

Assessment on gadgets addiction and its relation to sexual addiction behavior among undergraduate students

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Abstract

This study aims to examine the gadgets addiction and sexual addiction behaviour among undergraduate students in one of public university in Malaysia. This study was conducted among 201 students consist of 94 male adolescents and 107 female adolescents from random sample selection. Their ages range were 23-25 years old from 3 different programs. The instruments were adapted from The Internet Addiction Test created by Young (1998) and Psychosocial and Individual Compulsive Sexual Behavior created by Efrati and Mikulincer (2018) with reliability Cronbach alpha of 0.65. Data collected were analyzed using Statistical Package for Social Science (SPSS) version 23. Statistic descriptive and inferential with analysis t-test and correlation Pearson were used to analyse the data. Results showed there is significant different between gadgets addiction behaviour among adolescents based on gender but no significant different between sexual addiction behaviour among them. Finding also showed a negative correlation between gadgets addiction and sexual addiction behavior among adolescents. This indicates that the effect of gadgets addiction toward sexual addiction behavior is in moderate level. Researcher believe there are other factors such as peers influence, environment factors and maturity of ages plays a significant variables that lead adolescents to involve in this misbehaviour problems. Researcher also recommends in future studies to get a larger sample across multiethnic and culture, parents background, level of education and status socioeconomic factor should be considered as significant variables to gain better findings.

Keywords: *Gadgets Addiction; Sexual Addiction Behaviour; Pornography; Undergraduate Students*

I. Introduction

In this modern age, various electronic devices and technologies are available on the market or known as gadgets like mobile phones, laptops, pads and so on. This is augmented by software dumps and various social media such as Youtube, Facebook, Instagram, tips and tricks, and more. This situation has led to teenager spending money to buy sophisticated gadgets to surf the internet and this is not only happened in Malaysia, but most adolescents in the world. However, the dumping of technology and the internet is not only beneficial to teenagers.

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It also has a negative impact on teenagers especially addicted to gadgets by spending a lot of time on the Internet ignoring academic and life lessons. In addition, in the cultural context and context in Malaysia there is a tendency for free sex behavior among young people. All of this happened because the younger generation used gadgets to easily watch pornographic pictures and movies on their mobile phones.

A study by Saffron Hill on behalf of Symantec found that Internet use habits show teenagers spend at least 16 hours a week surfing the Internet. The number is actually 6 hours more than the global average time for a study for spending internet user time involve 12 countries in the world. It was reported that 31 percent of the teenagers spent time at cyber cafe meanwhile 60 percent of them spent time chatting with strangers. (Johari and Raja, 2012).

Students who spend too much time on the internet without parental control can be exposed to pornography. According to Quadara, Murr & Latham (2017) children and adolescents in Australia aged 9 -16 who watch often have strong sexual desire, disturbed minds, are emotionally unstable, and have frequent desire to watch pornography repeatedly. Muhammad et. al (2017), reported that sexual activity among youth is a global phenomenon issue involving teenager from the age of 15 to 19 years old showed the figures of 30 to 50 comes from developed countries and Africa. Thus, this may causes the teenagers facing not only addict of sexual behavior but also emotional and psychological disturbance.

Quadara et.al (2017) reported at least 6 aspects of the addictive effects of pornographic behavior - knowledge of wrong sex, wrong attitudes and beliefs, aggressive sex practices and behaviors, attitudes and attitudes toward gender, sexual aggression and mental health problems and wellbeing. This finding and information is consistent with Greenfield (2004) had reported pornography also provides misinformation about sex between men and women. In a sexual relationship pornography is described as a physical affair, without the need for intimacy or desire between the perpetrators. Pornography also teaches that every woman has sex. Misunderstandings about this sexual relationship can cause male students to behave inappropriately with their partner, such as sexual harassment or even rape.

There are new perspectives of adolescents who were always in curiosity and looking for information about human health reproduction. Normally the situation of curiosity exist when the teens grow up to maturity period and it's related to the growth of physical, biological and as well as sexual reproduction. However, until certain circumstance of period, they feel uncomfortable and avoid to discuss about this issue especially with their parent's as well as family members. During this stage, they feel their parents refuse to talk about sex until they seek alternative sources such as peers or the Internet media (Murdiningsih, Rosnani & Hidayat, 2016). Murdiningsih et.al (2016), reported adolescents nowadays are more looking for sex information and reproduction through Internet. According to the survey they conduct among teenagers' showed the first information about sex and human reproduction was learned from the Internet than parents' or biology teacher at school. This was been caused that parents in Asian context having taboo to speak about this issue to their children and assume they will know it by themselves or from the teacher in school. Therefore, teenagers' today seem more prefer to use technology to search all the information including sex, puberty and biology growth which is related to their life.

Therefore, this study attempts to look on a new perspective with combining the variables of gadgets addictive behavior and sexual behavior that's lead to pornography behaviour among adolescents'. Thus, this study will contribute to the new finding when using adolescents' or Y generations as the variables with the other behaviour variables. As we discussed before, even through prior study has been executed related to sexual behavior, but to combine these 3 variables are not been yet implemented in Malaysian context. Hence, researcher decide to examine the correlation of gadgets addiction and sexual behavior among adolescents in a public university Malaysian context.

Statement of Problem

According to the National Health and Morbidity (NHMS) in 2017 reported 50.6 per cent of 13 to 17 years old of students from high school spent 3 hours watching television and computers. The survey showed 85.6 percent of teens use the internet and 29 percent of them were addicted to internet. This study was reflected from the overall figures of teens which are 94 % of them were smartphones users', and the remains 62 % were computer users'. Furthermore, this study is in line with the finding from Malaysian Communication and Multimedia Commission (MCMC) in 2016. The agency reported that school students spend most of time online average 21 hours a week. These figures were alarm to our society and situation becomes more difficult when National Institute of Occupational Safety and Health (2018) stated that obsessive of gadget users' behavior can lead to pornography or cyberbully.

In Malaysia, the use of gadgets becomes a widespread not only among adults but also to the young peoples'. According to Salmah and Malisah (2015), the exposure and use of technology gadgets among child as early as two years old and below common happened in Malaysian context. This may be caused by some people assume that giving early exposure of technology to their children can improve the development of children in all aspects such as cognitive, learning, physical, behavioral and social skills. What is even more alarming is two out of seven of schools girls were found addicted to internet and from this figures 94 % were smartphones users'. As such, we can see that the long duration of time spending on gadgets will give them a lot of bad effects. According to a study by Indrijati (2018), 58.4% of individuals ages from 12 to 34 years old spend on 5 hours per day in average used for laptop and 5 hours using smartphone for daily use in a day. These students activities such as searching for information and emails (48%), downloading or watching YouTube (47%), playing games and other activities reported approximately 35%. In fact, all of these statistics revealed that gadgets addiction is actually attacking our society from difference level of ages, ethnics and its' really impacted our life silently.

In addition, study by Alifia (2016) revealed that there is a relationship between smartphone uses with adolescent sexual behavior. The study showed that smartphone use leads the adolescents' to involve in sexual behaviour misconduct such as masturbating, hugging in public, kissing cheeks, and lips with different gender. This finding indicates that the use of smartphones has stimulated the sexual arousal unconsciously to the teens during the cognitive process and caused to sexual behaviour. Another term which related to sexual behavior and gadget addiction is cyber sexual addiction. This term could be described as viewing pornographic content or online

sexual communication. The most common form of cybersex is sexual chatting or talking between two or more individuals and the consequences will be followed by masturbation activities (Subrahmanyam and Smahel 2011).

However Carroll, Padilla, Nelson, Olson, Barry & Madsen (2008) had described pornography was a common culture which is happened among teenagers' in the Western context. Based on the finding in Brigham Young University and the University of Missouri done a survey of couples who were addict to porn behaviour by watching porn movies and pictures. The study found that uses of porn among men were associated with low quality of sexual of men and this may effected the spouse. (Weir, 2014). The findings were similar to Bridges and Morokoff (2011) that reported when men watch porn materials, they actually have low self-confidence and this also may affected the sexual intimacy with their partner. This study showed that by watching porn movies or materials may increase sexual desire among couples unconsciously however, there no study yet in Malaysian context to show that this argument is important to couple's to have a better life by behaves like this.

Therefore, the researchers plan to study these two variables: gadget addiction and pornographic addiction behavior. Researchers decided to choose adolescents as variables in this context is based on Sam (1999) that imply gen Y is an active generation to use gadgets. Thus, I believed by combine these variables may associated all the variables (gen Y, addict behavior and porn variable) and its' will gives a great impact to the results. In this study, the researchers' priorities were to examine the relationship between gadget and pornographic addiction behavior among university students' based on gender and place of residents' in Malaysian context.

Objectives of research

1. To identify the significant difference between gadgets addiction based on gender among adolescents
2. To identify the significant difference between of sexual behavior based on gender among adolescents
3. To identify the significant correlation between gadgets addiction and sexual behaviors among adolescents

II. Literature Review

Gadget Addiction Behaviour

Gadgets and internet have transformed our lives in many ways and shifted our paradigm regarding human relationship, works and life. A study by Abdullah (2004), Malaysian youths claimed that owning a mobile phone is essential in their life. This is not surprising as the younger generations are digital natives (i.e., individuals born in the technological era) and will naturally be easily attracted to any technological gadgets. The younger generations furthermore, used the mobile phone not just as a tool for communication but also as a way to express themselves (Ito and Okabe, 2004) and more importantly to look hip and cool (Ling, 2001).

Gadget usage has both pros and cons. Continuous use of gadget leads to many reported health problems like eye-straining, finger pain, backache, neck pain and sleep disturbances. Depending on the amount of time spent on the gadget (duration and frequency), there are adverse effects like physiological, psychological, social and emotional. There is a relationship between excessive internet use and loneliness, antisocial values and lower

emotional intelligence and depression. Social network sites, online games, video-sharing sites and gadgets, such as iPods and smart-phone are now fixtures of youth culture (UNICEF, 2017).

A study done by Rosliza et. al (2018) aimed to determine the prevalence of internet addiction among undergraduate students in a Malaysian public university and its associated factors. Based on the 322 respondents, 25 respondents (7.8%) were categorized as internet addict users, while 182 respondents (56.5%) were problematic internet users and others were unknown. The common online activities reported were social networking (86.6%), social entertainment (77.3%) and for educational purposes (77.0%). The findings revealed from multivariate analysis, problematic and addictive internet use was significantly more common among male students, those who received study loan and other types of funding compared to those on scholarships, and those who spent between four to ten hours a day accessing the Internet compared to those using the Internet for two hours or less a day. The study also found that the prevalence of problematic and addictive internet use among respondents was higher compared to previous researches among Malaysian adolescents.

According to a study from Wahyuningtias and Wibisono (2018), most of teens (60.7%) over the age of 17 were involved in gadgets addiction. Based on the finding, the medium of gadgets used among teenagers were 82.1% from Facebook and Instagram, 89.3% has meet couples in dating and 78.6% of them were having free sex knowledge. Further finding in this study reported 28 respondents in one of the school in Indonesia revealed that there is a strong relationship between the usage of social media among teenagers' towards knowledge of free sex. In fact, every online technology can be used for a sexual purpose. Through the World Wide Web, displaying text, graphics, and multimedia about sexual things is not difficult to find in this current situation. Sexual purposes can be served easily by seeing pornographic images, sexualized chatting, video streaming, or accessing other sexual areas (Delmonico and Griffin, 2011).

Theory Addiction Behaviour by Kimberly Young (1988)

Theory of this study is based from The Internet Addiction Test (IAT; Young, 1998). This theory was created by Dr. Kimberly Young, a professor at St. Bonaventure University and director of the Center for Internet Addiction Recovery, developed the IAT to assess symptoms of Internet addiction and compulsivity in a variety of test settings. Dr. Kimberly Young first identified addictive use of the Internet as a distinct psychological disorder utilizing comprehensive case studies of Internet users. Young's interest in Internet addiction started when the Internet was proliferating in the 1990s, when a friend's of husband was spending hundreds of dollars a month so he could participate in AOL chat rooms. At that time, many people in mainstream media were beginning to coin the phrase "online addicts" for those who spent large amounts of time on the Internet. Young identified that the United States lagged behind other nations in recognizing excessive Internet use as an addiction and was surprised at how few studies examined the phenomenon of Internet addiction. Then, Young founded the center for Internet Addiction Recovery in 1995 and has served as its director since its inception. In 1998, Young devised an Internet Addiction Test (IAT) to assess symptoms of Internet addiction and compulsive behavior in adults. Young cautions against strictly measuring addiction to technology in terms of time, but by how disordered someone's life has become because of it. Young says that digital addiction is similar to drug and alcohol addiction, and recent research shows digital devices can affect the brain the same way that cocaine and heroin does. Young

believes that it is important for parents to establish household rules about internet use to help their children avoid internet addiction, since children as young as three years old can become addicted. She recommended few guidelines should be followed to parents to handle their children. The guidelines were begun from Birth – 3 years: Never, 3 – 6 years: One hour a day (Supervised), 6 – 9 years: Two hours a day, 9 -- 12 years: Two hours a day /some independence on social media and 12 – 18 years: Independence (Digital Diet).

In this study, the application of Theory of Addictive Behavior focuses on aspects of adolescents sexuality. In this study, researchers try to engage the adolescents' behaviour with the time they spend while surfing the pornographic websites. By presuming that addicted behaviour may give consequences to human body functioning, its' will not only effect the human physical but also emotional disturbance and obsessive sexual desire especially during teens ages. This was been discussed by Young (1998) that excessive internet use and poor internet control by parents among youngsters may not only bring addiction behaviour but also anti-social behavior among youngsters in the public.

Sexual Addiction Behaviour

Exposure of adolescents to internet pornography could bring influence on their sexual behaviour. In certain circumstances, pornography through gadgets was a mechanism that suit and appropriate to educate young generations in this digital era. According to Mitchell, Finkelhor and Wolak (2003), 75.6 percent of adolescents ages between 14-17 old years were found accessed pornography websites. Kaiser Family Foundation (2002) reported that 70 percent of youngsters ages 15-17 were accidentally coming across pornography online. Pardun, Ladin L'engle and Brown (2005) reported that behaviour exhibited in internet pornography complicates the sexual behaviour of adolescents exposed to internet pornography in the development of sexual behaviour of adolescents. Furthermore, a study by Oddone-Paolucci, Genius and Vilato (2000) reveal that exposure to internet pornographic material puts one at risk for developing sexual deviant behaviours, committing sexual offences, experiencing difficulties in one's intimate relationship and accepting rape myth.

Furthermore, a study by Efrati and Gola (2018) on understanding and predicting the profile of compulsive sexual behavior among adolescents using a profile compulsive sexual behavior (CSB) of 1,182 people. The samples were divided into 3 groups namely abstainers, sexual fantasy and individuals' with compulsive sexual behaviour. The result showed girls were having high fertility, lower level of psychopathology with a good sex communication with partners plus lower compulsive sexual behaviour. However this study showed a significant result that only religious parents' will bring a quality of sex communication and compulsive sex behaviour among their boys compared to parents who did not practices their religious activities at home.

Khuldian Faith (2019) examines sexual addiction driven by anxiety and sex desire among male students in Malaysia. The students ages were from 18 to 27 years old studying in one of private university in Malaysia. This study focused on measuring the teens' anxiety and related to passionate love and sexual desire among the male students' in schools. The result showed there is a significant relationship between dating anxiety, passionate to love and d sex addict behavior among the male students'. The significant finding in this study was the researcher found coping skill to overcome the teenagers' delinquent problems. Its known sex addict behaviour only can be

inhibited among addicts' if an individuals' is in early-stage and by doing this may reduce sex crime cases in the future. However, this study has been argued when the data of respondents were not honest when answering the questions. Thus, in the future researcher will expend the study by using mixed method to add the interview sources from the actual respondents. Moreover by doing this, researcher will get a quality result pertaining from school students perspectives' related to emotional imbalance, sexual desire and passionate in love from the male students'.

Many past studies reveal about the use of gadgets and addictive behaviors among adolescents. Based on Johari and Raja Shahrina (2012) reported teenagers' spend at least average 31 percent of hours in cyber cafés and 60 percent of time on Internet use at home. How ever in Malaysian context an empirical studies focusing on addiction behavior related to pornography culture among youngsters' were still lack of research and not been researched yet. Even many research has been done by local researchers' but it only focused to certain variables focused on sexual behavior in the context of factors, causes, and effect. The study beyond than that such as to see the connected between scientific variables such as addiction behavior, sexual desire and pornography in scientific context was less studied in local context. (Roslee and Mohamed Sharif, 2011) and Mariam, Nurul & Nurul (2019). Therefore, researcher in this study determine to study focuses on addictive gadgets behaviors and pornographic practices among adolescents. Hopefully at the end of this study, researcher will get the finding to depicts the relationship between the gadgets addiction behaviour and pornography among university students. In fact, this is the contribution of researcher in local context to fill the gap which other researchers doesn't did by connected the variables of addiction and porn behavior among university students in local institutions'.

Theory Psychoanalysis on Sexuality by Sigmund Freud (1939)

In Freud's view of human nature, Freud believed that humans were born with the instinct of natural instinct. He believes that a person's personality is influenced by one's psychological development. This theory of psychosexual development is divided into five stages based on different ages, namely oral, anal, anal, latent and genital. Today's human behavior stems from the infant's adherence or discomfort when he was a child at a psychosexual level during his childhood with his mother. If he or she fails to breastfeed, cherish and reared in childhood with his mother then in adulthood, he or she will act out of control such as aggressive, unconscious and addictive behavior and so on and this is due to the childhood psychosexual failure.

In constructing this item, the researchers created a theory based on the theory of Sigmund Freud (1939) in the psychosexual section. The constructs developed were items of conscious awareness and stimulation of sexuality, sexual addiction and adolescent sexual desire, and past experiences of current sex addiction.

III. Research Methodology

This study used quantitative research design to acknowledge the addiction behavior and pornography practise among the adolescents. According to Gavin (2008), quantitative research is referring to collect numerical data and the data will be analyzed using mathematically based methods where it is in statistics form. Furthermore, Babbie and Earl (2010) stated that regarding quantitative data where it is a research design that emphasizes on objective measurements and numerical analysis of data collected through questionnaire or surveys. Quantitative research focuses on gathering numerical data and generalizing it across according to the sample of the research.

This study is using quantitative research design where the study was involved one of the public university in Malaysia. According to Creswell (2014), quantitative research is an educational research method which requires respondents to distribute questionnaires, collecting and analyze the data without involved bias manner.

Based on early study, researcher has distributed a set of questionnaires to a targeted group of population consist 420 students.' Based on Krejcie and Morgan (1970), with 420 peoples' of samples it's only requires 210 samples. In initial stage, researcher has distributed 220 set of questionnaires to the students but only 210 questionnaires were returned. Out of this, 9 questionnaires were damaged and could not be used in this study. Overall, samples on this survey were among university students from a public university in Malaysia consists of 94 male adolescents (46.8%) and female adolescents 107 (53.2%). These adolescents represent 68 students from the communications program, 81 students were from the social work program and 62 from the political science program. The purpose to choose different of students program were to gain more comprehensive and holistic view and this showed the strength and uniqueness of samples on this study. In further, to explain the significant variable in this study was the age of the respondents range were chosen from 23-25 years old as referred to "generation Y". According to Hairol Anuar (2015) "generation Y" is a generation born between 1977 to 1997 or also defined in Malaysian context as the next generation of the future. Based on the human science epistemology, generation Y is an active users' of Internet, less understand of peoples' emotional and always act spontaneous before thinking. Thus, researcher decided to choose the samples among campus students as samples in this study as they were the appropriate and fit samples in this study, besides other factors such as the facility of free wifi they received and the environment of youngsters were in the local campus.

Reliability of Instrument

The construct of addictive behaviors was built on The Internet Addiction Test Theory (IAT; Young, 1998). This theory was created by Dr. Kimberly Young, a professor at St. Bonaventure University and director of Center for Internet Addiction Recovery. The purpose of developing the IAT was to identify the symptoms of Internet addiction and compulsivity in a variety of settings, compulsive and mental disorders. The IAT was researched on a sample of adolescents and adults spanning ages 13 to 67 years old. Statistical analyses found sample size adequate for factor analysis, which was conducted and yielded six factors that the IAT assesses. The 6 scores were namely, salience, excessive use, neglect work, anticipation, lack of control, and neglect social life. The IAT total score was ratings given by the examinee for 20 items responses. Each item was rated on a 5-point scale ranging from 0 to 5 and the maximum score is 100 points. The alpha value of Internet Behavioral Addiction Construction was 0.86. Based on this study, the researcher make changes to the IAT construct by adding a new construct called gadgets addiction behavior. Although the original constructs were developed by Young (1998) but based on the aims and social context situation on this study, researcher has made some modification by adding new items to fit on this study. For example, "you feel addicted using mobile phone even during eating time" or "you feel addicted using the internet during the daytime until emotions are disturbed to the level anxiety".

In addition, this instrument was constructed based on the theory of Freud (1939) in the section on Psychosocial and Individual Compulsive Sexual Behavior (CSB) questionnaires (Efrati and Mikulincer, 2018).

Researcher has construct some items from Freud's Theory, namely awareness and stimulation of sexuality, addiction and sexual desire among adolescents, and experiences on sexual behavior with their couples. In another perspective, researcher also add on some items from Individual Compulsive Sexual Behavior (CSB) to measure the sexual fantasy and pornographic viewing behaviors. This questionnaire also has adapted from several criteria of sexual construct developed by Matlatt (2008) and Roslee (2011) such as kiss and hug with couples in public, and practise free sex activity before married their partner. Furthermore, the instrument consist of 12 items using 5 point scale ranging from 1 (strongly disagree) to 5 (strongly agree) with Cronbach's alpha value was 0.68.

Pilot Study

Table 1: Reliability value Constructs of Gadgets Addiction Behavior and Sexual behavior

No	Construct	Pilot Test 1		Pilot Test 2		Cronbach
		No item	alpha Cronbach	No item	alpha Cronbach	
		value		value		
1	Gadget					
Addiction						
Behaviour		20	0.56	20	0.86	
2	Sexual					
addiction to		14	0.53	12	0.68	
Pornography						

According to Fraenkel and Wallen (1996), pilot test is an attempt of a small scale study with the aim to identify the weakness of the study instrument and the study procedure. The purpose of pilot test is to verify the instrument and to get reliable of validity and reliability of the instrument. Researcher has chosen 30 students as representative samples in a public university in Malaysia. The samples selected were among youngsters students ranging age from 23 to 25 years old represented from both genders. According to table 1, result showed the items were suit and appropriate with the variables studied. The two construct questionnaires showed a high degree of Cronbach alpha value for the reliability of Gadget Addiction Behavior was 0.86, and Sexual Addiction to Pornography was 0.68. Total reliability for both instruments were 0.65. According to Cohen (1992) and Najib (2001) the reliability index value of 0.60 were accepted. In terms of construct validity for each item, Pearson's correlation method was used with a significant level of $p < 0.05$. All items used in this study were through two pilot studies. Non-significant items in pilot test 1 has through the language validation process. While in Pilot test 2, all items were significant at $p < 0.05$.

IV. The Results

Table 2: Frequency and percentage on program of the respondents

Program	Frequency	Percent (%)
Media Communication	68	33.8
Social Work	81	40.3
Political Science	52	25.9
Total	201	100

Table 2 shows the frequency and percentage program of the respondent involved. Respondents from media communication program are 68 students (33%), 61 (40.3%) respondents from social work program and 52 (25.9%) respondents from political science program.

Table 3: Independent Sample t-test on significant different of gadgets addiction behaviour based on gender among adolescents

Gadgets	Mea n	S D	t	df	Si g.
Equal variances assumed.	3.43 48	.4 3984	3.300	1 99	.0 01
Equal variances not assumed	3.24 18	.3 8938	3.274	1 87.263	.0 01

Significant on level $p < 0.05$

Meanwhile, table 3 show an independent sample t-test has been run between gadgets addiction behaviour based on gender among adolescents. If the p value is less than or $p <$ the significance level ($\alpha = 0.05$) then the result is significance. While if the p value is more than or $p >$ the significance level ($\alpha = 0.05$), then the result is not significance. The significant between gadgets addiction behaviour and gender among adolescents ($t = 3.300$, $p < 0.05$). Thus, H_0 is accepted. This means that there is significant different between gadgets addiction behaviour based on the gender among the adolescents.

Table 4: Independent Sample t-test on significant different of sexual addiction behavior based on gender among adolescents

Sexual behavior	M	S			Si
	ean	D	t	df	g.
Equal variances	2.	.4	.348	1	.7
assumed	8936	5716		99	28
Equal variances	2.	.4	.348	1	.7
not assumed	8710	6052		96.036	28

Significant on level $p < 0.05$

Based on the table 4, depict an independent sample t-test has been run between sexual addiction behaviour based on gender among adolescents. If the p value is less than or $p < \alpha$ the significance level ($\alpha = 0.05$) then the result is significance. While if the p value is more than or $p > \alpha$ the significance level ($\alpha = 0.05$), then the result is not significance. The significant between sexual addiction behaviour and gender among adolescents ($t = 3.48$, $p > 0.05$). Thus, HO2 is unaccepted. This means that there is no significant different between sexual addiction behaviour based on the gender among the adolescents.

Table 5: The correlation between gadgets addiction behavior and sexual behaviour among adolescents

		Gadgets Addiction Behaviour	Sexual Behaviour
Gadgets Addiction Behaviour	Pearson Correlation	1	-.052
	Sig. (2-tailed)		.477
	N	201	201
Sexual Behaviour	Pearson Correlation	-.052	1
	Sig. (2-tailed)	.477	
	N	201	201

Correlation is significant at level $p < 0.05$ (2 tailed)

Table 5 shows the correlation between gadgets addiction and sexual behavior among adolescents with correlation coefficients ($r = -.052$, $p < 0.05$). The results showed a negative correlation between gadgets addiction behaviour and sexual behavior among adolescents. Correlation test showed significance at $p > 0.05$. This means that HO3 is rejected. Simple correlations indicate that gadgets addiction behaviour influence at a moderate level presents a low sexual addiction behaviour among adolescents. This indicates that the effect of gadgets addiction on sexual addiction behavior is modest and does not affect adolescents engaging in pornographic behavior. Other possible factors such as peer influence, environment and age play a significant role in influencing adolescents involved in pornographic behavior.

V. Discussion

i. Gadgets addiction behavior based on gender among adolescent

The independent sample t-test has been run between gadgets addiction and sexual addiction behavior based on gender among adolescents. Many findings indicate that gadgets addiction behaviour has a significant impact on the gender. This finding was supported by Bhushan, Preethi, Daniel, Abhinay & Labhanya (2015) found that male students showed more significant effects on gadgets addiction than female students. In other finding showed that gender has a significant impact on female students such as the study by Duraimurugan et. al (2015), Sharma et al (2014), and Morahan-Martin and Schumacker (2000). According to their research, most men were engage with online social problems such as online gaming, enormous pornography chatting, and online gambling that cause men spend lot of time using Internet and this may affect them to gadgets addiction. In addition, the study also found students who live in the house are more likely to be addicted to the internet than those who live in the hostel. This is due to reasons that students live in dormitories are tied to the discipline and culture of the college compared to students who live at home, they are independent and have a low learning discipline. As a result, they spend a lot of time browsing gadgets and internet without control from the parents' or authorities'.

Annisa and Grace (2017) have different perspectives with the findings of the researchers. They studied the influence of gadgets addiction on adolescents and family functioning involved 226 adolescents ages ranging from 2-18 years old. There were two types of questionnaires, namely the Kwon (2013) questionnaire was to measure the gadgets addiction behaviour meanwhile the Epstein's (1983) Family Assessment Device purpose was to measure the family functioning. The result showed that there is a negative association between using of gadgets and family functioning. In this context, the presence of gadgets bring changes of behavior patterns and interaction within the family. It is because teenagers are happy to spend a lot of time using their gadgets, as it allows them to interact with people outdoors in their home, while doing other chores. If parents want their family to function properly even in the presence of gadgets, there need to be rules and changes in roles that are created. This shows that adolescents in the role of family members can still function even when teenagers use gadgets in their daily lives. The main factor is that they need to be disciplined, wise during using the gadgets in limited time and obey to their parents' instructions.

This finding is different from Kumar and Sherkhane (2018) study on gadgets addiction and its implication toward undergraduate medical students university in India. The study used cross-sectional method toward 200 undergraduate students' ranging ages 21-23 years old with 50% of them were addicts to gadgets in a week. The Finding showed the students have a tendency to rely on gadgets until forget their personal health. This indicates that our finding was different from Kumar and Sherkhane (2018) that even though the samples were almost similar involving undergraduate students on campus, but the result showed that Malaysian addicted students were still under controlled and did not neglect their personal health compared to students from India.

ii. Sexual addiction behavior based on gender among adolescents

The results showed that there was no significant difference in sexual behavior based on gender among adolescents. This study is in line with Ogboru et. al (2016) showed there were no significant differences between male and female adolescents on the influence of Internet addiction and sexual behavior. The finding showed that both genders, male and female, reported that Internet has negatively affected their sexual behavior. This was contradicted with finding by Stack, Wasserman and Kern's (2004) revealed that pornography cultures' actually affects on male adolescents compared to female adolescents. In General, male adolescents were addicted 6.43 times more frequent and 12 per cent increase surfing the obscene web than female adolescents.

Shimoni et. al (2018) study personality factors of gender and associate with sex addiction among male and female adolescents. The study involved 267 participants comprising 186 men and 81 women selected from Internet users'. Findings showed that male adolescents exhibit more sexual addiction than female adolescents, having more experiences but less neurotic than female adolescents. The result also showed that personality factors contribute for 19.6% of addictive behaviors among adolescents and their associated neuroticism. In other study conducted by Becker et. al (2017) on sex, addiction and gender differences using qualitative method through library research and documents analysis. The finding found sexuality and gender differences are not solely determined by biological, socio-cultural or environment factors but was determined by scientific genetic in human body. It's namely phenotypes that may be more masculine or more feminine. Gender-related sex differences in the brain can influence the response to drug abuse, progressive changes in the brain after exposure to drug abuse and addiction resulting from the experience of taking the drug.

iii. Correlation between gadgets addiction and sexual addiction behaviour among adolescents

The final result showed the Pearson Correlation test between gadgets addiction and sexual behaviour are not significantly correlated ($r = -.050$, $p > 0.05$). This is because most likely, sexual behavior was not caused by gadgets but was influenced from the websites contents or electronic tools. According to Kristiana et. al (2019), sexual contents are the easiest documents to find by anyone either children, teenagers' of adults'. With the current technology access becoming more better teenagers can easily surf obscene images or film for their own sake. Actually, the affect to teenagers' was not only addiction to sex behaviour but moreover its may affected individuals life cycle such as having sleep disorders and forgetfulness in life. However, beware that not all online sexual activity has negative impacts on its consumer (Delmonico and Griffin, 2011). It's reported nearly 80% of online sexual activity is aimed for recreational purposes and does not create any significant problems based on an earlier study by Cooper et. al (2000).

Our study was supported by Khoirotul, Yuli & Heru (2015) that focus research to look at internal and external factors as influences variables toward adolescents' sexual behavior. Internal factors in the study covered the level of education, knowledge and attitude toward sex and lifestyle. Adolescents who were highly educated and having good sexual knowledge were found less frequently involved in premarital sexual activity. In further, adolescents who have poor attitudes and involved in high-risk lifestyle (such as smoking, alcohol consumption and drug addiction) were found significantly engage in premarital sex. However, this finding also mentioned some

factors that can affected more or less of the addiction behavior among teenagers. Its believed that the role of the nearest person include friends, parents, close relatives, teachers, health workers and religious leaders actually can influence teenagers to avoid this misbehaviour. Therefore, based on the prior discussion it's clear that a lot of factors can influence sexual behaviour among adolescents and it does not solely depend on the use of gadgets addiction but more important is the strength of internal human factor.

In contrary, study done by Ogburo et al (2016) revealed that there is a correlation between adolescents' exposure to Internet pornography and sexual behaviour. This study found several issues related to negative sexual behaviours through their clients such as pre-marital sex, sex through anal, oral sex among couples, using vibrator to abuse couples, sexual aggression, and sex compulsion toward couples. This study in line with Nordin, hanson & Tyden (2004), Cline (2001) and Freeman-Longo (2000) showed there was strong association between exposure to Internet pornography and sexual behaviour. The study found that adolescents who viewed sexually explicit materials had a mood-altering experience whereby they practice what was viewed. The unhealthy sexual behaviours were enumerated as masturbation, early sexual among couples, anal sex with couples, oral sex with couples, group sex with different gender, sexual addiction, compulsivity and aggression sex with couples. This study established the fact that there is a strong association between exposure of adolescents to internet pornography and negative sexual behavior. Besides that, study by Nordin et. al (2005), examined the association between pornography consumption and sexual practices among 718 students from high school classes in Sweden. The study found 53 percent of students reported pornography could influence them by giving new knowledge, inspire and engage them in sexual activities such as oral sex, anal sex and to practice group sex among them. In general, their engagement was significantly associated with high consumption of pornography.

VI. Conclusion

This paper describes gadgets addiction and pornography behavior among university students based on gender and location of residence. Although many studies have been conducted to study gadgets addiction and pornography behaviour but this research try to identify new finding related to youngsters represent by university students, gadgets addiction and pornography behavior. As I discussed before, youngsters' are importance as the main samples study because these samples represent the Y generations which is an active users'of Internet and were identified as risk's generation to online criminals.

These findings are noteworthy despite the strong influence of gadgets among teenagers at university, but do they practice pornography cultures in the campus? However in this study, result showed that there is a significant correlation between the use of gadgets and the effects of pornography but the impact was small. This finding is in line with Kumar and Sherkhane (2018) and Khoirotul et. al (2015) which showed that there is a significant relationship between the use of gadgets addiction and pornography behaviour among university students despite the small effect. However, is the focus on pornographic behavior perpetrated among male students unrelated to the cause of the incident? Whether sexual behavior is associated with stress, depression and loneliness while students are studying on the university campus or to fill the quiet life of the campus. Therefore, it is recommended that further studies should be carried out among the younger generation involves larger population and of various races, namely Malays, Chinese and Indians. The ethnic diversity factors are interesting to study to

gain different causes and effects from these three races associate to variables of gadgets addiction and pornography behaviour. In addition, other factors such as parents' influence, school environment and culture factors, socioeconomic status factors are also important factors to be considered as variables in future studies.

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