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THE PRELIMINARY STUDY: FACTORS OF INTERNET ADDICTION AND ACADEMIC PERFORMANCE

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ABSTRACT

Internet addiction is considered excessive and obsession online. Excessive and obsession to surf the internet could result in interference to everyday life activities. Internet obsession is caused by poor control the desire to surf the internet adequately. Individual attachment to technology such as mobile phones and video games is one of the leading factors that could cause excessive internet usage and internet obsession. The student who suffers from excessive internet usage and internet obsession show poor discipline to manage their life, awkwardness while talking to a person face-to-face, low self-esteem, depression, and easy to feel bored when there is no internet connection. The study conducted a preliminary survey of 100 respondents to determine the instrument reliability before the actual data collection. The reliability test value for the variable in this study is between 0.7 to 0.8 indicated that the instrument is reliable for the actual data collection. The preliminary analysis to test the hypotheses revealed that only the internet addiction and parent lack of control are correlated to the student academic performance. Both factors show low strength to influence student academic performance. Therefore, the preliminary analysis findings are contradicted to the suggested hypotheses. However, the study expects a different result for the actual data collection.

1.0 INTRODUCTION

The Internet is a vast computer network developed by several thousand interconnected networks that provide a wide range of services, such as electronics, file transfer protocols, access to databases, and many others (Ogedebe et al., 2004; Siraj et al., 2015). It is a powerful platform for people where it plays an important role in our daily lives, socially, politically, economically, and even emotionally. People use the internet for communication, business, shopping, paying bills online, entertainment, at home, school, and public places (Ambad et al., 2017).

Asia has the highest percentage of internet users by continent or area, comprising 50.3 percent of the world's 7.77 billion people this year. A study shows that the number of Malaysians who access the internet in 2019 is 29 million people (Nurhayati-Wolff, 2020). In 2025, this figure is expected to rise to 33.5 million. In Malaysia, a study conducted by Dr. Norharlina Bahar, a child, and adolescent psychiatrist, reported that men under 24 years old had the highest internet addiction (Cheng, 2016). Students especially undergraduates between the ages of 19 to 24 are considered more prone to internet addiction (Lee, 2010; Ambad et al., 2017).

The internet indeed brings a few benefits to students such as communicating with others in a short time, easy to get information for learning sessions, and simplifying their lives by submitting assignments and paying their tuition fees online. However, the internet also has disadvantages for students. For example, causing anonymity, neglecting their studies, and losing the ability to communicate with others face to face (Advantages and Disadvantages of Internet for Students 2000W, 2020). They are used to communicating with others via the internet that they feel awkward talking face to face. The students also neglect their studies as they spend too much time on the internet. Most of them cannot devote their time to the assignment but they may spend time watching movies or interacting with friends over the internet. Internet addiction can also result in low self-esteem, depression, boredom, and hyperactive attention-deficit disorder (Norharlina, 2016; Senad, 2018). They also feel their life is boring without the internet due to parents' lack of attention. Besides that, they cannot focus on doing daily activities because they are too obsessed with the internet.

As the use of the internet is becoming more widespread among students in Malaysia, it is time to study how serious this issue is in Malaysia (Sidek et al., 2015). In particular, it is essential to understand the factors leading to internet addiction to take the appropriate steps to resolve this issue (Sidek et al., 2015). Hence, by conducting this research, we understand the factors of internet addiction that affect the students' academic performance. Thus the study is aiming to achieve the following objective to address the research problem.

1.   To determine the relationship between factors of internet addiction and academic performance.

2.   To determine the relationship between emotional instability and academic performance.

3.   To determine the relationship between parents' lack of control and academic performance.

The study is significant because it provides a clear sense of knowledge on the relationship between factors of internet addiction factors with academic performance. Based on this study findings, students can find out the main internet addiction factor that influences their academic performance. Hence, they can take appropriate action based on the main factor known to improve their academic performance. Therefore, the study may achieve a new theory between factors of internet addiction and academic performance.

2.0 LITERATURE REVIEW

2.1 The factors of internet addiction and academic performance

Many researchers have defined internet addiction in multiple ways over the years. Internet addiction means any compulsive, online-related behaviour that interferes with everyday life and imposes significant stress on the family, friends, loved ones, and the work environment (Young, 2019). It can also be defined as excessive or poorly controlled worries, urges, or behaviours that lead to disability or distress concerning computer use and internet access (Shaw & Black, 2008). According to Rouse, (2018), internet addiction can be characterised as an impulse control disorder that involves the obsessive use of mobile devices, the internet, or video games, despite negative aftereffects to the

technology user. The study described internet addiction as the act of surfing the internet excessively and obsessively, causing damage to one's daily life.

Academic performance means standardised achievement tests are objective instruments that assess skills and abilities children learn through direct instruction in various subject areas, including reading, mathematics, and writing (Sattler, 2001). Therefore, academic performance can be defined as learning through instruction and measured by a standardised scale. One study conducted at a small private university in Pittsburgh, Pennsylvania found that the longer the time spend on the internet the lower the Grade Point Average (GPA) of the students (Mishra et al., 2014; Ambad et al., 2017). Heavier recreational Internet use was highly correlated with impaired academic performance (Barmola, 2015). Therefore, this study is hypothesised:

H1: Factors of Internet Addiction has a relationship with academic performance

2.2 Emotional instability and academic performance

Emotional instability is often associated with poor academic performance (Duchesne et al., 2008; Ambad et al., 2017).). The individual who experiences emotional instability is unable to handle stress well (John & Srivastava, 1999; Ambad et al., 2017). Students who cannot handle their stress effectively performed poorly in their exams (Khan, Altaf & Kausar, 2013; Ambad et al., 2017). Emotional instability can be defined as the incapability to control their stress and thus performed badly in their academic performance. Therefore, emotional instability can be defined as the inability to handle stress, hence affecting individual emotional control.

Teacher rating scales allow teachers to rate the child's academic work accuracy compared to other children in the class and allow for ratings on a wider range of academic tasks than examined on standardised achievement tests (DuPaul & Rapport, 1991). Having an emotional instability such as anxiety and stress level can affect student's academic performance. Students that have emotional instability are not committed in learning, for instance, they showed a lack of interest in studies, low grades in exams or test and on assignments (Vitasari et al., 2010; Ambad et al., 2017). It can be deduced that emotional instability can reduce students' academic performance. There, this study hypothesised:

H2: There is a relationship between emotional instability and academic performance.

2.3 Parents' lack of internet control and academic performance

According to Cherry (2019), parents' lack of control can be defined as uninvolved parenting which is a style characterised by a lack of responsiveness to the needs of a child. It can also be interpreted as cold and uninterested in the needs of their child. By limiting time-sharing and contact, they keep their child at a distance. As parents, they have a low degree of commitment to their role (Anastassiou-Hadjicharalambous, 2011). For various reasons, parents may tend to become so involved in their own lives that they tend to unknowingly ignore the needs of the child (Dhaliwal, 2018). Therefore, we can describe it as parents who do not care their children needs and prefer the pleasures of their own lives.

Academic performance was measured by two methods: standardised achievement test scores and teacher reports of academic performance through rating scales (GonzalezDeHass et al., 2005; Hughes et al., 2005). A lower academic achievement was associated with the misuse of the internet for a social and recreational purpose (Kim, 2011; Ambad et al., 2017). The parent's lack of control can also cause excessive use of the internet as they ignore the needs of the child resulting them to spend more time on internet. The study among medical students at the Army Medical College, Rawalpindi, India, found that the longer the students spent time on the internet, the less their marks in the professional examination (Khan et al., 2016; Ambad et al., 2017). Therefore, this study hypothesised:

H3: Parents' lack of internet control has a relationship with academic performance.

The conceptual framework is developed based on the empirical findings from the previous research. Figure 1 shows that the framework consists of internet addiction, emotional instability and parents' lack of internet control as the independent variables and academic performance as the dependent variable.
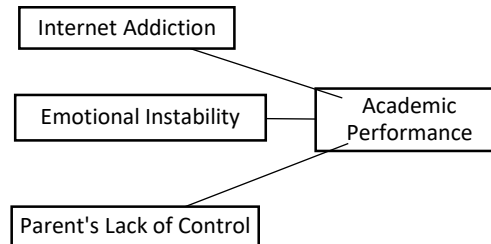
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┌──────────────────────┐
│  Internet Addiction  │
└──────────────────────┘
                          ┌──────────────────┐
┌──────────────────────┐  │    Academic      │
│ Emotional Instability│──│   Performance    │
└──────────────────────┘  └──────────────────┘
┌──────────────────────────┐
│ Parent's Lack of Control │
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Figure 1: Conceptual Framework

3.0 METHODOLOGY

The research used an online survey to gather respondent feedback through a questionnaire in Google Form. The survey was distributed to the potential respondents via the Whatsapp application. This study focused on Kolej Universiti Poly-Tech MARA (KUPTM KL) students from various courses and education levels as respondents. The questionnaire contained 40 questions divided into five sections: the demographic and four variables. The study applied two sets of 5-point scale from 1- Never, 2- Rarely, 3- Sometimes, 4- Often, and 5- Always, and 1- Strongly Disagree, 2- Disagree 3- Somewhat Agree 4- Agree 5- Strongly Agree for the respondents' feedback. The questionnaire for internet addiction is adapted from previous studies, Ambad et al. (2017). The questionnaire for emotional instability is also adapted from Ambad et al. (2017). Meanwhile, the questionnaire for parents' lack of control is adapted from Shi et al. (2017), Zhang et al. (2019), and Li et al. (2014). Ten items for the dependant variable, academic performance are adapted from Sansgiry et al. (2006).

The unit of analysis for this study is a student from KUPTM KL. The respondents come from various courses and educational backgrounds such as Foundation, Diploma, and Degree. Hence, 111 responses have been gathered for the preliminary study but the researchers only choose 100 responses that are relevant to this study. KUPTM KL students were selected as respondents because the majority of them consisted of men under the age of 24 years old and students aged 19 to 24 who are the highest group prone to internet addiction. The analysis applied a quota sampling technique to pick the respondent. This is because quota samples only require sample meet of the target number of individuals with particular characteristics typically used in market research (Brick, 2014; Azlan et al., 2020). Also, the samples are convenient to be accessed.

The research performed a preliminary study before the actual data collection to minimize bias and questionnaire validity and reliability problems. The study performed a content validity test by submitting the proposed questionnaire to the content expert to ensure that the items are suitable for measuring the chosen variables.

The study used Cronbach Alpha guidelines for the reliability test to ensure the questionnaire items are consistent. For the reliability test, the acceptable value is more than 0.7 (Taber, 2018; Azlan et al., 2020). The questionnaire is considered to be reliable since the reliability test value is between 0.7 and 0.8.

A simple statistical analysis was conducted descriptively in the study. The results were presented using percentages. Also, the study carried out an inferential analysis using a correlation test to test the research hypothesis.

4.0 FINDINGS AND DISCUSSION

Table 1: Respondent Demographic

Measurement	Item	Percentage, %
Age	18-22	68.0
	23-26	31.0
	27-30	1.0
Gender	Female	74.0
	Male	26.0
Course	BK201	24.0
	AA103	2.0
	AA201	3.0
	CT205	1.0
	AB201	21.0
	BE101	21.0
	BE201	6.0
	CC202	1.0
	CC201	3.0
	CC101	7.0
	BE202	2.0
	BK101	2.0
	AA111	1.0
	AB101	1.0
	AB202	1.0
	BE203	2.0
	AA102	1.0
	CT101	1.0
Semester	Semester 1	7.0
	Semester 2	20.0
	Semester 3	9.0
	Semester 4	31.0
	Semester 5	14.0
	Semester 6	14.0
	Semester 7	4.0
	Semester 8	1.0
How often internet use per day	4-16 hours	58.0
	More than 16 hours	42.0

Table 1 shows the respondent demographic analysis. The previous finding from Ambad et al. (2017) showed that 70% of female students, 78.2% of them are between the ages of 18 to 20, are addicted to the internet. The existing finding shows that most of the students who addicted to the internet are between the age of 18 to 22 years old because they spend more time online than other group af ages. According to KKF (2009), a person who spends time online more than 16 hours are considered addicted to the internet while a student who spend 3-16 hours are considered moderate users. Based on the findings, we can conclude that nearly half of the respondents are addicted to the internet as they spend more than 16 hours, while the other half have the tendency to get internet addiction.

Table 2: Descriptive Analysis of Internet Addiction

	N	Mean	Std. Deviation
(IA1) I often find myself staying online longer than I had planned.	100	4.32	.909
(IA6) I often check my social media like Instagram, Twitter, etc., before doing something.	100	4.07	1.166
(IA8) I often hope to use the internet again quickly if a problem like a bad internet connection occurs.	100	3.89	1.024
(IA10) I often try and fail to cut the amount of time I spend online.	100	3.64	1.059
(IA9) I often lose sleep due to late-night logins.	100	3.54	1.417
(IA2) I often ignore my studies to spend more time online	100	3.30	1.202
(IA7) I often prefer to spend time on the internet instead of going out with others.	100	2.76	1.207
(IA4) I often hear people close to me complain about the amount of time I spend online.	100	2.74	1.236
(IA3) I often make new online friends.	100	2.60	1.206
(IA5) I often get low marks or CGPA due to the amount of time I spend on the internet.	100	2.06	1.062

Based on table 2, the descriptive analysis for respondent internet addiction shows that most respondents agreed that they often find themselves staying online longer than they had planned because they spend longer time on social media. They also show simple sign of addiction like anxiously wanting to use the internet quickly after experiencing bad connectivity, they always fail to limit the amount of time they spend online, often lose sleep due to spending more time on social media, and they often prioritise spending time online than studying.

Table 3: Descriptive Analysis of Parent's Lack of Control

	N	Mean	Std. Deviation
(PC4) My family members contribute their commitments to our family.	100	3.99	.937
(PC6) My family members support and rely on each other when facing any concerns.	100	3.99	1.049
(PC5) My family members are very loving and considerate.	100	3.98	.974
(PC2) My family members are happy with each other.	100	3.96	.887
(PC7) My family members praise me if I achieve something.	100	3.95	1.009
(PC3) My family members are perfectly harmonious.	100	3.91	.900
(PC1) My family members convey their emotions to each other.	100	3.21	1.047
(PC9) My family members scold me even for a minor mistake.	100	3.05	1.192
(PC8) My family members oppose me, thus I will seek social support from the virtual world interacting experiences.	100	2.98	1.073
(PC10) My family members interfere with everything that I do.	100	2.88	1.018

Based on table 3, the descriptive analysis for parents' lack of control indicated that majority of the respondent agrees that family members contribute their commitments to their family. Students with loving and harmonious problem do not tend to have internet addiction as they receive the support from their family members.

Table 4: Descriptive Analysis of Emotional Instability

	N	Mean	Std. Deviation
(EI3) I often get worried.	100	3.91	1.083
(EI7) I often get nervous.	100	3.77	1.004
(EI6) I often remain calm in tense situations.	100	3.46	.968

	N	Mean	Std. Deviation
(EI2) I often manage my stress.	100	3.38	1.080
(EI4) I often get upset and unable to keep my emotions stable.	100	3.31	1.169
(EI5) I often get moody.	100	3.25	1.140
(EI1) I often see myself as someone who is depressed.	100	3.23	1.221
(EI8) I often afraid that my life is dull, flat, and joyless without the internet.	100	3.05	1.313
(EI9) I often get irritated if someone bothers me while I am on the internet.	100	2.60	1.206
(EI10) I often get anxious to get on the internet when I am not using it.	100	2.55	1.132

Based on table 4, the descriptive analysis for respondent emotional instability indicates the majority of the respondent often had emotional instability. They often get worried and nervous. They managed to remain calm in tense situations and manage their stress even though sometimes they get upset and unable to keep their emotions stable. They disagree that they get anxious to get on the internet when they are not using it. Therefore, this indicates that their emotional instability is caused by other factors other than spending time on the internet.

Table 5: Descriptive Analysis of Academic Performance

	N	Mean	Std. Deviation
(AP2) I study for examinations.	100	4.09	.767
(AP9) I take efforts in improving my academic performance.	100	3.97	.717
(AP4) I prepare for a test.	100	3.78	.786
(AP8) I assess my academic knowledge.	100	3.72	.740
(AP5) I can cope with examination tension.	100	3.53	.979
(AP7) I manage my course load.	100	3.53	.731
(AP3) I organise my study time.	100	3.53	.979
(AP10) I find my academic performance dissatisfying	100	3.29	1.076
(AP1) I have difficulty in combining study and leisure time.	100	3.14	1.092
(AP6) I have difficulty in managing study material.	100	3.13	.971

Based on table 5, the descriptive analysis of the respondent academic performance shows that majorities of the respondent agrees that they study and take efforts in improving their academic performance when it comes to a test or an examination. They often make efforts in assessing their academic knowledge whilst managing their course load and study time. They cope well with the examination tension and do not have any difficulty in managing their study time and study material.

Table 6: Guildford Rule of Thumb Table

Value, r	Strength
<0.2	Negligible Relationship
0.2 to 0.4	Low Relationship
0.4 to 0.7	Moderate Relationship
0.7 to 0.9	High Relationship
>0.9	Very High Relationship

Table 7: The result of the correlation test for the level of internet addiction with academic performance

			r	$P < .05$	Result
Internet Addiction	→	Academic Performance	.222	.026	Significant

The correlation test finding between internet addictions with academic performance is shown in table 7. The analysis shows that H1 is supported. The level of internet addiction and academic performance are correlated and show a low relationship. The possible explanation for this relationship is that the respondent assumes that internet addiction does not affect their academic performance. The respondent believes that even though they spend more time on the internet,

they can still manage their academic performance.

Table 8: The result of the correlation test for the level of parent's lack of control with academic performance

	r	*P* < .05	Result
Parent's Lack of Control ⟶ Academic Performance	.267	.007	Significant

The correlation test finding between parent's lack of control with academic performance is shown in table 8. The analysis shows that H2 is supported. The level of parent's lack of control and academic performance are correlated and shows a low relationship. The possible explanation for this relationship is that the respondent believes that the parent's lack of control is not related to their internet addiction. The respondent believes that if their parent is supportive and does not control their internet usage, they can manage their spending time on the internet. Thus, the respondent believes that parent's lack of control does not affect their academic performance.

Table 9: The result of the correlation test for the level of emotional instability with academic performance

	r	*P* < .05	Result
Emotional Instability ⟶ Academic Performance	.171	.089	Not Significant

The correlation test finding between emotional instability with academic performance is shown in table 9. The analysis shows that H3 is not supported. The respondent believes that their emotional instabilities are not related to their achievement in academic.

5.0 CONCLUSION

The study concludes with the following points. This research indicates initial evidence between the factors of internet addiction and academic performance. This study shows that respondents believe that internet addiction and parent's lack of control have a low relationship with academic performance. However, not with emotional instability. The results show that the majority of respondents stated that emotional instability does not affect their academic performance.

The method used to collect data information in this study is the survey method where the questionnaire was created through Google Form. The researchers applied a quantitative type of research that will be based on the numerical data itself to analyze the questionnaire provided to the respondents. Using the Statistical Package for the Social Sciences (SPSS) application, the data collection was processed to obtain the precise results that can be logical to convert to the table format and numerical data analysis, which is simple to store and also track the relationship of this research.

To make it easier for the researchers to obtain data from respondents, they need to further widen the demographic profile. The respondent is limited if it is too narrow down. Not only that, researchers need to pay attention to respondents' feedback to give cooperation in answering the questionnaire. This is because each of the respondents' answers is very important. Analysis tools, on the other hand, are also one of the limitations that researchers have encountered. As the researchers used Google Form to distribute the questionnaires, some of the target audience ignore and refuse to answer the questions. Some respondents are not serious in answering the questions given. So this kind of issue makes it difficult for researchers in terms of data collection.

Further searches are required via websites and other tools to examine multiple elements related to the title of the study. Researchers need a lot of supporting materials for them to choose the research topic that they want to do. Also, the original source should be the basis for statements of facts, hypotheses, opinions, judgments, and research reports related to the selected topic. Researchers should also avoid using opinions that do not have solid references.

Lastly, potential researchers may use other questionnaire distribution methods such as SurveyMonkey, PaperForm, and JotForm, apart from Google Form to create a better study value.

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