

Internet Addiction among Secondary School Students in Pasir Mas, Kelantan, Malaysia

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Abstract— Internet usage which proliferated rapidly has made the millennials, especially students, become more addicted to it. This is a perturbative topic that needed to be tackled. Hence, a study is conducted involving secondary school students in Pasir Mas, Kelantan in order to observe the level of internet dependency among them. A total of 352 students from the age of 13 until 19 years old are selected as respondents. This study uses descriptive analysis by reporting the results of the study in the form of frequency and percentage to determine the level of internet dependency among local students. The research instrument in the form of an Internet Addiction Test questionnaire is modified by a researcher from the Internet Addiction Test (IAT) and is used to obtain an internet addiction score. The results showed that 352 students had experienced internet addiction, but at different levels. The moderate level of internet addiction is recorded at 72 percent and only 4 percent of students had experienced high internet addiction. Therefore, the problem of internet addiction cannot be remaining open and hanging because, in the long run, it is possible for students in Pasir Mas to experience a high level of addiction, thereby negatively affecting themselves. Therefore, researchers believe that it is the responsibility of all parties to ensure that the usage of the internet will not reach up to the addictive level. It should be scrutinized intricately to ensure that internet usage is more towards the positive side and not the other way around.

Keywords— Internet Addiction, Secondary School, Student, Pasir Mas, Kelantan

I. INTRODUCTION

The revolutionary impact of information and communication technology has brought great changes in the cultures and lives of all societies in the world. It has transformed and enhanced the power of computing in the presentation and dissemination of information globally [1]. One of the most popular computer customs now is the use of the Internet that is said to be the information stored in the process of communication and dissemination of information [2].

The word Internet comes from "Network Connection Network" [3], which leads to the purpose of connecting computers around the world using standard protocols. Additionally, a worldwide connectivity that is inaugurated for computers which impressively enable the transmission of information is known as Internet [1]. The Internet is also defined as an international computer network and can be accessed by anyone on the network [2].

In 1960s, the Department of Defense specifically in the US was the first to establish the Internet as sole purposes related to military [4]. Since then, continuous and advanced development of Internet technology has been made in providing exceptional levels of public access to various forms of communication, data storage, management and transfers; social websites like Facebook; text messages like Twitter, and so on [5]. Furthermore, the development of cheaper and more user-friendly mobile access tools for easier deployment of smartphones, laptops, tabs and so on have resulted in increased Internet usage [6].

In Malaysia, Internet usage began in 1984 and Dr. Mohamed Awang Lah is the first to make connections [7]. It is not astonishing that in the 21st century, Malaysians are composed of a society that lives in the globalization era of science and technology. Community's life patterns in the era of globalization are distinctly different from the previous life patterns because of its presence [8]. Among the differences is that humans rely heavily on the use of science and technology in all aspects of life. Working operations are more dependent on teamwork through networks around the world and cannot be fully mobilized over individual endeavor. Hence, the main drivers of advancement are knowledge, dissemination through information and communication technology [8].

The existences of the Internet undoubtedly provide many benefits and conveniences to its users such as efficient access to any large sum of various data available on the networks, access to foreign news and events internationally as well as free access of interface via email [9]. However, we may be oblivious that the rampant use of the Internet will cause addiction to some individuals, which is alarming, especially to school students [10]. Thus, the Internet does not only give a positive impact to an individual as it also gives negative impacts on the users when it is abused [11]. Unhealthy and heavily disproportionate, as many scholars believe, use of the Internet will potentially cause an addiction [12]. In view of this, it is not surprising that Internet dependence has attracted attention from health professionals, educators, and society since these phenomena have caused negative impacts on people such as the decline in academic performance [13]; relationship problems, interpersonal problems [14]; financial problems [15]; as well as physical and psychological health problems [13]. For instance, [16] in their finding, supported that Internet addictive individuals often experience psychiatric problems. Hence, systematic research on the occurrence and

pervasiveness of Internet addiction is needed to investigate the probability of the positive and negative impact of Internet use as well as to recognize the potential of an intercession strategy to minimize the dangers of Internet addiction.

II. LITERATURE REVIEW

2.1 The Addiction Concept

Addicere is recognizably from Latin word, which is later translated in English as "addiction"; have "bound to" or "enslaved by" meaning attached to it [17]. Initially, there is no particular orientation that can be referred to describe the concept of addiction because commonly it is used in correlation to various social behaviors, like alcohol abuse or drug addiction; to name a few. Addiction, is also defined as a process where behavior can develop pleasure and act as an escape to internal discomfort [18].

Over the years, the term 'dependence' has been redefined. Traditionally, addiction is defined as the dependency of psychoactive substances (such as heroin, tobacco and alcohol) upon both physical and psychological that eventually will affect the brain when the substances are consumed and can provisionally disturb brain chemistry [19]. Some professional psychologists have now defined dependence as an abnormal psychology since the addiction will cause an individual to depend on the things that have caused him to be addicted, for instance, the dependence on work, Internet, watching TV, shopping and many more [20].

2.2 Internet Addiction

In 1998 Young conducted the first Internet addiction study, which testified that 79.88 percent of 496 Internet users are generally categorized as Internet addicts [10], [21]. This study used the DQ Diagnostic questionnaire via email and telephone survey.

Goldberg introduced the term Internet addiction in 1996 [10]. Internet addiction is seen to be on the rise and has been classified as a form of matter that could potentially be cancer to society [22].

Internet addiction has been generally defined as the incapability to control the use of the Internet that ultimately leads to psychological impairment, family issue, and educational disruption also societal or work issues [23]. However, the term for "Internet Addiction" is inconsistent in the writing of previous studies as some researchers have called this problem an "Internet Addiction Disorder" [24]. Therefore, Internet addiction has become a widely-accepted term for behaviors that are identified as a form of Internet addiction. In addition, there are other researchers using the term Internet addiction as an Internet Addiction behavior [25]; Compulsive Internet Usage [26]; The use of Internet Pathology (PIU) [27]; or Internet dependency [28]. However, [27] and [28] managed to identify the same diagnostic criterion for Internet addiction which is the incompetence to control the use of the Internet to a point that it affects the everyday life of

an individual, such as affecting work performance, family time, problems in school, and mental health disorders. There are currently no standard diagnostic criteria for Internet addiction problems agreed in other research. Most researchers, however, recognize the existence of Internet addiction. In this respect, the researchers use a variety of conceptual models of Internet addiction. This current research, however, uses the term "Internet Addiction" to include all terms that are used in the past.

Past researchers have worked hard to construct a precise assessment tool to diagnose Internet addiction. For example, a renowned assessment tool to categorize Internet addiction was introduced by Young (1998) in the form of questionnaires of eight-item Diagnostics (DC) which are based on the criteria of pathology gambling [27]. The DQ has three sections which are equipped by the Yes / No question type; the first section is about the fun that one enjoys on the Internet, the second section depicts the extent of time spent when browsing the Internet, and the last one covers the negative effects of using the Internet. Subsequently, the modified DQ is inserted in the latest test called Internet Addiction Test (IAT) [27]. Following the instrument that was introduced by Young [10], [21], there are multiple of other assessment tools that are developed intensively. For example, Associated Addiction Behavioural Inventory (IRABI) by [29]; IA scales for Taiwanese High School Students (IAST) by [30]; and Pathology Internet Usage Scale (PIUS) by [31]. Hence, all of these instruments are established for the same purpose which is to measure the level of Internet addiction.

III. MATERIALS AND METHODS

3.1 Instrument

This study is a quantitative research using the method of the survey questionnaire. The questionnaire used is a measurement scale that aims to measure the addiction level of an Internet user. This scale questionnaire is modified by the researcher from the Internet Addiction Test (IAT) questionnaire that was developed by Young in 1998.

The Internet Addiction Scale used in this study is the Likert scale, with 15 items using four response sets indicating how often respondents are involved in the described behavior. The answer set is from Never = 1 to Very often = 4.

The Internet Scale used in this study comprises 15 items. The questions are:

1. I spent my time going online longer than I should.
2. I ignored my schoolwork to spend more time surfing on the Internet.
3. I love spending my time on the Internet rather than with my friends.
4. I have more friends on the Internet than in school / residential area.
5. I'm always looking for new friends on the Internet.

6. Many people complained because I spent too much time on the Internet.
7. My grades/schoolwork is affected as more time was spent on the Internet.
8. I don't like other people asking what I'm doing on the Internet.
9. I'm worried my life will get bored if I don't surf the Internet.
10. I became upset if other people bothered me while I was on the Internet.
11. I've got trouble sleeping because I often surfed late at night.
12. At first, I wanted to surf the internet for only a few minutes, but the consumption of time becomes longer because I was too engrossed.
13. I tried to reduce my time on the Internet but failed.
14. I often felt stressed, depressed or restless if I didn't surf the Internet.
15. I would frequently, and spend more time on the Internet when I have a problem.

Figure 1: Gender

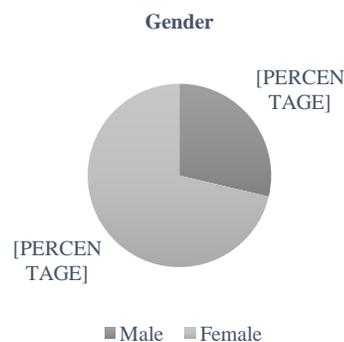
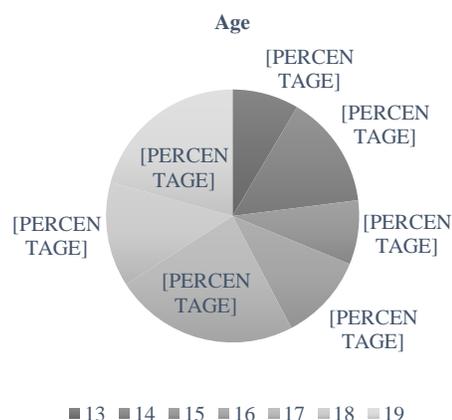


Figure 2: Age



Respondents are asked to answer these items by giving their statement on the 4-point Likert scale. The number of scores for this scale is determined by the results of the 15 questions, based on the 4-point Likert scale; answered by each respondent in order to figure the Internet-dependence stage of the respondent. The scores for the questions have four levels, which are:

- 0-15 = No Internet addiction problems.
- 16-30 = Internet addiction is low.
- 31-45 = Internet addiction is moderate.
- 46-60 = Internet addiction is high.

Based on this stage, the level of Internet addiction for each individual can be determined.

3.2 Data Analysis

Researchers use descriptive analysis to get the frequency and the percentage values to describe the overall extent of internet dependence.

IV. RESULTS

The total number of respondents for this research is 352 respondents, consisting of 29 percent of male and 71 percent of female respondents (Figure 1). The respondents are between 13 and 19 years old. Most respondents are the students of the age 17, with a percentage rate of 24 percent (Figure 2).

Internet Usage

This study found that majority of the respondents suffered from internet addiction but on a different level. The majority of respondents had low Internet addiction rate which is 72.0 percent and for high internet addiction, the percentage is at its slightest as it only rates 4 percent (Table 1). Meanwhile, the number of respondents with moderate addiction is 22.0 percent. The remaining 3.0 percent has no Internet addiction.

Table 1: The level of internet addiction among respondents

Score	Stage	(F)	(%)
0-15	Normal	9	3.0
16-30	Low	253	72.0
31-45	Moderate	77	22.0
46-60	High	13	4.0
Total		352	100.0

V. DISCUSSIONS

The Malaysian Crime Prevention Foundation (MCPF) has stated that children and adolescent are intensely absorbed in using the Internet that it has led to a virtual chronic disease known as Internet addiction. The result of the analysis has found that the overall respondents of secondary school

students are at a low level of addiction, which is 72.0 percent (see Table 1). This shows that Internet usage among secondary school students in the Pasir Mas district in Kelantan is less impulsive but needed to be controlled so it will not become a deleterious issue or out of control in the future. Students that are categorized as low-level Internet addiction obtained accumulated scores in between 16 to 30 points in the Internet addiction test. In addition, this finding is in line with an internet addiction study in Turkey that depicts the majority of respondents in the study are young people with the low level of Internet addiction [32].

In addition, the results showed that from 352 secondary school students around the district of Pasir Mas in Kelantan, respondents with a high level of Internet addiction have the percentage of only 4.0 percent with accumulated scores in between 46 to 60 points which showed that Internet usage has a profound impact on the student's life. In parallel, students at this stage need to thoroughly ponder over the negative sides of the Internet as it will cause harm to no one but themselves. In comparison to [33] study on the adolescent group in Spain, the percentage of individuals with high Internet addiction is slightly higher, which is 5.2 percent. If left unchecked, the same addiction problem may occur to the students in Pasir Mas too and it will affect them negatively.

Accordingly, the researcher believes that it is the responsibility of all parties to ensure that Internet usage will not cause addiction. It must be scrutinized intricately to ensure that the use of the Internet is more towards the good and positive side. [34] has reported that Internet addiction amongst youth, especially in students and teenagers are higher than the adults. Therefore, those who fall under these respective categories should be monitored as often as possible.

VI. CONCLUSIONS

The use of the Internet is seen to be useful for many as it facilitates one's daily affairs. However, there are some individuals who could not put a limit on themselves to a point that they become overly dependent on the Internet and spent too much time on it. Excessive usage of the Internet or Internet addiction will cause negative effects on its users. Irrefutably, Internet users especially students need to comprehend the actual use of the Internet to ensure that it is used for good purposes only.

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