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Indicators of Mobile Phone Addiction on Wellbeing of Youth

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Abstract

Mobile phones have become ingrained in our daily life. Mobile phone usage increasingly every year and now reaches near 2.4 billion worldwide. In today's life we cannot look away from our phone screen because we rely on it to communicate and connect with others. Despite the distance separating, mobile phone allows them to interact and integrate regularly. While these advantages are available; mobile phone addiction has become a global problem mainly among youth. However, such social issues seem won't get much attention, that contributes eventually reduce the understanding of the issue. As a result, this research aims to investigate the factors that indicate mobile phone addiction in relation to psychological characteristics such as extroverts, self-esteem and anxiety. This study was undertaken to investigate the level of extroverts, self-esteem and anxiety towards mobile phone addiction among IPTAs youths in Malaysia. There were employed survey method in this study. The research was carried out on 400 youths from four public universities. These findings conclude that youth's mobile phone addiction is correlated with psychological characteristic name extroversion, anxiety and self-esteem. This issue must be taken into account before the youths become addicted to problematic usage. To prevent the harmful effects of phone mobile addiction, all the responsible parties such parents and educators need to work together.

Keywords: Smart phone addiction, Smart phone usage, Extrovert, Self-Esteem, Anxiety.

Introduction

According to Nielsen.com (2017), more than 90% of Malaysians youth aged 15-24 years consume traditional media to get information. Factors affecting them to consume traditional media such as newspaper are escapism and cognitive needs rather than social, feelings and personal need (Ghazali & Omar, 2014). But nowadays, mobile phone become one of main tool that used for information retrieval, online transactions, entertainment, calling and messaging. Furthermore, mobile phones are regarded as a necessary mode of interaction and has become an integral part of life. Generally, humans are emotional beings who are greatly influenced with the surroundings that they born into or are merely on what exposed (Eryilmaz, 2014). It is not exceptional because millennials are digitally literate and would easily attract to any new media communication technology. Mobile phones have become a basic necessity

for people in today's world, and they are no longer considered as luxury products. (Fadzil, Ghazali, Samah & Bolong, 2019).

The advancement of the mobile phone era has generated a valuable set of functions and more desirable movability, resulting in increased cellular phone use, particularly among young. Furthermore, according to Adams and Paul (2017), cell phones have become one of the greatest prominent digital gadgets among young adults. Furthermore, they noted that adolescent clientele is becoming more aware of the functions and capabilities of mobile phones than their elder community. Despite the fact that mobile phones provide tremendous convenience, they have adverse implications, create serious psychological changes, and cause hazardous physiological reactions, leading to a condition known as "mobile phone addiction" (Eduardo et al.,2012). This became noticeable that there were significant psychological needs. Low psychological wants, can cause physical and mental issues, as well as addictive behaviors such as internet addiction and mobile phone addiction (Kumcagiz & Gunduz, 2016; Settley, 2020). According to the findings of a prior reports, youths who have a low level of psychological stability rely on mobile phones to stay connected with others, which contributes to the risk of mobile phone attachment (Kim & Koh, 2018). These findings are consistent with the concept of self-determination, a motivational paradigm that outlines how individual motivation is generated and then influences people's growth. Furthermore, this study shows that when long-term mental needs exist in one social environment, the individual may have a strong desire to meet those expectations in other social contexts, such as the digital world (Ryan & Deci, 2020). As a result, fulfillment with psychological desires isn't always just a function of the social setting, but also a source of internal motivation that drives people to engage in trivializing activities. Consequently, teenagers can satisfy their psychological needs by playing computer video games, watching movies online, or conversing online (Sheldon, Abad & Hinsch, 2011).

Mobile phone considered as the basic need for the people all over the world. It transformed the way we exchange information, connect, search for information, work, do the chores and spend time. Moreover, Adams and Paul (2017) classified mobile phone is a tool that used to find the information, interact, entertainment, and to do online transactions, and many others. Based on the Statistic Department on individuals and families' use and access to ICT were identified almost 98.2% individuals are using mobile phone in their daily life compare to computer fixed line telephone, pay TV channel and television (DOSM, 2020). The statistics showed mobile phone become as essential part in everyone's life. Event though, mobile phone brought a lot of benefits to the users' in their daily life, it also causes harm to the user's psychological well-being.

Mobile phone use among youths not only affects their social interactions, hobbies, entertainment, information gathering, along with their behavioral habits, such as digital payments, mobile transactions, and e - shopping Generally, mobile phones have a wide range of functions (Lian et al., 2021). Thus, it would increase the mobile phone usage among more individuals (Han, Kim & Kim 2017) and significantly enhances the user stickiness of mobile phone. The heavy usage of mobile phone is correlated with health issues such as depression, anxiety, stress and sleep disturbances (Lopez-Fernandez et al., 2018). Heavy mobile phone usage can cause physiological and psychological ramifications (Parasuraman, Yee, Chuon & Ren, 2017). Moreover, in the academic performance, Ng, Hassan, Nor and Malek (2017), also asserts mobile phone use associated negatively with academic success. Thus, this issue must give a serious attention because it will impact wellbeing of youth. Wellbeing, has been demonstrated to have a strong link with life-course health and well-being in youth, who are more sensitive to hazardous surroundings (Pigaini et al., 2020; Germani et al., 2020). Hence, researchers believed there have significant relationship between mobile phone

use and youth mental health and some agree there is a negative or ambiguous connection between them. Therefore, this study will identify the causes of mobile phone addiction among the youth.

LITERATURE REVIEW/ANALYTICAL FRAMEWORK

Indicators of Psychological Characteristics towards Mobile Phone Addiction

Extrovert

Extroverts generally get their energy from being around other people. Their energy level is sapped when they spend time alone. Hence, this type people highly engaging with people and more sociable. They are ecstatic and excited for new opportunities and anticipation (McElroy et al., 2007). Generally, in the management and marketing jobs extrovert type of people keen to perform more higher (Barrick Steward & Piotrowski, 2002).

In a team-based environment, extroversion is associated with higher efficiency and better leadership skills (Kristof-Brown, Barrick and Kay Stevens, 2005). Individuals with a high level of extroversion are more likely to consider their appearance and various behavioral social ramifications, as well as to generate urges to act based on their perceptions of significant others' perceptions. Devaraja, Easley and Crant (2008), found that extraversion positively influenced the relationship between social norms and technology-using actions so that the relationship for individuals with higher extraversion is greater. This statement supported by Ehrenberg et al., (2008) noticed extraverted individuals were spending more time in typing texts. Thus, people with high level of social extroversion would tends to use phone more frequently.

Extraversion obviously influenced the relationship between social norms and technology acceptance such as mobile phone to connect with people and reliance on recognition. Due of their drive to develop and maintain engagements, people on this pathway will strive to engage from social components of mobile phones such as instant messages, email, and online platforms. Extraverted individuals mostly have a mobile phone because they want to interact with others all of the time (Law & Manner, 2011). Extravert's type of people are sociable, outgoing, and have a strong urge to communicate with others. As a result, the extraverts will message each other to keep in touch. Extraverts use mobile technology to stimulate themselves rather than to socialize (Bianchi & Phillips, 2005). Extraverts, emotionally unstable people, and no conscientious people spend plenty of time hanging out with people by sending or receiving messages, whereas introvert people tend to be alone and spend the substantial amount of time alone by changing wallpapers on their phone or setting their mobile ring tone (Chittranjan, Bloom & Gatica-Perez, 2013). Hence, it has been proven that extroversion and mobile phone addiction have a significant association.

Anxiety

Anxiety is characterized by individuals' undesirable mental reactions, such as worry, anxiousness, and social isolation (Aderka, Weisman, Shahar & Gilboa-Schechtman, 2009). If people having lack of individual skill and competence to shield themselves from the harmful effects of traumatic events, anxiety levels rise, they feel powerless and useless, and their physical and mental health is jeopardized. Extreme phone usage highly associated with anxiety and depression (Elhai et al., 2016). Attachment anxiety and self-esteem were found to have a significant negative association (Li & Kato, 2006), and insecure people also predicted would have such a low sense of self-worth (Zhao, Kong, & Wang, 2012). As a result, a lack of trust in one's desire to integrate with others is linked to attachment anxiety. Attachment anxiety can be used to predict social anxiety (Li & Kato, 2006), and social anxiety might impact on the worsen mobile phone addiction (Darcin et al., 2016).

In the prior studies it was identified negative feelings such as sadness, stress, anxiety and empathy link with excessive mobile phone use (Lachmann et al., 2018; Hawi & Samaha, 2017). Moreover, academic challenges in studies increased stress as they encounter new social and academic obstacles when they start and proceed through university (Ward-Griffin et al., 2018). In the past studies anxiety over attachment has been linked to behavior and addiction on mobile phones. Cheng and Hong (2017) fueled up that statement that higher amounts of anxiety among people lead to a favorable correlation with mobile phone addiction. According to Jeon and Jang (2014), using a mobile phone can reduce anxiety about social friction and unexpected consequences. Through anonymity, desynchronization, and non-verbal communication, Kong et al. (2020) hypothesized that social networking will reduce social anxiety.

Hence, youths with social anxiety often use their mobile phones to compensate for poor experiences with others in real-life situations. In general, anxious people use their mobile phones to send messages. People with high anxiety frequently rely on mobile phones as an efficient substitute for direct communication due to their aversion to interpersonal interactions and less of face to face communication abilities (Tang et al., 2016). As a result, this study identifies association between anxiety and mobile addiction, that could help us in understanding the relationship between anxiety and mobile consumption as well as bring into mobile phone addiction.

Self-esteem

There are several finding of research shown that poor self-esteem is a major factor on mobile phone addiction (Kim & Koh, 2018). A multitude number of findings exhibit that, some mediating variables may be used to examine the self-esteem impact on cell phone addiction (Walsh et al., 2008). Scholars focused their research on determining the level of self-esteem among youths and its effect on this electronic gadget.

People who have strong self-esteem are expected to use their phones less than those who have low self-esteem. Positive social connections, can provide teenagers with more social support, increase their self-esteem, and perhaps even minimize maladaptive behaviors (Soh, Chew & Ang, 2018). Result of prior studies indicated having supporting friendships will help them to avoid being addicted to mobile phones (Bae, 2015; Badanes-Ribera et al., 2019). Individual that having lower self-esteem used their phones for motivation and support rather than only for social networking.

Since the mobile phone provides a means of communication with anyone, self-esteem could have an impact on how they are using mobile phone. Based on findings of Bianchi and Philips (2005), poor self-esteem are more frequent callers and send more text messages. Billieux (2012), discovered that people with low self-esteem often have problems in real-world social relationships, necessitating protection in affective relationships, whereas indirect mobile phone interaction such as text messaging gave the protection feelings and reimbursed the need of security. As a result, persons who have low levels of self-esteem may use their phones constantly. This viewpoint is complied with research that shows a connection among high self-esteem and violence or risky behaviour. For example, Individuals with higher sense of self-worth are more willing to fight during war because they believe they can win (Baumeister, 2003). Since there have two contradict opinion, perhaps this article will to examine the connection between self-esteem and mobile phone usage and hazardous of addiction.

Mobile phone addition

Based on Gao et al., (2018), the term mobile phone addiction refers to mobile phone attachment. The researchers (Niemsz, Griffiths & Banyard, 2005; Yen et al., 2009) characterized mobile phone addiction as loss of

self-control, poor concentration, adaption, abstinence, confrontation and relapse as typical addictive behaviors. In the updated fourth edition of the Diagnostic and Statistical Manual of Mental Disorders (Billieux et al., 2015), the medical standard for cell phone addiction is deliberately reformulated by those who recognized and treated various addiction habits, such as drug consumption and gambling requirements.

The use of mobile phones is a part of digital technology equivalent to the internet, and it is expected to have a substantial effect. The internet is the most important communication medium of modern generation, as well as the best source of knowledge (Thakuria & Rofique, 2022). This study investigates indicating factors towards attachment on mobile phone. Billieuex, et al., (2015) proposed a model comprising three unique pathways for creating problematic substance use of mobile phone in order to detect the negative sensation of mobile phone usage. The overly reinforcement process concentrates on personality qualities like poor self-esteem, depressed mood, anxiety, and insecure attachments, which can lead to a person using their phone excessively to seek comfort from everyone.

Mobile phone addiction causes problems with emotional understanding, which may lead to more interpersonal problems. People who are more reliant on cell phones or other forms of media are more likely to conceal and cover up their emotions. The compensatory Internet use theory also suggests that negative living conditions can lead to a desire to access online in order to relieve negative feelings (Kardefelt-Winther, 2014b). When a person's motivation to access online is based on an unmet need in real life, and using the Internet helps to solve the real-life issue, the person can demonstrate a stronger the inclination to devote more time on the internet, which could lead to unfavorable outcomes (Kardefelt-Winther, 2014a).

RESEARCH METHOD

This paper involves primary data which data are collected through quantitative method. There were 400 youths from four public university involved in this study. The population of the study was the undergraduate students from 18 public universities in Peninsular Malaysia. The researcher will not be able to ask questions to the full general population who do not match the study's eligibility criteria.

Multi-stage random sampling method were employed to identify the sample group. This is one of the technique under probability sampling. In the first stage, multi-stage cluster random sampling was employed where all the IPTAs (only the main campus) were grouped according to four zones (northern, southern, central and east coast). From the southern zone (comprises of states such as Johor, Malacca and Negeri Sembilan) the researcher chose UTHM, USIM, UTEM and UTM. In the central zone comprises states such as Selangor, Kuala Lumpur and Perak. Universities selected from this zone are UPM, UKM, UITM, UIA, UPNM, and UPSI. In the third zone which is the East coast include states such as Pahang, Terengganu and Kelantan. Under this state the universities that listed is UMT, UnisZA, UMK and UMP. The fourth zone is Northern. The state listed are Pulau Pinang, Kedah and Perlis. The IPTAs that chosen was UUM, UNIMAP and USM.

After listing the IPTA based on zones, IPTAs will be selected to represent those zones. After that, faculties are randomly selected from each of the IPTA and at the final stage of the sampling, a total of 100 students per faculty will be selected as the respondents, making the total number of the respondents are 400 (4 zone x IPTA x 1 faculty x 100 respondents). The sample size for this study was determined by the G-Power. The G-Power analysis will focus on a moderate effect size, an alpha value of.005, and a power magnitude of.90 to.95.

MEASURES

Questionnaire of this study consists four main sections. Section A indicates gender, age, and race. Section B will measure about extroversion. This section consists of 20 items. Each statement was measured in the form of Likert Scale of 1 (never), 2 (rarely), 3 (sometimes) and 4 (often). Followed by section C identifying anxiety there were 10 statement used. The anxiety level was measured through four Likert scale as 1(never), 2 (rarely), 3 (sometimes) and 4 (often). Self-esteem and mobile phone addiction are the study's final sections. In this section there are 20 statements to discuss about the level self-esteem by using mobile phone. Each statement was measured in the form of Likert Scale of 1 to 5. Scale 1 (very uncharacteristic or untrue), Scale 2 (Uncharacteristic), Scale 3 (Neutral), Scale 4 (Characteristic) and Scale 5 (Very characteristic or true).

ANALYSIS

SOCIO-DEMOGRAPHIC PROFILES OF THE RESPONDENTS

This study included 400 participants from public universities, and the results of the respondents' socio-demographic profiles are reported in Table 1.1. The greater percentage of the respondents (63.5%) were male, with the remaining respondents were female (34.5 %). The findings demonstrated that majority of the respondents were 21 years old or younger (66%) and remaining respondents (34%) were under the age of 20 years old. Muhammud (2012) states that teenagers aged 16 and up are more cerebral and think critically before making the decisions. Hence, this sample group of teenagers seems to be more sophisticated and capable of making wise decisions in their lives.

Table 1 Socio-Demographic Profiles of Respondents (n=400)

Profile	Frequency	%
Gender		
Male	254	63.5
Female	138	34.5
Age		
21 years old and older	136	66.0
20 years old and younger	264	34.0
Ethnic		
Malay	317	79.3
Chinese	45	11.3
Indian	12	3.0
Sarawakian	12	3.0
Sabahan	11	2.8
Others	3	0.8

PSYCHOLOGICAL CHARACTERISTIC THAT INDICATES ON MOBILE PHONE ADDICTION

Respondent's psychological characteristics level on introvert and anxiety was categorized into three categories namely low (mean score 1.00-2.00), moderate (mean score 2.01- 3.00) and high (mean score 3.01-4.00) (Table 2). Statements are arranged by mean score, from highest to lowest. A mean score above 3.01 shows that respondents in the study have a strong addiction to mobile phones. The lower mean score level stated that youth's mobile phone addiction is very lower, followed by a moderate level which showed that youths was moderately addicted mobile phone and high level stated that youth behavior was very high in mobile phone addiction.

Table 2 Extroversion and Anxiety Level Mean Score Scale

Level	Scores
Low	1.00 – 2.00
Moderate	2.01 – 3.00
High	3.01 – 4.00

EXTROVERSION TOWARDS MOBILE PHONE ADDICTION

Table 3 shows the mean score and standard deviation of statements related to extrovert. All these statements were developed based on previous literature. Each of measure was measured in the form of Likert Scale of 1 to 4. Scale 1 (never), Scale 2 (rarely), Scale 3 (sometimes) and Scale 4 (often). According to Table 3, more than half of the respondents

(52.5%) had agreed that "they often feel part of a group of friends" (Mean = 3.36, SD = .786). This shows that youths are highly engage to their friends. They will frequently communicate with each other in the daily basis. Apart from that almost half of the respondents (48.55%) indicated "they are people they have to talk" (Mean = 3.33, SD = .763). The result demonstrate that the youths are have peers to share their opinions with one another and mainly use mobile phones as a medium to communicate.

The least contributed item to measure extroverts among youths was "I am no longer close to anyone" (Mean = 1.56, SD = .782). The finding demonstrated that the majority (86.3%) of the youths have least agreed that they not close to anyone. These findings indicate that public university students have high interpersonal relations and they engage more to discuss about subject matters, activities and so on.

From this research, the results explicated that in total mean score level of extrovert towards mobile phone addiction is in moderate level (Mean = 2.04, SD = .305). To sum up the analysis shows youths are moderately addicted to the mobile phone usage.

Table 3 Distribution of Youths in Public Universities by Extrovert (n=400)

Items	Percentage (%)				Mean	SD
	1	2	3	4		
1. I feel part of a group of friends.	2.8	10.8	33.8	52.5	3.36	.786
2. There are people I can talk to.	2.5	10.5	38.5	48.5	3.33	.763
3. I feel in tune with the people around me	1.3	8.3	47.0	43.5	3.32	.679
4. There are people whom I can turn to	1.8	12.5	39.3	46.3	3.30	.757
5. There are people I feel close to	3.3	12.0	37.5	47.3	3.28	.800
6. I am an outgoing person	4.3	12.0	38.8	45.0	3.24	.825
7. I can find companionship when I want it	4.5	14.5	39.0	42.0	3.18	.844
8. There are people who really understand me	6.0	18.0	33.5	42.5	3.12	.911
9. I do not feel alone	16.3	19.8	29.8	34.3	2.82	1.077
10. I have a lot in common with the people around me.	5.5	26.0	50.5	18.0	2.81	.790
11. I am unhappy being so withdrawn	12.3	23.0	39.8	25.0	2.77	.960
12. People are around me but not with me.	24.8	39.0	30.5	5.8	2.17	.868
13. My interests and ideas are not shared by those around me	26.5	37.5	29.0	7.0	2.16	.899
14. No one really knows me well	31.3	33.5	25.3	10.0	2.14	.973
15. There is no one I can turn to	39.0	32.5	24.8	3.8	1.93	.885
16. I lack of companionship	40.8	34.5	19.3	5.5	1.89	.900
17. I feel left out	40.0	36.5	20.0	3.5	1.87	.851
19. I feel isolated from others	48.3	33.3	16.0	2.5	1.72	.818
20. I am no longer close to anyone	59.8	26.5	11.5	2.3	1.56	.782
Overall					2.04	.305

Note: 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often.

SD = Standard Deviation.

ANXIETY TOWARDS MOBILE PHONE ADDICTION

Table 4 illustrates the percentages, means and standard deviations for all 10 measurements items of anxiety and mobile phone addiction among youth. Based on the table, more than half of the youth (68.3%) had agreed that "In the last month, they often been able to control irritation in life" (Mean = 2.88, SD = .849). This showed that they are able to balance their anxiety in the life. Furthermore, almost half of the youths

(43.5%) mentioned they sometimes had the ability to solve problems with the statement "In the last month, how often have you felt confident about your ability to handle your personal problems" (Mean = 2.83, SD = .830). This significantly demonstrated that youth have the capability to manage their personal problems solely without relying on anyone. That is to say, youth understand that they cannot prolonged with problem and find ways to solve problems with the use of mobile phones.

The lowest contributing item for measuring anxiety and mobile phone addiction among youths in public universities is "In the last month, how often have you felt difficulties were piling up so high that you could not overcome them" (Mean = 2.60, SD = .456). This shows that the majority of the youth (42.8%) agree that they very often felt hard to curb the issues that faced. The results identified youth require some medium to rely on to reduce their anxiety such as mobile phones attachment. Therefore, the more the use the mobile phones will be less anxious feeling among them.

As shown in Table 3, the level of anxiety was at moderate level (Mean = 2.60, SD = .456). This shows that youth have the capability to reduce anxiety by using the mobile phones by contacting their peers whenever they need to. This is in line with Kong et al. (2020), anonymity, desynchronization, and text messages would help to decrease social anxiety within social networks.

Table 4 Distribution of Youths in Public Universities by Anxiety (n=400)

Items	Percentage (%)				Mean	SD
	1	2	3	4		
1. In the last month, how often have you been able to control irritation in your life.	5.3	26.5	42.5	25.8	2.88	.849
2. In the last month, how often have you felt confident about your ability to handle your personal problems.	4.8	29.5	43.5	22.3	2.83	.830
3. In the last month, how often have you felt that things were going you way.	5.5	30.0	49.0	15.5	2.74	.781
4. In the last month, how often have you found that you could not cope with all the things that you had to do.	6.3	34.0	47.3	12.5	2.66	.775
5. In the last month, how often have you felt nervous and "stressed".	8.0	37.0	36.8	18.3	2.65	.873
6. In the last month, how often have you been upset because of something that happened unexpectedly.	9.0	39.3	37.3	14.5	2.57	.852
7. In the last month, how often have you felt that you were unable to control the important things in your life.	11.8	38.0	36.8	13.6	2.52	.875
8. In the last month, how often have you felt that you were on top of things.	13.0	37.8	40.8	8.5	2.44	.823
9. In the last month, how often have you been angered of things that were outside of your control.	15.3	36.5	38.3	10.0	2.43	.867
10. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them.	18.5	38.8	33.3	9.5	2.33	.886
Overall					2.60	.456

Note: 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often.

SD = Standard Deviation.

SELF-ESTEEM TOWARDS MOBILE PHONE ADDICTION

The statements to measure respondents' self-esteem and mobile phone addiction was developed based on past literature. Table 4 consist of 20 statements to discuss about self-esteem among youth who use mobile phone. Researchers use the mean score levels namely low, moderate and high to categories the level. Based on the 20 statements given, a possible mean score from 3.68 to 5.00 indicates very high self-esteem towards mobile phone addiction, followed by mean score 2.34 to 3.67 stating that the self-esteem towards mobile phone is moderate and final mean score 1 to 2.33 indicated the level of self-esteem on mobile phone addiction was at a lower level. The mean ranking results are shown in Table 5.

Table 5 Self-esteem Level Mean Score Scale

Level	Scores
Low	1.00 – 2.33
Moderate	2.34 – 3.67
High	3.68 – 5.00

The result in Table 6 revealed the percentage, mean and standard deviation for "self-esteem towards mobile phone addiction" among youth. According to the table the majority of the respondents (57.8%) had agreed that "they do not find it difficult to ask other people for information" (Mean = 3.57, SD = 1.128). This showed that youths were more confident to refer others to get the information needed for them. Hence, it will help to increase their self-esteem. Moreover, most youths (32.5 %) had agreed that they were neutral in "I am confident about my social skills" (Mean = 3.47, SD = 1.049). It is demonstrated that the respondents unprejudiced on their competence to facilitate interaction communication with others.

On the other hand, the least contributing item to measure self-esteem among youth is "Sometimes being introduced to new people makes me feel physically upset (for example, having an upset stomach, pounding heart, sweaty palms, or heat rash)" (Mean = 2.55, SD = 1.217). Based on Table 6, most youths (25.8%) generally agreed that some were neutral to the above statement. This shows that they are still hesitant to get to know with new people. They are not interested in getting to know or communicating with new people because of low self-esteem. Therefore, low self-esteem will stimulate on mobile phone addition where they will find this way to communicate with others.

In addition, the results in Table 6, indicated the youths' self-esteem is at higher level with overall mean value of 3.13 (SD = .507). It revealed almost all the youths' have shown their low self-esteem which triggers mobile phone addiction. This statement also supported by Kim and Koh (2018), who mentioned low self-esteem is a major predictor on mobile phone addiction.

Table 6 Distribution of Youths in Public Universities by Self-Esteem (n=400)

Items	Percentage (%)					Mean	SD
	1	2	3	4	5		
1. I do not find it difficult to ask other people for information.	5.8	11.5	25.0	35.3	22.5	3.57	1.128
2. I am confident about my social skills.	3.3	14.5	32.5	31.5	18.3	3.47	1.049
3. It does not take me long to overcome my shyness in a new situation.	5.5	12.3	32.5	33.8	16.0	3.42	1.068
4. I feel nervous when speaking to someone in authority.	7.8	12.5	26.5	35.8	17.5	3.42	1.145
5. I often have doubts about whether other people like to be with me or not.	6.8	12.8	32.8	33.8	14.0	3.35	1.082
6. During conversations with new acquaintances, I worry about saying something dumb.	6.3	18.0	28.2	29.8	17.8	3.34	1.148
7. I do not find it hard to talk to strangers.	7.2	14.0	34.8	26.5	17.5	3.33	1.135

8. I feel tense when I am with people I don't know well.	6.3	13.5	38.8	27.3	14.2	3.29	1.068
9. I am usually a person who initiates conversation.	10.5	15.5	32.5	23.8	17.8	3.25	1.160
10. I am shy when meeting someone of the opposite gender.	5.5	26.0	50.5	18.0		3.22	1.214
11. I feel relaxed even in unfamiliar social situations.	7.2	18.5	38.3	22.5	13.5	3.16	1.102
12. It is hard for me to act natural when I am meeting new people.	12.5	17.0	34.5	23.8	12.3	3.06	1.181
13. I worry about how well I will get along with new acquaintances.	10.5	20.3	34.0	24.8	10.5	3.04	1.136
14. I feel painfully self-conscious when I am around strangers.	12.5	20.3	32.3	23.5	11.5	3.01	1.183
15. I am often uncomfortable at parties and other social gatherings.	10.3	23.0	34.8	21.3	10.8	2.99	1.133
16. I have trouble looking someone right in the eyes.	13.5	21.8	30.3	21.5	13.0	2.98	1.223
17. When I am in a group of people, I have trouble thinking of the right things to talk about.	14.5	22.8	33.5	19.8	9.5	2.87	1.171
18. I am socially somewhat awkward.	16.5	22.5	34.0	18.0	9.0	2.80	1.179
19. I feel inhibited in social situation.	21.0	27.5	31.0	15.5	5.0	2.56	1.131
20. Sometimes being introduced to new people make me feel physically upset (for example, having an upset stomach, pounding heart, sweaty palms, or heat rash).	25.0	25.3	25.8	17.8	6.3	2.55	1.217
Overall						3.13	.507

Note: 1 = Very uncharacteristic or untrue, 2 = Uncharacteristic, 3 = Neutral, 4 = Characteristic,

5 = Very characteristic or true.

SD = Standard Deviation.

The result of this study construed the understanding the inconsistent relationship between psychological characteristics and mobile phone addiction. As a result of this study, it was reported youths' mobile phone addiction moderately effected because of extroversion and anxiety. Apparently, lower self-esteem associated with higher level of mobile phone addiction. As we know the results show the main indicator of mobile phone addiction is self-esteem. The results of this research demonstrated there have a substantial impact on both direct and indirect on mobile phone addiction. Based on the past studies self-esteem correlated with mobile phones (Seong Nam, 2017; Lee et al.,2015). Furthermore, these finding are consistent with previous finding where lower self-esteem is linked to attachment instability (Baik, 2000; Kim & Koh, 2018). On the other hand, the higher degree of avoidance attachment would lead to the lower self-esteem and anxiety which indicates a greater mobile phone addiction. Youths with lower self-esteem would create more anxiety feeling and anxious increase one's fascination on mobile phone addiction.

CONCLUSION

The study's findings demonstrated a link between extroversion, anxiety, and self-esteem, along with mobile phone addiction. Hence, it is expected this paper is useful for educators, and especially youths, should be aware of the components that lead to mobile phone addiction. Initially, all three of these factors (extroversion, anxiety and self-esteem) come from internal. Thus, the individual needs to be aware of the matter. If they maintain a balance in controlling

all three of those characteristics, they may reduce mobile phone addiction. Adversely, the mobile phone addiction has a huge impact to the users. Thus, for those who exhibit negative characteristics, educators can play an integral role in reinforcing interpersonal relationship-building approaches and self-control education, as well as organizing study time and motivating them to attain their goals in life.

The highest addiction to mobile phones has a tremendous effect to the users, mainly for youths. Therefor it is hoped that this paper will be an eye opener to everyone mainly for the parents who are responsible for their children and it is hoped they can guide the children for mobile communication activities. Today's children are tomorrow's leader. So, the awareness of mobile phone addiction needs to be nurtured from the very beginning.

Apart from that, there are some limitations in the study. The sample selection for this study was limited because there are only a small-scale of university students from four IPTAs were selected as respondents. This study used psychology variables such as extroversion, anxiety and self-esteem, which was selected as factor that tribute to the mobile phone addiction. There are studies on other variables such as the usefulness, loneliness, gender, family income level and other factors that are not take into consideration. The analysis of this paper has reinforced parents and those with responsibilities towards youth. Cross-national replication studies are required for further understanding for this research. It is possible to gain a greater understanding of mobile addiction by looking at various age groups from different countries. Mobile phone addiction is not a local problem. It is considered as global issue.

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