

## Personality differences of college students with public and private Facebook profile: A big five model viewpoint

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### **Abstract**

Social networking sites are prevalent media in communication and self-expression among people across different ages. The study determined possible personality differences of Facebook users with public and private profiles and examined personality traits that are predictive of Facebook profile preference through a descriptive-predictive research design. Two hundred seventy college students ( $n=270$ ) whose ages range from 15 to 27 were recruited from a private collegiate institution in Manila City. Findings revealed that Facebook users with public and private profiles differ in openness,  $t(298) = -2.04, p < .05$ , while the robust predictor of Facebook profile preference is conscientiousness ( $\beta = -.20, t = 3.09, p < .005$ ). Distinction in the way profiles are chosen depends on predisposition to be broad-minded, creative and appreciative while preference over public and private Facebook profiles relies on tendencies to exercise greater degree of self-control, order and regulation. Selection of Facebook profiles, therefore, is a behavior that can be influenced by innate predispositions in the form of personality traits.

**Keywords:** Big five model; Facebook profile; Filipino adolescents; personality traits

## **Personality differences of college students with public and private Facebook profile: A big five model viewpoint**

### **1. Introduction**

Social Networking Sites such as Facebook, Twitter, Multiply and the likes charted a distinct way to interact with other people in the cyberspace. Yet, the popularity of Facebook seemed to be incomparable to other Social Networking Sites with its approximate figure of 750 million users throughout the world (Facebook, 2011). Information access, communicating with friends and establishing relationship with others are the major functions of Facebook. As pointed out by previous empirical findings, the frequent use of Facebook leads to substantial number of empirical researches dealing with the issues as regards Facebook use (Amichai-Hamburger, 2002; Bachrach, Kosinski, Graepel, Kohli, & Stillwell, 2012; Butt & Philips, 2008; Goldbeck, Robles, & Turner, 2011; Ross, Orr, Sasic, Arseneault, Simmering, & Orr, 2009). Recent studies also proved that Facebook usage is an effective setting for interpersonal relationship and different valuable results (Feinstein, Bhatia, Hershenberg, & Davila, 2012; Kim & Lee, 2011).

Due to its interpersonally-pertinent configurations, Facebook serves as one of the innovative ways to present one's self. It has distinct options that are sensitive to users' preference. Particularly, it enables them to categorize their profile as public or private. Private profile is closed to all members of the networked public which is used for drafts of stories and personal diaries (Boyd, 2007; Boyd & Ellison, 2008; Harbaugh, 2007). On the other hand, Public profile can be accessed by anyone within the networked public (Boyd, 2007; Boyd & Ellison, 2008; Harbaugh, 2007). Only members are allowed to respond to site content and receive updates on site information. Facebook users have an option to select the type of profile that they would like to have. That said, the role of one's choice and preferences cannot be easily discounted in the selection process. Our way of making choice or preference may be shaped by our predispositions (e.g. personality traits) to behave in particular circumstances (Gogolinski, 2010). Dispositional variables like the Big Five personality traits play a crucial function in the performance of specific behaviors (e.g. using Facebook).

In assessing one's personality across different cultures, Big Five Model appeared to be the most robust formulation (Costa & McCrae, 2005). It asserts that personality has five general dimensions mainly Extraversion, Openness, Conscientiousness, Agreeableness and Neuroticism (McCrae, 1992). With its utility in predicting behavioral outcomes, several studies proved the association of link between personality and Facebook use and profiles (Amichai-Hamburger, 2002; Bachrach, Kosinski, Graepel, Kohli, & Stillwell, 2012; Butt & Philips, 2008; Goldbeck, Robles, & Turner, 2011; Ross, Orr, Sasic, Arseneault, Simmering, & Orr, 2009). With reference to previous empirical studies conducted in Western context, Facebook is correlated with openness (Quercia, Lambiotte, Stillwell, Kosinski, & Crowfort, 2012), conscientiousness, and extraversion (Amichai-Hamburger & Vinitzky, 2010), and agreeableness and neuroticism (Butt & Philips, 2008). It is very evident that some amount of variances in use of Facebook and preference over specific profiles can be associated to personality traits (Schrammel, Koffel, & Tscheligi, 2009).

Given that connection between Facebook profile and personality traits was attested by previous researches (Quercia, Lambiotte, Stillwell, Kosinski, & Crowfort, 2012; Harbaugh, 2007; Amichai-Hamburger, 2002), it is interesting to look at how personality traits affect the use of social media (Harbaugh, 2007). The factors influencing disclosure information in online communities (Schrammel, Koffel & Tscheligi, 2009) paved the way towards exploring Facebook profiles and usage as indicators of personality (Dawson, 2011; Back, Stopfer, Vasire, Gaddis, Schmukle, Egloff, & Gosling, 2010; Bachrach, Kosinski, Graepel, Kohli, & Stillwell, 2012; Ross, Orr, Sasic, Arseneault, Simmering, & Orr, 2009). Cultural differences between individuals from Western and Eastern context (Byrne, in press; Gajjala, 2007) in the use of Facebook is supported as well. Despite these empirical formulations, what remained unexamined are the differences in the personality traits of Facebook users with

public and private Facebook profiles and specific personality traits that are predictive of Facebook profile preferences.

Previous researches on Facebook and personality traits were based on Western context by utilizing American and European college students as partakers (Quercia, Lambiotte, Stillwell, Kosinski, & Crowfort, 2012; Harbaugh, 2007; Dawson, 2011; Back, Stopfer, Vasire, Gaddis, Schmukle, Egloff, & Gosling, 2010; Bachrach, Kosinski, Graepel, Kohli, & Stillwell, 2012). Since there is an apparent difference on the characteristics of individuals coming from individualistic and collectivistic societies (e.g. self-awareness, implicit attitude, and construal) as divulged by previous studies, it may be possible that distinctions regarding dispositional determinants of Facebook use can be recognized. That said, it is not valid to conclude that personality traits identified to be predictive of Facebook use in the Western context applies in people from Asian context.

Despite the advances in the researches that concerned Facebook usage and personality traits, there is still a gap regarding the applicability of such inferences from people in the Asian societies. Hence, the current study delved on the differences of personality traits among Facebook users with public and private Facebook profiles because previous studies showed connections between such constructs, yet no investigation were executed in the Philippine context. Given that personality traits are stable and consistent measures of behaviors (Denissen & Penke, 2008; Gerber, Huber, Doherty, Dowling, & Ha, 2010; McAdams & Pals 2006; McCrae & Costa 1996; Mondak, Hibing, Canache, Selingson, & Anderson, 2010), it is interesting to know how these biologically rooted constructs mark the differences in Facebook users with public and private Facebook profiles. Firstly, we hypothesized significant difference in the personality traits of Facebook users with public and private Facebook profiles. Secondly, we expect that extraversion and openness predict preference over public and private Facebook profile which is consistent with the empirical assertion of Amichai-Hamburger (2002).

## 2. Methods

### 2.1 Research design

The current study employed descriptive-predictive research design in answering the research questions. In particular, the descriptive section delineates the differences between the respondents with public and private Facebook profiles. The predictive section identified specific personality traits that are determinants of preference either public or private Facebook profile.

### 2.2 Participants

Two hundred seventy undergraduate students ( $n=270$ ) whose ages range from 15 to 27 ( $M=18$ ,  $SD=1.78$ ) were recruited in one of the private colleges in Metro Manila through convenience sampling technique. Fifty two point six percent (52.6%) of the participants are male while forty seven point four percent (47.4%) are female. Most of them are enrolled in the Business Administration program (90%) while the rest are from other programs like Information Technology (10%).

### 2.3 Materials and procedure

We employed Facebook survey which comprised significant information about the respondents' use of Facebook. It contains the number hours of Facebook use on a weekly basis, number of friends, and the type of Facebook profile of participants.

The Ten-Item Personality Inventory was used (Gosling, Rentfrow, & Swann, 2003). It is a 10-item survey that measures the essential characteristic of an individual's personality. It has a 7-point scale (1=strongly disagree to 7=strongly agree). The five dimensions are conscientiousness, openness, neuroticisms, agreeableness and extroversion. The reliability of coefficient is  $\alpha=.68$ . Attached in the surveys is the informed consent which

ensured that participation in the study is done on voluntary basis.

After collecting and encoding data, they were subjected to descriptive and inferential statistical measures to answer the research questions. For the Facebook profiles to be integrated in the regression analysis, dummy coding was done. Mean, standard deviation, Levene's test for homogeneity of variance, t-test for independent samples and linear regression coefficients (e.g. beta weights) were computed. The aforementioned statistical measures were computed with the use of Statistical Package for Social Science (*SPSS 17.0*). Thereafter, statistical values were interpreted to answer the research questions in the current study.

### 3. Results

The statistical findings of descriptive and inferential analyses are presented in this section. Sequence of presenting the data depends on its complexity. Descriptive statistics are first discussed before examining results of inferential statistics.

**Table 1**

*Descriptive statistics of personality traits for respondents with public Facebook profiles (n=65)*

	<i>M</i>	<i>SD</i>
Extraversion	5.28	1.72
Openness	5.08	1.70
Conscientiousness	5.25	1.52
Neuroticism	5.08	1.81
Agreeableness	5.77	1.54

Respondents scored higher in *agreeableness* ( $M=5.77, SD=1.54$ ) and *extraversion* ( $M=5.28, SD=1.72$ ). It is possible that they have tendencies to be consensual with others and higher inclinations to interact with other people.

**Table 2**

*Descriptive statistics of personality traits for respondents with private Facebook profiles (n=235)*

	<i>M</i>	<i>SD</i>
Extraversion	5.51	1.52
Openness	5.51	1.46
Conscientiousness	5.54	1.25
Neuroticism	5.43	1.47
Agreeableness	5.70	1.45

Respondents scored higher in *agreeableness* ( $M=5.70, SD=1.45$ ) and *conscientiousness* ( $M=5.54, SD=1.25$ ). It is possible that they have tendencies to be consensual with others and higher inclinations to self-control, order and regulation. That said, it can be inferred that though both groups manifested similarity regarding the prevalence of *agreeableness* as their relatively stable predisposition, marked difference can be seen from other traits as the respondents from the group with private Facebook profiles scored higher in *conscientiousness* while the other group shown to have greater predispositions to social interactions. Though, these are inferences that can be demarcated from descriptive statistical measures. To further capture possible statistically significant differences regarding the personality traits of the respondents from two groups, t-test for independent samples were executed.

Since homogeneity of variances was assumed through Levene's tests, data were subjected to t-test for independent samples. The first hypothesis was then confirmed with openness,  $t(298) = -2.04, p < .05$ , as the personality trait where respondents with public and private Facebook profile differ. Those with private profile were more likely to have higher openness scores than those of the users with public profile. Those users with higher scores in openness were more likely to be.

**Table 3**

*Test of significant difference for personality traits of respondents with public and private Profiles*

	<i>t</i>	<i>df</i>	<i>Sig. (2-tailed)</i>
Extraversion	-1.09	298	.28
Openness	-2.04	298	.04*
Conscientiousness	-1.58	298	.12
Neuroticism	-1.63	298	.11
Agreeableness	.35	298	.73

Note: \* Significant at  $\alpha = .05$  (2-tailed)

Also, we conducted additional analysis to found out the predictors in the preference in Facebook profile. In particular, linear regression done to identify if what among these Big Five traits predicts likelihood to choose public and private Facebook profiles. Surprisingly, individuals' conscientiousness ( $\beta = .20, t = 3.09, p < .005$ ) is the lone significant predictor of the respondents' preferred Facebook profile.

**Table 4**

*Linear regression coefficients between personality traits and Facebook profile preference (n=270)*

	<i>B</i>	<i>t</i>	<i>Sig. (2-tailed)</i>
Extraversion	.06	.88	.38
Openness	-.13	-1.93	.06
Conscientiousness	-.20	-3.09	.002*
Neuroticism	-.007	-.10	.92
Agreeableness	.11	.298	.73

Note: \* Significant at  $\alpha = .005$  (2-tailed)

#### 4. Discussion

The objective of our study is to look at the differences on the personality profile of the Facebook users with public and private accounts. It extended previous empirical underpinnings that link Facebook profile and personality traits, an assertion that is consistent with findings from previous studies (Amichai-Hamburger, 2002; Bachrach, Kosinski, Graepel, Kohli, & Stillwell, 2012; Butt & Philips, 2008; Goldbeck, Robles, & Turner, 2011; Ross, Orr, Sisic, Arseneault, Simmering, & Orr, 2009). Specifically, we hypothesized that there is a significant difference on the Big five personality traits of respondents with public and private Facebook profiles. We also identified possible determinants of Facebook profile preference using regression analysis.

From the results of our inquiry, it was revealed that adolescents with public and private Facebook profiles differ in terms of *openness*,  $t(268) = .50, p < .05$ . Predispositions to become broad-minded, creative, artistic and intellectual define one of the focal points where individuals with public and private accounts in Facebook can be differentiated which validates findings from previous researches (Amichai-Hamburger, 2002; Bachrach, Kosinski, Graepel, Kohli, & Stillwell, 2012; Goldbeck, Robles, & Turner, 2011; Ross, Orr, Sisic, Arseneault, Simmering, & Orr, 2009). However, respondents with private profiles scored higher in openness as compared to

those with public profiles. This finding contradicts assertion from past researches that open-minded individuals would show greater inclination to choose public profiles.

Interestingly, the inconsistency between the results of our study and previous empirical findings explains how various personality traits operate in a specific developmental phase. Though it sounds atypical, adolescents who are more open-minded, creative, and flexible prefer to have private rather than public profiles since it allows them to utilize social networks in a self-determined manner. Having a private profile gives adolescents an opportunity to restrict other people from establishing relationships with them and to practice autonomy in controlling the intensity of their online social interactions.

When adolescents feel that they are capable of controlling the intensity of their social interactions and the people they are going to deal with, they realize that using Facebook is a good venue for enhancing self-control and meaningful relationships. This consequently helps them fulfill their respective developmental tasks given that adolescents are expected to establish a healthy sense of identity which marks how satisfied they would be in their lives. Choosing private Facebook profiles, therefore, may assist adolescents' in their quest to build a sense of self that is relatively independent from other people. Yet, the process of selecting Facebook profile setting substantially depends on conscientiousness.

Conscientiousness, which refers to individuals' predisposition to self-control, regulation, and order influenced individuals' preference Facebook profile setting (e.g. public and private). This is because the selection of Facebook account settings partially requires inherent tendency to manage different options that can be configured in virtual cyberspace (Amichai-Hamburger, 2002). For instance, selection of a private Facebook profile may be perceived as individuals' distinct way to restrict the number of people who can view their profiles, the same way as the choice of public profile that permeates more people who can readily interact with them. Either way, these circumstances are highly shaped by biologically-rooted tendencies to exercise greater degree of self-control, regulation, order, goal-directedness and other relevant traits.

Given that Facebook serves as the medium of self-presentation of individuals, understanding variables that are pertinent to its practical utility is a matter that warrants serious attention. Result of the current investigation gives emphasis on the conscientiousness or the goal-directedness behavior of the individual as the predictor in the selection of individual in disclosing the information. Preference on a specific Facebook profile (e.g. public or private) indirectly charts propensity to self-disclose in the cyberspace. With self-disclosure being pinpointed as a possible end of selecting Facebook profiles, the role of individual variables like personality traits cannot be easily discounted in analyzing factors that impact the use of Facebook.

## 5. Conclusion

The current study examines differences on personality traits of college students with public and private Facebook profiles and determines traits that would predict preference of Facebook profile (e.g. public, private). Individuals with public and private profiles differed in terms of *openness*, a predisposition to be broad-minded, creative and intellectual. *Conscientiousness* was found to be a salient determinant of Facebook profile preference. Such results validated findings from previous studies that linked Facebook use and personality traits.

Given that *openness* is a trait where individuals with public and private Facebook profiles can be differentiated, it implies that predisposition to become flexible, artistic and broad-minded can serve as the focal point of such well-recognizable differences. In addition, *conscientiousness* as a predictor of Facebook profile preference demarcates the major role of one's inherent predispositions to self-control, regulation and goal-directedness in the course of configuring the generic setting of Facebook profiles. That said, in designing experiments or interventions which necessitate the use of online social networking sites, prospective participants' levels of self-control should also be examined as part of the inclusion criteria. It gives direction as well to the possible influence of *conscientiousness* not just to selection of other social networking sites' account settings but also to the process of self-disclosure in general. In other words, findings of the current study augmented the

evidences about the utility of Big Five personality traits in predicting specific behavioral outcomes.

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