

Like it or not. The relationship between personality traits, narcissism, self-esteem, self-monitoring and Facebook usage.

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ABSTRACT

The study examined the relationship between 3 of the 'Big Five' personality traits, extraversion, conscientiousness and openness to experience, narcissism, self-esteem, self-monitoring and the Facebook usage and also investigated the differences between Facebook users and non-users on extraversion, narcissism and self-esteem. 123 adult participants using a convenient sample participated in non experimental quantitative study. They completed the online survey containing Big Five Inventory, Narcissism Inventory, Rosenberg Self-esteem, Self-monitoring and Facebook Intensity Scale.

The result showed that extraversion and openness to experience significantly correlate with Facebook use. The results also showed significant differences between Facebook users and non-users on self-esteem. No significant differences on extraversion and narcissism have been found. Implications of the findings, and suggestions for future research, are discussed.

INTRODUCTION

The internet has changed the whole world and become a part of human's everyday life, both work and play. People can find interesting information there; they can share views and engage in discussions about endless subjects. People look for the job on the Internet, it helps with study and research, and is used to play games and entertain. The Internet has led to an explosion in Social Networking Sites (SNSs) which in the last decade have become very popular around the world. Social Network Sites are web-based services where individuals can “construct a public or semi-public profile within a bounded system, articulate a list of other users with whom they share a connection, and view and traverse their list of connections and those made by others within the system” (Boyd & Ellison, 2007). The most popular one – Facebook – currently has over a billion active members (Facebook, 2012). Facebook allows its member to present themselves in a personal online profile where they can add friends, share photos and interests and also view each other's profiles. Its mission is “to make the world open and connected. People use Facebook to stay connected with friends and family, to discover what's going on in the world and to share and express what matters to them” (Facebook Press, 2013). According to Baumeister & Leary (1995) a need to belong is a ‘powerful, fundamental, and extremely pervasive motivation’.

Some believe that online communication negatively affects real interactions and relationships, suggesting that social media may increase the risk of cyber-bullying, depression and social rejection (O’Keeffe & Clarke-Pearson, 2011). Other, however, believe that the Internet gives an additional possibility to stay connected with friends and family. Despite the

huge interest in Social Networking Sites there are still people that are not attracted to joining them.

The aim of this study is to investigate the relationship between personality traits, narcissism, self-esteem, self-monitoring and the Facebook usage. The differences between Facebook users and non-users on extraversion, narcissism and self-esteem will be also studied.

After providing a description of Facebook and a definition of its usage, previous research examining its relationship with personality traits, narcissism, self-esteem and self-monitoring and differences between Facebook users and non-users will be reviewed. At the end of this section the purpose and the contribution of the current study will be described.

(1) Social Networking

The Internet has been widely studied by researchers. Previous studies have shown that there is a relationship between certain personality traits and total internet usage (Correa, Hinsley, Zúñiga, 2010; Zhong, Hardin, Sun, 2011). Zhong et al., (2001) study showed that those who spend more time on Internet in general, also spend more time using Social Networking Sites and surfing the Web without particular purpose. In addition, this study brings an evidence for the correlation between personality traits and social media use.

Internet has changed the way that people communicate with development of technological communication, which is commonly known as computer-mediated communication

(CMC). “The major developments in technology have found communication being mediated in a number of revolutionary new ways (...), communication was transformed in some way by enabling mass publication and far greater speed and distance” (Thurlow, Lengel, Tomic, 2004, p.26). CMC includes messaging, blogging and communication through social networking sites. Once seen as very negative and making people “sad and lonely”, the internet today is a leading place of social interactions (McKenna & Bargh, 2000).

The huge popularity of social networking sites e.g. Facebook leads to investigate its impact on society and examine the factors that lead millions of people to use this tool of social interactions. Researchers have investigated Facebook in many different areas, such as identity construction (Back et al., 2010), social skills (Oldmeadow, Quinn & Kowert, 2012), privacy (Brandtzæ, Lüders, & Skjetne, 2011; O' Bien & Torres, 2012). Significance of personality factors was also examined (Ross et al., 2009; Mehdizadeh, 2010; Ong et al., 2011), however, there is still a lack of psychological theory relating to Facebook use.

Facebook usage

Previous research has adapted a few different indicators of Facebook usage. Some people use Facebook to keep in touch with friends, find new friends or romantic relationship (Lenhart, Madden, 2007), other want to belong, share information, values and self-identity (Ridings & Gefen, 2004). Facebook usage is defined as various activities on Social Networking Sites. This acting includes number of hours spend on SNS daily, how many days in a week the website is entered and the duration of the session (Kalpidou, Costin, Morris, 2011; Ellison et al., 2007;

Valkenburg et al., 2006). It may be also defined by a number of attached friends, by extent to which the participant is emotionally connected to Facebook and also the extent to which Facebook was integrated into the user daily activity (Ellison et al., 2007). Facebook Intensity scale created by Ellison et al., (2007) was used in current study in order to obtain a measure of Facebook usage.

Why people use Facebook?

Use of the social networking sites is an inherent part of life for millions users around the world today.

People have different motivations and benefits from using social networking sites. According to Sheldon (2008a) people use Facebook to satisfy interpersonal communication needs. Papacharissi and Mendelson (2011) characterised several motives for use of Facebook, which are: expressive information sharing, habitual passing of time, entertainment, companionship, professional advancement, social interaction, and forming new friendships.

Hunt, Atkin and Krishnan (2012) suggested that people use social networking site when bored. The results of their study showed that behavioural factors influence activity on Facebook, with entertainment, and passing time motives being the strongest one.

Hargittai (2007) investigated the differences between users and non users of social networking sites among 1060 first year undergraduates. The aim of his study was to examine the differences between people who use the sites and who stay away even if they are aware of their existence. The results of the study suggest that person's gender, race and ethnicity, as well as parental educational background are all associated with use of Social Networking Sites.

According to Gangadharbatla (2008), joining and participation in Facebook is influenced by internet self-efficacy, need to belong and collective self-esteem.

Muscanell & Guadagno (2012) examined the influence of gender and personality on use of Facebook. In accordance with the researchers' expectations, the results showed that gender and scores measured by Big Five personality scale would moderate online social networking behaviour. Men, participating in this study reported to form new relationship when using Facebook, while women reported to use Social Networking Sites to maintain existing relationships.

Facebook profiles became a very important and commonly used source of information about people. Facebook users have an easy access to personal information shared by not only the people they know but also by complete strangers (Muise, Christofides & Desmarais, 2009). Some people use Facebook to get additional information about newly met person, other use personal information available on Facebook in the workplace. As more and more employers use Facebook as a source of additional information on applicant evaluation and selection decision making, current study of Weathington & Bechtel (2012) investigated how information contained on the applicant's Facebook profile such as alcohol consumption or gambling habits can affect his chances of getting the job. The results of the study, consistent with the hypothesis, found that both alcohol consumption and gambling habits were found to negatively affect evaluations of job candidates at all stages of evaluation from chances to being invited for interview until employment of the candidate. In accordance with new trend, interviewer may request from job applicant his Facebook passwords or request to be his "friend" in order to check his pictures, relationships and activities. By doing this employers check for illegal & suspicious information that could harm the reputation of the company (Cusano, 2012). The results of the above study

demonstrate that negative information obtained through a non resume source can negatively affect evaluations of job candidates.

Facebook use is also associated with human need for presentation. Users can post on their profiles information about themselves, personal interests and present their photos. Feedback received online i.e. likes and comments are treated as rewards and may become addictive.

There is plenty of research that attempts to understand how people use Facebook and other social networking sites (e.g. Bachrach et al., 2012), but current study is conducted with the attempt to understand why millions of people use it and to see whether the Facebook users and non-users differ on personality traits and personal characteristics.

(II) Personality and Facebook usage

Personality is the “psychological qualities that contribute to an individual’s enduring and distinctive patterns of feeling, thinking and behaving” (Cervone & Pervin, 2008, p.8). Five Factor Model developed by Costa & McCrae (1992) have been widely used by researchers to measure personality traits. The Big Five Model divides personality into 5 dimensions: extraversion, introversion, conscientiousness, openness to experience and agreeableness. This study measured the relationship between three of five traits of the above mentioned dimensions: extraversion, conscientiousness and openness and Facebook use. Extraversion measures sociability of individual and ability to experience positive emotions. Extraverts tend to be more friendly, outgoing and socially active. Extraverts can easily become the centre of attention and

make new friends. Conscientiousness describes the individual's degree of self-discipline and control. It measures preference for an organized or spontaneous approach to life. Individuals high in conscientiousness are reliable, organized and consistent. Openness to experience reflects individual's intellectual curiosity and wish to consider new ideas. It measures a person's imagination, interest in culture, it is related to emotional sensitivity and tolerance. In contrast, individuals low in openness to experience contrasts those traits with shallowness and imperceptiveness (Goldberg, 1993).

Previous studies have investigated relationship between characteristic of offline personality and online, showing positive correlation between actual personality and Facebook-related behaviours (Back et al., 2010; Vazire, Gosling, 2004). Bachrach et al., 2012 focused on how different Facebook features i.e. the number of joint groups and events, or number of photos manifests the user's personality.

Acar (2008) found significant differences between online social networks and real life social networks in terms of social network size. The results of his study showed that extroversion is one of the major predictors of both online social network size and time spent online for social networking.

Early study of Amichai-Hamburger (2002) found that extraverted people are not as heavy internet users as introverted and more neurotic users. Extraversion is characterised by sociability, talkativeness and optimism. Due to anonymity provided by Internet people who have problems with making connection with others will be more attracted by social networking sites (Amichai-Hamburger, 2002). More recent study has shown contradicted results, suggesting that Facebook is used to communicate with people that are already known to the user, minimising the anonymity factor (Lampe, Ellison, & Steinfeld, 2006). Correa, Hinsley & de Zuniga (2010)

showed, however, that extraverted people tend to engage more in social networking use as current social networking services do not provide anonymity. A study by Wilson, Fornasier & White (2010), asked participants to complete questionnaires in relation to personality and their addictive use of Facebook. Extraverted individuals reported higher level of social networking use and addictive tendencies. Wilson, Fornasier & White (2010) also found that low conscientious individuals are using social networking more.

Ryan & Xenos (2011) investigated the differences between Facebook users and non users among 1324 self-selected Australian internet users. The aim of their study was “to explore the possibility that people with certain characteristics were more likely to be Facebook users and to ascertain whether these characteristics were related to differential usage of the site” (p.1659). They found Facebook users to be more extraverted but less conscientious than non users.

Openness to experience was found to be positively correlated with social networking use. Individuals with a high level of openness to experience were found to be heavier users of social networking sites (Ross et al., 2009). Ross et al., (2009) hypothesised correlation between personality and use of social networking, including positive link between extraversion and Facebook use and negative relationship between conscientiousness and Facebook use. Unfortunately, the small number of samples used in the study created difficulty to extrapolate their findings to general populations. Amichai-Hamburger & Vinitzky (2010) conducted a study among 237 students based on the Ross et al., (2009) hypothesis, but used information from actual Facebook profiles. They have examined more objective Facebook behaviours and more detailed Facebook use. The study found extraversion and conscientiousness to be connected with number of friends and openness to experience associated with being more expressive on the social networking profile.

Openness to experience reflects on looking for new and novel experiences. Openness is characterised by curiosity, creativeness and imagination. Individuals with low scores on openness prefer convention and well-known patterns (John & Srivastava, 1999). Since social networking sites are a relatively new application of Internet technology, it is expected that those who are more open to experiences would experiment with creating an online profile (Carpenter, Green, LaFlam, 2011).

Skues, Williams & Wise (2012) examined undergraduate psychology students and found that students with higher openness level spend more time on Facebook and have more friends. The researchers concluded that the aim of high in openness Facebook users is to connect with others to discuss their interests.

Among emerging adult population, a positive correlation between Facebook and extraversion and openness to experience was found (Jenkins-Guarnieri, Wright & Hudiburgh, 2012). In contrast, Wilson et al., (2010) found no correlation between openness and social networking use suggesting that it is due to the fact that such media are not longer seen as novelty.

Taken together, the above findings support the suggestion that there is a reliable link between personality traits and Facebook use. There is also evidence of the differences on personality between Facebook users and non-users.

Another variable examined in current study was narcissism.

(III) Narcissism and Facebook usage

Narcissism is a clinical personality disorder that causes increase in person's self-importance, abusive and manipulative tendencies and lack of empathy (Wallace & Baumeister, 2002). Raskin & Terry (1988) described narcissism as a personality trait rather than personality type. Narcissistic individual shows signs of "a grandiose sense of self-importance or uniqueness, an inability to tolerate criticism," and "entitlement or the expectation of special favours without assuming reciprocal responsibilities" (p.891). Narcissism is related to physical attractiveness, intelligence and power (Brown, Zeigler-Hill, 2004). Narcissism and self-esteem are manifested on the social networking site, Facebook. Narcissist needs attention and admiration to boost their self-esteem. One of the ways to do this is through the use of the Social Networking Sites which gives them an opportunity to fulfill the need for social contact, engage in self-promotional behaviours and provide opportunity for gaining fame. High narcissism level predicts high social activity and more self-promoting content on their profiles (Buffardi & Campbell, 2008). Buffardi & Campbell (2008) compared participants' scores on Narcissistic Personality Inventory (Raskin & Terry, 1988) and raters' assessment of participant's narcissism on Facebook profile pages. They found narcissism to be related to higher social activity i.e. more self promoting content and sexier photographs. Furthermore, people with narcissistic personality traits have been found checking their profile page more often than the other users and in general spend more time online (Mehdizadeh, 2010). Consistent with this notion are the results of Christopher Carpenter study. Carpenter (2012) conducted a study to measure self-promoting Facebook behaviours such as posting photos and profile updates in 292 participants. Narcissists seek attention by posting status updates and pictures and changing their profile information waiting for comments and

'liking' the posts which would flatter his self-image. Similarly, the relationship between narcissism and self presentation in the users Facebook profiles found that narcissism predicted features presenting self-generated content such as frequency of updating status and rating of profile picture (Ong et al., 2011).

Recent research also highlighted the relationship between number of Friends on Facebook and narcissism (Buffardi & Campbell, 2008; Bergman, Fearington, Davenport & Bergman, 2011). According to Buffardi & Campbell (2008) narcissist engages in many shallow relationships on Facebook and the number of Facebook friends contributes to the narcissist's sense of importance.

In addition, Ryan and Xenos (2011) confirmed that there are significant differences between Facebook users and non users on narcissism with Facebook users having a tendency to be more narcissistic than non users.

Kapidzic, (2013) investigated this issue and analyzed the relationship between narcissism and motivations behind Facebook profile picture selection such as physical attractiveness and personality. Narcissism was a significant predictor of the motivation for choosing profile pictures that, for men and woman, highlight personality and attractiveness.

According to Kasser & Ryan (1996) narcissism as a personality trait is predominantly associated with extrinsic goals and person that concentrate on them is more likely to have low physical and psychological well-being.

Users with narcissistic tendencies use the social media to encourage more narcissism. Big number of Facebook friends increases greatness and significance. Frequent changing of photo and profile content encourages self-centration, engaging in self-presentation activity and

impression management. The above mentioned studies show the relationship between narcissism and intense Facebook usage, and, according to Kuss & Griffiths (2011), users with narcissistic tendencies have greater possibility to become addicted to the use of social media sites.

To summarize, the review of literature on relationship between narcissism and Facebook usage suggests strong correlation between those variables. The above studies also bring evidence of the differences between Facebook users and non-users on narcissism.

(IV) Self-esteem and Facebook usage

Concept of the self is a definition of who the person is. Perception of the self has behavioural, cognitive and emotional consequences. Self-esteem is a core feature of self-concept; it is an “attitude towards oneself along a positive – negative dimension” (Hewstone et al., 2008, p. 101). Self-esteem is an opinion of ourselves. In relation to self-esteem studies have shown that individuals with low self-esteem are more likely to use social networking sites (Mehdizadeh, 2010; Kalpidou, Costin & Morris, 2011). Study of Mehdizadeh (2010) examined manifestation of self-esteem on social networking sites among 100 students and the results showed significant negative correlation between the variables. Lower scores on the Rosenberg Self-Esteem Scale (Rosenberg, 1965) were correlated with a greater amount of time spent on Facebook per session and a greater number of Facebook logins per day. Results of Mehdizadeh’s study are consistent with findings of Sheldon (2008b) that people with lower self-esteem may spend more time on Facebook because they look for connection, but usually have fewer friends than those who like

being the centre of attention in real social life. Moreover, as predicted in their hypothesis, the results of Kalpidou, Costin & Morris (2011) study, individuals with low self-esteem spent more time on Facebook.

Ellison Steinfield & Lampe (2007) study found relationship between Facebook usage and self-esteem. Users experiencing low self-esteem and low life satisfaction might benefit from using Facebook as they may extend their social capital.

Stefanone et al., (2011) investigated the relationship between self-worth and particular online activities, such as photo-sharing. The results based on the participants online survey responses, indicated influence of person self-worth on the online photo sharing.

Lampe, Vitak and Ellison (2013) investigated the differences between Facebook users and non-users on self-esteem. In contrast with previous research, they did not find self-esteem to be significantly related to likelihood of being a Facebook member.

The above studies showed that the self-esteem may be a significant variable in deciding to join Facebook or not, but Facebook usage itself, have also impact on our happiness, well-being and self-esteem. Receiving positive comments, 'likes' and feedback from online friends increases self-esteem (Valkenburg, Peter & Schouten, 2006).

A 2009 study of Gonzales & Hancock examined how self-esteem can be affected by exposure to Facebook. Participants of the study were divided into 3 groups. One group was presented with their Facebook profiles, second group sat in front of turned-off computer, and the third one sat at the turned-off computers with the mirror placed against the screen. All participants were also asked to complete questionnaire assessing their self-esteem. The results of the study indicated that becoming self-aware by viewing one's own Facebook profile increases

self-esteem. These findings suggest that the person's Facebook profile can be the form of self-awareness, which can boost the feeling of self-esteem. Facebook users find themselves comparing their lives with other users.

Summarizing, the above findings show a reliable link between self-esteem and Facebook usage, suggesting significant differences in self-esteem between Facebook users and non-users.

(V) Self-monitoring and Facebook usage

Self-monitoring refers to a “differences in the extent to which people monitor (observe, regulate and control) the public appearance of the self they display in social situations and interpersonal relationships” (Snyder, 1987, p. 4). Snyder (1974) developed the Self-monitoring Scale (1974) to measure the extent to which an individual can adjust and modify their behaviour depending on the demands of different social situations and also to measure the degree to which the person employs impression management strategies. He hypothesized that people differ in the degree to which they control an impression of themselves.

People who are high self-monitors constantly monitor their behaviour to act in socially plausible way. They watch other people, and respond to the behaviour of others. Such individuals in order to 'look good' will adapt well to differing social situation. Low-monitors, on the other hand, are more unmindful to how others see them and behave more coherent despite the situation. High self-monitors are described as more popular, expressive, and socially poised

(Funder & Harris, 1986) and are more likely to look to the social environment to measure their feelings (Graziano & Bryant, 1998)

Every Facebook user can create a personal profile where they can present an image of themselves, and that is why Facebook offers a great tool for self-presentation providing ideal settings for impression management. Sheldon (2008b) applied the “use and gratification approach” to investigate behaviour and attitudes of Facebook use. According to “use and gratification approach” person’s social and psychological characteristics, such as self-monitoring and self-consciousness influence motives and obtained gratification from using Facebook.

According to Kramer & Winter (2008) behaviours associated with self-presentation and impression management are very important when creating Facebook profile. Facebook is giving their users possibility to decide what information they want to include on their Facebook profile and allows them to not complete personal information if they want to. In other words, Facebook user has full control over his/her profile and the person has control over the image presented online.

In accordance with Lin (2008) study, user’s perception of Web portal usage may be linked to self-monitoring. She found that, comparing with low self-monitors, high self-monitors would display more limited information on their pages. This study showed that self-monitoring plays moderate role in using such websites as Facebook.

Facebook users are anxious about what they display on Facebook profile and how they display it. Self presentation or impression management is evident when creating a Facebook profile. Self-monitoring and self-consciousness contributes to person self-presentation.

(VI) Summary

Internet usage is an everyday activity of millions of people around the world and Social Networking Sites changed the way we communicate with others. Researchers investigated Facebook in many different areas, however, psychological theory related to its use has not been found yet. There are different motivations and purposes of using Facebook and positive and negative effect has been associated with its use.

Overall, the above examples suggest that high level of extraversion and openness to experience, low level of conscientiousness, high level of narcissism, low level of self-esteem and high level of self-monitors are associated with high Facebook use.

The results of the above studies indicate the importance of examining individual differences in online behaviour.

Rationale of the study

The aim of this study is to investigate the relationship between personality traits, personal characteristic and the Facebook usage. The purpose of this study is also to investigate the differences between Facebook users and non-users. Previous research have focused on the users of the Social Networking Sites, however, there is still not too much known about the characteristics of individuals who do not use Facebook.

This study was conducted because of the concern as to how and why individuals differ in usage of one of the most popular social networking site, Facebook. As hundreds of millions

individuals engage in communication using Social Networking Sites, it is expected to see individual differences that explain this phenomenon.

Previous studies tried to determine who use Facebook by recognising different types of people. Understanding different psychological processes that affect behaviour and its outcomes are a crucial task of Psychology.

The current study examined whether extraversion, narcissism and self-esteem might influence the decision to use Facebook and investigate differences between Facebook users and non-users on those factors. The purpose of this study is to examine the relationship between personality traits like extraversion, conscientiousness, openness, narcissism, self-esteem, self-monitoring and the Facebook usage among a sample of adult people living in Ireland. The aim of this study is also to examine differences between Facebook users and non-users extraversion, narcissism and self-esteem. This study is conducted with the hope to understand the phenomenon of the popularity of Facebook and investigate whether personality traits may be considered as a significant variable in joining social networking site, Facebook, and have influence on its usage. It also raises the question of whether and how the individual differences may be manifested in them.

To achieve this aim, extraversion, conscientiousness, openness, narcissism, self-esteem, self-monitoring will be taken into consideration as factors influencing Facebook usage. Extraversion, conscientiousness and openness will be measured for each participant using the Big Five Inventory questionnaire (John, Srivastava, 1999). Narcissism will be measured using Narcissism Personality Inventory 16 items (Ames, Rose & Anderson, 2006) and Self-esteem using Rosenberg's Self-esteem Scale (Rosenberg, 1965). Snyder's self monitoring scale (Snyder,

1974) will measure the extent to which an individual adjusts and modifies his and her behaviour and employs impression management strategies. Participants that indicate that they are Facebook users will be asked to complete Facebook Intensity questionnaire (Ellison, Steinfeld & Lampe, 2007).

Main Hypothesis:

Hypothesis 1: It is hypothesized that there will be significant relationship between extrovert personality and Facebook usage intensity.

Hypothesis 2: It is hypothesised that there will be significant differences between Facebook users and non-users on extraversion.

Hypothesis 3: It is hypothesized that there will be significant relationship between conscientiousness and Facebook usage intensity.

Hypothesis 4: It is hypothesized that there will be significant relationship between openness to experience and Facebook usage intensity

Hypothesis 5: It is hypothesized that there will be significant relationship between narcissism and Facebook usage intensity.

Hypothesis 6: It is hypothesised that there will be significant differences between Facebook users and non-users on narcissism.

Hypothesis 7: It is hypothesized that there will be significant relationship between self-esteem and Facebook usage intensity.

Hypothesis 8: It is hypothesised that there will be significant differences between Facebook users and non-users on self-esteem.

Hypothesis 9: It is hypothesized that there will be significant relationship between self-monitoring and Facebook usage intensity.

METHODOLOGY

Participants:

The sample of 123 (N = 123) individuals participate in this study. The sample consists of 70 females and 53 males. Participants age vary from 18 to 71 (M = 33.74 SD = 10.40). Participants were recruited using convenient sample method. Participation in the study was completely voluntary.

Design:

Mixed-study design was introduced in the current study. Partially, non experimental quantitative correlation was introduced in this study where predictor and criterion variables were measured. Predictor variables of extraversion, conscientiousness and openness to experience, narcissism, self-esteem and self-monitoring were measured along with criterion variables, Facebook Intensity scale. Partially, cross-sectional study design was used, where independent variables of Facebook users and non-users were measured along with dependent variables, extraversion, narcissism and self-esteem.

Materials:

A hard copy of survey was first produced and then questionnaires were set up on MonkeySurvey.com, a commercial survey-hosting website. Survey contained pre-existing measures and scales. In addition, participants were also asked to provide information regarding their gender, age and whether they are Facebook user or not. The complete survey contained 90 items.

Instruments used in this study are the scales that have been widely used in research. All instruments demonstrated high level of reliability.

Facebook Intensity Scale, FBI (Ellison, Steinfeld & Lampe, 2007)

Respondents who answered “Yes” to the question “Do you have a current Facebook account?”, were asked to complete Facebook Intensity Scale. Facebook Intensity Scale measures the Facebook usage and not only duration and frequency. The Scale includes self-reported assessments of Facebook behaviour, designed to measure the degree of engaging in Facebook activities, such as, number of Facebook friends and time spent online, per day. It also includes a 6 of Likert-scale questions, ranging from strongly disagree to strongly agree, designed to measure active engagement and emotional connection with the website, for example, “Facebook is part of my everyday activity” and “I feel out of touch when I haven’t logged onto Facebook for a while”. The Facebook intensity score is computed by calculating the mean of all of the items in the scale. For the purpose of the current study one question was added to the survey, “*Why do you use Facebook?*”. Facebook Intensity Scale has shown great reliability with a Cronbach’s alpha of 0.89.

Big Five Inventory (John, Srivastava, 1999).

Big Five Inventory questionnaire measures dimension of extraversion, neuroticism, conscientiousness, openness to experience and agreeableness. This study will measure 3 of five traits: extraversion (8 items), conscientiousness (9 items) and openness to experience (10 items) answered on five point scale, from “strongly agree” to “strongly disagree”. Statements relate to the person’s perception of themselves and include items such as: “I m someone who is

...talkative, ...does a throughout job, ... Is original, comes up with new ideas”. Some of the scores will be reversed-coded before calculating total scores for each of the measured scale. Costa and McCrae (1992) provide good support for the reliability and validity, calculating internal consistency coefficients at 0.86 to 0.95.

Narcissism Personality Inventory, NPI-16 (Ames, Rose, Anderson, 2006)

The Narcissistic Personality Inventory contains 16 items that measure narcissism. It has been drawn from across the dimensions of Raskin & Terry (1988) 40-items measure. According to Ames et al., (2006), NPI-16 provides a valid measure of narcissism in situation where the use of longer inventories is not possible. Participants read a pair of statements and selected the statement that comes closest in describing their feeling and beliefs about themselves, e.g. “I really like to be the centre of attention or “It makes me uncomfortable to be the centre of attention”. Questionnaire is scored based on computing proportion of responses consistent with narcissism. Raskin & Terry (1988) calculated internal reliability of .83. The Narcissism Personality Inventory, NPI-16 (Ames, Rose, Anderson, 2006) has also shown meaningful internal reliability score ($\alpha = .72$).

Rosenberg Self-esteem Scale RSM (Rosenberg, 1965)

Rosenberg Self-Esteem scale measures the level of psychological self-esteem. It consists of a list of 10 statements dealing with person’s general feeling about themselves, e.g. “On the whole, I am satisfied with myself” and “At times, I feel I m no good at all”. Items are measured on four point likert scale from strongly agree to strongly disagree. The sum of 10 items, in which 5 are reverse coded, will represent the level of self-esteem. The higher the score indicate the

higher the self-esteem. Rosenberg Self-esteem Scale presents high ratings in reliability areas where internal consistency was 0.77 and minimum Coefficient of Reproducibility was at least 0.90 (Rosenberg, 1965).

Self-monitoring Scale, SM (Snyder, 1974)

Self-monitoring was assessed by a scale containing 25 questions rated as true or false, relating to personal reactions to number of situations. Examples of the items include “I find it hard to imitate the behaviour of other people” and “My behaviour is usually expression of my true inner feelings, attitudes and beliefs”. High scores on the measure indicate high self-monitoring. Low scores on the measure indicate low self-monitoring. Snyder (1974) provided the evidence for the scale’s validity and also the Self-Monitoring Scale has been shown to be reliable, having test-retest reliability of .83.

Procedure:

Email with URL link was sent to all participants asking to complete survey. Participation in this study involved completing and returning anonymous survey called “*Like it or not. Personality & Facebook usage*”, containing measures of: Facebook intensity, extraversion, conscientiousness, openness to experience, narcissism, self-esteem and self-monitoring (Appendix 1). Completing the survey took approximately 15 minutes. As the participation was anonymous and no names were used, responses could not be attributed to any participant. For this reason, withdrawal from participation was not possible after questionnaire has been collected.

All of the variables in the study were analyzed and results were obtained.

RESULTS

The data from questionnaires were downloaded from Survey Monkey website and transferred to electronic format. Missing data from the questionnaires were replaced by the missing value. Also the questionnaires that have been completed/finished were used. Questionnaires completed only partially were removed. The data then was screened for anomalies and analyzed using SPSS Statistic 18.

Descriptive statistics were conducted to illustrate the demographic characteristics of the sample as well as their use of Facebook. Correlations were used to provide a numerical estimate of the relationship between variables and independent t-test was examined to explore the differences between personality traits of Facebook users and non-users.

Descriptive statistic:

A sample of 123 (N= 123) respondents chose to participate in the study. Out of the 123 respondents 70 were female (N = 70, 56.9 %), and 53 male (N = 50, 43,1 %). The Table 1 given below shows the information about the frequencies of the respondents' gender.

Table 1: Participants by Gender

Group	Frequency	Percentage frequency
Females	70	56.9
Males	53	43.1

69.9% of the participants of the current study reported to be Facebook users, most likely to spend between 0 & 10 minutes on Facebook and having between 101 – 150 friends. Table 2 reports summary statistic on the participants' Facebook use & non-use.

Table 2: Participants by Facebook usage

Group	Frequency	Percentage frequency
Facebook users	86	69.9
Facebook non-users	37	30.1

Table 3 presents the summary of the descriptive statistic of Psychological Measures.

Table 3: Descriptive Statistics of Psychological Measures

Variables	Mean	SD	Minimum	Maximum
Extraversion	3.51	0.69	1.88	4.88
Conscientiousness	3.90	0.61	2.22	5.00
Openness to experience	3.61	0.50	2.20	4.90
Narcissism	19.89	3.48	16.00	31.00
Self-esteem	18.60	3.97	10.00	27.00
Self-monitoring	10.14	4.14	2.00	22.00
Facebook Intensity usage	3.15	0.92	1.00	5.13

Inferential statistic:

Inferential statistics test including Pearson's Correlation and Independent T-test were performed on the data with use of SPSS. Significant results will be presented first with non-significant results represented at the end of the result section. Results of the correlation analysis are displayed in Table 4. Results of the Independent T-test analysis are displayed in Table 5.

Hypothesis 1

In relation to the first hypothesis, that there will be significant correlation between extravert personality and Facebook Intensity usage, the results were consistent with expectations.

The mean scores for extraversion was 3.51 (SD = 0.69) and for Facebook Intensity usage was 3.15 (SD = 0.92). A Pearson's correlation coefficient found that there was a weak positive significant relationship between extraversion and Facebook usage ($r = 0.22$, $p < .05$). Therefore the null hypothesis is rejected.

Hypothesis 4

In relation to the fourth hypothesis, that there will be significant correlation between openness to experience and Facebook Intensity usage, the results were consistent with expectations. The mean scores for openness was 3.61 (SD = 0.50) and for Facebook Intensity usage was 3.15 (SD = 0.92). A Pearson's correlation coefficient found that there was a weak negative significant relationship between openness to experience and Facebook Intensity usage ($r = -0.26$, $p < .05$). Therefore the null hypothesis is rejected.

In addition, openness to experience was significantly correlated with a total number of reported Facebook friends showing weak, negative relationship. ($r = -0.29$, $p < .01$).

Hypothesis 8

In relation to the eight hypothesis that there will be significant differences between Facebook users and non-users on self-esteem, Facebook users (mean = 19.08, SD = 3.91) were found to have higher self-esteem than Facebook non-users (mean = 17.51, SD = 3.97). The 95% confidence limits show that the population mean difference of the variables lies somewhere between 0.03 and 3.10. An independent samples t-test found that the difference between self-

esteem of Facebook users and not users was a significant ($t(119) = 2.03, p = .045$). Therefore the null hypothesis is rejected.

In relation to the hypothesis 3, 5, 7, and 9, Pearson's correlation was carried out to examine the relationship between the variable 'Facebook usage' and 'conscientiousness', 'narcissism', 'self-esteem' and 'self-monitoring'. No significant correlation was found between Facebook use and conscientiousness. $r = -0.04, p > .05$. No significant correlation was found between Facebook use and narcissism. $r = -0.07, p > .05$. No significant correlation was found between Facebook use and self-esteem. $r = 0.14, p > .05$. Also no significant correlation was found between Facebook use and self-monitoring. $r = 0.08, p > .05$. Therefore the null hypotheses failed to reject.

In addition, correlation tests were carried out to examine relationship between self-esteem and total number of Facebook friends and time spent online. No significant correlation was found between self-esteem and total number of Facebook friend. $r = 0.06, p > .05$. No significant correlation was found between self-esteem and time spent online. $r = 0.01, p > .05$.

Table 4: Correlation between Facebook use score and other personality measures

Variables	1.	2.	3.	4.	5.	6.	7.
1. Facebook usage score	--						
2. Extraversion score	.216*	--					
3. Conscientiousness score	-.044	.230*	--				
4. Openness score	-.264*	.354**	.240**	--			
5. Narcissism score	-.072	.348**	.123	.244**	--		
6. Self-esteem score	.143	-.353**	-.416**	-.106	-.383**	--	
7. Self-monitoring score	.078	.132	-.049	-.001	.425	.007	--

Note: p* significant at .05 level (2-tailed)

P** significant at the 0.01 level (2-tailed)

In relation to the hypothesis 2 and 6, independent sample t-test was carried out to examine the differences between Facebook users and non-users 'extraversion' and 'narcissism'. No significant differences were found between Facebook users and non-users on extraversion. ($t(121) = 0.79$, $p = .429$). No significant differences were found between Facebook users and non-users on narcissism. ($t(120) = -1.36$, $p = .177$). Therefore the null hypotheses failed to reject.

Table 5: An Independent Sample T-test table displaying the differences between the Facebook users and non-users for the various variables

Variables	Group	Mean	SD	t	df	p
Extraversion	Facebook user	3.55	0.67	.794	.21	.429
	Facebook non-user	3.44	0.72			
Narcissism	Facebook user	19.61	3.20	-1.358	120	.177
	Facebook non-user	20.54	4.04			
Self-esteem	Facebook user	19.08	3.91	2.027	119	.045*
	Facebook non-user	17.51	3.97			

Note: p* significant at .05 level

DISCUSSION

The purpose of the current study was to investigate the relationship between personality traits, narcissism, self-esteem, self-monitoring and the Facebook usage and also to investigate the differences between Facebook users and non-users on extraversion, self-esteem and narcissism. Nine hypotheses were defined at the beginning of this project.

In regards to the first hypothesis, it was hypothesised that there would be a significant correlation between extraversion and Facebook Intensity use. Analysis was consistent with hypothesis and showed that there is a significant, positive relationship between variables and the null hypothesis was rejected. The relationship, however, was only weak. Based on previous research it was suggested that individuals that are very sociable, should demonstrate more engagement and activity in social networking sites like Facebook.

Similar to Correa, Hinsley and Zuniga (2010) the current study shows that extraverted individuals are more likely to engage in Social Networking Sites, such as Facebook. The present study is also consistent with Wilson, Foransier and White (2010) study which reported extraverted individuals to have higher level of social networking use.

Results of the current study confirm that ongoing people like to be involved and included in Social Networking sites and being more active users.

The second hypothesis was created to investigate individual differences between Facebook users and non-users on extraversion. It was hypothesized that there would be significant differences between Facebook users and non-users on extraversion. No significant

differences were found i.e. there is no difference between Facebook users and non-users on extraversion. We failed to reject the null hypothesis. According to previous research (Ryan & Xenos, 2011) Facebook users score higher on extraversion than non-users, however current study did not support the hypothesis and suggest that users of Facebook do not differ significantly on extraversion from Facebook non-users. It is however important to note the limitations of the sample of Facebook non-users. More equal sample of Facebook users and non-users may be used in future research that would allow more accurate analysis.

In relation to third hypothesis, it was hypothesised that there will be a significant relationship between conscientiousness and Facebook Intensity usage. No correlation has been found between the variables and we failed to reject the null hypothesis. According to previous studies (Wilson, Foransier & White, 2010; Ryan and Xenos, 2011) there is negative, significant relationship between variables, suggesting that less conscientious individual would use Facebook more, but this was not a significant factor in current study.

In relation to fourth hypothesis, it was hypothesised that there will be a significant relationship between openness to experience and Facebook Intensity usage. Consistent with previous research, weak, significant, correlation was found between the variables, however in contrast with previous research, the results of the current study suggest that openness to experience is negatively correlated to Facebook usage. Previous research has found positive correlation between openness to experience and social networking use (Ross et al., 2009; Skues, Williams & Wise, 2012). Individuals with high level of openness to experience were found to be heavier users of social networking sites. According to Costa & McCrea (1992) high openness to

experience reflects individual's curiosity, creativeness and wish to consider new ideas. Building on the results of previous studies it was highly expected that individuals scoring higher on openness to experience are more likely to try new things and consequently may more likely use a new way of communication, such as Facebook. However, negative correlation between openness to experience and Facebook use, may suggest that, correspondingly with Wilson (2010) Social Networking Sites are not seen as novelty anymore. Daily use of this form of communication becomes a routine, which is characterized by person with low openness to experience. Over time, Facebook may become more "traditional" than traditional ways of communication such as conversation, phone call or letter.

Additionally, weak, negative correlation was found between openness to experience and Facebook total reported friends. According to Goldberg (1993) low openness to experience is characterised by imperceptiveness and shallowness. Evidence of high number of Facebook friends may suggest the shallow nature of those relationships. Further study on correlation between openness and Facebook Intensity use might provide better insight into perception of Facebook use.

Narcissism was also expected to have impact on Facebook usage. It was hypothesised that there would be a significant relationship between narcissism and Facebook Intensity score. Contrary to hypothesis, no significant correlation was found between variables, we fail to reject the null hypothesis. Current study did not support previous studies that indicated significant positive relationship between narcissism and Facebook Intensity usage (Mehdizadeh, 2010; Carpenter, 2012). According to Mehdizadeh (2010) higher scores on the NPI-16 (Ames, Rose & Anderson, 2006) were positively correlated with checking the profile pages and in general with

time spent online. In addition, Carpenter (2012) and Ong et al., (2011) studies showed that more narcissistic individuals seek attention by posting photos and profile updates and in consequence spend more time online. Narcissism score in present study were correlated to the emotional engagement with the site and also with the number of Facebook friends and time spent online. Further study may measure other online behaviour, more self-promoting activities, such as photos posting, profile updates and activity on commenting and 'likes' which may have stronger associations with narcissistic behaviours.

Previous studies on relationship between narcissism and Facebook provided an understanding that more narcissistic individuals should use Facebook more intensely as a way of flattering their narcissistic self-image with themselves and others, however it was not the case in current study.

Individual differences between Facebook users and non-users on narcissism were also investigated, and it was hypothesized that there will be significant differences between Facebook users and non-users on narcissism. Ryan and Xenos (2011) found that Facebook users are more narcissistic than those who do not use Facebook. The results of current study, yet, did not find significant differences between Facebook users and non-users on narcissism and this factor needs attention in future research.

In relation to the seventh hypothesis, it was hypothesized that there would be a significant correlation between self-esteem and Facebook Intensity usage. No significant correlation was found between the variables. The results of current study are inconsistent with previous research (Kalpidou, Costin , Morris, 2011; Sheldon, 2008b; Ellison Stenfield & Lampe, 2007) that

showed a reliable link between self-esteem and Facebook usage. Previous research has shown that individuals with low self-esteem are more eager to engage in Social Networking sites. The results of current study are in contradiction to the Mehdizadeh (2010) study showing that the lower scores on the Rosenberg Self-esteem Scale (Rosenberg, 1965) are correlated with a greater number of Facebook logins per day or results of Kalpidou, Costin and Morris (2011) study, showing individuals with low self-esteem spending more time on Facebook. Additional tests on relationship between self-esteem and number of Facebook friends and time spent online also did not show significant relationship between variables. Further study on correlation on self-esteem and Facebook use is suggested. Future research may want to extend the study by incorporating variables such as social anxiety.

In relation to eight hypothesis, it was hypothesized that there would be a significant difference between Facebook users and non-users on self-esteem. Significant differences between Facebook users and non-users on self-esteem were found. The current study showed that comparing to Facebook non-users, Facebook users have higher level of self-esteem. Previous research (Lampe, Vital & Ellison, 2013) did not find self-esteem to be significantly related to likelihood of being a Facebook member. Results of the current study may be explained by the notion that Facebook can have impact on the person's self-esteem (Valkenburg et al., 2006). The current study may suggest that the positive consequences of using Facebook close online connection with friends and family and received feedback, benefits to the individual self-esteem. Stefanone (2011) already showed relationship between self-worth and online photo sharing. As the results of current study contradict previous results, more research should be conducted in this area.

In relation to the ninth hypothesis, that there will be significant correlation between self-monitoring and Facebook Intensity score, no significant correlation were found between the variables. We have failed to reject the null hypothesis. The results of previous studies (Kramer & Winter, 2008; Lin, 2008) provided an understanding that self-monitoring and impression management are evident when creating Facebook account. Current study, however did not confirm this notion.

Additional question: why do you use Facebook?

Additional question was asked to the participants that stated that they are Facebook user to describe the reason why they use Facebook. Most of the Facebook users joint and use Facebook to contact family and friends that cannot be seen regularly or are abroad. These results are consistent with the Sheldon (2008a) study where the results shown that people use Facebook to satisfy interpersonal communication needs. Facebook users also stated that they use Facebook to see other people pictures, posts and comments and to keep up to date with what is happening in their friends' lives and even to control their kids. Participants also stated that they use Facebook when they are bored as Facebook gives them something to do. This is consistent with Hunt, Atkin & Krishnan (2012) results that people use Facebook when they are bored. For one person Facebook is "something that it is there" and they "don't know why they use it".

(1) Limitations, strengths and future research

The limitations of current study have been recognised.

One of the limitations of the current study was a sampling method not being a random sample. Individuals known to the researcher had greater chance of being invited to take part in the study. Although, the participants contacted by the researcher were asked to forward the link to the survey to the other people they know, which may like to participate in the study.

Current study consists of small sample, which can only provide guidelines to measure relationship between personality and its impact on Facebook usage and not usage. Further research may wish to study wider group of participants.

Facebook Intensity scale (Ellison, Steinfield & Lampe, 2007) has been used in this study to measure Facebook use, however, it is not used constantly in this area of research. Intensity of engagement and online activity has been described in many different ways, using various scales, including questions on time spent online, daily or monthly, or participants may be asked to state that they use it “always” ,” rarely” or “never”. Measurement of inconsistencies may be a threat for interpretation of the findings.

Another limitation of the current study was that the measurement of personality variables was done in a way of self-report measure. Self-report was also used to measure behaviour associated with Facebook. Some of the previous studies on social networking used more detailed features in relation to online behaviours associated with Facebook usage such as, number of

uploaded photos, number of signed up groups and discussion, likes & comments, status updates. Information from real Facebook accounts has been also previously used to measure online behaviours associated with Facebook use thanks to which analysis of those behaviour might be less biased.

Present study measures personality as predictors of Facebook usage. Future research may take into consideration factors such as privacy concerns, which may have strong influence on the decision to join Facebook or not. Safety issues and control of the personal data in such fast growing environment, which is Facebook, may be source of concern.

The strength of the current study is that participants of every age took part in this study. The sample used in previous researches was mostly undergraduate students so the results may be biased. The Social Networking Sites change and grow rapidly and it is important to include in the study, the participants of different ages.

The above inconsistencies may influence reliability of the interpretation of this study, however, despite the limitations, the current study is still able to provide interesting and useful points.

The above examples show that there are many different domains that the further areas of research could head on. Studying Facebook related behaviour is very important as the results of the studies have practical applications in real-world.

(II) Future applications

Counselling

Understanding of Facebook and other social networking sites and its users has an important implication for clinicians. Their good orientation and understanding of its use and technical aspects associated with it can increase their understanding of online social life and relationships. Especially in adolescence, for many of them, Social Networking use became an inherent part of their development, and its understanding would promote healthier development.

Cyber-bullying

Cyber-bullying became a huge problem in the last decade. Episodes of cyber bullying, which led to depression and suicide have been widely discussed in media in recent months. The results of the study on Facebook Intensity usage may found applications in relation to cyber-bullying which may lead to the school bullying. Issues of cyber-bullying are closely connected to the applications on online health and safety.

Health and safety

In relation to health and safety associated with use of the Internet and Social Networking sites, such as Facebook, evidence of the relationship between personality traits and Facebook use may raise awareness around privacy issues and awareness to the risks that may be faced online. Schools, especially, should protect children against online harassment and bullying by teaching them how to use social networking sites safe and highlight risks associated with Facebook use

such as cyber-bullying and pedophilia. There could be meetings organized in schools for children and their parents to make them aware of that problem and help them realize that bullying should be reported and punished.

Social Anxiety

Previous research has shown that Facebook profiles are an accurate representation of the individual's self (Back et. al., 2010, Vazire, Gosling, 2004). Facebook profiles may be helpful in recognising social anxiety based on, both, the Facebook profiles and impressions of other Facebook users.

Marketing

Facebook has also become a place where businesses can advertise their products. The information that more extraverted individuals are more likely to use Facebook may be of interest to these companies. Previous study already showed positive correlation between high extraversion and online shopping (Jen-Hung & Yi-Chun, 2010). Current study, however, showed significant but only weak relationship between Facebook activity and extraversion which may give the marketing agents only small benefit.

Longitudinal study

Personality is a stable feature of the individuals, however, taking into consideration the fact that Social Networking sites grow and change very fast, relationship between personality trait and personal characteristics and Facebook use may also change over time. Longitudinal

study of behaviours associated with Facebook usage by tracking changes of this concept could contribute to the research in the area.

(III) Conclusions

Previous studies have shown that personality traits influence the use of Facebook. Results of the previous studies have also suggested that individual characteristics such as narcissism, self-esteem or self-may be a valid predictor of Facebook use.

The results of the current study support the view that some of the personality traits display significant relationship with Facebook usage. The strength of these relationships, however, is not as strong as previously suggested.

Overall, the results of current study indicate that extraversion, openness to experience and self-esteem are factors connected with use of Facebook. Results of the present study, however, brought the unexpected results in connection with the direction of some of these relationships. Lack of systematic significant differences between Facebook users and non-users suggests that Facebook is used by people of different social groups. Analysis of other factors e.g. motivational ones including need to belong or communication or opportunity to leisure may bring better understanding why people use Facebook.

Present study provides a theoretical contribution to knowledge about the effects of personality traits and individual differences on Facebook use. Further research is required in order to better understand the relationship between social network use and personality and its consequences. Researcher of current study hopes that the research in this area will continue. It is

trusted that the results of this research will influence other researchers to expand study of Social Networking Sites and lead to a development of the psychological theory relating to its use.

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APPENDIX 1

My name is Monika Zabawska and I am conducting research in the Dublin Business School, Department of Psychology that explores Facebook usage. This research is being conducted as part of my studies and will be submitted for examination.

You are invited to take part in this study and participation involves completing and returning the attached anonymous survey. The completing the survey will take approx 15 minutes. While the survey asks some questions that might cause some minor negative feelings, it has been used widely in research. If any of the questions do raise difficult feelings for you, contact information for support services are included on the final page.

Participation is completely voluntary and you are not obliged to take part.

Participation is anonymous and no name will be used. Thus responses cannot be attributed to any one participant. For this reason, it will not be possible to withdraw from participation after the questionnaire has been collected.

The questionnaires will be securely stored and data from the questionnaires will be transferred from the paper record to electronic format and stored on a password protected computer.

It is important that you understand that by completing and submitting the questionnaire you are consenting to participate in the study.

Should you require any further information about the research, please contact
Monika Zabawska, or my supervisor Margaret Walsh can be contacted at

██████████.

Thank you for taking the time to complete this survey.

Gender (please circle): Female Male

Age:

This part of the questionnaire is to assess your basic use and attitudes towards Facebook.

Do you currently have a Facebook account (please circle)? Yes No

If you answered “Yes” to the above question please answer question 1 to 9. Please circle your answer from response categories: strongly disagree to strongly agree. If you answered “No” to the above question, please go to next section of the questionnaire.

1. Facebook is part of my everyday activity

a) Strongly Disagree b) Disagree c) Neutral d) Agree e) Strongly Agree

2. I am proud to tell people I'm on Facebook

a) Strongly Disagree b) Disagree c) Neutral d) Agree e) Strongly Agree

3. Facebook has become part of my daily routine

a) Strongly Disagree b) Disagree c) Neutral d) Agree e) Strongly Agree

4. I feel out of touch when I haven't logged onto Facebook for a while

a) Strongly Disagree b) Disagree c) Neutral d) Agree e) Strongly Agree

5. I feel I am part of the Facebook community

a) Strongly Disagree b) Disagree c) Neutral d) Agree e) Strongly Agree

6. I would be sorry if Facebook shut down

a) Strongly Disagree b) Disagree c) Neutral d) Agree e) Strongly Agree

7. Approximately how many TOTAL Facebook friends do you have?

- a) 10 or less b) 11-50 c) 51-100 d) 101-150 e) 151-200 f) 201-250
g) 251-300 h) 301-400 i) more than 400

8. In the past week, on average, approximately how much time PER DAY have you spent actively using Facebook?

- a) 10 min or less b) 10-30 min c) 31-60 min d) 1-2 h e) 2-3 h
f) more than 3 h

9. Why do you use Facebook?

The following statements concern your perception about yourself. Please write a number next to each statement to indicate the extent to which you agree or disagree with that statement

1	2	3	4	5
Disagree Strongly	Disagree a little	Neither agree nor disagree	Agree a little	Agree strongly

I am someone who...

- | | |
|---|---|
| 1. (1)_____ Is talkative | 15. (25)_____ Is inventive |
| 2. (3)_____ Does a thorough job | 16. (26)_____ Has an assertive personality |
| 3. (5)_____ Is original, comes up with new ideas | 17. (28)_____ Perseveres until the task is finished |
| 4. (6)_____ Is reserved | 18. (30)_____ Values artistic, aesthetic experiences |
| 5. (8)_____ Can be somewhat careless | 19. (31)_____ Is sometimes shy, inhibited |
| 6. (10)_____ Is curious about many different things | 20. (33)_____ Does things efficiently |
| 7. (11)_____ Is full of energy | 21. (35)_____ Prefers work that is routine |
| 8. (13)_____ Is a reliable worker | 22. (36)_____ Is outgoing, sociable |
| 9. (15)_____ Is ingenious, a deep thinker | 23. (38)_____ Makes plans and follows through with them |
| 10. (16)_____ Generates a lot of enthusiasm | 24. (40)_____ Likes to reflect, play with ideas |
| 11. (18)_____ Tends to be disorganized | 25. (41)_____ Has few artistic interests |
| 12. (20)_____ Has an active imagination | 26. (43)_____ Is easily distracted |
| 13. (21)_____ Tends to be quiet | 27. (44)_____ Is sophisticated in art, music, or literature |
| 14. (23)_____ Tends to be lazy | |

Below is a list of statements dealing with your general feelings about yourself. Circle the response option that corresponds to you. If you strongly agree, circle SA. If you agree with the statement, circle A. If you disagree, circle D. If you strongly disagree, circle SD.

- | | | | | | |
|-----|--|----|---|---|----|
| 1. | On the whole, I am satisfied with myself. | SA | A | D | SD |
| 2. | At times, I think I am no good at all. | SA | A | D | SD |
| 3. | I feel that I have a number of good qualities. | SA | A | D | SD |
| 4. | I am able to do things as well as most other people. | SA | A | D | SD |
| 5. | I feel I do not have much to be proud of. | SA | A | D | SD |
| 6. | I certainly feel useless at times. | SA | A | D | SD |
| 7. | I feel that I'm a person of worth, at least on an equal plane with others. | SA | A | D | SD |
| 8. | I wish I could have more respect for myself. | SA | A | D | SD |
| 9. | All in all, I am inclined to feel that I am a failure. | SA | A | D | SD |
| 10. | I take a positive attitude toward myself. | SA | A | D | SD |

Read each pair of statements below and place an "X" by the one that comes closest to describing your feelings and beliefs about yourself. You may feel that neither statement describes you well, but pick the one that comes closest. Please complete all pairs.

1. ___ I really like to be the center of attention
 ___ It makes me uncomfortable to be the center of attention

2. ___ I am no better or no worse than most people
 ___ I think I am a special person

3. ___ Everybody likes to hear my stories
 ___ Sometimes I tell good stories

4. ___ I usually get the respect that I deserve
 ___ I insist upon getting the respect that is due me

5. ___ I don't mind following orders
 ___ I like having authority over people

6. ___ I am going to be a great person
 ___ I hope I am going to be successful

7. ___ People sometimes believe what I tell them
 ___ I can make anybody believe anything I want them to

8. ___ I expect a great deal from other people
___ I like to do things for other people
9. ___ I like to be the center of attention
___ I prefer to blend in with the crowd
10. ___ I am much like everybody else
___ I am an extraordinary person
11. ___ I always know what I am doing
___ Sometimes I am not sure of what I am doing
12. ___ I don't like it when I find myself manipulating people
___ I find it easy to manipulate people
13. ___ Being an authority doesn't mean that much to me
___ People always seem to recognize my authority
14. ___ I know that I am good because everybody keeps telling me so
___ When people compliment me I sometimes get embarrassed
15. ___ I try not to be a show off
___ I am apt to show off if I get the chance
16. ___ I am more capable than other people
___ There is a lot that I can learn from other people

The statements below concern your personal reactions to number of situations. No two statements are exactly alike, so consider each statement carefully before answering. If a statement is true or mostly true as applied to you, mark T as your answer. If a statement is false or not usually true as applied to you, mark F as your answer. It is important that you answer as frankly and as honestly as you can. Circle your responses beside the statement.

1. I find it hard to imitate the behavior of other people. T / F
2. My behavior is usually an expression of my true inner feelings, attitudes and beliefs. T / F
3. At parties and social gatherings, I do not attempt to do or say things that others will like. T / F
4. I can only argue for ideas which I already believe. T / F
5. I can make impromptu speeches even on topics about which I have almost no information. T / F
6. I guess I put on a show to impress or entertain people. T / F
7. When I am uncertain how to act in a social situation, I look to the behavior of others for cues. T / F
8. I would probably make a good actor. T / F
9. I rarely need the advice of my friends to choose movies, books or music. T / F
10. I sometimes appear to others to be experiencing deeper emotions than I actually am. T / F
11. I laugh more when I watch a comedy with others than when alone. T / F
12. In a group of people I am rarely the center of attention. T / F
13. In different situations and with different people, I often act like very different persons T / F

14. I am not particularly good at making other people like me. T / F
15. Even if I am not enjoying myself, I often pretend to be having a good time. T / F
16. I'm not always the person I appear to be. T / F
17. I would not change my opinions (or the way I do things) in order to please someone else or win their favor. T / F
18. I have considered being an entertainer. T / F
19. In order to get along and be liked, I tend to be what people expect me to be rather than anything else. T / F
20. I have never been good at games like charades or improvisational acting. T / F
21. I have trouble changing my behavior to suit different people and different situations. T / F
22. At a party, I let others keep the jokes and stories going. T / F
23. I feel a bit awkward in company and do not show up quite so well as I should. T / F
24. I can look anyone in the eye and tell a lie with a straight face (if for a right end). T / F
25. I may deceive people by being friendly when I really dislike them. T / F

If you have experiences distress as a result of your participation in this study, please do not hesitate to contact the following organizations – Aware at 1890 303 302 or Samaritans at 1850 60 90 90.