, 1992). With regards to this research, the usage of Instagram will increase the level of agreeableness of oneself, thus contribute to a better person. Similar to that of conscientiousness in which high score on conscientiousness indicates a person as being responsible, efficient, organized, productive, thorough, achievement-oriented, self-disciplined and well-informed. Thus, these characteristics of conscientiousness do not easily influenced by the social media usage. Conscientiousness seems to be negatively related to Internet use in general (Wilson, Fornasier & White, 2010) because conscientious individuals seem to be more dutiful in their everyday (offline) tasks and tend to regard the Internet (and Instagram possibly even more) as an unwanted distraction from their daily routine, which might lead to less engagement in online activities (Stieger, Burger, Bohn & Voracek, 2013). However, result from this study revealed that conscientious individuals were also affected by the Instagram usage.

Results of this study revealed that Facebook, YouTube and Instagram are the most influential media towards Malaysian undergraduate students nowadays. All of the respondents stated that they are active users of Facebook, YouTube and Instagram, and inferential analysis proved that these social media have direct effects towards their personality traits. Hence, it is crucial for all the stakeholders to pay attention to the usage of these media. This group of young people will become the future leaders of Malaysia. Their personality traits need to be developed in a proper manner so that they will grow up to become a more responsible and accountable citizens. Further, the study pointed out important factors that can be considered by social media providers to re-look into the design and development of the social media applications to suit the various personality traits of the users. This particular study used the structural equation modeling technique to test the hypotheses and arrive at the result. Hence the result provides better validity of the outcome and the social media providers can better improve adoption strategies so that users could use it for betterment.

Limitations and Future Studies

The 50-item personality traits tested in the measurement model resulted only 16 items remain for model fit. Hence, the FFM might not be that relevant to the Malaysian culture. Future research in Malaysia or at a regional level might consider adapting or adopting the personality test developed by Malaysian local researchers, for instance Tajma™ Personality Test by Prof. Datuk Dr. Tajudin Ninggal, or Sidek Personality Inventory by Prof. Sidek Mohd Noah. By adapting or adopting the personal-

ity tests, it is hoped that the model for social media usage can be associated to the eastern culture. Another suggestion is pertaining to the sample selection. Future research might consider covering a broader sample such as all Malaysia university students or other populations such as adolescents, teenagers, and senior citizens. This will then help in determining whether the use of social media affects these broader populations and actions might be suggested to improve the quality of life of the society.

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