Fakulti Sains Kognitif dan Pembangunan Manusia

THE STUDY OF RELATIONSHIP BETWEEN INTERNET ADDICTION AND SELF ESTEEM AMONG UNDERGRADUATE STUDENT IN UNIVERSITY MALAYSIA SARAWAK

Larry Hilma Anak Mud

Bachelor of Science with Honours

(Cognitive Science)

2020

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THE STUDY OF RELATIONSHIP BETWEEN INTERNET ADDICTION AND SELF ESTEEM AMONG UNDERGRADUATE STUDENT IN UNIVERSITY MALAYSIA SARAWAK

LARRY HILMA ANAK MUD

(61185)

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The project entitled 'study of relationship between internet addiction and self esteem among undergraduate student in university malaysia sarawak' was prepared by Larry Hilma Anak Mud and submitted to the Faculty of Cognitive Sciences and Human Development in partial fulfillment of the requirements for a Bachelor of Science with Honours (Cognitive Science).

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ABSTRACT

There are many studies conducted between internet addiction and self-esteem globaly. This study is importance because it is one of the things can influence our daily life. This study examines the internet addiction and self-esteem in University Malaysia Sarawak (UNIMAS). The sample consisted of 102 students in University Malaysia Sarawak (UNIMAS). The study utilized an instrumental to measure the internet addiction; namely Internet Addiction Test (IAT) and rosenberg self-esteem scale (RSES). Demographic factors (gender, race, faculty, CGPA, Duration online) were examined too. Google form is a flatform used to collect the data from respondent in eleven Faculty in Universiti Malaysia Sarawak (UNIMAS). Data analysis is an inferential statistic (T-test, Pearson Correlation and Multipl Linear Regression).

The result suggests that the level of internet addiction among University Malaysia Sarawak (UNIMAS) is moderate. Moreover, (H1) there is a significant of gender difference in internet addiction in this study. But (H2) there is no statistically significant difference between self-esteem based on gender. (H3) There is no significant relationship between self-esteem and internet addiction and (H4) none of the internet addiction factor has an influences toward self-Esteem. It is recommended that problem of internet addiction should be aware to prevent growing of internet addiction.

ABSTRAK

Terdapat banyak kajian yang dilakukan antara ketagihan internet dan harga diri global. Kajian ini penting kerana internet adalah salah satu perkara dapat mampu mempengaruhi kehidupan seharian kita. Kajian ini mengkaji ketagihan internet dan harga diri di Universiti Malaysia Sarawak (UNIMAS). Sampel terdiri daripada 102 orang pelajar di Universiti Malaysia Sarawak (UNIMAS). Kajian ini menggunakan instrumen untuk mengukur ketagihan internet; iaitu Internet Addiction Test (IAT) dan skala harga diri rosenberg (RSES). Faktor demografi (jantina, bangsa, fakulti, PNGK, Tempoh dalam talian) juga dikaji. Google form adalah bentuk rata yang digunakan untuk mengumpulkan data daripada responden di sebelas Fakulti di Universiti Malaysia Sarawak (UNIMAS). Analisis data adalah statistik inferensi (Ujian-T, Korelasi Pearson dan Regresi Linear Berganda).

Hasilnya menunjukkan bahawa tahap ketagihan internet di kalangan Universiti Malaysia Sarawak (UNIMAS) adalah sederhana. Selain itu, (H1) terdapat perbezaan perbezaan jantina dalam ketagihan internet dalam kajian ini. Tetapi (H2) tidak ada perbezaan yang signifikan secara statistik antara harga diri berdasarkan jantina. (H3) Tidak ada hubungan yang signifikan antara harga diri dan ketagihan internet dan (H4) tidak ada faktor ketagihan internet yang mempengaruhi terhadap Harga diri. Sebaiknya masalah ketagihan internet harus diperhatikan untuk mencegah penambahan ketagihan internet.

Introduction

Internet addiction in the form of behavioural addiction in which the person is being addicted or dependent on using the internet. Internet addiction is the question that causes the distinct behaviour of the person. The issue affects the person's emotional response, attitudes, and the subject. Internet addiction has some results in the action of the person being dependent on the internet. They are some of the consequences of being internet-dependent; there are functional consequences and harmful consequences. Internet addiction is one of these most issues, particularly to teenage people. The number of internet addiction research shows that Internet Addiction Disorder is a psychosocial disorder, characteristics of which include lack of patience, loneliness and mental problems, and disruption of social relationships (Tonioni, D'Alessandris, & Lai, 2012). Such findings have shown that personality traits, self-esteem, and psychological issues are related to Internet addiction (Griffiths, 2000). Another source of this activity is the variable feedback results of Internet addiction. According to the principle of the Variable Ratio Reinforcement Schedule (VRRS) theory, the reason why you may be so hooked to Internet activity (e.g., gaming, gambling, shopping, pornography, etc.) is that it offers multiple bonus levels. Internet Addiction Disorder appears to affect the pleasure centre of the brain, in addition to other dependence disorders. Addictive activity triggers the release of dopamine and facilitates the pleasurable experience that induces the activation of these chemicals (Gregory & C, 2019).

Because of the use of laptops, smartphones, and tablets, individuals can conveniently access to the Internet and remain online constantly. Anywhere and everywhere, Internet access can be found, and its applications are limitless. It can provide new opportunities for information retrieval and sharing, linking us to others, and entertaining us. Many scholars agree that the Internet is not addictive, but, like other addictions, it contributes to destructive behaviour patterns (Young, 1998a). To put it another way, while there is no toxicant on the Internet that makes people psychologically addictive, this can lead to similar signs of addiction. Low self-esteem was studied to be one of the psychological traits that persons

experienced when they involved in using the Internet (Bianchi & Phillips, 2005; Leung, 2008). Research has been extensively pursued on this subject in highly wired countries, including South Korea, Japan, the United States, and some European countries.

The countries that were involved in the people who diagnosed with internet addiction disorder IAD are supposed to regulate the emotional process, executive thought skills and care, and cognitive ability. The mind modifications seen in the survey are believed to be related to those involved in different kinds of addiction, like alcohol and drugs. Earlier research had indicated similar connections, but the report appears to increase this growing body of information that internet addiction may exist. (Walton, & A. G, 2012).

Low self-esteem could cause specific individuals to pursue temporary relief from the problems of life by behaviours that would encourage them to withdraw from reality (Greenberg, 1999). Griffiths (2000) agreed with those suggestions, adding that a coping mechanism and a means to compensate for one's shortcomings, such as low self-esteem, can be the inappropriate use of the Internet. Young (2009) has suggested that people with low self-esteem should be able to use the Internet to feel better about themselves and their situations.

Positive or negative self-esteem can occur. A person with low self-esteem often have trouble with their life. They are usually optimistic about life, becoming more depressed, nervous, unapproachable, hostile or fearful of being disciplined. (Chabot, 2000; Myers, 2010; Reeve, 2010). On the other hand, those with a self-esteem usually have a positive attitude towards them and with others are happier and more successful, very active, more persuasive, more friendly, more open and more affluent. They will also be more assertive in their marriages, constructive and positive in their values and actions, excellently adjusted in communities and thrive from a higher standard of living. (Myers, 2010; Reeve 2010).

Problem Statement

When internet usage proliferates every year, internet addiction becomes a problem among some people. Addicted people may come from all walks of life, culminating in misery in the circumstances like education, family, job, and relationships in the central aspect of everyday life (Chebbi, Koong & Liu, Sep.2019). Singapore is a metropolitan city-state with a total population of just over 3.5 million residents, and the Singaporean literacy rate is 95.4%.

Results show that 84% of residents between the ages of 10 and 14 have been using the Internet, while Internet use is 64% of residents between the ages of 15 and 59. Sixty-one per cent of people use the internet for leisure activities, including playing/downloading football, listening to music, or watching movies (Mythily, Qiu & Winslow, 2008). In 2007 it was announced that there were 6.6 billion people in the world, but 20 per cent of them were using the internet, 265.6 per cent higher levels (Canbaz, Sunter, Peksen & Canbaz, 2009).

Nonetheless, another study showed that by the end of 2007, nearly 20 million internet users soared to 26 million in Turkey by September 2008 (Kabakci, Odabasi & Coklar, 2008). Besides, internet addiction trials have found in many different countries, including Western Countries, Malaysia, Taiwan, Hong Kong, Japan, Singapore, and so on. This research in Malaysia, though, is minimal, and the teenage rates of internet addiction are still in a question mark.

The objective of the Study

Main Objective: To analyse the relationship between internet addiction and self-esteem among undergraduate students in Universiti Malaysia Sarawak (UNIMAS).

Specific Objectives :

1. To identify the differences in internet addiction level based on genders among UNIMAS students.

2. To identify the different in self-esteem based on genders among UNIMAS students.

3. To investigate the relationship between self-esteem and internet addiction among UNIMAS students.

4. To identify the significant component in internet addiction (Withdrawal and Concealment, Social and Personal, Excessive Use) that influence self-esteem.

Hypotheses of Study

Ho1: There is a difference in internet addiction based on gender among UNIMAS student

Ho2: There is a difference in self-esteem based on gender among UNIMAS student

Ho3: There is a significant relationship between internet addiction and self-esteem among Unimas student

Ho4: At least one of the component in internet addiction have significant influence toward self-esteem
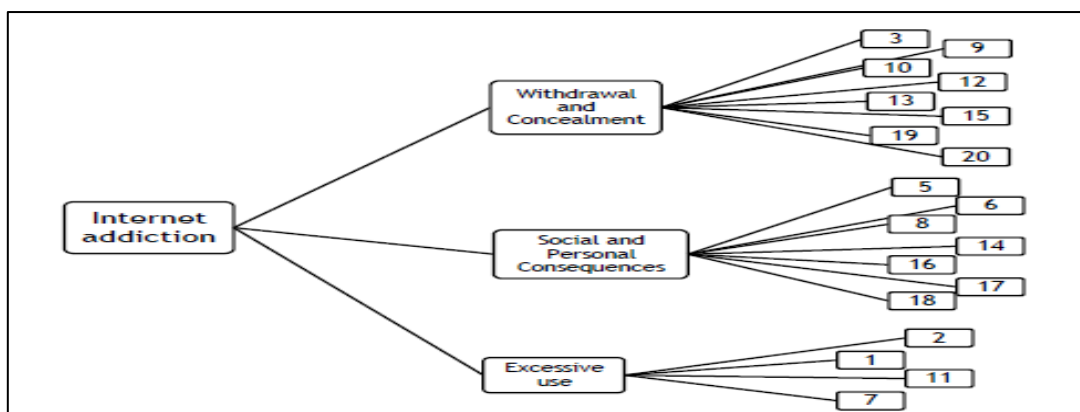
Figure 1: IAT Instruments Factors and Item

Conceptual Framework
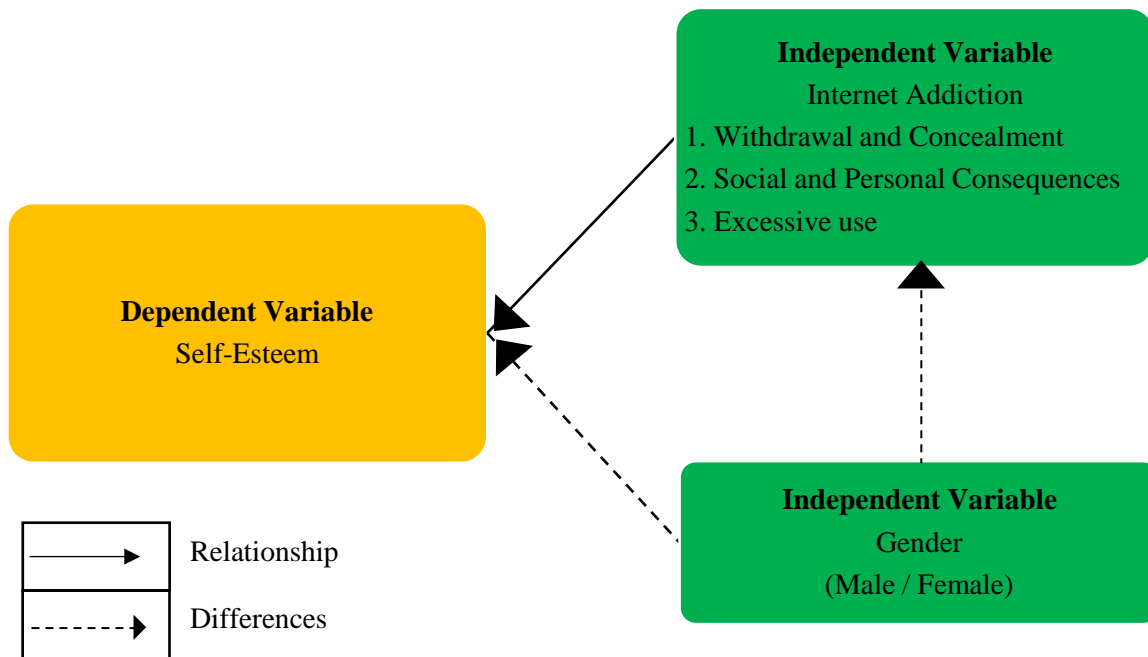
Figure 2: Conceptual Framework

The variables used in this analysis are shown in Figure 1. The independent variables in this study are the internet addiction and gender based on the demographic factor of the study. Whereas, the dependent variable in this study is self-esteem of an undergraduate student in UNIMAS.

Significance of the Study

Frequent Internet use impacts the behaviour and socialization of human beings. Internet addiction research investigates how people and culture are impacted by these changes. The study results will make a significant contribution to personality-related research on internet addiction and preventive studies of adolescents. The findings of this study can also be useful in understanding the symptoms of internet addiction between high school and university students and in defining precautionary measures in this area and in raising awareness of internet addiction. The researcher also wants to demonstrate the negative effect of internet addiction on their lives to the young generation. New longitudinal studies with a broader scope covering all of Sarawak and Malaysia will be useful to gather national data on internet addiction among teenagers.

Definition of Term

Term	Conceptual Definition	Operational Definition
Addiction	The unwillingness to resist or use something negative, in particular ("ADDICTION: meaning in the Cambridge English Dictionary," 2019).	Be unable to keep away from long-term internet use or loss of online self-control.
Internet addiction	Internet Addiction relates to both the existence and spectrum of individual internet dependency. (Young, 1998).	Internet addiction is a mental addiction in which a person is hooked on entertainment, social relationships, knowledge-seeking, etc. using the Internet.
Self-Esteem	Self-esteem is a term commonly used in open language as well as in psychology. This refers to the sense of an individual's worth or interest, or the degree to which a person trusts, agrees, appreciates, prizes or likes him or herself (Blascovich & Tomaka, 1991).	Self-esteem is generally regarded as the self-concept's evaluative portion, either good or bad.

Table 1: Definition of Term

CHAPTER TWO

LITERATURE REVIEW

Introduction

This chapter addresses the research reviewed the relevant literature. This involves a review of the related hypothesis and model, discussion of moving similar findings, and discussion of the study-related issues. Reviewing the literature is important in the research as it helps to explain the study's intent by looking over relevant literature materials and concepts. In this study, the principles of internet addiction and self-esteem will be used as a psychological dimension, as will the principle of uses and gratifications. Relevant previous research will also be reviewed on the impact of internet addiction on the brain.

Discussion of Related Theory and Model

Uses and Gratifications Theory (U&G)

U&G indicates that the fundamental needs of a person influence his / her conduct of communication. Citizens are therefore not considered to be moderately or reliably purposeful, inspired and engaged in their use of media to meet underlying needs. Individual factors, the essence of use, and public perceptions, and their content mediate consequences of use, both expected (e.g., basic needs satisfaction) and accidental (e.g., addiction) (Katz, Blumer, & Gurevitch, 1974). A traditional U&G paradigm would indicate that one's social and psychological conditions impact one's desires (perceptible in communication motives), which, also affect the collection and use of channels of communication (e.g., indirect and interpersonal) and performance. Although context influences and motivations affect media impact, U&G indicates that a complete picture of the path to media effects involves working together with different factors (i.e. psychological and social characteristics, media usage motives and media use).

The Internet's rapid growth, combined with its higher level of interactivity relative to other mainstream mass media, has contributed to the introduction of the U&G hypothesis to understand the motivations of internet use (Ruggiero, 2000). In the case of Internet usage, several scholars have applied the U&G theory to explain the common psychological and behavioural aspects of Internet use (LaRose, Mastro & Eastin, 2001). Kaye and Johnson (2001) note that Internet users are more active and engaged in the use of the Internet because of their interactivity. Since its interactivity is one of the main strengths of the Internet and engaged community is the core concept of the philosophy of uses and gratifications, it is known to be the essential theoretical bases for researching this medium (Hanjun, 2002).

Uses and Gratification Model for Internet Addiction.
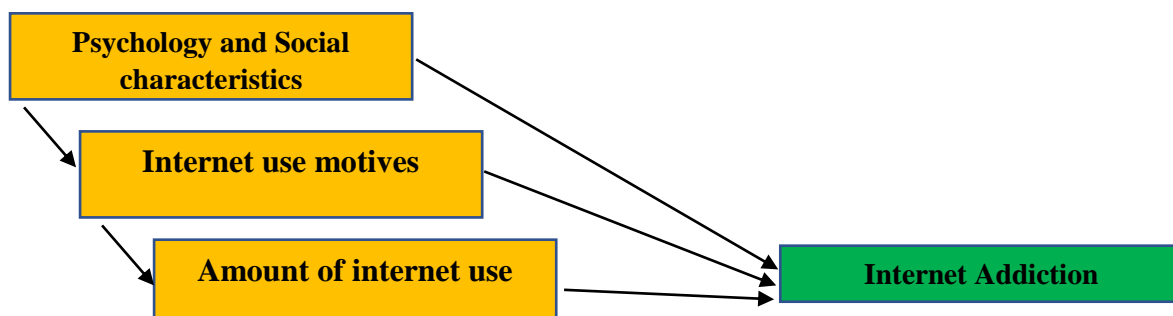
Figure 3: Uses and Gratification Model for Internet Addiction

Discussion of Pass Similar Findings

Internet addiction

Internet addiction is distinguished by uncontrollable and detrimental use of the Internet, including repetitive internet problems, negative emotions while offline, increased tolerance of the consequences of being offline and avoidance of inappropriate behavior, leading to damage or depression in interpersonal relationships, education or job, and wellbeing (Czincz & Hechanova, 2009; Young, 1998a, 2009).

Experts generally agree that if the individual shows a condition of internet addiction such as (a) Excessive use of the Internet (non-control of the amount of time online); (b) Symptoms of withdrawal (negative thoughts and internet restrictions); (c) Tolerance (increasing hours of use on the Internet and

the need for new computer / technological advances hardware or software); (d) Concealment (attempts to justify the applicability of participation); and last one (e) Adverse effects (negative results including social, political, physiological, education or internet-related problems) (Griffiths, 2000; Widyanto & McMurran, 2004; Young, 1998a).

In the context of this study thread, Kubey et al. (2001) proposed that the Internet's "pathological users" were engaging in a much more unhealthy mode of use than pure dependency or reliance. Although many users of the internet may spend a lot of time online, heavy use or dependence does not accurately reflect what may be one of the Internet addiction's most essential elements: lack of control. For example, it has been proposed that those who suffer from internet addiction are forced to spend considerable time experimenting with different internet practices because these behaviors lead them to ignore families, jobs, or education commitments. Such intemperate issues indicate a user's loss of control over Internet use, increased interaction with the Internet and an inability to curb this involvement, given the adverse effects of such use (Shaffer, 2004). The DSM IV definition for defining abuse in different contexts represents such a loss of control.

Unfortunately, although the DSM-IV guidelines for the treatment of pathological gambling and drug abuse included criteria for the definition of Internet addiction, most works were not scientifically focused. So we don't have an excellent overall theoretical description of the connections between factors that can anticipate addiction to the internet. As Kubey et al. (2001) suggested, there is at least a need for theoretical theories as to why the Internet may hang on to some people. In the present study, we use a public-centred perspective to media impact, uses and gratification (U&G) theory to study Internet addiction. In particular, U&G reflects on how different media user context attributes, media motivations and media usage patterns work together to affect results. Therefore it generates a framework for understanding with which we can consider the relative contribution to Internet addiction of social and psychological background factors that have predicted addiction in other contexts (e.g. substance addiction), and media-use motive variables linked to addiction to other media (e.g., television).

Neuropsychological Functions in Subjects with Internet Addiction

Neuropsychologically oriented studies, cognitive processes, decision-making and treatment mechanisms have been thoroughly studied using conventional neuropsychological methods, e.g. gambling exercises. Such strategies have already been passed on to behavioural addictions such as pathological gambling (Conversano, 2012) and compulsive spending (Black, 2012).
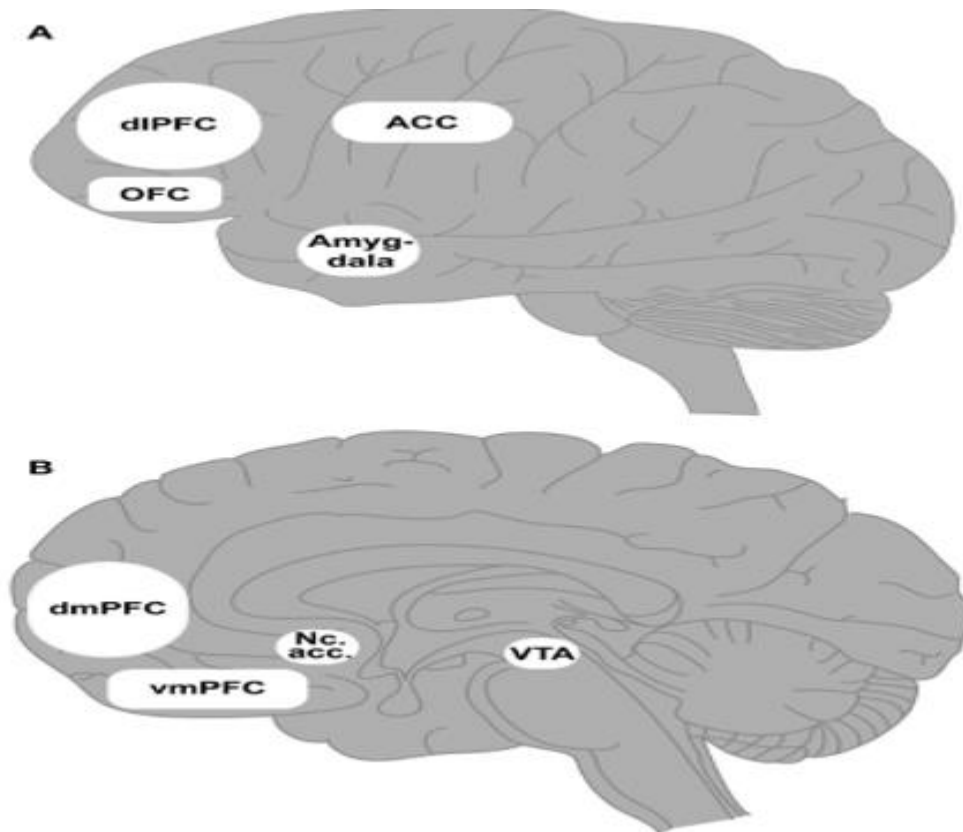
Figure 4: The prefrontal cortex areas and related brain structures are the most likely involved in the development and sustaining the Internet's addictive use

Structure A displays lateral vision of the brain, comprising dorsal sections such as anterior cingulate gyrus and amygdala, and structure B reveals the prefrontal cortex 's medium-sagittal perception. Such cortical and subcortical brain regions are the principal causes of drug abuse and other behavioral additions. The prefrontal, dorsolateral cortex (dlPFC) plays an important role in explicit limitations of executive functions, emotional coordination and decision-making. It is connected to several basal ganglia, especially to the nucleus caudatus and putamen, via the so-called frontal-striatal

loops. Critical in ambiguity are the orbitofrontal cortex (OFC) and the prefrontal ventromedial cortex (vmPFC). Such structures are connected to limbic structures (amygdala) and ventral striatum (nucleus accumbens, Nc. acc.) Via the limbic component of frontal — striatal circuits, the nucleus accumbens receives direct dopaminergic and indirect inputs (via glutamate and GABA) from the ventral tegmental region of the midbrain (VTA). The nucleus accumbens will send both the prefrontal dorsomedial cortex (dmPFC) and anterior cingulate cortex (ACC) a dopaminergic projection, and both sections are most likely involved in the so-called desired craving portion. Often addressed was the anterior cingulate gyrus as the key to conflict resolution (Brand, Young, & Laier, 2014).

Impact of Internet Addiction on Mental Health

There have been many psychological conditions associated with IA. It has been stated to have a low self-esteem association (Naseri, Mohamadi, Sayehmiri, Azizpoor, 2015). Neuroimaging findings have shown that IA is associated with systemic and functional changes in brain regions affecting executive performance, decision-making, social processing, and cognitive regulation (Lin, Yan, Yasong, Lindi, 2012). It has also been shown in the internet-addicted brain that the cohesion of white matter is compromised, and therefore, the typical communication and integration between the two hemispheres and the interactions of different brain lobes are also disrupted (Weng, Qian, Xian-Ming, Bin, 2013). In the hippocampus/amygdala, people with IA display a larger volume than healthy controls (Yoon, 2017).
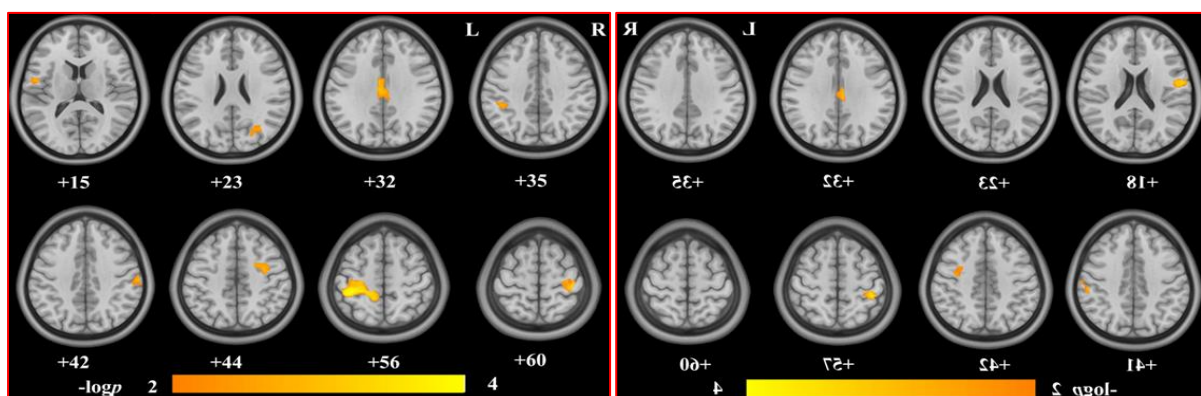
Figure 4: Before and After controlling the total time of playing the online game

Based on the figure above, the brain regions, teenagers with lower GMV linked to the mechanism of sensorimotor and cognitive function had a higher tendency towards Internet Gaming Disorder (IGD). This picture where obtains by using the MRI machine. Magnetic resonance imaging (MRI) is a procedure involving powerful magnets, radio waves, and a device to produce detailed images inside the body. The GMVs of the bilateral post CG, the left pre CG, the left pMCC, and the right MFG were still negatively correlated with the Internet Gaming Disorder (IGD) pattern despite accounting for the impact of the total time of playing an online game. In the brain regions, teenagers with lower GMV linked to the mechanism of sensorimotor and cognitive function had a higher tendency towards Internet Gaming Disorder (IGD).

Self-Esteem

Self-esteem is an individual 's total self-esteem or self-esteem, used to measure features and abilities. Even self-esteem can be positive or negative. People who have a low self-esteem often have problems with life. Usually we take a pessimistic view of life, becoming more depressed, nervous, unfriendly, violent or afraid of being directed by others, alone and frightened. (Chabot, 2000; Myers,, 2000). At the other hand, people with a strong self-esteem tend to have a good outlook towards themselves and others, and are usually more contented, active, persuasive, friendly, popular, assertive in their relationships, more confident and proactive in their thoughts and actions, more happy, more well-adapted in society and of a higher standard of life. (Reeve, 2010; Myers, 2010).

A personal belief of the self (i.e. the fundamental being of of a person) may conflict with their self-esteem. Individuals also idealize themselves, generating an image of a positive person that they like to build. The person feels proud of himself when the ideal self is close to his real self, and he will probably have a high self-esteem. He feels guilty and helpless if his authentic self is far from the ideal, and it can damage his self-esteem (Chabot, 2000) negatively. Culture is also a key variable in self-esteem growth. They rely on whether a person comes from an individualistic culture or a collectivistic culture, and they vary in their self-concept and self-esteem. Throughout collectivist cultures, self-esteem is closely related to "what others say of my community and me." Self-esteem is more intimate

and less related to those in individualistic cultural groups. People get more furious and gloomier when their identity is undermined than when someone is attacking their collective identity (Myers, 2010).

Self-Esteem and Internet Addiction

Researches have attempted to understand what kind of psychological character traits people have in internet addiction studies when they are involved in using the internet. Numerous psychological factors or causes have indeed been studied and established as variables related to Internet addiction, such as self-esteem, self-control, fear, depression, and so on (Bianchi & Phillips, 2005; Bozoglan, Demirer & Sahin, 2013; Leung, 2008; Park, Kang & Kim, 2014; Zhang et al., 2015).

Experts predict the correlation between internet addiction and self-esteem to follow the same path, based on the results of drug abuse that person with low self-esteem is an indication of excessive alcohol usage. (Parrott et al., 2004). Specific research does not just found a relationship between both the two causes, but also that self-esteem is a factor in Internet addiction (Aydin & Sari, 2011; Bozoglan, 2013; Kim & Davis, 2008; Leung, 2008; Sariyska, 2014; Stieger & Burger, 2010). For some explanation, many researchers proposed this hypothesis. Young (2009) suggested that low self-esteem individuals should be able to access the internet to feel a lot better about themselves because of their circumstances. The Internet offers opportunities for subjects to feel more confident and positive about themselves, made them appear to be more self-esteemed in the real world. (Yen, 2014).

Low self-esteem people will be more likely to try online reinsurance and more likely to use the Internet or mobile excessively (Bianchi and Phillips, 2005). Park et al. (2014) found that participants with low self-esteem are more likely to form virtual internet relationships to recover their diminished self-esteem in real-life relationships, while interactions with real-life issues become difficult.

In addition to investigating self-esteem and using the Internet, studies explored the use of certain social networking sites by adolescents and their association with their self-esteem. These studies show that young people with low self-esteem tend to spend extra time on social media websites than people with greater self-esteem (Ellison, Steinfield & Lampe, 2007; Steinfield, Ellison & Lampe, 2007).

These studies have shown that personality characteristics, self-esteem and other psychiatric disorders are associated with Internet addiction (Griffiths, 2000; 2008).

Discussion of Issues Related to the Study

Gender differences

Previous research has measured which group, man or woman, is at the most significant risk of developing internet addiction, but definitive results are still missing. Several reports have indicated that man is the highest risk category (Pontes & Patrão, 2014), others have found that women are more addicted to the Internet (Leung, 2008), while others have not shown significant findings (Chang & Law, 2008). A reason for this disparity is that there is increasingly greater access to the internet for men and women worldwide. Based on the results of a nationally representative survey study in China, the percentage of males with Internet addiction was substantially higher than females: 14.8% among males and 7.0% among females (Li, 2014). Besides, gender-based correlations have been shown to differ between Internet addiction and related factors.

Some studies have shown that the adverse effects of internet addiction are more severe for women than for men (Ko, 2014). Li, Zhang, Li, Zhen, and Wang (2010) reported that males scored lower than females in protective factors of problem Internet usage, but higher in risk factors. These results indicate that males and females can vary in the relationship between Internet addiction and related factors. Chiu and Hong (2013) examined that internet users are mainly shy teenage boys, but there is also an increasing number of addicted adolescent girls on the internet.

Past studies, showing that females have a weaker sense of self-esteem than males on average. The results of the current research indicate that gender influences the growth, presentation and display of self-esteem and that there are significant disparities between the sexes in the self-esteem of women Hossaini, & S. M. (2002). Schieman (2002) the majority of study do not find differences in self-esteem scores of men and women.

CHAPTER THREE

METHODOLOGY

Research Design

The purpose of this research is to investigate the relationship between internet addiction and self-esteem among undergraduate student at the University of Malaysia Sarawak (UNIMAS). The research type is a quantitative method. The research population is the University of Malaysia Sarawak (UNIMAS) undergraduates. Krejcie and Morgan sampling are used for this study and from the whole sets of sampling, 370 students responded to the questionnaire that has been formulated. This design was suitable for this investigation because it is a type of survey designed to use a structured questionnaire to view the respondents who are students. It was to determine the relationship between internet addiction and self-esteem among University Malaysia Sarawak (UNIMAS. The questionnaire is distributed to research respondents via Google form. The data is collected in Google spreadsheets and is then exported to SPSS.

Research Variables

The independent variable of this study is the Internet addiction by using the Internet Addiction level Test (IAT) (Young, 1998) as an instrument to analyse the internet addiction level among undergraduate students in UNIMAS. Another independent variable applies the demographic data which is "gender." The dependent variable for this study is self-esteem by using the Rosenberg Self-Esteem Scale (Rosenberg, 1989) for evaluating individual self-esteem.

Population, Sample and Sample Size

In this study, the target population is the undergraduate student in University of Malaysia Sarawak (UNIMAS). This research used a random sampling technique among 370 students of University Malaysia Sarawak (UNIMAS) from 11 difference Faculty selected randomly for this study.

Research Instrument

A bilingual questionnaire is an instrument used by this study to collect data from the respondents. The bilingual survey is a design based on the study's specific goals and independent variables. To order to avoid error or bias, the respondents ' name was omitted. The questionnaire is divided into three sections, which are Section A: Demographic Factor, Section B: Internet Addiction Test, and Section C: Rosenberg Self-Esteem Scale.

Section A: Demographic Factor

This section of the bilingual questionnaire consists of the demographic factor of the respondents. It is about the background information of the respondents, such as gender, race, faculty, CGPA and duration using the internet per day.

Section B: Internet Addiction Test (IAT) (Young, 1998b).

For section B The Internet Addiction Test (IAT) is the first accurate and effective online addiction assessment. In 1998 Kimberley Young invented this 20-item questionnaire. This tracks three-tiered internet addiction; mild , moderate, and extreme. Each response is graded from 1 to 5 on a Likert scale. So score 1= rarely, 2= occasionally, 3= frequently, 4= frequently, and 5= often.The total score between 20 and 49 represents a mild addiction, 50-79 represents moderate addiction, and 80-100 represents severe addiction. The instrument has exhibited good psychometric properties in previous researches. The reliability for this questionnaire is 0.899 in Cronbach's Alpha (Sally, 2006).

The response modes for sections B: 1= rarely, 2= occasionally, 3= frequently, 4= often, and 5= always.

1	2	3	4	5
Rarely	Occasionally	Neutral	Disagree	Strongly disagree

Section C: Rosenberg Self-Esteem Scale (Rosenberg, 1989)

For section C The Rosenberg Self-Esteem Scale, a widely used self-report instrument for evaluating individual self-esteem, was investigated using item response theory. Factor analysis identified a single common factor, contrary to some previous studies that extracted separate Self-Confidence and Self-Depreciation factors. A unidimensional model for graded item responses was fit to the data. A model that constrained the ten items to equal discrimination was contrasted with a model allowing the biases to be estimated freely. The test of significance indicated that the unconstrained model better fits the data. That is, the ten items of the Rosenberg Self-Esteem Scale are not equally discriminating and are differentially related to self-esteem. The pattern of functioning of the questions was examined concerning their content, and observations are offered with implications for validating and developing future personality instruments.

The response modes for sections C; Strongly agree (SA), Agree (A), Neutral (N), Disagree (D), and Strongly disagree (SD).

1	2	3	4	5
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

Ethics of Study

The ethics of the study is given to ensure that the respondents agree that their data will be secure and gathered for the analysis only when they answer the questionnaire. The knowledge of the respondents is private and confidential; hence, therefore, it does not include the name of the respondents. Only the analyst and their superiors will have access to the information and will be discarded once the analysis is finished.

Data Collection Procedure
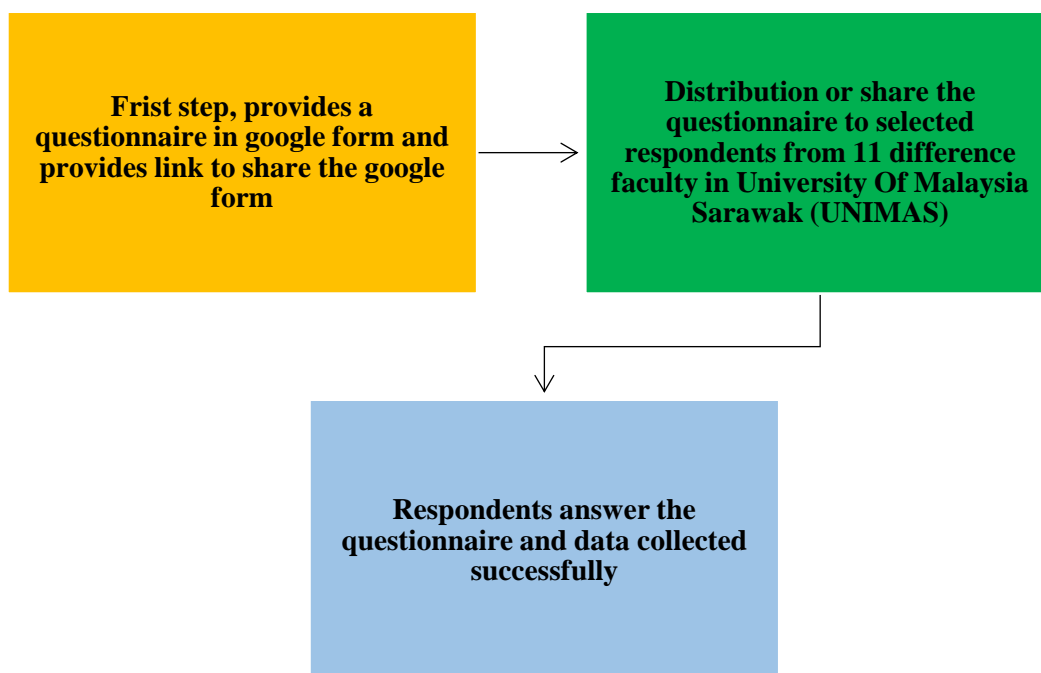
Figure 6 : Procedure for Collecting Data

Figure 4 represents the process of data collection procedure of the information of students on internet addiction level and for evaluating individual self-esteem. Simple random sampling was finally used and sampled the questionnaires among the respondents. Data was collected from eleven faculties available in University Malaysia Sarawak (UNIMAS), FCSHD, FEB, FCSIT, CLS, FRST, FMHS, FK, FACA, FSSH, FBE and Foundation. They were required to fill in the demographic data in section A and answer two parts of questionnaires, namely section B and section C which is internet addiction level and self-esteem. An online survey via Google Forms was conducted to collect data from the

sample. The link will be shared on WhatsApp to reach friends in other faculty who are UNIMAS students. This facilitated the completion of questionnaires as they could answer them regardless of location and time.

Validity and Reliability

The researcher is the importance of the external validity in order to ensure the instrument used in this study is measuring the variables tested. Besides, the scales that have been used in this study are used by many researchers to write established research papers. Thus, in order to improvise the external validity of the current study, this study is replicated from the other past studies but with different setting of study. To ensure the reliability of the instrument used, Cronbach's Alpha test is conducted. Cronbach's Alpha is conducted to test the internal consistency of the study include the number of test items, item interrelatedness and dimensionality affect the value of alpha (Cortina, 1993). This approach assumes that each item in the instrument as an equivalent test and the correlation between items measured arc equal. If the alpha value is high, it can be concluded that the instrument used has high reliability. Table above shows the Cronbach' Alpha value of the instrument to measure the internet addiction test and Self-esteem scale. The acceptable values of alpha, ranging from 0.70 to 0.95 (Tavakol & Dennick, 2011).

Pilot Study

Pilot study is conducted to test the understanding of the respondents toward the items asked in the questionnaire and to ensure the validity and reliability of the instrument since the original instrument is translated into Malay. With the help from Malay language experts to certain every item is understandable to the respondents once they are translated to Malay. The respondents for pilot study are 30 students from different faculty in University Malaysia Sarawak UNIMAS. Data collected from the pilot study is analysed by using SPSS software to test the internal consistency by using Cronbach's Alpha value.

Finding of Pilot Study

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.941	.938	20

Table 2: Cronbach's Alpha for Internet Addiction Test

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.800	.799	10

Table 3: Cronbach's Alpha Rosenberg Self Esteem Scale

Variable	No of Item	Total Sample	Cronbach's Alpha	Internal Consistency
Internet Addiction Test	20	30	0.941	Good
Self-Esteem Scale	10	30	0.800	Good

Table 2 : Cronbach Alpha result

Data Screening

Missing Value

Statistics			
		Internet Addiction Test mean	Self-Esteem Scale mean
N	Valid	102	102
	Missing	0	0

Table 3 : missing value result

Outlier

Internet Addiction Test mean

Self- Esteem Scale mean
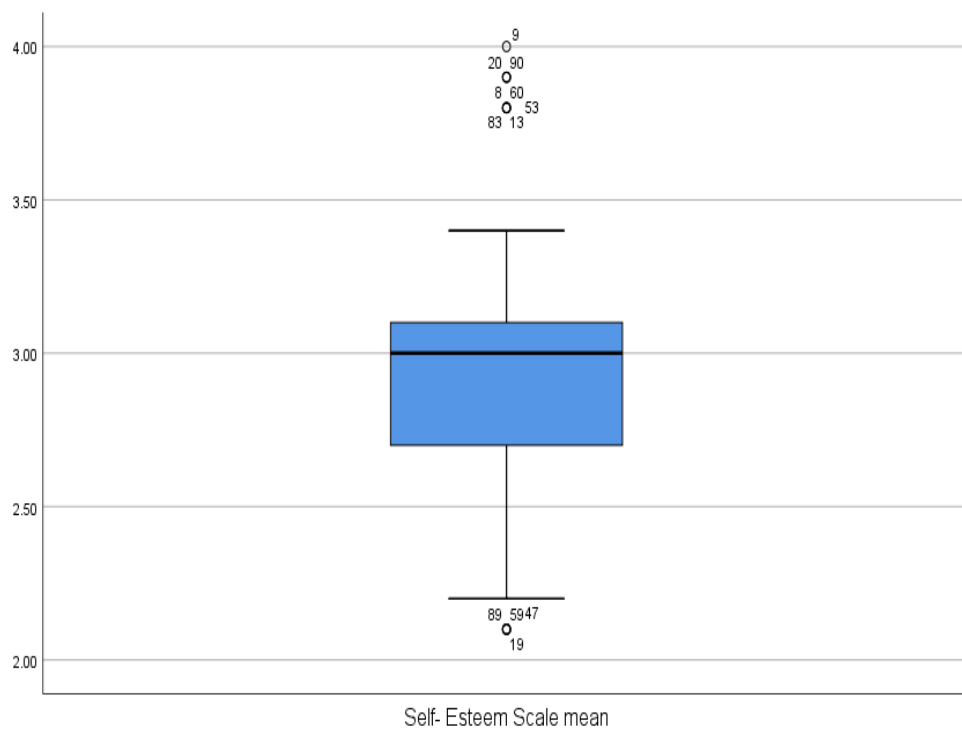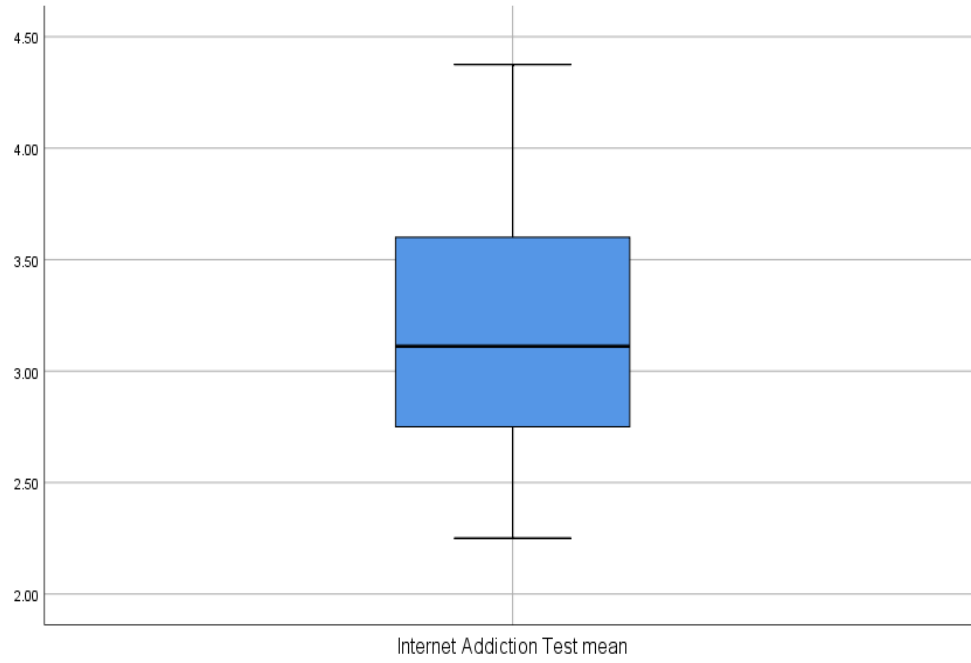
Normality Test

Variable	Skewness	Kurtosis	Conclusion
Internet Addiction Test	0.273	-0.850	Normally Distribute
Self-Esteem Scale	0.328	0.617	Normally Distribute
Internet Addiction (Male)	0.762	0.089	Normally Distribute
Internet Addiction (Female)	0.030	-0.947	Normally Distribute
Self-Esteem Scale (Male)	0.667	0.835	Normally Distribute
Self-Esteem Scale (Female)	0.093	0.295	Normally Distribute

Table 4 : Cronbach Alpha result

Data Analysis

Analysis of the data collected was done using frequency count and the mean average values. Statistical Package for the Social Sciences (SPSS) version 20.0 for Windows used to analyse and tabulate the data. The Statistical Packages for Social Sciences (SPSS) was used to analyse the data into frequency, percentage, mean and standard deviation since it saves more time and the calculation is more precise. Other than that, if there is less than 0.05 ($p<0.05$) in the significant relationship between two variables with ' p ' significance, the research hypothesis is accepted.

No	Research Hypothesis	Test
H1	There is a significant difference between self-esteem based on gender among UNIMAS student	Independent T-Test
H2	There is a significant difference between internet addiction based on gender among UNIMAS student	Independent T-Test
H3	There is a significant relationship between self-esteem and internet addiction among UNIMAS students.	Pearson Correlation
H4	At least one of the components of internet addiction have significant influence toward self-esteem	Multiple Linear Regression

Table 5: Data Analysis

Timeline

Month / Task	Sept 2019	Oct 2019	Nov 2019	Dec 2019	Jan 2020	Feb 2020	Mar 2020	Apr 2020	May 2020
Topic Discussion	███								
Chapter One		███							
Chapter Two			███						
Chapter Three			███						
Final Submission for FYP1				███					
Data Collection					███	███			
Chapter Four							███	███	
Chapter Five								███	███
Final Submission for FYP1 and FYP2									███

Table 6 : Project Timeline

RESULTS

Descriptive Statistics Analysis

Descriptive analysis explains the findings of the study from the data analysis to determine the frequencies and percentages of some characteristics of respondents which are taken to be part of the study such as gender, race, faculty, CGPA, year of study, duration online per day, as well as the Internet Addiction Test and Self-Esteem Scale of University Malaysia Sarawak UNIMAS.

Socio-Demographic

This section on is discussing about socio-demographic characteristics of the respondents which includes Gender; Race; Faculty; CGPA; Year of Study and Duration Online per day of University Malaysia Sarawak UNIMAS.

Demographic Respondent

Characteristics	Frequencies	Percentage (%)
Gender	Male = (38)	37.3%
	Female = (64)	62.7 %
Race	Malay = (30)	29.4%
	Iban = (35)	34.3%
	Chinese = (15)	14.7%
	Indian = (4)	3.9%
	Other = (18)	17.6%
Faculty	Faculty of Cognitive Sciences & Human Development = (30)	29.4%

	Faculty of Engineering = (16)	15.7%
	Faculty of Computer Sciences & Information Technology = (4)	3.9%
	Faculty of Language & Communication = (3)	2.9%
	Faculty of Resource Sciences & Technology = (15)	14.7%
	Faculty of Medical & Health Sciences = (2)	2.0%
	Faculty of Economics & Business = (3)	2.9%
	Faculty of Applied & Creative Arts = (9)	8.8%
	Faculty of Social Sciences & Humanities = (16)	15.7%
	Faculty of Built Environment = (3)	2.9%
	Foundation = (1)	1.0%
CGPA	Above 2.0 = (1)	1.0%
	2.01-2.50 = (6)	5.9%
	2.51-3.00 = (35)	34.3%
	3.01-3.50 = (41)	40.2%
	3.51-4.00 = (19)	18.6%
Year of Study	Year 1 = (10)	9.8%
	Year 2 = (38)	37.3%
	Year 3 = (49)	48.0%
	Year 4 = (4)	3.9%
	Year 5 = (1)	1.0%

Table 7: Demographic Respondent

Based on table above, number of female students participate is higher than male student. In term of participant race, Malay and Iban (29.4% & 34.3%) record a higher frequency compare with another race. This is because, in UNIMAS there is a lot bumiputra students compare to non-bumiputera. Faculty of Cognitive Sciences & Human Development (29.4%) record a higher participant involved in this study because, the questionnaire spread faster. Faculty of Foundation record the lowest participant involved with only 1.0%. In term of year of study, most of participant is year 3 students and some of it is year 5 students.

Duration online per day

Figure 7 shows the distribution of respondents based on duration online per day. It demonstrates that respondents who online for 6 hours (n=18; 17.6%) and 8 hours (n=18; 17.6%) are the highest among the respondents. Respondents who online for 5 hours (n=15; 14.71%) are second highest, (n=11; 10.78%) respondent online for 4 hours per day, (n=10; 9.80%) online for 12 hours per day, (n=9; 8.82%) online for 10 hours, (n=7; 6.86%) online for 7 hours, (n=3; 2.94%) online for 2 hours, (n=2; 1.96%) online for 15 and 16 hours and (n=1; 0.98%) are online for 1 hours, 3 hours, 9 hours, 11 hours, 18 hours, 20 hours and 24 hours per day.
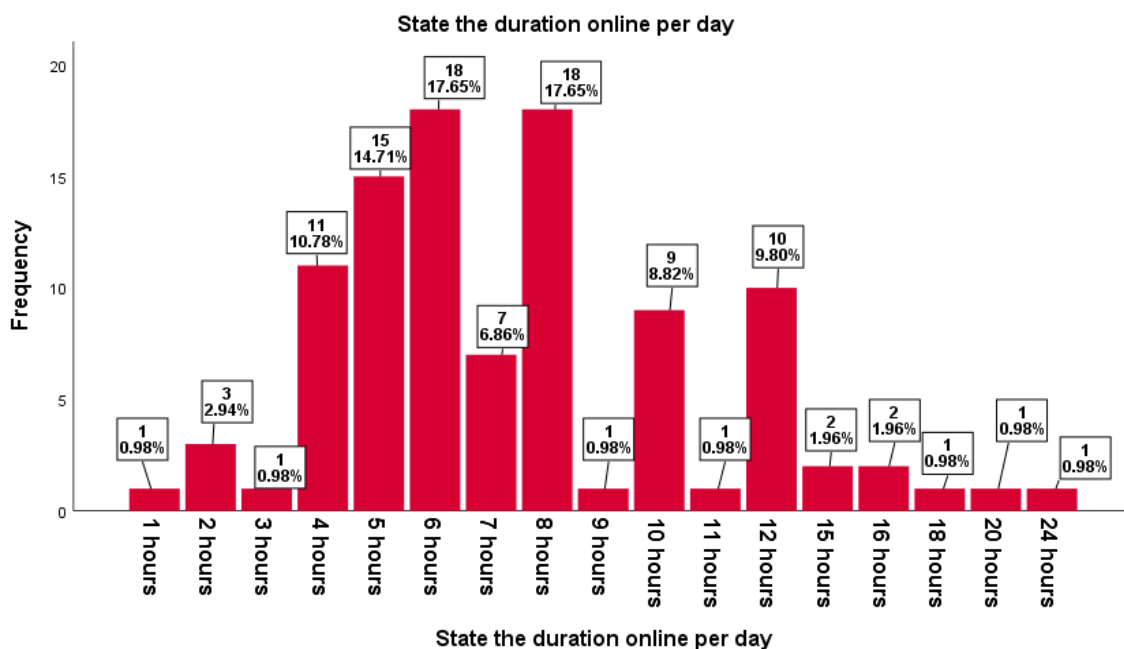
Figure 7 : Histogram of Duration Online per day

Inferential Statistics Analysis

Inferential statistics analysis has been conducted to test the hypotheses to determine the significant difference in students Internet Addiction Level and Self-Esteem Scale. Independent sample t-test, Pearson's Correlation and Multiple Linear Regression are used in most of the inferential statistics analysis.

Internet Addiction Based on Gender

To test the alternative hypothesis (H1): There is a significant difference in internet addiction between female and male students, Independent Sample t-test is used.

Table 8 and Table 9 show the overall mean and standard deviation of internet addiction in male and female and the result of Independent- sample t-test analysis respectively. The mean for female (M=3.2796, SD=0.54164) and male (M= 3.0277, SD=0.52771); $t(79.497) = -2.309$. Since the p value = 0.024 is equal to $\alpha= 0.05$, it can be concluded that the research hypothesis is accepted. Hence, these results suggest that gender different influence internet addiction level of student in UNIMAS. Based on mean value, female student is more addicted to internet compare with male student. Specifically, there is a significant difference in in internet addiction between female and male students.

The finding of this study is consistent with most of the past studies that have assessed which category, man or woman, is at the most significant risk of developing internet addiction, but there are still no conclusive results. Some studies suggest that men are the highest risk group (Pontes & Patrão, 2014), while others suggest that women are more addicted to the Internet (Leung, 2008), while women are more addicted to the Internet.

Table 8 : Overall Mean and Standard Deviation of Internet Addiction Test and male in UNIMAS

Group Statistics				
	Gender / Jantina	N	Mean	Std. Deviation
Internet Addiction Test	Male	38	3.0277	.52771
	Female	64	3.2796	.54164

Table 9 : Result of independent-Sample I-Test in Internet Addiction Test on Gender

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Internet Addiction Test	Equal variances assumed	.443	.507	-2.293	100	.024	-.25197	.10988	-.46996	-.03398
	Equal variances not assumed			-2.309	79.497	.024	-.25197	.10914	-.46919	-.03475

Self-Esteem Based on Gender

To test the alternative hypothesis (H2): There is a significant difference between self-esteem in female and male, Independent Sample t-test is used.

Table 10 and Table 11 show the overall mean and standard deviation of self-esteem in male and female and the result of Independent- sample t-test analysis respectively. The mean for female (M=2.8844, SD=0. 39530) and male (M= 3.0316, SD= 0. 41532); t(100) = 1.784. Since the p value = 0.77 is more than α= 0.05, it can be concluded that the research hypothesis is rejected. Hence, these results suggest that gender different do not has an effect on self-esteem among student in UNIMAS. Specifically, there is no significant difference in in internet addiction between female and male students.

This finding does not consistent with previous research such as findings of Hossaini, (2002), Marcotte et al. (2002) and SarAbadaniTafreshi (2006), which suggested that females, on average, have a lower sense of self-esteem than males. The findings of the current research suggest that gender has an impact upon the development, expression and demonstration of self-esteem and there are considerable gender differences in self-esteem of university students.

Table 10 : Overall Mean and Standard Deviation of Self-Esteem and male in UNIMAS

	Group Statistics			
	Gender / Jantina	N	Mean	Std. Deviation
Self-Esteem Scale	Male	38	3.0316	.41532
	Female	64	2.8844	.39530

Table 11 : Result of independent-Sample I-Test in Self-Esteem on Gender

		Independent Samples Test								
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Self-Esteem Scale	Equal variances assumed	.111	.739	1.784	100	.077	.14720	.08250	-.01646	.31087
	Equal variances not assumed			1.762	74.799	.082	.14720	.08355	-.01925	.31365

Relationship of Self-Esteem and Internet Addiction

To test the alternative hypothesis (H3): There is a significant relationship between self-esteem and internet addiction, Pearson Correlation test is used.

Table 12 and Table 13 show the overall mean and standard deviation of self-esteem and internet addiction and the result of Pearson Correlation test analysis respectively. The mean for self-esteem scale (M=2.9392, SD=0. 40715) and internet addiction test (M= 3.1858, SD=0.54772). The result shows a positive correlation between self-esteem and internet addiction test among students in UNIMAS. It is also showing a weak relationship because the coefficient r (-0.039) is low. It falls between ranges 0 to

-0.5. P value obtained in the table also exceed α (p=0.05) which is p=0.69. This show there is no significant relationship between e self-esteem and internet addiction test among students in UNIMAS. Therefore, research hypothesis H3 is rejected.

In this study, it shows a contradiction with some study that conducted between self-esteem and internet addiction. A studies has been examined the association between self-esteem and internet use (Armstrong, Phillips & Salling, 2000; Griffiths & Banyard, 2005; Kim & Davis, 2009) conclude that a negative relationship exists between these two variables where value of 'r' was -.499; and the p value is 0.01 level of significance. This occured because of different culture played by the respondent.

Table 12 : Overall Mean and Standard Deviation of self-esteem and internet addiction in UNIMAS

Descriptive Statistics			
	Mean	Std. Deviation	N
Self-Esteem Scale	2.9392	.40715	102
Internet Addiction Test	3.1858	.54772	102

Table 13 : Result of Pearson Correlation of self-esteem and internet addiction

Correlations		Self-Esteem Scale	Internet Addiction Test
Self-Esteem Scale	Pearson Correlation	1	-.039
	Sig. (2-tailed)		.696
	N	102	102
Internet Addiction Test	Pearson Correlation	-.039	1
	Sig. (2-tailed)	.696	
	N	102	102

Relationship of Self-Esteem and Internet Addiction Component

To test the alternative hypothesis (H4): At least one of the components of internet addiction have significant influence toward self-esteem, Multiple Linear Regression is used.

The multiple regression model with all three predictors produced $R^2 = 0.011$, $F (3) = 98$, $p = 0.7 > 0.5$. As can be seen form the table below, the Excessive Use and Social Personal Consequences predictors had significant positive regression weights, where Excessive Use value of $\beta = (.053)$ and Social and Personal Consequences value of $\beta = (.086)$. Withdrawal Concealment had significant negative regression weights, where value of $\beta = (-0.157)$. Since all p value of internet addiction component is more than 0.05, all three components of internet addiction test did not contribute to the multiple regression model. Therefore, the research hypothesis is rejected.

This result shows a contradiction with some study where one of the three factor which is withdrawal & concealment has a significant influence toward self-esteem. A reduction of 0.36 in the self-esteem score was observed for each one-point increase in the score of withdrawal & concealment. Therefore, the results revealed that people with high levels of withdrawal & concealment have lower levels of self-esteem. The result in such away, because student life style is not practically the same.

Table 14 : Result of Model Summary of self-esteem and internet addiction

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.104[a]	.011	-.019	.41108

a. Predictors: (Constant), Social and Personal Consequences, Excessive Use, Withdrawal and Concealment

Table 15 : Result of ANOVA of self-esteem and internet addiction

ANOVAª

	Model	Sum of Squares	df	Mean Square	F	Sig.
	Regression	.182	3	.061	.360	.782ᵇ
1	Residual	16.561	98	.169		
	Total	16.743	101			

a. Dependent Variable: Self-Esteem Scale

b. Predictors: (Constant), Social and Personal Consequences, Excessive Use, Withdrawal and Concealment

Table 16 : Result of Multiple Linear Regression of self-esteem and internet addiction

Coefficientsª

	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
	(Constant)	2.995	.244		12.265	.000
	Excessive Use	.034	.084	.053	.405	.686
1	Withdrawal and Concealment	-.106	.103	-.157	-1.032	.305
	Social and Personal Consequences	.052	.081	.086	.636	.526

a. Dependent Variable: Self-Esteem Scale

CHAPTER FIVE

DISCUSSION

5.0 Findings Summary

Objectives	Hypothesis	Data Analysis	Findings	Analysis Method
To identify the differences in internet addiction and based on gender among UNIMAS students	H1- There is a significant difference between self-esteem based on gender among UNIMAS student	Independent T-Test	Research Hypothesis is accepted	Independent Sample T-Test
To identify the differences in self-esteem and based on gender among UNIMAS students	H2- There is a significant difference between internet addiction based on gender among UNIMAS student	Independent T-Test	Research Hypothesis is rejected	Independent Sample T-Test
To investigate the relationship between self-esteem and internet addiction among UNIMAS students	H3- There is a significant relationship between self-esteem and internet addiction among UNIMAS students.	Pearson Correlation	Research Hypothesis is rejected	Pearson Correlation
To identify the significant component in internet addiction and self-esteem among UNIMAS students	H4- At least one of the components of internet addiction have significant influence toward self-esteem	Multiple Linear Regression	Research Hypothesis is rejected	Multiple Linear Regression

Table 17 Research Results

Internet Addiction based on gender

H1 There is a significant differences between internet addiction based on gender.

Based on the gender of University Malaysia Sarawak UNIMAS p value = 0.05, the outcome of this study showed that there is a significant difference in internet addiction. Hence the hypothesis for the study is accepted. Sex variable research showed that women had higher rates of addiction to the Internet than men. This research thus aims to add to the debate about which gender is at stake.

In this study, it shows that the mean of internet addiction in female is higher (M = 3.1593, SO=0.61347) than male (M= 2.9002, SO= 0.73423). Several studies have shown that internet addiction's negative effects are more severe for women than for men (Ko, 2014). Li, Zhang, Li, Zhen, and Wang (2010) reported that males scored lower than females in Internet issue use protective factors but higher in risk factors than females. These findings suggest that the relationship between Internet addiction and related facts will differ between males and females.

The reasons behind these findings nonetheless warrant further investigation. Internet hobbies not only include playing online games, but also looking for homework knowledge and other knowledge in mere moments on almost everything. In addition to internet activities , students also engage in other events, such as recreation, family gatherings, social activities, school activities, outdoor activities

Self-Esteem based on gender

H2 There is a significant differences between self-esteem based on gender.

The result of this study showed that, there is no significant different in self-esteem based on gender of University Malaysia Sarawak UNIMAS where p value = 0.75. Therefore, the reseacrh hypothesis is rejected. However, mean differences suggested that male student reported higher self-esteem than female students. The result show a mean for female (M=2.9297, SD=0. 35036) and male (M= 2.9526, SD= 0.38466).

Self-esteem is a major part of the self-understanding of teenagers and is likely to be a fluctuating and complex system, vulnerable to internal and external adolescent pressures. For the best of our

understanding, mixed vs is not given comparable reports from the same system. Uni-gender classes (only youth, girls and mixed groupings). Future research is suggested to focus on understanding how the outcomes of programs impact gender differences and how we should challenge those differences.

Self-esteem and Internet addiction

H3 There is a significant relationship between self-esteem and Internet addiction.

The result of this study showed that, there is no significant relationship between internet addiction and self-esteem among student in University Malaysia Sarawak UNIMAS where p value = 0.64. The result otherwise show a posistive relationship between internet addiction and self-esteem where correlation r = 0.04 but it show weak relationship.

Self-esteem is considered as an important determinant of individuals' behaviors and activities. Internet addiction is one of them and with a sense of diminishing self-control, it may cause a further reduction in self-esteem. The results from various experiments are very similar and minor variations can be due to sample size and equipment variations.

The present research investigated the prevalence of internet addiction in students and their interaction with depression and self-esteem. Evaluation of self-esteem and depression in persons with Internet addiction may be significant. Both factors will be geared for successful cognitive behavioral treatment of Internet dependent individuals.

Internet addiction factor and self-esteem

H4 At least one of the components of internet addiction have significant influence toward self-esteem

Analysis of the element reveals that the IAT can be defined as investigating three aspects of Internet behavior, which we call isolation & concealment, social & personal effects and overuse. The first component, withdrawal & concealment, includes two sets of objects that, when put together, provide proof of the detrimental symptoms exhibited by internet dependent individuals (e.g. negative emotions when offline and defensiveness). The second factor, social & personal consequences, includes issues arising from problematic use of the Internet (e.g. social , occupational, academic and physical

problems). Our third factor, excessive use, is composed of other symptoms caused by overuse of the internet (e.g. staying too long online).

In this research, all this three factor is testing to see which one of the factor has an influences toward self-esteem. Multiple linear regression is used and p value is consider to conclude either the factor has influence or not. As can be seen form the table 14, 15, 16 the Excessive Use and Social Personal Consequences predictors had significant positive regression weights, where Excessive Use value of $\beta = (.035)$ and Social and Personal Consequences value of $\beta = (.031)$. Withdrawal Concealment had significant negative regression weights, where value of $\beta = (-.008)$. Based on p value of the three factors, it shows no significant influence toward self-esteem, because p value is more than alpha value which is $\alpha = 0.05$.

Conclusion

Over the year, Internet used is increasing rapidly because of the technology development today. So have unwittingly, internet addiction may increase also. Hence, this study is to examine the of internet addiction for University student in Unimas. It conclude that there is a significant difference in internet addiction based on gender. The female student reported higher internet addiction compare to male student. This study report that there is no significant difference in sefl-esteem, however based on the analysis of mean, male student has higher self-esteem compare to female. Furthermore, significant positive relationship was found between internet addiction and self esteem.

It is important to mention that this study is not attempting to devalue the advantages of the Internet, but, instead, is trying to contribute to the study of Internet addiction, a progressively more accepted pathology with real symptoms and consequences. In fact, as described by Shaw and Gant (2002) and Liu et al. (2013), the Internet can improve self-esteem, if used properly.

The findings of this research would be beneficial in helping student to deal with the self esteem and internet addiction issues of the especially in higher education. It would also have implication for the timely and efficient counseling and interventions if required in colleges and universities.

Limitation of Study

This study is limited by a number of factors including the sample size, location and the data collection that required further discussion. First, this study is conducted only for student in University Malaysia Sarawak. Researcher had recruited as many student as possible to conduct the study. However researcher cannot exceed the sample target because respondent hardly to responds to the questionnaire provided. During the data collection, respondent (UNIMAS student) have to go home because of covid 19 pandemic. Therefore, the finding of this study may not represent the whole population of the student in University Malaysia Sarawak UNIMAS.

Also, in this study just focuses on Internet addiction and self esteem with gender demographic variable taken into consideration in order to determine the level of internet addiction and self-esteem. Moreover result finding only used quantitative method to analyze and it will limit the collection of information. However, there is limited information about internet addiction and self-esteem in Malaysia. The information in this study mostly from other countries cannot be generalized in Malaysia's society.

Reccomendation

For the further research, it is recommended that by study internet addiction with more detail in psychology pathology. It is because this problem seems like quite severe in now a day especially people who are internet addiction may have depression also and other psychological issues. This is also the way to let society realize the severity of social disease as well as psychology disorder. Apart from that, researcher can use a scanning machine, to monitor the region and which part in human brain has affected by internet addiction. Example, can uses MRI, fMRI and CT-Scan and etc.. This method can show more clear answer for study to identified either he/she addict toward internet on what level.

In the future studies should analyze the types of activities preformed online, due to the fact that previous investigations have shown that men and women often engage in different types of online activities.In addition, it is also recommended that more variable can be taken into consideration in order to determine the level of internet addiction. Moreover, this study is using quantitative method to find

out the result, it is recommended that using the both quantitative and qualitative method to collect data and find out the result because using qualitative way can find out the actual thinking and actual experience of sample so researcher can have In-depth investigation. Moreover, the similar and related topic of research is recommended to do more in the future as it is an important issue in the society.

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APPENDIX QUESTIONNAIRE

Section A: Demographic Factor

Please mark (/) on the space provided with the chosen answer.

Sila tandakan (/) dengan jawapan pilihan pada bahagian yang disediakan.

Gender / *Jantina* : (   ) Male / *Lelaki*

        (   ) Female / *Perempuan*

Race / *Bangsa* :(   ) Malay / *Melayu*

      (   ) Chinese / *Cina*

      (   ) Indian / *India*

      (   ) Others / *Lain-lain*

Faculty / *Fakulti* : (   ) FCSHD   (   ) FMHS

       (   ) FK   (   ) FEB

       (   ) FCSIT   (   ) FACA

       (   ) CLS   (   ) FSSH

       (   ) FRST   (   ) FBE

       (   ) Foundation

CGPA: (   ) Below 2.0

    (   ) 2.01 – 2.50

    (   ) 2.51 – 3.00

    (   ) 3.01 – 3.50

    (   ) 3.51 – 4.00

Duration online per day: (   ) Below 1 hours / *Jam*

          (   ) 2 – 4 hours / *Jam*

          (   ) 5 – 8 hours / *Jam*

          (   ) 9 – 12 hours / *Jam*

          (   ) More than 12 hours / *Lebih dari 12 Jam*

Section B: Internet Addiction Level Test (IAT) (Young, 1998).

Instruction: Internet Addiction Test (IAT) is a reliable and valid measure of addictive use of the Internet, developed by Dr Kimberly Young. It consists of 20 items that measure the mild, moderate and severe level of Internet Addiction.

Arahan: Ujian Ketagihan Internet (IAT) adalah ukuran penggunaan Internet dan ketagihan, yang dibangunkan oleh Dr Kimberly Young. Ia terdiri daripada 20 item yang mengukur kecenderungan Internet untuk menjadi ringan, sederhana dan teruk.

Circle the "0" **Does not apply** / *Bulatkan "0" jika Tidak pernah*

Circle the "1" **Rarely** / *Bulatkan "1" jika Jarang*

Circle the "2" **Occasionally** / *Bulatkan "2" jika Kadang-kadang*

Circle the "3" **Frequently** / *Bulatkan "3" jika Kerap*

Circle the "4" **Often** / *Bulatkan "4" jika Selalunya*

Circle the "5" **Always**/ *Bulatkan "5" jika Sentiasa*

	Question / *Soalan*	Scale / *Skala*					
1	How often do you find that you stay on-line longer than you intended? *Berapa kerapkah anda mendapati bahawa anda berada dalam talian lebih lama daripada yang anda inginkan?*	1	2	3	4	5	0
2	How often do you neglect household chores to spend more time on-line? *Berapa kerapkah anda mengabaikan kerja rumah untuk menghabiskan lebih banyak masa dalam talian?*	1	2	3	4	5	0
3	How often do you prefer the excitement of the Internet to intimacy with your partner? *Berapa kerapkah anda lebih suka keseronokan Internet untuk keintiman dengan pasangan anda?*	1	2	3	4	5	0
4	How often do you form new relationships with fellow on-line users? *Berapa kerapkah anda membentuk hubungan baru dengan pengguna dalam talian?*	1	2	3	4	5	0
5	How often do others in your life complain to you about the amount of time you spend online? *Berapa kerap orang lain dalam hidup anda mengadu kepada anda tentang jumlah masa yang anda belanjakan dalam talian?*	1	2	3	4	5	0
6	How often do your grades or school work suffer because of the amount of time you spend online? *Berapa kerapkah gred atau sekolah anda mengalami masalah kerana jumlah masa yang anda belanjakan dalam talian?*	1	2	3	4	5	0
7	How often do you check your email before something else that you need to do? *Berapa kerap anda menyemak e-mel anda sebelum sesuatu yang perlu anda buat?*	1	2	3	4	5	0

8	How often does your job performance or productivity suffer because of the Internet? *Berapa kerapkah prestasi atau produktiviti anda mengalami masalah kerana Internet?*	1	2	3	4	5	0
9	How often do you become defensive or secretive when anyone asks you what you do on-line? *Berapa kerapkah anda menjadi defensif atau rahsia apabila seseorang bertanya kepada anda apa yang anda lakukan dalam talian?*	1	2	3	4	5	0
10	How often do you block out disturbing thoughts about your life with soothing thoughts of the Internet? *Berapa kerapkah anda mengelakkan kebimbangan daripada membimbangkan hidup anda dengan pemikiran yang menenangkan di Internet?*	1	2	3	4	5	0
11	How often do you find yourself anticipating when you will go online again? *Berapa kerap anda mendapati diri anda menjangkakan bila anda akan dalam talian lagi?*	1	2	3	4	5	0
12	How often do you fear that life without the Internet would be boring, empty, and joyless? *Berapa kerapkah anda takut bahawa hidup tanpa Internet akan membosankan, kosong, dan tidak bergembira?*	1	2	3	4	5	0
13	How often do you snap, yell, or act annoyed if someone bothers you while you are on-line? *Berapa kerap anda terkejut, berteriak, atau marah jika seseorang mengganggu anda semasa anda berada dalam talian?*	1	2	3	4	5	0
14	How often do you lose sleep due to late-night log-ins? *Berapa kerap anda kehilangan tidur kerana log masuk lewat malam?*	1	2	3	4	5	0
15	How often do you feel preoccupied with the Internet when off-line, or fantasise about being on-line? *Berapa kerapkah anda merasa sibuk dengan Internet apabila di luar talian, atau fantasize tentang on-line?*	1	2	3	4	5	0
16	How often do you find yourself saying "just a few more minutes" when online? *Berapa kerap anda mendapati diri anda berkata "hanya beberapa minit lagi" ketika dalam talian?*	1	2	3	4	5	0
17	How often do you try to cut down the amount of time you spend on-line and fail? *Berapa kerapkah anda cuba mengurangkan jumlah masa yang anda habiskan secara on-line dan gagal?*	1	2	3	4	5	0
18	How often do you try to hide how long you've been on-line? *Berapa kerapkah anda cuba menyembunyikan berapa lama anda berada dalam talian?*	1	2	3	4	5	0
19	How often do you choose to spend more time on-line over going out with others? *Berapa kerapkah anda memilih untuk menghabiskan lebih banyak masa dalam talian untuk keluar dengan orang lain?*	1	2	3	4	5	0
20	How often do you feel depressed, moody, or nervous when you are off-line, which goes away once you are back on-line? *Berapa kerap anda berasa tertekan, murung atau gementar apabila anda berada di luar talian, yang hilang apabila anda kembali dalam talian?*	1	2	3	4	5	0

Section C: Rosenberg Self-Esteem Scale (Rosenberg, 1989)

Instruction: Please indicate to what extent you agree or disagree with each of the items below by giving the scale which corresponds to your responses. (Please circle your choice)

Arahan: Sila nyatakan sejauh mana anda bersetuju atau tidak bersetuju dengan setiap item di bawah dengan memberikan skala yang sesuai dengan tanggapan anda. (Sila lingkarkan pilihan anda)

Circle the "1" **Strongly Disagree** / *Bulatkan "1" jika Sangat tidak setuju*

Circle the "2" **Disagree** / *Bulatkan "2" jika Tidak setuju*

Circle the "3" **Agree** / *Bulatkan "3" jika Setuju*

Circle the "4" **Strongly Agree** / *Bulatkan "4" jika Sangat setuju*

	Question / *Soalan*	**Scale / *Skala***			
1	On the whole, I am satisfied with myself. *Pada keseluruhannya, saya berpuas hati dengan diri saya sendiri.*	1	2	3	4
2	At times I think I am no good at all. *Kadang-kadang saya fikir saya tidak bagus sama sekali.*	1	2	3	4
3	I feel that I have a number of good qualities. *Saya rasa saya mempunyai beberapa kualiti yang baik.*	1	2	3	4
4	I am able to do things as well as most other people. *Saya dapat melakukan perkara-perkara seperti kebanyakan orang lain.*	1	2	3	4
5	I feel I do not have much to be proud of. *Saya rasa saya tidak mempunyai banyak benda untuk dibanggakan.*	1	2	3	4
6	I certainly feel useless at times. *Saya pasti berasa tidak selesa pada masa-masa tertentu.*	1	2	3	4
7	I feel that I'm a person of worth, at least on an equal plane with others? *Saya rasa saya seorang yang berharga, sekurang-kurangnya pada kedudukan yang sama dengan orang lain?*	1	2	3	4
8	I wish I could have more respect for myself *Saya berharap saya dapat lebih menghormati diri saya sendiri*	1	2	3	4
9	All in all, I am inclined to feel that I am a failure. *Secara keseluruhan, saya cenderung merasa bahawa saya gagal.*	1	2	3	4
10	I take a positive attitude toward myself. *Saya mengambil sikap positif terhadap diri saya sendiri.*	1	2	3	4