THE INFLUENCE OF EXTRAVERSION AND NEUROTICISM ON SELF-ESTEEM AND LIFE SATISFACTION MEDIATED BY FACEBOOK USE AMONG THAI MILLENNIALS

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Abstract Facebook is the number one social networking site in the world that people engage in the most. Its popularity has reached epidemic proportions and it leaves many questions unanswered as to whether it is good or bad for users' psychological health, especially for Millennials who engage in Facebook more than any other activity in their lives. The current investigation attempted to explore the direct and indirect influences of the personality traits of extraversion and neuroticism on self-esteem and life satisfaction, being mediated by Facebook use among Thai Millennials. The results indicate that extraversion and neuroticism showed no significant indirect influences on the self-esteem and life satisfaction of Thai Millennials, being mediated by their Facebook use. However, both extraversion and neuroticism were found to have positive direct relationships with self-esteem and life satisfaction. Moreover, there is a positive correlation between Facebook use and extraversion but not with neuroticism. Additionally, the amount of Facebook use has no link to either self-esteem or life satisfaction and that using Facebook does not change how Thai Millennials feel about themselves and their state of life satisfaction.

Keywords: Extraversion, Facebook, Life satisfaction, Millennials, Neuroticism, Self-esteem.

Introduction
Social Network sites (SNS) are web-based services that permit users to create a public or semi-public profile of themselves that works within a certain boundary. Users specifically select list of other users they wish to include in their circle in order to share connection with them, and interact with them by viewing or traversing through their respective accounts in the system (Boyd and Ellison ,2008). *Facebook* is considered the most popular social networking site (SNS) in the world (Duggan, Ellison, Lampe, Lenhart, & Madden, 2015).

However, Facebook is deemed slightly different from other SNS because on this site, most users know each other in real life, unlike other sites where users tend to explore new friends and even strangers. This suggests that individuals who interact via Facebook may feel more connected with people than those who use other sites. More than just being a new communication tool, Facebook impacts on a deeper level that affects the way users feel about themselves, including their level of self-esteem and life satisfaction. Moreover, a strong relationship between Facebook use and personality has been identified in which extraversion and neuroticism stand out the most among the Big Five.

The two personality factors are very different, yet both are associated with intensive Facebook usage.The current investigation focused on the "millennial generation', or "the always connected" generation.

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Research Objectives

This investigation was expected to serve three purposes. First, this research would yield supporting evidence of the levels of extraversion, neuroticism, self-esteem, and life satisfaction among Thai Millennials. Second, it would give an idea of the role played by Facebook use in the target population's personality *vs.* Psychological well-being equation. Third, this investigation also aimed at filling the gap in the literature on the impact of extraversion, neuroticism, self-esteem, life satisfaction, and Facebook usage among Thai Millennials.

Conceptual Framework
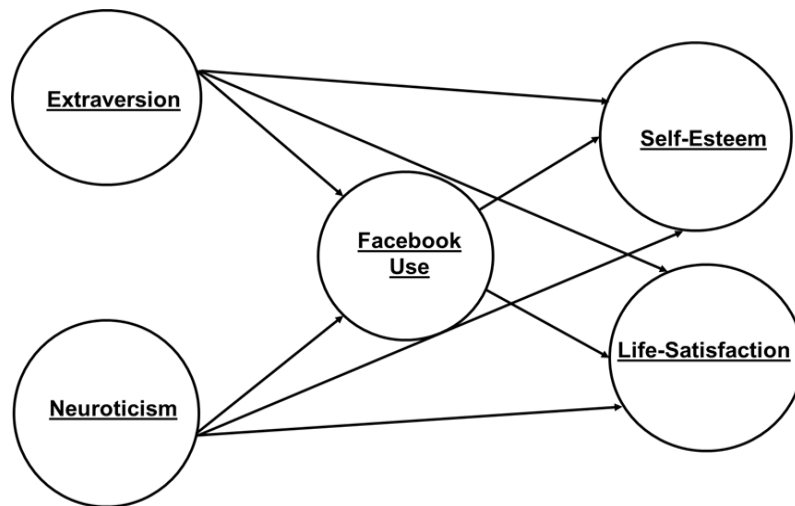
Figure 1. The conceptual framework of the study presenting the possible direct and indirect influences of personality (extraversion, neuroticism) on self-esteem and life satisfaction, being mediated by Facebook use.

Method/Procedure

In order to test this hypothesis, the current study employed the quantitative approach, which specifically utilizes the descriptive and inferential statistical treatments to analyze the research data. Data were collected through self-administered survey questionnaire. The current study considered 216 Thai Facebook user participants aged 18-34 years (those born within the period 1983-1999). Participants of the study were recruited from various public areas in Bangkok. The self-administered survey questionnaire used in this study was categorized under five sections as following (1) Personal Information (2) Eysenck Personality Questionnaire Revised–Short Form (EPQR-S) (Eysenck et al., 1985) (3) Rosenberg Self-Esteem Scale (RSES) (Rosenberg ,1965) (4) Satisfaction With Life scale (SWLS) (Diener et al., 1985). (5) Facebook Intensity Scale (FBI) (Ellison, et al., 2007).

Results

Based on the data derived from 216 valid completed questionnaires that were originally distributed to 250 Thai millennial Facebook users, as planned. The results from Section 1 (Personal Information) of the questionnaire indicated that, in terms of gender, 54.2% (n=117) were female and 45.8% (n=99) were male. In terms of age, 81.5% (n= 176) of the participants were aged 18-25 years, and 18.5% (n=40) were aged 26-34 years. With regard to marital status, majority of the participants were single at 93.5% (n=202), married at 5.6% (n=12), and divorced at 0.9% (n=2). For educational attainment, bachelor degree level had the highest number of participants at 65.3% (n=141), followed by high school level at 25% (n= 54), master's degree/Ph. D level and above at 5.6% (n=12), and diploma level at 4.2% (n=9). Relative to occupation,

students had the highest percentage at 72.2% (n=156), other (e.g., freelancer, business owner, unemployed) at 11.1% (n=24), employees of private companies at 6.95% (n=15), laborers at 6% (n=13), and government officials at 2.3% (n=5). Most participants earned a salary or allowance of less than 15,000 baht per month (70.4%, n=152), 15,000-30,000 baht (21.3%, n=46), and more than 30,001 baht (8.3%, n= 18). The results also showed that 72.7% (n=157) of the participants joined Facebook during the period 2009-2013, 17.1% (n=37) joined during the period 2004-2008, and 10.2% (n=22) joined during the period 2014-2017. From the results of Section 5 (FBI) of the questionnaire, it was found that most of the participants have Facebook friends numbering more than 401 (68.5%, n=148), 101-200 friends at 10.6% (n=23), 201-300 friends at 9.3% (n=20), and 301-400 friends at 6.5% (n=14). Finally, in terms of time spent per day (in minutes) using Facebook, results indicated that 26.45% (n=57) participants reported spending between 31-60 minutes per day on Facebook, 23.1% (n=50) participants reported spending more than 121 minutes per day, 20.8% (n=45) participants reported spending between 61-90 minutes per day, 17.6% (n=38) participants reported spending less than 30 minutes per day, and 12% (n=26) reported spending between 91-120 minutes per day actively using Facebook.

Path analysis via multiple regression was performed in order to examine the hypothesized direct and indirect relationships of the variables under investigation. The analyses include the following procedures: (1) regressing the dependent variables of self-esteem on the predictor variable of extraversion, neuroticism, and Facebook use; (2) regressing the dependent variable of life satisfaction on the predictor variable of extraversion, neuroticism, and Facebook use; (3) regressing the dependent variable of Facebook use on the predictor variable of extraversion and neuroticism

The result of the current study shows that .360 of Facebook use, Neuroticism, Extraversion variables correlated with the self-esteem. The three variables accounted for 13% of the self-esteem. Moreover, 13 % of the additional entry of Facebook use, neuroticism, extraversion accounted for the variance of the self-esteem. The entry of Facebook, neuroticism, extraversion $f(3,212) = 10.543$, p=.00 resulted in a significant amount of the variance accounted for the self-esteem. Also, .232 of Facebook use, Neuroticism, Extraversion with life-satisfaction accounted for 23.2% of the life-satisfaction. Furthermore, 23.2% of the additional entry of the Facebook use, neuroticism, extraversion accounted for the variance of the life-satisfaction. The entry of Facebook use, neuroticism, extraversion $f(3,212) = 21.337$, p=.00 resulted in a significant amount of the variance accounted for the life-satisfaction. Further result of the study shows that .031 of the neuroticism and Extraversion with Facebook use as well as it for 3.1% of Facebook use. Also, 3.1% of the additional entry of the neuroticism and extraversion accounted for the variance of Facebook use. The entry of Neuroticism and Extraversion $f(2,213) = 3.419$, p=.035 resulted as not significant amount of the variance accounted for in Facebook use. As a result, the predictor of Extraversion and Neuroticism are a significant prediction of self-esteem and life-satisfaction.

The findings yielded significant direct positive influences of both extraversion and neuroticism on self-esteem (beta= .15,.28), t=2.27,4.28, p=.02,.00 such that the higher level of the participant's extraversion and neuroticism, the higher is the level of their self-esteem.

Likewise, this study found significant direct positive influences of both extraversion and neuroticism on life satisfaction (beta= .196, .37), t=3.109,5.976, p = .00 such that the higher level of the participant's extraversion and neuroticism, the higher is the level of their life satisfaction. Extraversion was also found to be positively related to Facebook use (beta=.182), t=2.61, p=.01 such that the higher the reported level of extraversion, the higher is their Facebook usage. On the other hand, results indicate that neuroticism has no significant relationship with Facebook use.

Discussion

Positive direct influence of extraversion on self-esteem and life satisfaction.
Path analysis showed that extraversion had a significant direct positive effect on self-esteem and life satisfaction. Thus, it can be inferred that the higher the level of extraversion, the higher are the levels of self-esteem and life satisfaction. This finding suggests that extraversion may play an important role in boosting self-esteem and life satisfaction among today's youths. It has confirmed several past researches

where extraversion is associated with many positive facets such being gregarious, talkative, cheerful, self-confident, dominant, active, and excitement seeking (Seidman, 2013; Bakker et al., 2006). Moreover, Costa and McCrae (1992) claimed that extraversion is, in general, associated with the tendency to be optimistic as well as the tendency to reappraise problems positively. This character trait can influence the way extraverted individuals live their life, including making choices in life, coping with problems, perceptions toward their world which could affect their self-esteem (Robins et al., 2001; Amirazodi and Amirazodi, 2011). Additionally, many studies likewise claimed that high extraversion is linked with positive affect in the experience of positive life events, positive mental health, well-being, and happiness (e.g., DeNeve & Cooper, 1998; Costa & McCrae, 1980; Lucas et al., 2008; Magnus et al., 1993; Lamers et al., 2012; Jackson & Schneider, 2014).

Positive direct influence of neuroticism on self-esteem and life satisfaction.
Path analysis revealed that there is a significant positive direct relationship between neuroticism and the levels of self-esteem and life satisfaction such that the higher the level of neuroticism, the higher the levels of self-esteem and life satisfaction. This finding is contrary to those obtained from past studies which demonstrated a negative relationship between neuroticism and self-esteem in that individuals who scored high on neuroticism tended to have low self-esteem and happiness (Amirazodi & Amirazodi, 2011; Eysenck & Eysenck, 1975; Costa & McCrae, 1980; DeNeve & Cooper, 1998; Garousi et al., 2001; Brebner & Martin, 1995; Fujita et al., 1991). However, negative emotion does not always suggest weakness. Interestingly, there have been several researches that demonstrated the benefits of neuroticism and its shared traits (e.g., depression, anxiety, moodiness, etc.) Alloy and Abramson (1979) proposed a theory called "depressive realism" which argued that individuals who reported being mildly depressed can have realistic perceptions and, surprisingly, can do better than non-depressed individuals in certain conditions. This phenomenon is attested by such notion as the "judgment of contingency task". The results showed that non-depressed individuals presented an "illusion of control," where they overrated their degree of control over the realistic result, whereas depressed individuals have been shown to have more precise judgments than non-depressed individuals. Another study examined the influence of the setting in which participants make judgments or perceptions. The study showed that non-depressed individuals are more cognitively optimistic in public than in private, whereas depressed individuals are seen to be less responsive and reactive in cases where there are people around (Strack & Coyne, 1983). Moreover, Shao and Webber (2006), also found a link between leadership and neuroticism among Chinese business school students. Likewise, neuroticism and agreeableness proved to be significant predictors of leader performance among US military academy cadets at West Point (Bartone, Eid, Johnsen, Laberg, & Snook, 2009). In summary, being more realistic, intense, controlling, and able to function in a negative mood might be considered as good for those who are high on neuroticism. Further, an individual who presented a high score on this trait may set a higher standard and constantly put pressure on themselves than any other traits; however, the results in life that they receive might be bigger than others as well. Therefore, it is possible that these qualities supported their being self-sufficient and being independent which help them to gain self-esteem and life satisfaction (Amirazodi & Amirazodi, 2011).

In addition, Tafarodi and Walters (1999) stated that collectivism has greater effects on self-liking while individualism directly links with self-esteem. This self-liking tendency is also aided by the harmonization of one's ingroup personal behaviors. This means that following norms, and meeting needs and expectations promote social acceptance and approval in a collectivistic culture. These approval and acceptance hence promote the sense of self-worth or self-liking (Tafarodi & Walters, 1999). In this manner, it could be considered that high neuroticism individuals within the collectivist culture develop greater self-esteem and life satisfaction as they are more careful about their actions, and their relenting nature makes them follow the societal standards.

Indirect influence of extraversion on self-esteem and life satisfaction, being mediated by Facebook use.
Path analysis indicated that extraversion has no significant indirect relationship on self-esteem and life satisfaction, being mediated by Facebook use. However, only extraversion and Facebook use showed a

positive significant relationship such that the greater the level of extraversion, the higher rate of Facebook use.

In order to discuss this matter more substantially, the researcher divided the relationships into three parts: (1) the positive relationship between extraversion and Facebook use, (2) Facebook use and self-esteem, and (3) Facebook use and life satisfaction.

Firstly, this study reported a positive relationship between extraversion and Facebook use. This outcome is supported by the findings of previous studies (Correa et al., 2010; Amichai-Hamburger & Vinitzsky, 2010; Gosling et al, 2011). In this context, individuals who presented high scores on extraversion may utilize Facebook as a social tool, they tend to have many friends and spend more time on Facebook (Wehrli, 2008; Amichai-Hamburger and Vinitzsky,2010)

Secondly, it was found that Facebook use and self-esteem have no significant relationship, as confirmed by a study with similar results (Uttavanich, 2016). It is quite possible that people use Facebook as another tool to communicate with offline friends or friends who they really know in real life (Ellison et al, 2007). Moreover, there are many features in addition to photo upload such as "like" and "comment" that members commonly use, including "messenger" and "call". Thirdly, it was also found that Facebook use has no significant impact on life satisfaction. According to this matter, Adnan and Mavi (2015) described that Facebook friendship is not considered as 'quality' relationship as in real life. Facebook use does not ensure psychological effects; rather, it is the quality of interactions that matters in establishing psychological outcomes (Kross et al., 2013). Hence, it would seem like it does not matter how many Facebook friend's a person has and how often the interacts with them; it cannot be compared with real connections and support off screen.

More importantly, the current study was conducted among Thai millennials, which are believed to have unique characteristics that support the outcome of this study. For example, millennials score higher on such tests as IQ, self-esteem, self-liking, high expectation and assertiveness (Tweng ,2009). Tweng, Campbell and Freeman (2012) furthered that millennials may have been raised by different types of parenting styles, and these parenting styles significantly affect their upbringing leading them earn self-fulfillment and self-acceptance more readily than in the previous generations. Millennial generation is said to be closer to their parents than those generation in the past. Hence, childhood experiences that include supportive, responsive and consistent caregiving provide children with the abiding sense of positive self-regard, bringing them the lasting feeling of self-worth and love. This may bear positive effects as children once they are adults become more independent and reliant. Thus, it is but reasonable to say that Facebook may have no mediating impact on their life satisfaction as well as on their self-esteem and extraversion as Thai millennials may imbibe characteristics not relevant to these traits.

Indirect influence of neuroticism on self-esteem and life satisfaction, being mediated by Facebook use.
Path analysis revealed that neuroticism has no significant impact on self-esteem and life satisfaction, being mediated by Facebook use. First of all, the finding that there is no significant relationship between neuroticism and Facebook use had been established in past studies (Marcus, Machilek, & Schutz, 2006; Muscanell & Guadagno, 2012; Wilson et al., 2010). It is reasonable to believe that any kind of socialization is not in the genes of highly neurotic individuals as it could drain their energy and emotion. Many studies similarly reported that neuroticism is positively correlated with emotional exhaustion and depersonalization (e.g., Kim, Shin, & Swanger, 2009; Swider & Zimmerman, 2010). Thus, it would seem like interacting with others via Facebook could affect neurotic individuals' energy and temper. A related study reported that neuroticism is the only trait out of the Big Five that showed a positive correlation with social media fatigue, indicating that the higher the neuroticism level, the higher would be their level of social fatigue (Lee, Chou, & Huang, 2014). Social media fatigue or 'SOMeFat' is a phenomenon characterized by the reduction of interest in social media in which some formerly active individuals no longer actively share information with others while some users even deactivate their accounts (Patrick, Blau, Foong, & Lee, 2011). This symptom indicates that, perhaps, users are getting tired of the social functions, content, or activities provided by social networking sites. Some users even cut their usage or frequency of social networking or, worse, simply stop using the sites.

Recommendations for Future Research
This author recommends that future researchers clarify the most acceptable age range for Millennials and investigate within the parameters of this generation group. Second, future research should consider looking further into the best choice of personality assessment. For example, if future researchers interested in the same variables to look for suitable assessments in the form of rating scales in order to eliminate the identified limitation such as Big Five Inventory (BFI) (John & Srivastava, 1999), the Big Five personality factor's scale (Goldberg, 1999), the 35- items Berkeley Personality profile (Harrary & Donahue, 1994). Third, in order to understand the relationships between the variables in more depth, this author recommends that future researchers to use the qualitative approach. Finally, future research should consider investigating other personality traits such as conscientiousness, agreeableness, and openness and their impact on the same or related criterion variables, being mediated by other forms of social networking sites such as Instagram, Youtube, Twitter, or any other emerging sites.

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