



The Influence of Mobile Phone Addiction on Academic Achievement Among Teenagers

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Abstract. This study seeks to investigate how mobile phone addiction affects academic performance. It focuses on mobile phone addiction, including internet addiction, game addiction, and ‘mobile youth culture.’ In this study, a conventional survey using a questionnaire was distributed face-to-face to 200 students in Petaling Jaya aged ranging from 13 to 17 years old. The Statistical Package for Social Sciences (SPSS - 21) software was used to analyse survey respondent data and sample distribution. Both genders and age groups were studied to identify the connection between mobile phone addiction and academic achievement. A review of the survey results revealed that students who are addicted to mobile phones received lower grades in school. Thus, addiction to mobile phones has a negative impact on academic performance. This study focuses on a contemporary phenomenon, it is hoped that the findings and discussion instrument contribute to current literary works and help future researchers to better understand the relationship between mobile phone addiction and academic performance.

Keywords: Academic performance · Mobile addiction · Mobile youth culture

1 Introduction

Mobile phones are known to constantly developed advanced functions over time. Could this be one of the factors that contributes to the addiction? The GSM network was developed in Europe back in year 1990s, many transmission systems emerged in the United States while in July 1992 NTT DoCoMo was then introduced in Japan, Middle East, Asia and Africa with rapid expansion at the same time [1]. In year 1990’s mobile phone has only the basic functions which are call and short messaging system (SMS). During this period of time, telephone and internet can’t be used together at the same time.

Upon transition of development and advancement in technology, internet are mobilized and can easily be used or accessed anywhere on many devices such as mobile phone, computer, tablet, and many others. According to [2], social networking sites (SNS) have

become online and attractive popular tools in connecting people throughout the world. Most SNS provides interaction application for a different group of people with the same interest such as Twitter, WhatsApp, and Instagram. This interaction application is a form of mobile phone addiction and it has an impact towards student's academic performance in school.

The development of social media has cut across barriers and bureaucracy with positive and negative impacts on education. Social media has an impact on friendship, learning, communication, and education in general [3]. [4] refer to social media technology (SMT) as "web-based and mobile applications that allow individuals and organizations to create, engage, and share new user-generated or existing content, in digital environments through multi-way communication".

According to [4], "social networking sites are web-based services that allow individuals to construct a public or semi-public profile within a bounded system, articulate a list of other users with whom they share a connection, and view and traverse their list of connections and those made by others within the system." In January 2021, there were 32.57 million people living in Malaysia, or 27.43 million of them online [5]. In addition, the number of social media users in Malaysia increased by 2.0 million (+7.7%) between 2020 and 2021 [6]. The amount of usage will increase dramatically every year. Hence, this study will also look into whether the internet is a part of their addiction and how it affects their studies. Statistics demonstrate that more people are signing up for data plans in order to take advantage of internet services such as social networking [7].

Numerous comparable studies have been conducted, and research has shown that smartphone addiction damages one's health and interferes with everyday activities. It has also been shown that the majority of students spend more time on Facebook and other social media than on academics [8–10]. This decreases enthusiasm in class activities and dramatically reduces reading interest [11]. In research conducted by [12], 52.8 percent of teenagers revealed that their regular usage of mobile phones interferes with their study. Addiction to mobile phone services such as internet surfing and messaging services impacts sleep and results in poor academic performance [13].

This study aims to find out how academic performance is impacted due to mobile phone addiction.. It focuses on mobile phone addiction, including internet addiction, game addiction, and 'mobile youth culture.' In this study, a face-to-face survey using a questionnaire was distributed to 200 Petaling Jaya students age ranging from 13 to 17 years old. The Statistical Package for Social Sciences (SPSS - 21) software was used to analyse survey respondent data and sample distribution. Both genders and age groups were studied to identify the link between mobile phone addiction and academic performance.

1.1 Problem Statement

Several studies have shown that teenagers' social media displays typically include depictions of hazardous health behaviours such as unlawful alcohol consumption or overuse, illicit drug use, high-risk sexual activities, harmful behaviours and low academic interest [14–16]. As a result, it is apparent that smartphone addiction has become a major issue among teenagers. Smartphone addiction, a sort of technology addiction, is defined as an impulse control problem in which a person is exposed to the negative consequences of

technology as a result of excessive use of the internet, video games, and other types of entertainment [17].

Social media addiction and internet addiction were reported and raised by several online news reporting in Malaysia such as The Star Newspaper, New Straits Times, and The Malaysian Reserve. As a result of this issue, family engagement becomes lesser especially in public settings in Petaling Jaya because they are constantly glued to their gadgets and totally focus on it compared to valuing the family bonding time. In regard to this, research published in the Journal of Youth Studies found that one in every five students reported “almost always” waking up to check social media, with girls significantly more likely than boys [18]. Therefore “almost always” wake-up symptoms may result in poor academic performance in school. Academic performance suffers when an adolescent does not get enough sleep and rest because they are unable to focus in class and become fatigued easily [19, 20].

This addiction has worsened as mobile phone companies and service providers keep on developing new and interesting ideas for applications, features, and designs in order to captivate audiences’ attention especially young generations. Some applications, such as TikTok and Bigo, provide additional rewards and money in exchange for their commitment and engagement with the applications [21–24]. According to [25], teenagers aged 12 to 17 have low academic performance as a result of their extensive use of mobile phones for texting and making phone calls. On the other hand [26] demonstrated that mobile phone use at night, particularly in the bedroom, has been linked to poor sleep and insomnia, and its effects on academic and professional performance have been documented. Smartphones are often near by at night, and 70 percent of owners put their phone on a bedside table when sleeping to keep the device close by so they don’t miss the latest social media updates and can check on their phone if they wake up in the middle of the night [27].

[28] indicated that frequent mobile phone usage provides teenagers and adolescents with a chance to develop online relationships, and the expansion of online services, can lead to changes towards drop in education performance. Students become addicted to mobile phones and spend more time on social media watching YouTube nibble on social media and updating ‘live’ moments on social media interaction instead of talking of studying [29]. [27] prove that students that use their phones late at night are at the risk of long-term tiredness and potentially affecting students’ academic performance. A highly significant connection was established between using mobile phones late at night with difficulty in waking up, drop in study grades, demotivate in studying, and being late for classes. According to [14], 65.6% of teenagers between the age of 14 to 18 were addicted to internet and spend more time on their mobile phones thus affecting their academic performance. Students who are addictive wake up nearly every night to use social media or who didn’t wake up at a regular time in the morning were around three times more likely to report being constantly tired at school compared to those who never log on at night or had a regular wake up time each day [30].

Previously conducted research were shown to be comparable. However, there has been little research that are looking into the impact of academic accomplishment on

teenagers academic achievement due to the mobile phone addiction specifically in Petaling Jaya. Several previous studies were accomplished in a short amount of time and featured a diverse range of respondents, including medical and agricultural students. Thus, this paper research focuses on teenagers in Petaling Jaya to understand their addiction to mobile phones and the impacts of mobile phone addiction which may influence their academic performance at school. This research will be assessing mobile phone addiction for both gender and the age range 13 to 17 years old.

1.2 Purpose of the Study

The purpose of this study is to explore the level of mobile phone addiction among teens in general according to gender and age population in the area selected. The study will describe level of addiction by looking into time spends, frequency of checking phone, frequently log in social media and frequently playing online games. The research also includes determining academic achievement based on exam results. Finally, the research will determine whether or if there is a relationship between mobile phone addiction and academic performance.

1.3 Research Objectives

The study aim to address the following specific objectives:

- (1) To determine the level of addiction of mobile phones among teenagers in general.
- (2) To determine the level of addiction of mobile phones according to gender and age variable.
- (3) To explore relationship between addiction of using mobile phone with academic performance.

1.4 Research Hypothesis

The researcher established the following hypothesis for this research:

RQ 2: What is the level of addiction on mobile phones among teenagers according to gender and age variable?

RH1: There is a different in mobile phone addiction between genders

RH2: There is a different in mobile phone addiction between different categories of student age

RQ 3: What is the relationship between addictions of using mobile phone with academic performance?

RH3: There is a negative relationship between mobile phone addiction and academic performance

1.5 Significant of the Study

This research anticipate that the study's findings would be beneficial to students, parents, and instructors. This study will be essential in determining student behaviour toward

mobile phones and whether it has an influence on their educational level. If the teen exhibits symptoms of addiction, such as constantly checking their phone even when it is not ringing or receiving alerts, parents and teachers should speak with them about this behaviour before sending them for counselling.

Mobile technology is a developing prototype of advanced communication, and society has to recognise what's good and what's harmful. Losing sleep due to gaming and social media is an example of when essential follow-up is required. Today's mobile phones have touch screens, and everything is at our fingertips. It would be beneficial for the teenagers if it is being used wisely. Teenagers will discover how their smart-phone addiction impacts their academic performance. This study will also look at the degree of teenagers phone addiction and whether there is a link between it and academic performance.

2 Literature Review

Mobile Phone Addiction: Smartphone addiction might be categorised as a type of technology addiction [31] which defined as restlessness symptoms along with attempts to check the phone frequently even when there are no alerts or described as nomophobia (no mobile phone phobia) [32]. Aside from that, this addiction is characterised by a strong urge to use the mobile phone to pass the time, such as surfing the internet, online shopping, and playing games [33]. Students who 'interact' with their phones out of habit may be avoiding communication with their parents or professors [34]. When they are not able to use their smartphones, some students may develop withdrawal symptoms such as sleeplessness, anxiety, and sadness [35]. Mobile Phone Addiction namely mobile social networking addiction, mobile game addiction, mobile information acquisition addiction, and mobile short-form video addiction has different impact on adolescents and young adults [36].

Age and Gender Differences on Mobile Phone Addiction: In those at high risk of smartphone addiction, female outnumbered male. According to a recent study, females are more hooked to their phones and spend more time on them than males [37–39]. Females talk on the phone for longer duration of time than male, including gossiping, maintain social relationships, calls to family members, relatives, and friends, as well as customer service and sales calls [40]. As a result, female prefer online chatting, communication, and messaging apps, as well as social networking apps [41]. Gender studies show that female use mobile phones for social fulfillment and reinforcement, whilst males use mobile phones for more process-oriented fun such as online gaming and many other activities [42, 43].

Social media is also factors influencing addiction among adolescence and this effects their behaviours [44]. Social media has become an integral part of youngsters lives, and it has revolutionised the way they communicate and interact with each other. The rise of social media, increase the addiction among adolescents, which has led to changes in their behavior. Factors such as the need for social validation, FOMO (fear of missing out), and ease of access contribute to social media addiction among adolescents. The effects of social media addiction on adolescent behavior include a decrease in academic performance and real-life social interaction [45].

Demographic Differences on Mobile Phone Addiction: Everyone, regardless of age, gender, career, money, or education, uses a cell phone on a regular basis [46, 47]. [48] developed a conceptual framework to demonstrate the influence of demographic and lifestyle factors on mobile phone usage. In Mauritius, mobile phone usage differs from those of Western nations, Latin America, Africa, and Asia [49, 50]. According to [51], behaviour, attitudes, values, and characteristics influence the demographic component of mobile phone ownership. A Nigerian student and a Malaysian student may have opposing views on mobile phone addiction [52]. Playing online 3D games is perhaps the most recent craze in Malaysia; yet, owing to technological restrictions, only standard games are available in Nigeria. Therefore access to mobile phone network is vital.

School Academic Performance: According to [53–55], student's educational achievement is highly dependent on the social status of the student's familial background in society. Whereas [56, 57], and [55] research found few variables influencing student academic progress in school such as parent's educational background, student motivation, prior learning in school, family income, entrance qualification, and school location. In addition, student academic achievement is also connected to the socioeconomic status of their parents. [56] revealed that teacher's expectations towards the students and schools had a considerable impact on student achievement. According to [58], school ownership, facility supply, and resource availability in school are all key factors to student's academic performance. Generally, the school on the other hand contribute a significant impact on students' academic success [57].

Impact of Mobile Phone on Student's Academic Performance: Social media addiction and internet addiction was reported and raised by several online news reporting in Malaysia such as The Star Newspaper, New Straits Times and The Malaysian Reserve. As a result of this issue, family engagement becomes lesser especially in public settings in Petaling Jaya because they are constantly glued to their gadgets and totally focus on it compared to valuing the family bonding time. In regard to this, research published in the Journal of Youth Studies found that one in every five students reported "almost always" waking up to check social media, with girls significantly more likely than boys [18]. Therefore "almost always" wake-up symptom may result in poor academic performance in school. Academic performance suffers when an adolescent does not get enough sleep and rest because they are unable to focus in class and become fatigued easily [19, 20].

Social Learning Theory: This research applies Bandura's Social Learning Theory, which states that individuals learn from one another through observation, imitation, and modelling. Because it incorporates memory, attention, and motivation, this theory has been referred to as a bridge between behavioural and cognitive learning theories. According to [59], the results of highly interactive mobile phone connection creates a technology-based social structure that facilitates the social learning process of excessive technology use. The influence of perceived interactivity messages on different platform is mediated by a series of contextualised social learning theory. Furthermore, the influences of perceived interactivity on social learning factors are moderated by end user messages.

People learn through seeing the actions, attitudes, and consequences of others [60]. This hypothesis addresses two aspects of this study: cell phone addiction and the impact on academic performance. Individual learners, peers, and situation, according to Social Learning Theory, have the capacity to influence learning outcomes [60]. This theory describes how humans create their behaviour in terms of a continual give-and-take interplay between cognitive, behavioural, and environmental forces. In the context of this study, excessive mobile phone engagement is considered addicting, influencing student behaviour. Hence, this behaviour has a negative impact on academic success.

3 Methodology

Research methodology is being studied in this chapter. Methodology involves procedures of data collection, sample of research, processing and reporting. This chapter sees the research design, research instrument such as demographic, variable independence variable instrument and dependent variable instrument. The data collection management and how the data is being analysis in being discuss in this chapter.

3.1 Research Design

This chapter examines research methods. Methodology includes data collection procedures, research samples, processing and reporting. This chapter examines the study design, research instruments such as demography, variable independent variable instrument, and dependent variable instrument. This chapter also discusses data collection management and data analysis.

3.1.1 Research Design

This study employs a cross-sectional and correlation survey research design. This design was developed in order to gather information on the impact of mobile phone addiction on academic performance among teens in Petaling Jaya. The links between the independent (addiction) and dependent (academic performance) variables are examined in this survey. Because mobile phone addiction is linked to academic achievement, a cross-sectional and correlation survey was employed. Surveys helped researchers better grasp how mobile phone addiction affects academic achievement. This type of survey allows for the study of a big sample. The questionnaire was designed to collect demographic information, mobile phone behaviour, and school examination results.

The design enables for the collection of quantitative data, which can then be analysed and interpreted before reaching the major findings. These methods were utilised to gather and analyse data from closed-ended items given to teenagers in Petaling Jaya. The quantitative method yields amounts of variables of interest [61].

This form of study use questionnaires and a 5-point Likert scale to assess qualities or behaviour. Furthermore, quantitative investigations, based on the existing framework, fit the empirical character of this study since they produce reliable and objective results from a large sample size in a short period of time and demand less resources for data collection and processing [62].

3.1.2 Method of Data Collection

This study collects data by distributing structured questionnaires to a population of 200 students aged 13 to 17 to both gender in Petaling Jaya. Questionnaires are a low-cost tool that may be quite beneficial when response rates are high and respondents are cooperative. This questionnaire was distributed to kids after school hours in surrounding their school area, resulting in a high response rate. This questionnaire is a closed research tool meant to assess student phone addiction and academic achievement at school.

3.1.3 Research Instrument

The questions are written in English without jargon words. This question relates to the research objective and conceptual framework. The questionnaire was closed-ended, so students could only choose their answers based on the scale provided. The built-in questions address the hypotheses presented in Chapter One.

The research instrument is divided into two parts which are demographic and mobile phone usage behaviour. The demographic information required from the respondents are gender, age, mobile data, and average grade in school. The measurement for this instrument was adopted from [63, 64]. Meanwhile part mobile phone usage behaviours, the instrument was adopted from [65] and [66]. All the research instrument was adopted for relevant resources and the following hypotheses was identified:

RH1: There is a different in mobile phone addiction between genders

RH2: There is a different in mobile phone addiction between different categories of student age

RH3: There is a negative relationship between mobile phone addiction and academic performance

3.1.4 Data Analysis

The Statistical Package for the Social Sciences (SPSS) is being used to analyse all of the data that has been obtained.

4 Findings

4.1 Preview

This chapter discusses the conclusions from the data obtained during the survey. The data obtained from 200 respondents in Petaling Jaya is being analysed using the Statistical Package for the Social Sciences (SPSS) Version 21. The results produced are intended to address the research questions and research hypotheses.

4.2 Respondents Demographic Profiles

This study's demography includes high school students in the Petaling Jaya region. The demographic information is based on gender, age, and the availability of mobile data on their respective phones.

Table 1. Gender and Age Crosstabulation

Gender and Age Crosstabulation		Age		Total
		13–15 Years	16–17 Years	
Gender	Male	50	50	100
	Female	50	50	100
Total		100	100	200

Table 2. Summary of Having Data on Mobile Phone

Gender				Mobile data		Total
				Yes	No	
Male	Age	13–15 Years	Count	36	14	50
			%	72.0%	28.0%	100.0%
		16–17 Years	Count	44	6	50
			%	88.0%	12.0%	100.0%
	Total		Count	80	20	100
			%	80.0%	20.0%	100.0%
Female	Age	13–15 Years	Count	37	13	50
			%	74.0%	26.0%	100.0%
		16–17 Years	Count	40	10	50
			%	80.0%	20.0%	100.0%
	Total		Count	77	23	100
			%	77.0%	23.0%	100.0%

4.2.1 Cross Tabulation on Gender and Age

This study's demography includes high school students. Table 1 reveals that 50 respondents are males aged 13–15 and 50 respondents are females aged 16–17. Meanwhile, 50 female respondents are between the ages of 13 and 15, and 50 are between the ages of 16 and 17.

4.2.2 Mobile Phone Data Availability

Table 2 shows that 72% percent of male students aged 13–15 and 88% of male students aged 16–17 possess mobile data on their phone. Not least, female students possess mobile data shows to 74% of female students aged 13–15 while 80% are female students aged 16–17.

Table 3. Summary of Level Addiction

Level Addiction		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Low Addiction	38	19.0	19.0	19.0
	Middle Addiction	129	64.5	64.5	83.5
	High Addiction	33	16.5	16.5	100.0
	Total	200	100.0	100.0	

4.3 Research Questions and Hypothesis

This study's demography includes high school students in the Petaling Jaya region. The demographic information is based on gender, age, and the availability of mobile data on their respective phones.

4.3.1 Research Question 1: What is the Level of Addiction on Mobile Phones Among Teenagers in General?

According to Table 3, 64.5% of students are classified as having a midrange addiction, 19% are classified as having a low addiction and 16.5% are classified as having a high addiction. Questions using a 5-Point Likert Scale were asked to the students and divided into 16 categories of addiction. The non-addictive scale was 16, while the addictive scale was 80.

The addiction scale runs from 16 to 37 for low addiction, 38 to 59 for medium addiction, and 60 to 80 for high addiction.

4.3.2 Research Question 2: What is the Level of Addiction on Mobile Phones Among Teenagers According to Gender and Age Variable?

According to Table 4, males are more addicted to mobile phones than females. Males account for 24% of those with high addiction, whereas females account for only 9%. Females make up 26% of those in the lowest addiction category, while males make up only 12%.

4.3.2.1. Research Hypothesis 1: There is a Different in Mobile Phone Addiction Between Gender

Table 5 shows that $X^2 = 11.984$, $df = 2$, $p = 0.002$ 0.05 . As a result, there is a significant difference in the level of mobile phone addiction between men and women. Hypothesis 1 is accepted.

4.3.2.2. Research Hypothesis 2: There is a Different in Mobile Phone Addiction Between Different Category of Student Age

Table 6 shows that 25 percent of students aged 13–15 years old are severely addicted to mobile phones. Meanwhile, students aged 16 to 17 are less addicted. In the intermediate addiction category, students aged 16–17 years are 75% addictive, while students aged 13–15 years are 54% addictive.

Table 4. Summary of Level Addiction According to Gender

			Level Addiction			Total
			Low Addiction	Middle Addiction	High Addiction	
Gender	Male	Count	12	64	24	100
		%	12.0%	64.0%	24.0%	100.0%
	Female	Count	26	65	9	100
		%	26.0%	65.0%	9.0%	100.0%
Total		Count	38	129	33	200
		%	19.0%	65.5%	16.5%	100.0%

Table 5. Summary of Chi-Square Test on Level Addiction according to Gender

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	11.984a	2	.002
Likelihood Ratio	12.364	2	.002
Linear-by-Linear Association	11.807	1	.001
N of Valid Cases	200		

Note: 0 cells (0.0%) have expected count less than 5. The minimum expected count is 16.50.

Table 7 demonstrates that $X^2 = 12.597$, $df = 2$, $p = 0.002 < 0.05$. As a result, age differences in mobile phone addiction are significant. Thus, hypothesis 2 is accepted.

Table 6. Summary of Level Addiction According to Age and Level Addiction Crosstabulation

			Level Addiction			Total
			Low Addiction	Middle Addiction	High Addiction	
Age	13–15 Years	Count	21	54	25	100
		%	21.0%	54.0%	25.0%	100.0%
	16–17 Years	Count	17	75	8	100
		%	17.0%	75.0%	8.0%	100.0%
Total		Count	38	129	33	200
		%	19.0%	64.5%	16.5%	100.0%

Table 7. Summary of Chi-Square Test on Level Addiction according to Age

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-square	12.597a	2	.002
Likelihood Ratio	13.049	2	.001
Linear-by-Linear Association	2.373	1	.123
N of Valid Cases	200		

Note: 0 cells (0.0%) have expected count less than 5. The minimum expected count is 16.50.

Table 8. Summary of Independent T-Test

	Academic Performance	N	Mean	Std. Deviation	Std. Error Mean	t	df	Sig. (2-tailed)
Addiction	1.00	107	51.0000	12.90239	1.24732	4.370	198	.000
	2.00	93	43.5591	10.89521	1.12978	4.421	197.845	.000

4.3.3 Research Question 3: What is the Relationship Between Addictions of Using Mobile Phone with Academic Performance?

4.3.3.1. Research Hypothesis 3: There is a Negative Relationship Between Mobile Phone Addiction and Academic Performance

Table 8 indicates $t = 4.370$, $df = 198$, $p = 0.000 < 0.05$, indicating that there is a significant difference in mobile phone addiction between high and low academic achievement. As a result, hypothesis 3 is accepted.

Academic Performance 1.00 represents results C, D, and E, whereas Academic Performance 2.00 represents results A and B. In other words, mobile phone addiction has a detrimental impact on academic achievement or there is a negative association between mobile phone addiction and academic performance. The more the dependence on mobile phones, the lesser the academic performance.

5 Conclusion

In conclusion, the study has identified the impact of mobile phone addiction on academic performance among teens in Petaling Jaya. Teenagers are often classified as having a moderate degree of addiction, however, the amount of addiction varies depending on age and gender. Males are more addicted to mobile phones than females, and young adolescents ages 13 to 15 top the chart for mobile phone addiction in this group.

On the other hand, students who receive an A in school indicate low level of mobile phone addiction, but students who receive an E in school resulted to a high level of mobile phone addiction. Addiction to mobile phones has a detrimental association with academic achievement. The mobile phone addiction among teenagers is a major distraction during school hours as students may find themselves constantly checking messages,

social media, or playing games instead of focusing on their studies. This lead to decreased concentration and lower academic performance. Besides that, excessive mobile phone use hinders active engagement in the learning process. Students miss important information, fail to participate in classroom discussions, or neglect to take notes, resulting in a limited understanding of the subject matter because of gadget addiction.

Excessive phone use negatively impacts face-to-face social interaction among students. It leads in reducing communication skills, limited personal interactions and isolation from peers, affecting their social development and interpersonal relationships. The school must take proactive measures by having control such as setting a time limitation for teens to look and engage with their gadgets. By doing so, students are able to focus on teachers interaction and give more attention. The discussion division reinforces information from past studies in order to substantiate the current findings. Furthermore, this chapter discusses the limitations of the current study as well as future recommendations to improve the current study.

6 Limitation and Recommendation

This research is only being undertaken in Petaling Jaya and only 9 schools in the surrounding area are participating. As a consequence, because various schools are geographically placed and mobile phone accessibility are varies, this conclusion cannot be generalised because the sample size of this study is small and it is impossible to make strong generalisations about the population being investigated. Students who answer to questions about their 'average grade in school' may in fact lie about their actual results because they are embarrassed to disclose the truth. Besides, most students completed all questions while waiting for the school bus after school, and this time frame may not be appropriate because they were in a rush to go back home.

Due to the fact that this questionnaire was handed by hand, several students were hesitant to participate and provides no cooperation. Some questionnaires were even damaged and invalid. It is suggested that future research expand the scope of mobile phone addiction and include value add questions on school grade. It is also advised that a comparison research be conducted between two schools in different localities in order to determine the association between mobile phone addiction and academic achievement. A bigger sample population would also help the research.

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