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FACTORS AFFECTING SEXTING BEHAVIOUR AMONG YOUNG ADULTS
IN MALAYSIA

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A RESEARCH PROJECT SUBMITTED IN
PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE
BACHELOR OF SOCIAL SCIENCE (HONS) PSYCHOLOGY
FACULTY OF ARTS AND SOCIAL SCIENCE
UNIVERSITI TUNKU ABDUL RAHMAN

APRIL 2020

Running head: FACTORS AFFECTING SEXTING BEHAVIOUR

Factors Affecting Sexting Behaviour Among Young Adults in Malaysia

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This research project is submitted in partial fulfillment of the requirements for the Bachelor of Social Science (Hons) Psychology, Faculty of Arts and Social Science, Universiti Tunku Abdul Rahman. Submitted on April 2020.

ACKNOWLEDGEMENTS

It would not be possible for us to complete this final year project without the assistance, guidance and support of several people involved in the process. Therefore, we would like to express our gratitude to the following individuals:

To our supervisor, Mr. Tan Soon Aun, who devoted much time and effort to correct our drafts and to also make sure we were on the right track in the study. Despite the numerous mistakes and inconveniences we have brought throughout the process, Mr. Tan never stopped providing guidance and support to us. This study would not happen without his patience and genuine assistance.

To our family members and friends who gave mental and emotional support to carry on with the study when we faced obstacles.

Special thanks to friend, Ang May Phing, who read our drafts and offered guidance in our writing, which enabled us to construct our ideas better.

Finally, thanks to the participants of this study for their trust and patience to complete our survey willingly.

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APPROVAL FORM

This research paper attached hereto, entitled “Factors Affecting Sexting Behaviour Among Young Adults in Malaysia” prepared and submitted by “ Adeline Seah Wei Xuan, Lee Xin Lin and Lim Shar Minn” in partial fulfillment of the requirements for the Bachelor of Social Science (Hons) Psychology is hereby accepted.



Supervisor

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Date: 6 April 2020

FACTORS AFFECTING SEXTING BEHAVIOUR

TABLE OF CONTENTS

	Page
Abstract	i
Declaration	ii
Chapter	
I Introduction	1
Background of Study	1
Problem Statement	5
Research Objectives	8
Research Questions	8
Hypotheses	9
Significance of Study	9
Definitions of Terms	11
II Literature Review	13
Self-esteem and Sexting Behaviour	13
Sexual sensation seeking and Sexting Behaviour	15
Perceived peer pressure and Sexting Behaviour	18
Gender differences and Sexting Behaviour	19
Relationship status and Sexting Behaviour	22
Theoretical Framework (Problem Behaviour Theory)	25
Conceptual Framework	28
III Methodology	29
Research design	29
Sampling method	29
Sample size	30
Participants and Locations	30
Instruments	31

FACTORS AFFECTING SEXTING BEHAVIOUR

	Procedure	33
	Pilot Study	34
	Actual Study	35
	Normality Assumptions	37
	Multiple Linear Regression Assumptions	38
	Data Analysis	39
IV	Results	41
	Descriptive statistics	41
	Frequency distribution of variables	42
	Prevalence of Sexting Behaviour	43
	Inferential Statistics	44
	Gender differences and Sexting Behaviour	45
	Relationship status and Sexting Behaviour	45
	Predictors of Sexting Behaviour	46
V	Discussion and Conclusion	48
	Discussion	49
	Implications of Study	56
	Limitations and Recommendations	58
	Conclusion	60
References		
Appendices		
	Appendix A	Questionnaire
	Appendix B	Ethical Approval For Research Project
	Appendix C	Turnitin Originality Report

Abstract

In recent years, the phenomenon of sexting has received tremendous attention by the researchers as several negative consequences were found attributed to sexting. However, such phenomenon is not well-understood in Malaysia context because so far only one local qualitative study was dedicated to understand this behaviour among a group of teenagers. Thus, the present study decided to further investigate on this topic by adopting quantitative, cross-sectional and correlational research design. Particularly, this study intended to examine sexting prevalence rate among Malaysian young adults; gender and relationship status differences in sexting behaviour; as well as the factors (self-esteem, sexual sensation seeking and perceived peer pressure) that would affect people to sext. Hence, a total of 396 Malaysian young adults (aged 18 to 38 years old, $M = 24.21$, $SD = 3.15$) were recruited by using purposive sampling method and online survey serves as a tool for data collection. Based on the findings of this study, 72.5% of the participants do engaged in sexting and no significant gender difference was found in sexting behaviour. As for relationship status, individuals in a relationship sext more than the singles, but no significant difference was found in married individuals. Moreover, findings also indicated that only sexual sensation seeking significantly predicts sexting behaviour, while self-esteem was not associated with sexting. Therefore, the findings in this study could enrich the literature of sexual media studies in Malaysia, and provide useful data for future researchers to investigate on this topic.


Keywords: sexting behaviour, self-esteem, sexual sensation seeking, perceived peer pressure, young adults, Malaysian

DECLARATION

We declare that the material contained in this paper is the end result of our own work and that due acknowledgement has been given in the bibliography and references to ALL sources be they printed, electronic or personal.

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Chapter I

Introduction

Background of Study

The evolution of communication technology has provided creative ways to communicate and build intimacy with one another (Gámez-Guadix et al., 2016). However, a new form of online communication pattern which involved sexual matter or “sexting” to call, has garnered the attention of the community (Clancy et al., 2019). To define sexting, it is important to note that its definition is still in grey area as different researchers might have defined it differently. For instance, some researchers prefer to use the general definition of sexting, which is sending sexual content in the form of messages, images and videos (Klettke, 2019; Korenis & Billick, 2014; Livingstone & Gorzig, 2014; Mitchell et al., 2012; Morelli et al., 2016; Smith et al., 2014) while others specifically focus on image-based content only (Doring, 2014; Englander, 2012; Eugene, 2015; Sevcikova, 2016). However, in present study, we define sexting as “the phenomenon that include sending, receiving and sharing nude or sexual photos, videos, messages to another person mainly through the phone” (Englander & McCoy, 2018; Madigan et al., 2018; Ybarra & Mitchell, 2014).

Since the occurrence of sexting, researchers have found more and more individuals getting themselves involved in this behaviour. According to a recent review done by Englander and McCoy (2018), sexting, in western countries such as the United States and Spain, were found to be more common as people age. It was found that among the adolescents in the United States aged below 18, sexting rate was approximately at 10% to 16% while comparing to young adults which ranged from 48% to 53% at a much higher rate. For example, in a research conducted by Bianchi et al. (2019), it was indicated that young adults who were in a romantic relationship were especially more adoptive of a positive attitude towards sext hence they engaged in sexting more often. Besides that, an increasing

trend was discovered among college students with 27% in 2012 and rose to 44% in 2015, which suggested that sexting has becoming more popular across time (Englander & McCoy, 2018).

While the reported prevalence rate of sexting is high in other countries, the prevalence of sexting in Malaysia is still unknown as the topic of sexting is not a widely researched topic in local. Fortunately, there was one local qualitative study dedicated to find out how highschool students in Perlis described and defined sexting (Mohd Muhaiyuddin et al., 2019). Their research has displayed that sexting was a common phenomenon in the teenage age group of 13 to 19, whereby most of them had reportedly received sext almost every day and they even took initiation to ask for sexually explicit images when they did not receive it. They also described sexting as a trend among peers because majority of the adolescents owned a phone thereby giving them access and allowing them to easily engage in sexting. From this finding, it is undeniable that sexting behaviour is happening in Malaysia as a matter of fact and adolescents would even describe it as a “routine activity”. Yet, local research regarding to this topic is very limited. Since such behaviour is not well understood in Malaysian context, current research aimed to fill up this knowledge gap by discussing the prevalence rate and the predictors of sexting in Malaysia so that people could gain a better understanding regarding to this phenomenon.

Besides revealing the popularity of sexting among Malaysian high school students, Mohd Muhaiyuddin et al. (2019) also pointed out that most of the female students are worried about such phenomenon because they described sexting behaviour as something “dangerous”, “harmful” and “unhealthy”. As according to them, exchanging sexually explicit photos or videos encouraged the students to engage in real-life sexual activities without thinking through the consequences, therefore in their opinion, sexting should be forbade (Mohd Muhaiyuddin et al., 2019). Their concern is understandable because many of the researchers

are also worried about the nature of sexting and afraid that it might bring harmful outcomes to sexters, especially among the youths (Van Ouytsel et al., 2018). This is supported by findings from Benotsch et al. (2013), which demonstrated that sexting is associated with a few risky sexual behaviours in real life, such as having sexual intercourse with multiple partners and having sexual intercourse without practising safe sex. Furthermore, several possible negative outcomes have mentioned across studies, which including decline in one's emotional well-being (Alonso & Romero, 2019), online and offline dating violence (Morelli et al., 2016), sharing explicit photos without consent, blackmailing (Powell & Henry, 2014) and cyberbullying (Lievens, 2014). In some cases, the consequence may escalate to be as severe as suicide (Englander, 2019).

In order to prevent the potential negative outcomes from occurring, multiple studies have been carried out to study the potential factors that may lead to the behaviour of sexting. This is so that researchers may be able to provide substantial and useful insight to professionals who intend to employ effective interventions in the future by allowing them to narrow down and focus on the aspects that are more important. Among all potential factors, one of the widely studied factors is self-esteem. Self-esteem has been found associated with risky sexual behavior such as having multiple sex partners (Chilisa et al., 2013; Davis et al., 2016), as well as the need of elevating a positive view of self through getting positive feedback from sext (Bianchi et al., 2019). Nevertheless, there are mixed results of its association with sext. According to some researchers, self-esteem was found to have a significant relationship with sexting, which self-esteem served as a buffer against sext (Scholes-Balog, Francke & Hemphill, 2016), while other studies did not find the similar result as they claimed that there was no association between self-esteem and sexting (Gordon-Messer et al., 2013; Gámez-Guadix & de Santisteban, 2018). Thus, this indicating that more studies should be carried out on this matter to make a conclusive statement.

Other than self-esteem, another important variable to consider in the study of sexting is sexual sensation seeking. It was found that individuals with high sensation-seeking usually look for experiences and sensations that are different, novel and intense (Horvath & Zuckerman, 1993; Arnett, 1994). According to them, high sensation seekers are willing to take risks in order to enjoy the intense experiences, and such experiences could include risky sexual activities (Horvath & Zuckerman, 1993; Arnett, 1994). As sexting is deemed as novel, highly arousing and risky activities, it is possible that higher sensation seekers are more likely to be involved in sext (Delevi & Weisskirch, 2013). However, to the best of our knowledge, researchers have yet to examine the association between sexual sensation seeking and sexting as most studies tend to focus exclusively on sensation seeking. Although sexual sensation seeking is also a type of sensation seeking, its definition and measurement can be varied as sexual sensation seeking is more sex-specific. Therefore, it would be beneficial to include sexual sensation seeking in this study so that this new association can be explored.

In addition, Ingram et al. (2018), stated that young adults may be more susceptible to peer pressure in demonstrating certain behaviours, including behaviours related to sex. This is in line with other studies which discovered the association between peer pressure and sexting behaviour (Drouin & Tobin, 2014; Lee & Crofts, 2015; Englander, 2017). Vanden Abeele et al. (2014), also indicated that individuals who sext may engage in it due to the desire to achieve acceptance among peers and thereby gain a status. Hence, since existing literatures have consistently supported that peer pressure could predict sexting, it would be worthy to study this variable in a different context, which is in Malaysia, so as to investigate whether or not perceived peer pressure also plays a role in predicting sexting behaviour among the local young adults.

Based on the existing studies that have been discussed above, it becomes clear that present study will be placing focus on three factors, namely self-esteem, sexual sensation

seeking and perceived peer pressure. By understanding how these variables are able to predict the tendency of sexting, perhaps it could fill up the knowledge gap and at the same time generate rich insights regarding the practice of sexting behaviour in Malaysia.

Problem Statement

Nowadays, social media has permeated the everyday life of all age groups as it is an important platform for people to communicate. However, several studies have found that more and more people use it as a medium for them to send, receive or forward sexual content – which is so-called “sexting” (Hudson & Fetro, 2015; Klettke, Hallford & Mellor, 2014; Scholes-Balog et al., 2016). For instance, teens (22%) and young adults (28%) admitted that they used sexually suggestive words and images in social media more often than in “real life” (NCPTUP, 2008). This may be due to the “anonymity” that social media allow, as users tend to talk more openly about sex when they can stay anonymous or falsify their online identities (Subrahmanyam & Smahel, 2011). Eventually, this could be the reason why people who are more involved in smart phone and social media, they will have greater tendencies to sext (Gregg et al., 2018). In other words, the privacy and anonymity in social media have encouraged them to sext because their sexual desire can be satisfied without revealing their identities. Since social media has mediated and facilitated sexual communication, it is reasonable to assume that frequent use of social media might be associated with greater opportunity to sext. Given that there is a high percentage of social media users in Malaysia, which consisted 80% (21.9 million) of the total population (Malaysian Communications and Multimedia Commission, 2017), this could imply that Malaysians might as well possess risk to sext. However, it is surprising to know that the prevalence rate of sexting behaviour in Malaysia still remained unknown up until today. This is because majority of those studies were conducted in Western countries, and research regarding to sexting in Malaysia is limited. Hence, their findings might not be able to generalize to the Malaysian population,

considering that there is a difference in cultural background. For this reason, present study also intends to examine the prevalence rate of sexting behaviour in Malaysia.

As sexting behaviour has been a recent trend across the world, there is a constant debate over the consequences of sexting behaviour, whereby some of the researchers claimed that sexting might increase intimacy and satisfaction (McDaniel & Drouin, 2015), while others argued that sexting leads to more negative consequences than positive consequences. Regarding to this issue, Walker and Sleath (2017) found that sexting often leads to negative consequences, especially when it involves non-consensual dissemination of private sexual media. Taking the smartphone application “Snapchat” as an example, it is commonly used for “sexting” as senders believe that their photos or videos are unlikely to be saved due to time limits, and the application only allows users to send content to people who are already in their friend list. However, Roesner, Gill and Kohno (2014) revealed that Snapchat does not completely delete the expired messages; instead, the files will simply be renamed and the user is unable to access it. Eventually, someone with technical expertise can recover those private images and proceed to spread it to the entire world unbeknownst to the original user and without his or her consent (Roesner, Gill & Kohno, 2014). When the photos or videos are being shared on a public forum, the victim could be bullied or humiliated (Crofts & Lievens, 2018). Consequently, it would also lead to severe social and emotional problems or even to a worst-case scenario, suicide (Siegle, 2010). Several researchers also supported the possible negative outcomes associated with sexting, where they claimed that it could negatively affect one’s mental health and causing the occurrence of online victimization behaviors such as cyberbullying, online dating violence or revenge porn (Agustina, 2012; Brenick et al., 2017; Gamez-Guadix, 2015). Apparently, sexting can be considered as a problematic behaviour due to the fact that it could result in several negative consequences. In spite of that, most studies have reported that the prevalence rate of sexting behaviour is continuously growing and this

might create public anxieties as many of them are concerned with the potential harms that sexting could bring. Hence, in order to achieve better insight on this issue, current research intends to understand the factors that affect people to sext.

Although research regarding sexting behaviour is growing, most of the available research mainly focus on adolescents (Ahern & Mechling, 2013; Judge, 2012; Korenis & Billick, 2014; Richards & Calvert, 2009), and research that concerns young adults is limited. However, some studies have pointed out that sexting is more common among young adults than teenagers as they are more comfortable and perceived less risk to share sexual contents compared to teenagers (Englander & McCoy, 2018; Klettke et al., 2014; Scholes-Balog et al., 2016). Even if there are few existing studies which focus on young adults, it is mostly targeted on undergraduate students (Dir, Cyders & Coskunpinar, 2013; Dir & Cyders, 2014; Hudson & Fetro, 2015) who have higher education level and socioeconomic status than general populations. Taking an example, Scholes-Balog et al. (2016) recruited their participants a university Facebook page and sent emails to all students from the faculty of arts and social science who were in the Australian public university. Hence, findings from those studies might only be applicable to a particular group of people. Therefore, in order to address this literature gap, present study intends to focus on sexting behaviour among young adults and it does not limit to undergraduate students only.

Besides that, existing studies that dedicated to understanding factors affecting sexting behaviour has been having discrepancies. For instance, Scholes-Balog et al. (2016) revealed that high sensation seekers are more likely to send suggestive texts and texts propositioning sex, whereas another study by Delevi and Weisskirch (2013) reported that sensation seeking is not the predictor of sexting behaviours. Moreover, although Scholes-Balog et al. (2016) found that those who are high self-esteem have lesser tendency to send sexually suggestive texts and texts propositioning sex, but Hudson and Fetro (2015) disagreed with it and

mentioned that there is no significant relationship between self-esteem levels and sexting behaviours. As the findings from past literature has been inconsistent, this further justified our decision to study on this topic, hoping that present study could further consolidate past findings as well as to identify the potential predictors of sexting behaviour in Malaysian context.

Objectives

1. To determine the prevalence rate of sexting behaviour among young adults in Malaysia.
2. To investigate gender difference in sexting behaviour among young adults in Malaysia.
3. To identify the differences of relationship status (i.e. Single, in a relationship, married) in sexting behaviour among young adults in Malaysia.
4. To determine whether self-esteem, sexual sensation seeking, perceived peer pressure predict the sexting behaviour among young adults in Malaysia.

Research questions

1. What is the prevalence rate of sexting behaviour among young adults in Malaysia?
2. Is there any gender difference in sexting behaviour among young adults in Malaysia?
3. Do relationship status (i.e. Single, in a relationship, married) engage differently in sexting behaviour among young adults in Malaysia?
4. Do self-esteem, sexual sensation seeking, perceived peer pressure predict the sexting behaviour among young adults in Malaysia?

Hypotheses

H₁: Male young adults are more likely to engage in sexting behaviour.

H₂: Married young adults are less likely to engage in sexting behaviour.

Significance of study

Sexting is a growing trend that many scholars are concerned about (Lee & Crofts, 2015), due to the fact that people would experience guilt, shame and embarrassment when they are being forced to sext (Temple & Lu, 2018). Finding from Barrense-Dias et al. (2019) further supported the adverse effect of sexting where they claimed that people who circulate sexually explicit pictures of someone without their consent would cause online sexual harassment to happen. Temple et al. (2012) also reported that those who engage in sexting are more likely to have multiple sex partners, use drugs and alcohol. Hence, based on previous findings, it is undoubtedly that sexting could possibly jeopardize one's life. For this reason, it is crucial to identify the potential predictors of sexting behaviour in order to help the practitioners and educators to focus on the important aspects when developing effective interventions. In other words, this study intends to provide information for the professionals to mitigate the possible negative outcomes of sexting by studying the factors that can predict sexting behaviour.

Apart from that, the target population of this study – young adults, are another potential implication. This is due to the lack of research done on young adults, and many of the available literatures are using adolescents as participants instead. For example, research on sexting in Asian countries, specifically on young adults is limited as most of the studies were targeted on adolescents (Lee et al., 2013). Hence, the knowledge of sexting particularly among young adults is still insufficient (Lee & Crofts, 2015). It is equally important to explore the young adults' perspective because this population is found to have a higher prevalence rate in sexting compared to teenagers (Englander & McCoy, 2018), and have a more favourable attitude towards sexting (Bianchi et al., 2019). Therefore, study among young adults should be given more attention.

Besides, this study aims to fill in the knowledge gap of sexual media studies in the Malaysian context. This is because the topic of sexting in Malaysia is still at infancy, as most of the past studies on sexting were conducted in western countries (Lee & Crofts, 2015; Salter et al., 2013; Scholes-Balog et al., 2016). While the predictors of the engagement in sexting have been studied and identified in other countries, the reported results could not be accurately generalized to the locals. Therefore, present study which focuses on sexting behaviour among young adults in Malaysia could enrich the literature of sexual media studies in Malaysia.

Since the issues of sexting remain understudied in Malaysia, people might not have enough knowledge about the current trend of sexting behaviour in Malaysia. Hence, one of the goals in present study is to fill up this literature gap by studying on the prevalence rate of sexting behaviour in Malaysian context. Additionally, the results from this present study could also provide some useful data for future researchers in Malaysia who are also interested to study on this topic.

Definition of terms

Sexting behaviour. Conceptual definition: Sexting is the exchange of sexually explicit material via Internet social-networking site or mobile phone (Dir, Coskunpinar, Steiner & Cyders, 2013).

Operational definition: It is measured with the Sexting Behaviour Scale (SBS) developed by Dir (2012). The frequency of sexting behaviour such as receiving sexts, sending sexts and content of messages will be assessed using a 5-point Likert scale from 1(*never*) to 5(*frequently or daily*).

Sexual sensation seeking. Conceptual definition: “The tendencies to try unique and novel sexual experiences to obtained optimal levels of sexual excitement” (Kalichman et al., 1994).

Operational definition: Sexual sensation seeking is assessed with the sexual sensation seeking scale developed by Kalichman et al. (1994). This scale contains 10 items, and the items are rated on a 4-point likert scale ranging from “*not at all like me*” to “*very much like me*”. Higher scores indicate higher sexual sensation seeking.

Perceived peer pressure. Conceptual definition: The extent to which people perceive pressure from their peers to engage in activities they do not necessarily desire to engage in (Vanden Abeele, Campbell, Eggermont & Roe, 2014).

Operational definition: Perceived peer pressure will be assessed by using a subscale, Pressure (PRE) from Network of Relations Inventory–Relational Quality Version (NRI-RQV). It is measured by how often the friends or peers pressure the respondents to engage in activities that he or she is not willing to do, ranging from 1 (almost never) to 5 (almost always).

Self-esteem. Conceptual definition: “Self-esteem is the negative or positive attitude that individuals have of themselves” (Rosenberg, 1979).

Operational definition: Self-esteem is measured with the Rosenberg Self-Esteem Scale (Rosenberg, 1979). This measure contains 10 items, each scored on a 4-point scale, ranging from *strongly agree* to *strongly disagree*. The higher the score indicates that respondents have greater self-esteem.

Young adult. Conceptual definition: According to Erikson’s psychosocial development theory, young adults are at the age of 18 to 40 years old (Chung, 2018).

Operational definition: Young adults from the age of 18 to 40 years old reported by the respondents based on their biological age.

Chapter II

Literature Review

Self-esteem and sexting behaviour

According to research, people with low self-esteem tend to involve in risky activities that could bring harm to themselves and the others. For example, using substances and problematic drinking behaviour, risky sexual acts and having more sexual partners are found to be associated with individuals who score low in self-esteem. In fact, the relation of self-esteem and risky behaviour could be explained by the individuals' needs to boost the feelings toward themselves while involving in the negative activities (Ramiro et al., 2013; Ybarra & Mitchell, 2014). In other words, risky behaviour is a coping method for people with lower self-esteem to escape from feeling negative towards self (Wild et al., 2004).

While sexting is inclined to be categorized under one of the risky sexual behaviours due to its possible perilous consequences such as cyberbullying and defamation (Van Ouytsel et al., 2014; Naezer, 2017), the level of self-esteem is often suggested to be associated with sexting behaviour which individuals with low self-esteem would be more likely to engage in sexting (Wachs et al., 2017). Furthermore, according to scholars, it is possible that sexting may become a mean for the individuals to enhance their self-esteem by seeking social approval and feeling desired through the other person on the phone (Wachset al., 2017; Gámez-Guadix & de Santisteban, 2018).

The notion is supported by Scholes-Balog et al. (2016), that a negative association between self-esteem and sexting was found. According to the study, high sense of self-esteem is also a protective factor of sexting and it decreases one's probability to sext as people with high self-esteem are less likely to take part in risky activities (Scholes-Balog et al., 2016). Moreover, Muncaster and Ohlsson (2019) stated that people who are high esteem have lesser

tendency to engage in sexting behaviour. This is also in accordance with most of the research done in adolescents that show low self-esteem predicts sexting behaviour while people with high self-esteem are less likely to engage in sexting (Gámez-Guadix & de Santisteban, 2018; Gámez-Guadix & Mateos-Pérez, 2019; Ybarra & Mitchell, 2014).

However, in contrast with the negative association of self-esteem and sexting behaviour, some studies show a different result. M. Crimmins and Seigfried-Spellar (2017) found that self-esteem is not a predictor of sexting behaviour. Similarly, a research done among individuals in romantic relationships did not find an association between self-esteem and sending or receiving nude photos (Galovan et al., 2018). On top of that, Crimmins and Seigfried-Spellar (2017), also supported that self-esteem does not affect any sexting behaviours. In addition, with the similar result indicated in Hudson (2011), the researcher provided an explanation that individuals with high and low self-esteem may engage in sexting due to different reasons rather than the motivation of self-esteem.

As stated across the literatures, the relationship of self-esteem and sexting behaviour among young adults has not yet come to an agreement as the results shown were mixed. One of the possible reasons of the contradicting results could be the different definition used hence the different results were produced. For example, Scholes-Balog, Francke and Hemphill (2016) defined sexting as sending sexual photos or videos and forwarding or sharing sexual photos or videos of others without consent, while Crimmins and Seigfried-Spellar (2017), defined sexting as only sending nude or semi-nude photos or videos. Other than that, differences in sample characteristics may be another reason as well. For instance, using participants that are mostly single or only in a relationship. Besides, most of the research regarding to self-esteem and sexting behaviour were using adolescents as the targeted sample instead of young adults. Hence, the related research is still scarce to be conclusive.

As the literature gap found in studies addressing self-esteem and sexting exists, present study intends to further confirm the association of self-esteem and sext among young adults, so that it can consolidate the findings from previous research.

Sexual sensation seeking and sexting behaviour

Sensation seeking, which was defined by Kalichman et al. (1994) as the desire to take part in “novel”, “exciting” and “optimal” level of stimulating activities. According to Birthrong and Latzman (2014), sensation seekers are mostly unrestricted, so they tend to seek for thrilling and new experiences in order to achieve pleasure and excitement. To date, numerous studies are interested to explore the association between sensation seeking and sexting as sensation seeking is deemed as one of the potential predictors of sexting behaviour. The reason is because sexting often being viewed as a novel and highly arousal activity, hence there is a possibility that high sensation seekers possess a greater tendency to engage in sexting behaviour (Dir et al., 2013).

Indeed, a number of studies came out with the findings which suggested that sensation seeking could potentially predict the involvement of sexting behaviour. For instance, studies have found that those with high levels of sensation seeking are more inclined to participate in sexting (Baumgartner et al., 2014; Champion & Pedersen, 2015; Van Ouytsel et al., 2014). Similarly, Scholes-Balog et al. (2016) also reported that sensation seeking was associated with two forms of sexting which included sending suggestive texts and texts propositioning sex, as well as non-consensual forwarding of sexts. Regarding to these findings, Cyders et al. (2009) came out with two possible explanations which stated that (i) sensation seekers have an ongoing need to pursue stimulation, so they engage in sexting behaviour more frequently than others do (Cyders et al., 2009), (ii) sensation seekers usually are more outgoing, which thereby increases their likelihood to engage in social activities (Cyders et al., 2009).

Although most of the studies have consistently reported that sensation seeking could predict the engagement in sexting behaviour, Delevi and Weisskirch (2013) refuted with these findings as they claimed that sensation seeking is not the predictor of sexting behavior. According to their explanation, high sensation seekers might not get enough novelty or intense experience even when they involve themselves in sexting behaviour (Delevi & Weisskirch, 2013). This is because sexting is no longer perceived as a risky behaviour, yet being considered as a norm to maintain relationship, which has also been culturally accepted by young adults (Delevi & Weisskirch, 2013). Therefore, this could be the reason why sensation seeking might not necessarily be the predictor of sexting behaviour. Due to these contradicting findings, Arnett (1992) further explained that the association between sensation seeking and risky behaviour largely depends on the social context, whereby the “cultural values” and “degree of restrictiveness” might affect their propensity to express this behaviour. Simply put, even though a person has the desire to engage in a risky activity, he or she might not be able to express it if they are born in a restrictive society when such behaviour is prohibited in the society (Arnett & Eisenberg, 2007). In such a case, the influence of sensation seeking on sexting behaviour is not strong. Since the findings from previous studies have been mixed, additional research on this topic is very much needed for people to gain an intensive understanding regarding to this issue. Otherwise, the association between sensation seeking and sexting will be remained unclear. Hence, present study intends to include sensation seeking as one of the variables in this research, in hope that it could consolidate past findings.

In addition, it is notable that most of the research that have been discussed above are using sensation seeking as the main variable in their sexting studies. However, Kalichman et al. (1994) pointed out that the measurement which has been used to assess sensation seeking consists of many culturally outdated items and the questions are often unrelated to sexual

behaviour. This might be raising questions as the measurement utilized in the existing sexting studies are not sex-specific. Therefore, Kalichman et al. (1994) decided to revise the original sensation seeking scale into sexual sensation seeking scale, which specifically looking into sexual activities and interests. Nonetheless, it is important to note that sexual sensation seeking is not the replacement of sensation seeking construct, in fact it is a type of sensation seeking but more related to sexual activities (Kalichman et al., 1994). To define sexual sensation seeking, it is the tendency to gain an optimal level of sexual excitement through the involvement in novel sexual experiences (Kalichman et al., 1994). Up until now, there are numerous studies which have found that sexual sensation seeking often related with variety of sexual activities such as high sexual sensation seekers are more likely to engage in online sexual activity (Zheng & Zheng, 2014), particularly, problematic internet pornography use (Chen et al., 2018) and risky sexual behaviours (Heidinger et al., 2015; Nguyen et al., 2012). Hence, it is plausible that sexual sensation seeking could be a potential personality trait that predict the engagement of sexting behaviour. However, no prior study has dedicated to understanding this association as many of them are placing their focus exclusively on sensation seeking. Therefore, in order to shed light on this topic, present study intends to narrow down the focus and specifically looks into sexual sensation seeking instead of sensation seeking, so as to fill up the knowledge gap and provide new insights to the practitioners or educators when developing intervention strategies.

Perceived peer pressure and sexting behaviour

Based on past studies, majority of the researchers came into consensus that peer and social groups are likely to influence a behaviour to become normative (Ringrose et al., 2012; Ringrose et al., 2013). When most members of a certain peer group engage in a particular culture or behaviour, it is expected for all members to practice the same behaviour as the others in the group. If such expectation is not met, they may feel that the group is being

jeopardized. Hence, those who do not practice may be pressured into doing so, even in an abusive way (Ringrose et al, 2013; Lee & Crofts, 2015).

Similar to Adimora et al. (2018), peers can influence the change of behaviour, attitude and values of an individual as peers would lay pressure on the individual to behave the same. While among all the aspects in life that could be affected by peers, risky sexual behaviour is found to be associated with peer pressure (Adimora et al., 2018). On top of that, Symons et al. (2018), emphasized that peers may be the important factor in studying the sexual behaviour of young people. It was stated that young people who have friends that practice an active sexual lifestyle tend to also have the similar sexual practice as their friends had (Symons et al., 2018). Hence, peer pressure is suggested to be a notable factor that impact sexual behaviour according to past studies. Whereas in the context of online sexual behaviour such as sexting, Van Ouytsel et al. (2014) also indicated that pressure from peers is a more effective motivation for young individuals to engage in sexting compare to their own attitudes to the behaviour.

The association of peer pressure and sexting is further supported by Champion and Pedersen (2015), which peers can affect one's tendency to sext. The researchers divided 511 participants into non-sexters and sexters, and the results showed that most of the sexters reported to experienced greater peer pressure, when compared with non-sexters. They further explained that most sexters perceived sexting to be a common activity among their peers, which thereby encouraged them to do the same. This finding is consonant with another study done by Drouin and Tobin (2014), which supported that the propensity to engage in sexting behaviour might be due to peer pressure. As according to their findings, the reason for people to participate in the behaviour did not arise from their own intentions, but merely hope to achieve approval and popularity from their peers (Drouin & Tobin, 2014). In other words, the

result suggested that peer pressure plays a vital role in predicting one's tendency to engage in sexting.

Furthermore, the relation of peer pressure and sexting is supported by Salter et al. (2013), as 25 per cent of the respondents said that they were pressured by friends to send or post sexual content, while 12 per cent of teenage girls felt pressured by their partners to do so. However, these findings are completely contradicted with the research from Vander Abeele et al. (2014), as they found that sexting among adolescents at the age of 11 to 20 years old has no relationship with perceived peer pressure. They explained that the pressure to engage with sexting came more likely from their boyfriend or girlfriend instead of peers.

Although one study has reported no relationship between peer pressure and sexting, majority of the studies have yielded the same result which claimed that peer pressure could be the predictor of sexting behaviour. This demonstrated that more research should be done to study on this association in order to further consolidate the findings from past literature. Besides, one of the main issues that need to be addressed is the sample from past studies are mostly adolescents instead of young adults. Since young adults and adolescents can be different in many areas such as sexual development, the results that conducted among adolescents might not be able to generalize into young adults' population. Moreover, as far as we know, all the existing literatures were conducted in other countries and research on this topic was very rare in Malaysia. Thus, this study aims to examine the association between perceived peer pressure and sexting, where the targeted sample is Malaysian young adults.

Gender differences and sexting behaviour

Regarding to the issue of whether sexting behaviour would differ by gender, most of the past studies have shown mixed results. According to some studies, there is no considerable difference in terms of sexting frequency among both genders, whereby males

and females participate at a relatively equal rate (Benotsch et al., 2013; Dir et al., 2013b; Henderson, 2011). However, other researchers have found the differences when they specifically looking into different types of sexting behaviour, such as sending, receiving or sharing sexts (Dir et al., 2013a; Gordon-Messer et al., 2012; Klettke et al., 2014).

As according to a study done by Rice et al. (2014), they have revealed that males are at a much higher rate of sending sexually explicit messages compared to females. This is consonant with the findings from Seccombe (2015) as they claimed that males tend to be the initiator in sexting rather than females due to the concept of masculinity, whereby males should be the ones that in charge of taking initiative, which causing them more likely to send sext messages. Females, on the other hand, are expected to be emotional and timid, and do not have the dominant qualities like males to initiate sext (Seccombe, 2015). This is in line with other studies which also indicated that males send more sext messages or pictures than females do (Dir et al., 2013a; Renfrow & Rollo, 2014; Garcia et al., 2016; Vanden Abeele et al., 2012).

Indeed, some studies have found that females are more likely to be the receiver of sexting and rarely send sext (Klettke et al., 2019; Seccombe, 2015). However, although females could be the receiver of sext in this case, most of them reported that they dislike receiving those unwanted sexts and tend to ignore it when they received (Klettke et al., 2019). Perkins, Becker, Tehee, and Mackelprang (2013) further explained that females tend to feel more embarrassed or upset when they receive unwanted sext, which thereby suggesting that females tend to have an unfavourable attitude about receiving sext. Unlike females, Renfrow and Rollo (2014) revealed that males feel proud when they receive sexts from their girlfriend or other girls and want to show it off by sharing those pictures with their male friends. In other words, they perceive this behaviour as a gain in status and feel proud whenever they get the opportunity to show those messages (Renfrow and Rollo, 2014). Consequently, this

would create another problem as the texts or photos that they have received are not originally intended for them and those photos are being share without the females' consent (Lenhart, 2010; Mitchell, Finkelhor et al., 2011; Reed et al., 2018). Garcia et al. (2016) also highlighted that females would be upset if their photos are being circulated beyond the intended recipient. Hence, this could explain why females are more reserved in this behaviour because they are concerned and careful about the negative consequences of sexting (Samimi & Alderson, 2013).

Yet, some researchers have reported that females do involve in sexting behaviour, and most of them are the senders. However, it should also be noted that most females who are the senders, claimed that they do not desire sext but they are only being pressured by their potential partners or someone from the opposite sex to do so (Lippman & Campbell, 2014; Ringrose et al., 2013; Renfrow & Rollo, 2014; Salter et al., 2013). It is reported that some young females send sexually explicit text messages unwillingly just to satisfy their partners, but many of them feel disappointed afterwards (Renfrow & Rollo, 2014). Walrave et al. (2013) also stated that some young females are being persuaded successfully to engage in sexting due to their close interpersonal relationship with the opposite gender, even though they already knew that it would affect their reputation and well-being. While according to Ringrose et al. (2012), they supported that females who have sent sext are most likely to be harmed or embarrassed. For instance, females' reputation would be tarnished as they would be labelled as "slutty" or "shameful" by displaying or sharing their body parts, whereas males who produce and show off the images of themselves are deemed as normal (Ringrose et al., 2012). This happened because females are often being judged differently for their social act. Such situation can be known as sexual double standard mentality, whereby males are rewarded but females are being negatively evaluated when they are performing a similar behaviour (Lippman & Campbell, 2014; Ringrose et al., 2013; Vanden Abeele et al., 2012).

Therefore, females often perceive the act of sexting as something risky and could potentially result in blames and damage their reputation (Ringrose et al., 2013).

Based on the existing studies that have been discussed above, it is clear that males generally hold more positive attitudes toward sexting than females, regardless of which forms of sexting behaviour they are engaging in (e.g. sending, receiving or sharing). For instance, most studies have found that males who initiate sext experience more positive outcomes or reactions from others, but females who send sext would be criticized by doing the same behaviour. In terms of receiving sext, males also display positive reactions in receiving unrequested sext messages, while females tend to feel more embarrassed or upset if they received it. Hence, it would be reasonable to hypothesize that males are more likely to engage in sexting as they have positive perceptions toward sexting, while females would be more reserved in this behaviour. By examining the gender difference of sexting behaviour in Malaysia, perhaps it could also throw some lights on local sexuality studies as majority of the past studies on this phenomenon were all conducted in overseas.

Relationship status and sexting behaviour

According to Lenhart (2010), single young adults tend to engage in sexting more than those who have married. This is supported by Jeanfreau et al. (2018) where they further explained that single young adults are more likely to engage in sexting because they want to initiate intimate relationship with people whom they are interested in and to look for a new partner. As for the findings from Garcia et al. (2016), they claimed that the reason for single young adults to engage in sexting is to search for uncommitted sexual encounter and be involved in sexual activities.

However, when single young adults being compared with those who are dating, in a serious relationship or cohabitating, the result showed that single young adults are less likely

to send sexts via mobile phone (Delevi & Weisskirch, 2013; Dir & Cyder, 2014; Dir et al., 2013a). To support this finding, Dir et al. (2013) stated that single individuals have significantly stronger negative expectancies about sending and receiving sexts (i.e. sexting makes one feel embarrass) compared to those who are in a romantic relationship, which in turn causes them less likely to engage in sexting. Renfrow and Rollo (2014) also pointed out that those who are single are less likely to sext as they are afraid that those messages, photos or videos might be circulated beyond the intended recipient, which later causing embarrassment and loss of reputation. In other words, single young adults feel uncomfortable sending sext because they fear that their own sexual photos or messages would be sent to third party without authorization.

Consistent with previous findings, Samimi and Alderson (2014) also found that dating individuals are more likely to engage in sexting than those who are single. The reason is because most of the dating couples practice sexting so that they can initiate sexual relationship with their partner (Weisskirch & Delevi, 2011). Similarly, other researchers also suggested that individuals are more likely to engage in sexting when they have high levels of commitment with their partner in a relationship (Delevi & Weisskirch, 2013; Drouin et al., 2013). For instance, females reported that they are more willing to send sexually explicit messages when they are in a highly committed relationship (Weisskirch & Delevi, 2011). This is because they perceive sexting as one of the ways to secure, maintain and strengthen their romantic relationships (Delevi & Weisskirch, 2013; Garcia et al., 2016; Hertlein & Ancheta, 2014; Renfrow & Rollo, 2014; Weisskirch & Delevi, 2011). To further strengthen the point, sexting enables couples to feel that they are close together when they are far away, and this helps to enhance the relationship by fulfilling the functional and emotional needs (Hertlein & Ancheta, 2014; Jin & Park, 2010). Hence, this could explain why those who are in a long distance relationship tend to engage in sexting (Renfrow & Rollo, 2014). In

addition, Herlein and Ancheta (2014) also explained that couples may be hesitant to talk about sexual topics face to face, so they think that the best way for them to discuss sexual topics is through sexting as it could reduce anxiety level and increase confidence.

As for married couples, a research conducted by McDaniel and Drouin (2015) found out that sexting is less common among married adults as only 12% of them reported to have sent nude photos to their partners. The possible explanation to this situation would be that married adults think that sexting does not contribute to greater relationship satisfaction, unless they are in insecure attachment (McDaniel & Drouin, 2015). Besides, married individuals are more careful in evaluating the risks associated with sexting such as sexual images would be exposed online to other people (McDaniel & Drouin, 2015)

As reported by Drouin and Landgraff (2014) and Parker et al. (2013), their results suggested that sexting is a relationship based behaviour and occurs more frequently in the beginning of relationships. Sexting is more likely to be less explicit after a long period of relationship (Drouin & Landgraff, 2012; Parker et al., 2013). This could explain why those who have married received less sext messages compared to those who are still in relationship. Besides, married individuals may experience sexting within the marital relationship only. Therefore, it is believed that they may have a negative view towards sexting as it links to marital infidelity (Jeanfreau, Wright and Noguchi, 2018).

According to Jeanfreau et al. (2018), there was a significant difference between couples who are in a relationship and couples who have married in receiving sext text messages. As compared to married couples, couples who are in a relationship receive more sexual messages. The reason could be because they see each other less often than those who have married. Also, the commitment level and sense of security between them is different (Jeanfreau et al, 2018).

In sum, there are mixed findings for single young adults. As for those who are in a relationship, the engagement in sexting is higher when the relationship is more committed compared to singles. Sexting is less frequent among married couples as it is often used to initiate intimate relationships. As married couples have already established the intimacy, they tend to sext less (Jeanfreau et al, 2018).

Theoretical framework

The Problem Behaviour Theory (PBT) developed by Jessor and Jessor (1977) is a social-psychological framework which postulated that the occurrence of problem behaviour results from both environment and personality factors. More precisely, this framework consists of three systems, namely “behavioural”, “personal” and “perceived environment” system. Within each system, it consists of instigators and controls—which also known as risk factors and protective factors. Risk factors refer to increasing the probability to engage in problem behaviour, while protective factors refer to decreasing the probability to engaged in problem behaviour (Korn, Shaked & Fogel-Grinvald, 2014). As for the definition of problem behaviour, it refers to the behaviour that deemed as problematic, a source of concern or disapproved by the norms of the larger society (Jessor, 1987). An in-depth explanation of each system will be discussed as below.

Behavioural system: This system is closely related to the co-occurrence of other problem behaviours, whereby engagement in one problem behaviour will increase the likelihood of engaging in other problem behaviours (Karaman, 2013). In other words, if sexting behaviour is deemed as a problematic behaviour, eventually it will also lead to the occurrence of other problem behaviours. This can be supported by findings from several researchers, where they claimed that sexting is a risky behaviour because it is often associated with risky sexual behaviours (i.e. sexual intercourse with multiple partners),

substance and alcohol use (Benotsch et al., 2013; Klettke et al., 2014), online and offline dating violence (Morelli et al., 2016) cyberbullying (Lievens, 2014) or even suicide (Englander, 2019; Siegle, 2010). Therefore, in this case, sexting behaviour can be considered as a problem behaviour.

Personal system: Generally, personal system refers to individuals' own values, expectations, controls, beliefs or traits that they have within themselves (Jessor, 1987). Up until now, a number of studies have found that the involvement of risky or problem behaviors is strongly related to traits such as self-esteem and sexual sensation seeking. For instance, people who have low self-esteem are more likely to engage in sexting because they need to seek social approval and feeling desired from others in order to boost their self-esteem (Wachs et al., 2017; Gámez-Guadix & de Santisteban, 2018). In this case, low self-esteem would be the risk factor for people to engage in sexting. While for sexual sensation seeking, Cyders et al. (2009) mentioned that high sensation seekers have an ongoing need to seek for stimulating activities, hence they would engage in sexting behaviour more frequently than others would in order to achieve pleasure. As present study uses sexual sensation seeking instead of the general sensation seeking, in order to be more specific, high sexual sensation seeking is hypothesized to be the risk factor for people to engage in sexting. Since past studies have found the association between problem behaviours with both types of personality traits, hence, present study includes both self-esteem and sexual sensation seeking as the predictors of sexting behaviour.

Perceived environment system: This system is related to social support, control and expectation of others, which usually involved parents and peers (Karaman, 2013). As mentioned by Karaman (2013), peer pressure would inevitably lead to the engagement of problematic behaviour. This is because one's perception towards the environment can largely affect their tendency to engage in a problem behaviour (Aunola et al., 2000). To make it

simple, even though a person might refuse to involve in certain problematic behaviour, they would still end up performing it due to peer pressure. For instance, Drouin and Tobin (2014) found that people start to sext not because they want to do so, but rather because of their desire to gain popularity and seek approval from their peers. In this way, their propensity to involve in sexting behaviour is largely due to peer pressure. Hence, in present study, perceived peer pressure is included as one of the predictors of sexting behaviour.

As the variables in present study can be supported by this theory, it serves as a foundation for us to determine the association between self-esteem, sexual sensation seeking, perceived peer pressure and sexting behaviour among young adults in Malaysia.

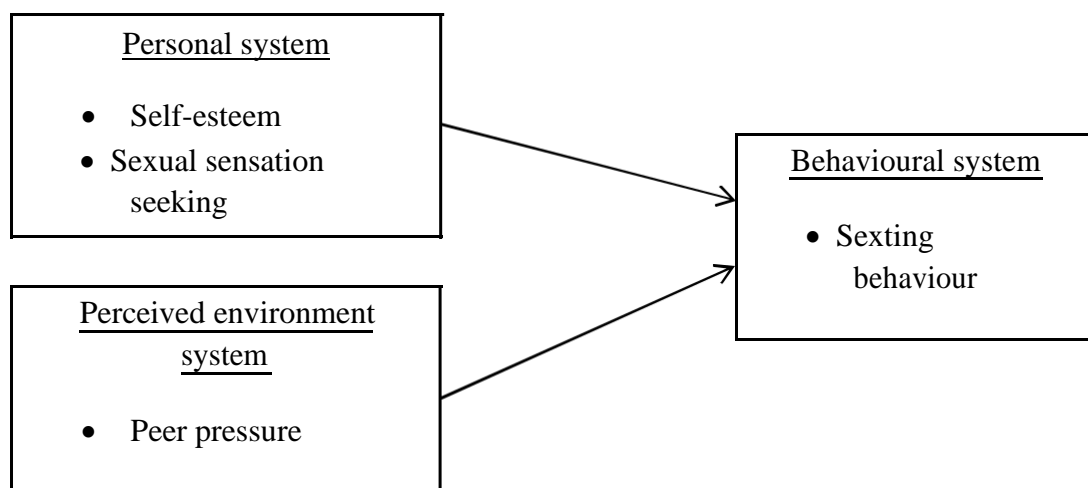


Figure 2.2. Theoretical framework of self-esteem, sexual sensation seeking, perceived peer pressure and sexting behaviour among young adults in Malaysia.

Conceptual Framework

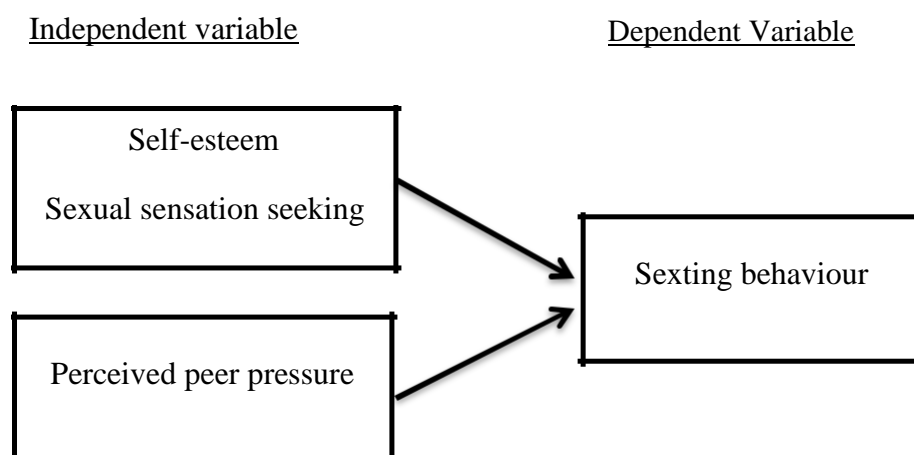


Figure 2.2. Conceptual framework of self-esteem, sexual sensation seeking, perceived peer pressure and sexting behaviour among young adults in Malaysia.

The present study aims to examine the factors affecting sexting behaviour among Malaysian young adults, and these factors include self-esteem, sexual sensation seeking and perceived peer pressure. In order to gain a better understanding of this topic, a conceptual framework model guided by problem behaviour theory is adapted and illustrated as above (refer to Figure 2.2). Based on this framework, self-esteem, sexual sensation seeking and perceived peer pressure are the predictors for the outcome variable, sexting behaviour.

As past studies have found that males are more likely to engage in sexting behaviour than females (Dir et al., 2013; Seccombe, 2015; Vanden Abeele et al., 2012), present study also intends to find out whether there is a gender difference in sexting behaviour. Furthermore, past studies indicated that married people are less likely to sext when compared to those who are single or in a relationship (Gordon-Messer et al., 2013; Jeanfreau et al., 2018; Lenhart, 2010), therefore, present study is dedicated to find out whether relationship status (i.e. Single, in a relationship, married) will make differences in sexting behaviour.

Chapter III

Methodology

Research design

The present study is a cross-sectional study which intended to gather all the data at one-time point. The reason why this research design was chosen is because it could provide information about the prevalence of outcome variables, and able to complete in a short period of time (Levin, 2006). Moreover, another research design that was adopted in the present study is correlational design because the researchers also interested to examine the relationships between self-esteem, sexual sensation seeking, perceived peer pressure and sexting behaviour among Malaysian young adults. In general, the present study was quantitative in nature because researchers attempted to make inferences based on the numerical data, whereby the data was collected and further analyse by using statistical method (McCusker & Gunaydin, 2014). Hence, in order to collect the quantitative data, online survey method was used because it is relatively inexpensive and allowed the researchers reached out to wider population (Wright, 2005).

Sampling method

This study employed a non-probability sampling method to recruit the samples of this study. Non-probability sampling method does not provide equal chances for all the members in the population to participate in this study (Etikan et al., 2016). This sampling method was deemed appropriate to applied in the present study because the populations of young adults in Malaysia are limitless, which makes it impossible to randomly select participants from the populations.

Specifically, purposive sampling method, a non-probability sampling method was used to approach the participants because the researchers aimed to get information solely

from certain group of people. In other words, their participation was based entirely on researcher's judgment because only individuals with specific characteristics were targeted to participate in this study (Tongco, 2007). Although this sampling method might sound bias, it is reasonable to this study as the researchers have already targeted who they want to studied (i.e. Malaysian young adult). Hence, in this study, the researchers have set the inclusion criteria as (i) 18 to 40 years old, (ii) Malaysian and (iii) equal number of male and female participants. With these preset criteria, the researchers would purposively look for the "qualified" participants and send the online survey link to them through social media such as Facebook, Whatsapp, Instagram and WeChat. Hence, those who does not fit into these criteria, eventually they were being excluded in this study. It is extremely important to recruit the participants based on the inclusion criteria because the information that they have provided would be helpful in answering the research questions.

Sample size

The sample size of this study was derived from Krejcie and Morgan (1970) formula in determining the desired sample size, wherein the confidence level was set at 95% and margin of error was 5 %. According to the table, the present study should achieve a minimum number of 384 participants due to the unknown population of young adults in Malaysia. Hence, in present study, we have exceeded this minimum requirement as there were 596 participants took part in this survey. However, 200 participants were excluded from this study due to not fulfilling the inclusion criteria, participants that fall under the extreme outliers, as well as incomplete responses. More precisely, those who were (i) below 18 years old, (ii) above 40 years old, (iii) Non-Malaysian, (iv) scores below lower fences of interquartile range, (v) scores above upper fences of interquartile range, (vi) completion rate below 100%, were be excluded from this study. Therefore, after data screening, only 396 participants were

included as the final sample but it still met the minimum requirement of the desired sample size.

Participants and Locations

According to Erikson's psychosocial theory, the age range for young adulthood is between 18 to 40 years old; hence, only participants within this range were included in this study. For those who were below 18 years old and above 40 years old, they were not eligible to participate because the present study is exclusively focused on young adults only. Since this study was intended to investigate sexting behaviour among Malaysian, so those who claimed to be non-Malaysian were excluded from this study. Although the participants in this study were geographically dispersed, the researchers have successfully collected 396 responses by using online questionnaire. Thus, the present study was conducted across different states in Malaysia, which include of Johor, Kedah, Kelantan, Malacca, Negeri Sembilan, Penang, Perak, Selangor, Terengganu, Sabah and Sarawak.

Instruments

There were four different instruments utilized in this study, which include Sexting Behaviour Scale (SBS), Rosenberg Self-Esteem Scale (RSES), Sexual Sensation-Seeking Scale (SSSS), and Network of Relations Inventory-Relational Quality Version (NRI-RQV).

Sexting Behaviour Scale

Sexting behaviour was measured by using Sexting Behaviours Scale (SBS) developed by Allyson Dir (2012). This scale measures the frequency and prevalence of several sexting behaviours, which include sending or receiving sexts; content of messages (i.e. sexually suggestive pictures or text); as well as posted sexual content in social media. In total, there were 11 items in this scale, and 9 items are constructed based on a 5-point Likert scale

(ranged from 1 as “Never” to 5 as “frequently”); one item assesses the number of people they have exchanged sext with; another item assesses who they exchanged sext with. Higher total score indicates that the participants engage in sexting more frequently. Sample items included, “How often have you received suggestive or sexually charged text messages?”, “How often have you sent provocative or suggestive pictures by text message?” and “How often have you publicly posted suggestive or provocative pictures on internet?”. This scale also has a good internal consistency with $\alpha = .88$ (Dir, 2012).

Rosenberg Self-Esteem Scale

Self-esteem was measured by Rosenberg Self-esteem scale (RSE) created by Morris Rosenberg (1965). This scale measures the person’s self-worth and self-acceptance (both positive or negative feelings about themselves). This scale contains 10 items and it was constructed based on a 4-point Likert scale range from “1 = strongly disagree” to “4 = strongly agree”. In order to generate the total score for self-esteem, the score for items 2,5, 6, 8 and 9 need to be reversed, and then added up with the scores from the rest of the items. Higher total score indicates that they have greater self-esteem. Sample items on this scale include “On the whole, I am satisfied with myself”, “I take a positive attitude toward myself”, and “At times I think I am no good at all.” The alpha value for this scale is .91, which can be considered as having strong internal consistency (Sinclair et al., 2010).

Sexual sensation seeking scale

Sexual sensation seeking was measured by using Sexual Sensation Seeking Scale (SSSS) developed by Kalichman et al. (1994). This scale measures one’s tendency to obtained optimal levels of sexual excitement by engaging in new and unique sexual experiences. This scale consists of 10 items and it was constructed based on a 4-point likert scale (ranged from 1 as “not at all like me” to 4 as “very much like me”). There is no reverse

scoring in this instrument so the score for each item was added up together to obtain the total score. Higher score means that the person has higher level of sexual sensation seeking. Sample items include, “I like wild “uninhibited” sexual encounters”, “I enjoy watching X-rated videos”, and “I feel like exploring my sexuality”. Gaither and Sellbom (2003) have examined the reliability for this instrument among heterosexual college students, and it demonstrated an excellent internal consistency whereby $\alpha = .83$ for men and $\alpha = .81$ for women.

Network of Relations Inventory–Relational Quality Version (NRI-RQV)

Perceived peer pressure was measured with a subscale, Pressure (PRE) that was adopted from Network of Relations Inventory–Relational Quality Version (NRI-RQV). This scale was developed by Buhrmester and Furman (2008) and it consists of 10 subscales, one of the subscales is peer pressure (PRE). The developers have mentioned that this scale can be adjusted, in which the researchers can specifically measure on one type of relationship as long as the items in the subscale are retained (Buhrmester & Furman, 2008). Hence, in the subscale of peer pressure, it consists of 3 items and measures by 5-point Likert scale (ranged from 1 as “almost never” to 5 as “almost always”). The score for each item was added up together to obtain the total score. Higher score indicates that the person perceived greater peer pressure. Sample items include “How often do your friends push you to do things that you don’t want to do?”, “How often do your friends try to get you to do things that you don’t like?” and “How often do your friends pressure you to do the things that he or she wants?”. This scale also demonstrated a good Internal consistency as the Cronbach’s alpha for this subscale was .75 (Vanden et al., 2014).

Procedure

Before the actual study begins, researchers were pending approval from UTAR Scientific and Ethical Review Committee (SERC) to ensure that this study was conducted ethically. Once the ethical approval was obtained, the researchers started to carry out a pilot study where it involved 44 participants, and reliability of each instruments were tested. After the researchers evaluate feasibility of the study, it then proceeds to actual study whereby Qualtrics software was used to design the online survey. Generally, this online survey encompasses four different instruments namely Sexting Behaviour Scale (SBS), Rosenberg Self-Esteem Scale (RSES), Sexual Sensation-Seeking Scale (SSSS) and Network of Relations Inventory–Relational Quality Version (NRI-RQV). This survey also included some demographic questions such as age, sex, and nationality because such information is useful for the researchers to determine which individuals were eligible to participate in this study. Once the online survey was ready, the link and QR code were sent out to the targeted participants through social media such as Facebook, WhatsApp, Instagram, and WeChat.

All the participants were required to read the information sheet and informed consent beforehand because they need those details to decide whether or not they still want to take part in this study. Hence, the purpose of study, advantages and disadvantages of their participation was stated clearly in the information sheet so that it could avoid misunderstanding in the future. Since the present study also required participants to disclosed information about their sexual behaviour, there is a possibility that some participants might be reluctant to answer the questions. As such, the participants were given reassurance that their participation was completely anonymous. Eventually, this would encourage them to complete and provide truthful responses because they already being informed that their actual identity would not be tracked. Other than providing assurance, the participants also being informed that they have the right to quit from this study if they feel uncomfortable answering the questions, and no penalty will be given to them. As the participants might also be

wondering how their data would be handled, the participants were being told that their responses will be kept private and confidential. The informed consent also mentioned clearly that their information will not be revealed to third parties unless it is required by law. Otherwise, their responses are solely used for research purpose and all data will be deleted once the research has completed.

After the participants read the terms of study and willing to participate, they were directed to click on the “I agree to participate” button. This is to indicate that their participation is voluntary and they allowed the researchers to record their responses for further analyses. When they finished answering all questions, the contact information of the researchers was shown at the end of the survey so that the participants would know who to contact if they have any inquiries regarding the study.

Pilot study

Pilot study was carried out before the actual study because it can examine whether that particular method is feasible to apply in larger-scale study (Hassan et al., 2006). Thus, an online survey link was distributed to the targeted participants and 44 participants were included in this pilot study. After gathering up all data, a reliability test was carried out to evaluate the reliability for each instrument. Based on the justification from Taber (2017), instruments that have a good internal consistency would be in the range of $\alpha = .71$ to $.91$. Therefore, the result showed that all of the instruments have good internal consistency as the alpha values were fall within these range. The result from this test also indicated that all the instruments were reliable and able to proceed with the actual study.

Table 3.1

Reliability of Instruments in Pilot study

Variable	Number of items	Cronbach's alpha
Sexting Behaviour Scale	9	.907
Rosenberg Self-Esteem Scale	10	.842
Sexual Sensation Seeking Scale	10	.814
Network of Relations Inventory- Relational Quality Version	3	.880

Actual study

In the actual study, online survey link was sent out to the targeted participants through social media such as Facebook, Whatsapp, Instagram, and WeChat. A total of 596 participants were recruited in this study but only 396 of the responses were used for actual analyses because those incomplete responses, unmet requirements and extreme outliers' cases were being removed from this study. Similar to pilot study, reliability test also has been carried out to test the reliability for each instrument. The result also showed a good internal consistency whereby the alpha values for all the instruments were within the range of $\alpha = .71$ to $.91$ (Taber, 2017).

Table 3.2

Reliability of Instruments in Actual Study

Variable	Number of items	Cronbach's alpha
Sexting Behaviour Scale	9	.903
Rosenberg Self-Esteem Scale	10	.818
Sexual Sensation Seeking Scale	10	.894

Network of Relations Inventory-

Relational Quality Version 3 .899

Normality Assumptions

The checking of normality was considered as a prerequisite before conducting any statistical tests because it can help the researchers to make accurate inferences on the findings (Cain et al., 2017). Therefore, one of the ways to check on the normality is through boxplot, as it can help to determine univariate outliers. In the present study, there were 24 outliers in total but only 3 cases with extreme scores were excluded in this study. The reason to retain the remaining outliers is because the scores are fall within the ranges of lower and upper fences. To generate the values for lower fences, the interquartile range is multiplied by 3 and then subtract with the first quartile; for upper fences, the value of interquartile range multiplied by 3 is added up with the third quartile value. Hence, values that are within the range of lower and upper fences were included in the present study.

Other than that, the skewness and kurtosis values were checked because it is also one of the important assumptions for normality. According to Bryne (2010), the data will be deemed as normal if the value of skewness is between -2 to +2, and kurtosis is -7 to +7. Therefore, based on the result (refer to Table 3.3), it showed that this assumption was met because the values are fall within the acceptable range.

Table 3.3

Skewness and Kurtosis

	Skewness	Kurtosis
Sexting Behaviour	1.53	2.01
Self-Esteem	-0.12	0.60

Sexual Sensation Seeking	0.56	-0.15
Perceived peer pressure	0.50	0.16

Multiple Linear Regressions Assumptions

Before the researchers conduct regression analysis, the assumptions of multiple linear regressions need to be checked because it could affect the trustworthiness of the results (Osborne & Waters, 2002). If these assumptions are not met, it might be reflected on the existence of Type I or Type II error, which in turn causing unreliable inference on the results (Osborne & Waters, 2002). Although there are several ways to check on these assumptions, the present study intended to focus on multicollinearity as it is the fundamental assumption of regression analysis. The concept of multicollinearity refers to two or more predictors in the regression model are highly correlated with each other (Daoud, 2017). If multicollinearity exists in an analysis, it can be a huge problem because it increases the standard error of coefficients (McClendon, 2002). Generally, it means that the variables that supposed to be significant turn out to be statistically insignificant due to the standard error (Daoud, 2017).

Therefore, in order to check on multicollinearity, there are three different elements that need to be focused on which include correlation coefficients, tolerance and variance inflation factor (VIF) values. Ideally speaking, the correlation coefficients for predictor variables should have magnitude that was lesser than 0.35 to indicate that they have a low or weak correlation (Taylor, 1990). If the coefficients magnitude is close to ± 1 , it shows that the predictors are strongly correlated (Taylor, 1990), which implying that the predictors are multicollinear. Based on the correlation matrix, it showed that the predictors are not highly correlated and has a weak correlation, in which the coefficients magnitude is between .112 to .182. As for the VIF and tolerance values, Shieh (2010) suggested the tolerance values for each of the predictors should be larger than .10 and Variance Inflation Factor (VIF) have to

be lesser than 10 to indicate no violation of multicollinearity assumption. Hence, this assumption was met because the tolerance values for each of the predictors were above .10, while the Variance Inflation Factor (VIF) values were below 10.

Table 3.4

Correlations and Collinearity Statistic Table

Variables	1	2	3	4	Tolerance	VIF
Sexting Behaviour	1					
Self-Esteem	.038	1			.945	1.058
Sexual Sensation Seeking	.491***	.112*	1		.946	1.057
Perceived peer pressure	.141*	-.182***	.180***	1	.926	1.080

Note. * $p < .05$, *** $p < .001$

Data analysis

In this study, several analyses were conducted by using SPSS version 23. One of the analyses that was carried out at the very first stage is normality test, whereby boxplots, skewness and kurtosis were examined. After that, assumptions of multiple linear regressions also being investigated by checking on multicollinearity, in which the correlation coefficient, tolerance and Variance Inflation Factor (VIF) values were evaluated.

Another test that was conducted in the present study is Pearson correlation test. This test was conducted to examine the association between self-esteem, sexual sensation seeking, perceived peer pressure and sexting behaviour. Independent t-test also has been carried out to determine whether there is a gender difference in sexting behaviour among young adults in Malaysia. One-way ANOVA test also has been performed to examine the differences of relationship status (i.e. single, in a relationship, married) in sexting behaviour. Moreover, Multiple regression analysis was conducted, whereby sexting behaviour is the outcome

variable, while self-esteem, sexual sensation seeking and perceived peer pressure are the predictors. As for the demographic data such as age, sex, nationality, employment status, sexual preference and relationship status, it was being analysed and used as descriptive statistics.

Chapter IV

Results

Descriptive Statistics

The demographic information of the respondents was illustrated in Table 4.1. There were 206 females (52%) and 190 males (48%) participated in this study, and their ages ranged between 18 to 38 years old ($M = 24.21$, $SD = 3.15$). Among those respondents, majority of them were Chinese (79%), followed by Indians (8.3%), Malay (5.8%), and other races (6.8%) such as Sino-Kadazans, Sino-Dusuns, Bidayuh, and Sikh. In terms of employment status, 48.2% of the respondents reported that they are currently employed, 45.5% are students and 6.3% of them are unemployed. Based on their current relationship status, there were 51.5% of the respondents are currently single, 36.6% of them are in a relationship, while 11.9% of them are married. As for those who are currently in a relationship, 10.9% of the respondents claimed that they are cohabiting. Regarding their sexual preferences, majority of them are attracted to the opposite sex (92.4%), 3.8 % of them are attracted to both sex, 2.8% attracted to the same sex and only 1% of them choose others, in which they mentioned that they are uncertain with their sexual preferences.

Table 4.1

Demographic information of respondents (n = 396)

	n	%	Mean	SD
Age			24.21	3.15
Sex				
Males	190	48		
Females	206	52		
Race				

Malay	23	5.8
Chinese	313	79.0
Indian	33	8.3
Others	27	6.8
Employment status		
Employed	191	48.2
Unemployed	25	6.3
Students	180	45.5
Current relationship status		
Single	204	51.5
In a relationship	145	36.6
Cohabiting	43	10.9
Non-cohabiting	102	25.8
Married	47	11.9
Sexual preferences		
Attracted to opposite sex	366	92.4
Attracted to same sex	11	2.8
Attracted to both sex	15	3.8
Others (Undecided sexual preferences)	4	1.0

Frequency distribution of variables

Table 4.2 displayed the frequency distribution of each variables which include of self-esteem, sexual sensation seeking, perceived peer pressure and sexting behaviour. In the present study, median score serves as the cut-off score for each instrument, and it was used to categorize the data into two different levels. Thus, those who scored lower than the median is

falling under the low-level category, while those who scored higher than the median is classified as a high-level category.

Table 4.2

Frequency distribution of variables (n = 396)

	n	%	Mean	SD	Median
Sexting behaviour			13.45	5.22	12
Low (≤ 12)	232	58.6			
High (> 12)	164	41.4			
Self-esteem			28.34	4.24	28
Low (≤ 28)	207	52.3			
High (> 28)	189	47.7			
Sexual sensation seeking			19.21	6.56	18
Low (≤ 18)	201	50.8			
High (> 18)	189	49.2			
Perceived peer pressure			6.35	2.48	6
Low (≤ 6)	228	57.6			
High (> 6)	168	42.4			

Prevalence of sexting behaviour

Research question 1: What is the prevalence rate of sexting behaviour among young adults in Malaysia?

In order to examine whether or not the participants have involved in sexting, those who have a total score of 9 indicated as never engage in sexting because they rated their responses for all the 9 questions as “Never = 1”. Therefore, in the present study, majority of

the respondents admitted that they have engaged in sexting, which consists of 287 (72.5%) respondents, while for those who claimed that they do not engage in sexting, it consists of 109 (27.5%) respondents. Thus, the prevalence rate of sexting behaviour among young adults is reported with 72.5%.

Inferential statistics

Gender differences and sexting behaviour

Research question 2: Is there any gender difference in sexting behaviour among young adults in Malaysia?

H₁: Male young adults are more likely to engage in sexting behaviour.

To analyse the gender difference in sexting behaviour among young adults in Malaysia, an Independent *t*-test was carried out. Based on the results, there was no significant gender difference in sexting behaviour, $t(394) = 1.315$, $p = .189$, whereby both males ($M = 13.82$, $SD = 5.28$) and females ($M = 13.13$, $SD = 5.15$) appeared to have almost same mean score in sexting behaviour. Therefore, H_1 was not supported.

Relationship status and sexting behaviour

Research question 3: Do relationship status (i.e. Single, in a relationship, married) engage differently in sexting behaviour among young adults in Malaysia?

H₂: Married young adults are less likely to engage in sexting behaviour.

Based on the result from one-way ANOVA test, it showed that there was a statistically significant difference between relationship status (single, in a relationship and married) in sexting behaviour, $F(2, 393) = 6.906$, $p = .001$. Therefore, a post hoc Tukey was conducted in order to determine which specific group shows the differences. As a result, the mean score for in a relationship ($M = 14.72$, $SD = 6.12$) was significantly different than

single ($M = 12.69$, $SD = 4.50$), in which those who are in a relationship have a greater mean score. However, married young adults ($M = 12.91$, $SD = 4.39$) was not significantly different from both single and in a relationship. Hence, H_2 was not supported.

Table 4.3

One-Way Analysis of Variance of Relationship Status on Sexting Behaviour

Groups	<i>M</i>	<i>SD</i>	<i>df</i>	<i>F</i>	<i>p</i>
			(2, 393)	6.90	.001
Single	12.69	4.50			
In a relationship	14.72	6.12			
Married	12.91	4.39			

Note. *M* = mean, *SD* = standard deviation, *df* = degrees of freedom, *F* = F distribution, *p* = significant value

Table 4.4

Post hoc Tukey test for Relationship Status on Sexting Behaviour

Groups	<i>Mean difference</i>	<i>P</i>	<i>CI (95%)</i>	
			<i>Upper limit</i>	<i>Lower Limit</i>
Single				
In a relationship	-2.03	.001	-3.35	-0.72
Married	-0.29	.959	-2.19	1.73
In a relationship				
Single	2.03	.001	0.72	3.35
Married	1.80	.094	-0.23	3.83
Married				
Single	-0.23	.959	-1.73	2.19

In a relationship	-1.80	.094	-3.83	0.23
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Predictors of sexting behaviour

Research question 4: Do self-esteem, sensation seeking, perceived peer pressure predict the sexting behaviour among young adults in Malaysia?

Pearson correlation test was conducted prior to multiple linear regression analysis. The results show that there was a statistically significant positive relationship between sexual sensation seeking and sexting, $r(394) = .491, p < .001$, as well as perceived peer pressure and sexting $r(394) = .141, p = .003$. However, the relationship between self-esteem and sexting was statistically non-significant $r(394) = .038, p = .226$, therefore, self-esteem was not included in the multiple linear regression analysis.

Table 4.5

Correlation among variables (n = 396)

Variables	1	2	3	4
Sexting Behaviour	1			
Self-Esteem	.038	1		
Sexual Sensation Seeking	.491***	.112*	1	
Perceived peer pressure	.141*	-.182***	.180***	1

Note. * $p < .05$, *** $p < .001$

To further explore whether sexual sensation seeking and perceived peer pressure significantly predicted sexting behaviour, multiple linear regression analysis was performed. In the model of sexual sensation seeking and perceived peer pressure on sexting behaviours, the result showed that it was statistically significant, $F(2, 393) = 63.371, p < .001$, and

accounted for 24% of the variance. However, according to table 4.8, only sexual sensation seeking ($\beta = .481, p < .001$) significantly predicted sexting behaviour among young adults in Malaysia, but not perceived peer pressure ($\beta = .054, p = .227$).

Table 4.6

Multiple Regression Analysis for Variables Predicting Sexting Behaviour

Predictors	<i>F</i>	<i>Adj. R2</i>	<i>df</i>	<i>t</i>	<i>Std. β</i>	<i>p</i>
	63.371	.240	(2, 393)			
Sexual sensation seeking				10.791	.481	$\leq .001$
Perceived peer pressure				1.211	.054	.227

Note. *df* = degrees of freedom, *Std. β* = standardize coefficient, *p* = significant value

Summary of the result

Table 4.7 present the summary of the result based on the research questions of the study.

Research questions	Hypotheses	Results	Decision
RQ1: What is the prevalence rate of sexting behaviour among young adults in Malaysia?			
RQ2: Is there any gender difference in sexting behaviour among young adults in Malaysia?	H1: Male young adults are more likely to engage in sexting behaviour.	$t = 1.315$ $p = .189$	Fail to reject H_0
RQ3: Do relationship status (i.e. Single, in a relationship, married) engage differently in sexting behaviour among young adults in Malaysia?	H2: Married young adults are less likely to engage in sexting behaviour.	$F = 6.906$ $p = .001$ Post hoc test: Only single and in a relationship significantly differ from each other $p = .001$	Fail to reject H_0
RQ4: Do self-esteem, sensation seeking, perceived peer pressure predict the sexting behaviour among young adults in Malaysia?		Only sexual sensation seeking significantly predict sexting $p < .001$	

Chapter V

Discussion & Conclusion

Prevalence of sexting behaviour

Research question 1: What is the prevalence rate of sexting behaviour among young adults in Malaysia?

Although sexting often being discussed together with its potential negative consequences, most of the studies have found that the practice of sexting continues to prevail and even became a trend in society. For instance, there were 40% Australian young people (Yeung et al., 2014), 62% undergraduate students in Chicago (Drouin et al., 2017), 82.23% Italian adolescents and young adults (Morelli et al., 2016), 87.80% American adults (Stasko & Geller, 2015) reported to have engaged in sext. However, it should also be noted that those studies were largely conducted in other countries, and little is known about the prevalence rate of sexting in Malaysia. Hence, in order to examine the prevalence rate of sexting among Malaysian young adults, there were 396 participants included in this study and the result showed that majority of them (72.5%) admitted having engaged in sexting, while 27.5% claimed that they do not sext. In other words, the prevalence rate of sexting behaviour among young adults in Malaysia is 72.5%.

From this finding, it becomes clear that sexting is not only occurred in other countries such as United states, Spain, Australia and India (Drouin et al., 2017; Gamez-Guadix et al., 2017; Klettke et al., 2018; Morelli et al., 2016; Stasko & Geller, 2015; Yeung et al., 2014), but in Malaysia as well. In fact, more than half of the participants in this study have reported to involved in sext. Congruent with the findings from a local qualitative study, Mohd Muhaiyuddin, Abu Bakar and Hussin (2019) also revealed that the practice of sexting is very common among the teenage age group of 13 to 19, as they reported to have received sext

almost every day and it deemed as a “routine activity” for them. Apparently, both past study and the present study have supported the notion that sexting is indeed prevalent in Malaysia, regardless of among teenagers or young adults. Therefore, this topic definitely deserves more attention from local academic researchers so that more studies can be carried out to discuss and extend understanding of this matter. Otherwise, people would just continue to sext without knowing the underlying reasons or possible consequences associated with sexting.

Gender differences and sexting behaviour

Research question 2: Is there any gender difference in sexting behaviour among young adults in Malaysia?

The present study hypothesized that male young adults are more likely to engage in sexting behaviour compared to female young adults. However, the result of the study revealed that both genders have no significant difference in sexting behaviour. This implied that the engagement rate of sexting for both males and females are almost similar. Hence, the hypothesis was not supported.

This finding is also in opposition to past studies where they mentioned that men have a greater tendency to sext because they will be rewarded, while women will be embarrassed or humiliated (Liong & Cheng, 2017; Ringrose et al., 2013). One possible explanation for this inconsistent finding might be due to the shift of cultural value. This is because women nowadays are no longer seen as a submissive role when it comes to expressing their sexuality (Farvid et al., 2016). Instead, society started to value females being active in sexual activities due to the heavy promotion of women sexuality empowerment in media. Therefore, it could be possible that female participants in the present study might be more willing to engage in sexting because their behaviour would not be evaluated negatively. Farvid et al. (2016) also supported that the change of perspective on women’s sexual behaviour may encourage them to take more initiation in expressing their own sexuality. Therefore, this could be the reason

why females' participants in the present study would engage in sexting just as much as males. It is possible that they are aware of the cultural shift, which in turn increases their likelihood to engage in sext.

Relationship status and sexting behaviour

Research question 3: Does relationship status (i.e. Single, in a relationship, married) engage differently in sexting behaviour among young adults in Malaysia?

The present study hypothesized that married young adults are less likely to engage in sexting behaviour. However, this hypothesis was not supported because findings showed that married individuals also engage in sexting, and does not show differences from those who are singles and in a relationship. In fact, the present study found that people who are in a relationship are more likely to sext compared to the singles.

This finding is contradicted with past findings as they stated that married adults have lesser needs to sext because they spend more time with their partners and already develop secure relationships with their partners (Jeanfreau et al., 2018; McDaniel & Drouin, 2015). However, in the present findings, married individuals do not appear to sext less as hypothesized in this study. The possible reason could be due to the change of needs among married participants. According to McCarthy and Ross (2018), married couples would look for new sexual activities, other than the normal sexual intercourse, to enhance their sexual desirability and sexual satisfaction. Similarly, Castaneda (2017) supported that married couples often engage in sexting behaviour because they want to achieve sexual pleasure with their partners. Hence, it could be that a secure relationship among married participants was not enough because they might want to further enhance their sexual desire.

Moreover, findings in the present study also demonstrated that participants who are in a relationship have greater tendency to sext. This is in line with several past findings as they mentioned that people who are in a relationship sext more because they use sexting as a way

for them to maintain and secure their romantic relationships (Delevi & Weisskirch, 2013; Hertlein & Ancheta, 2014; Renfrow & Rollo, 2014; Weisskirch & Delevi, 2011). This is especially applicable to those couples who are in a long-distance relationship because they often do not have physical contact with their partner. Thus, the use of technology would be the only option for them to communicate sexual desires in order to sustain their intimate relationship (Hertlein & Ancheta, 2014). Hence, it could be possible that participants who are in a relationship sext more because they deemed sexting as one of the methods to secure or maintain their intimate relationship. Meanwhile, Renfrow and Rollo (2014) mentioned that the reason why singles would sext less than those who are in a relationship is because they do not trust the recipient. They might assume that if the recipient is not an intimate partner, there is a possibility that their sexual photos could be forwarded to unknown people (Renfrow & Rollo, 2014). Therefore, singles participants in this study might be afraid of engaging in sext because they are worried that their sexting photos would be forwarded without their consent.

Predictors of sexting behaviour

Research question 4: Do self-esteem, sensation seeking, perceived peer pressure predict the sexting behaviour among young adults in Malaysia?

The aim of the present study is to examine whether self-esteem, sexual sensation seeking, perceived peer pressure able to predicts sexting behaviour among young adults in Malaysia. Hence, the result shows that self-esteem does not have a significant relationship with sexting behaviour; perceived peer pressure is not a significant predictor of this behaviour; only sexual sensation seeking significantly predicts sexting behaviour.

Self-esteem and sexting behaviour

Based on the finding in this study, it has shown contradiction with several studies that have found the association between self-esteem and sexting behaviour. As reported in prior publications, people with low self-esteem are more likely to engage in sexting compared to

people with high self-esteem (Gámez-Guadix & de Santisteban, 2018; Scholes-Balog et al., 2016; Ybarra & Mitchell, 2014). Their explanation to this finding is that individuals who are low in self-esteem might use sexting as a way for them to elevate their self-esteem levels. This is because people with low self-esteem are more likely to gain approval from others when they send sexual content, and this led them to feel positive about themselves again (Wachs et al., 2017; Gámez-Guadix & de Santisteban, 2018). However, in the present study, this might not be the case as self-esteem appears not to be associated with sexting. One of the possible explanations could be due to participants in the present study might use other ways to enhance their self-esteem levels instead of engaging in sexting. For example, some studies suggested that great social skills (Losa-Iglesias et al., 2017), high socioeconomic status (Farwa et al., 2019) and academic achievement (Tetzner et al., 2016) could help in enhancing one's self-esteem level. Thus, sexting was not the only method for people to increase self-esteem levels, it is possible that people might prefer other options that can achieve the same results.

Furthermore, several past studies have supported the finding in this study as they mentioned that self-esteem level does not influence one's intention to sext (Crimmins & Seigfried-Spellar, 2017; Galovan et al., 2018; Hudson, 2011; Sharma et al., 2019). The idea is that individuals may practice sexting for various reasons but not necessarily related to their self-esteem levels (Hudson, 2011). For example, people may involve in sexting because they want to initiate sexual intercourse in real life or get attention from their romantic partners (Klettke et al., 2014). Similarly, Sesar et al. (2019) speculated that sexting could be a type of foreplay or suggestion to move their intimate relationship into physical sexual activity. Thus, these findings show that people's motivations to engage in sext are varied, and it might not be attributed to self-esteem.

In short, it appears that participants in this study might involve in sexting due to different reasons (i.e. gain attention from partners and initiate sexual intercourse) rather than merely want to boost their self-esteem. Even if they want to increase their self-esteem levels, there are many alternative ways for them to do so (i.e. improve social skills, socioeconomic status, and academic achievement) instead of engaging themselves in sexting. With this explanation, it might be able to explain why the result showed that self-esteem is not associated with sexting behaviour in the present study.

Sexual sensation seeking and sexting behaviour

The result of this study indicated that sexual sensation seeking is a significant predictor of sexting behaviour. Hence, findings of the present study show a consistent result with the past studies which indicated that people who have greater tendency to seek for novel experiences, they are more likely to engage in sext (Dir et al., 2013; Dir, 2012; Scholes-Balog et al., 2016).

As high sensation seeker is prompt to pursue subjects that are arousing and exciting, they would have stronger will to participate in activities that could produce such stimulating feelings (Nguyen et al., 2012). Hence, several studies have proposed that sending or exchanging sexual messages or photos could become one of the provoking experiences that allows the individuals to feel exhilarate in sexual context (Baumgartner et al., 2014; Champion & Pedersen, 2015; Dir et al., 2013; Van Ouytsel et al., 2014). In other words, it is possible that participants in this study might perceive sexting as an exciting experience, so they tend to engage in sexting to achieved excitement. This point is also supported by Dir et al. (2013) as they construed that sexting is a novel and highly arousal activity, that motivates sensation seekers to participate in it. Similarly, a large number of existing studies have found that high sensation seekers are more inclined to participate in sexting compared to low sensation seekers (Baumgartner et al., 2014; Champion & Pedersen, 2015; Van Ouytsel, Van

Gool et al., 2014). Hence, past findings together with the present findings underlie the assumption that people tendency to seek thrilling experiences has increases the likelihood of engaging in sexting behaviour.

However, it is important to emphasize that past literature mainly focuses on sensation seeking in general, instead of sexual sensation seeking. Even though sexual sensation seeking and sensation seeking could be similar, yet, sexual sensation seeking is much more sex-specific. Kalichaman et al. (1994) explained that sexual sensation seeking refers to people's tendency to achieved optimal levels of sexual excitement by engaging in novel sexual activities. As sexting is a type a sexual activity, it is much more relevant to adopt this variable into the present study so that the researchers can specifically look into the sexual aspects of the participants. Yet, no prior studies to date have dedicated their research to understand in the association between sexual sensation seeking and sexting behaviour. Since sexual sensation seeking was found to a significant predictor in the present study, this could provide new insights to the existing literature of sexting. It could suggest future researchers to include sexual sensation seeking as one of the variables in their sexting studies in order to further consolidate the prediction of sexual sensation seeking in sexting behaviour.

Perceived peer pressure and sexting behaviour

According to the results from the present study, perceived peer pressure does not significantly predict sexting behaviour. This shows that their tendency to engage in sexting behaviour might not be due to peer pressure. This finding is contradicted with previous research as they have stated that individuals are prone to sext when under the pressure of the social group (Champion & Pedersen, 2015; Drouin & Tobin, 2014; Lee & Crofts, 2015).

A possible reason to explain this contradicting result is that the pressure to engage in sexting might not necessarily come from peer groups, instead, it might come from a different source. One potential source would be the romantic partner of the individuals rather than

peers (Drouin & Tobin, 2014; Vander Abeele et al., 2014). Based on the findings from Ross et al. (2016), it was found that women being pressured by their romantic partners to engage in sexting. This is similar to another research that revealed one in fifth of the young adults have experienced undesirable but consensual sexting with an intimate partner, and this was encountered more by women as well (Drouin et al., 2015). They further explained that women would feel compelled to engage in sexting in order to prove that they are committed to their partners even though they might not want to sext (Drouin et al., 2015). Thus, this could explain why perceived peer pressure does not predict sexting behaviour in the present study. This is because there is a possibility that the pressure faced by the individuals are come from romantic partners rather than peers.

Theoretical Implications

The present study used Problem Behaviour Theory (PBT) as a guidance to understand the factors that affect the engagement of sexting. According to this theory, the occurrence of problem behaviour might be the result of both environment and personality factors. Hence, environmental factors in the present study refer to perceived peer pressure, while personality factors refer to self-esteem and sexual sensation seeking. Based on the results, out of the three variables that represented environment and personality factors, the only significant predictor of sexting is sexual sensation seeking. Self-esteem does not associate with sexting behaviour and perceived peer pressure does not significantly predict sexting behaviour. Hence, the results of this study are not fully supported by the Problem Behaviour Theory (PBT).

Eventually, this study has provided new insight into this theory. It is possible that individual differences might play a role in between which would affect the propensity to engage in problem behaviour. For example, even though the person might experience peer pressure to sext, they might not necessarily end up performing it as it would be depending on how much they value their friends or how they evaluate certain behaviour. Thus, it is not

definitive that peer pressure will predict the involvement of problem behavior, but it also depends on their own evaluation. Since the result is inconsistent with the theory, it could also provide insight for future researchers so that they are able to explore the possible reason to justified on this inconsistency. When more studies carried out to study on this to topic, it would also help to broaden the perspective on this theory.

Practical Implications

Due to the limited research of sexting in Malaysia, findings in the present study might be useful as it could provide data for the local professionals to tailor and design effective interventions that aimed to control the behaviour of sexting. For example, clinicians could develop interventions that promote the “safe” use of sexting to mitigate the negative consequences associated with sexting. Since findings from the present study showed that sexual sensation seeking significantly predicted sexting behaviour among Malaysian young adults, such interventions could be targeted to young adults, especially those who have high level of sexual sensation seeking. A highly targeted intervention would have greater success in reducing the undesirable outcomes associated with sexting. This is because people who are more at risk to sext, they would be educated about how to practice safe sexting.

Moreover, findings from the present study have found that 72.5% of the Malaysian participants admitted having engaged in sext. This showed that sexting is prevalent in Malaysia and it needs more attention from the public. Therefore, this study could provide useful insight to the relevant agencies, so that they can organize campaigns or talks that would encourage the discussion of sexting in Malaysia. By organizing a campaign, it could bring awareness to the public, and enable them to understand more about the potential risks and effects of sexting.

Limitations

There are several limitations that need to be addressed in the present study. Firstly, there are some flaws discovered in the characteristics of the sample recruited, in which the ratio of ethnicity in this study is not evenly divided. Most of the respondents in the present study were Chinese which consisted of 79%, while there were only 8.3% of Indian respondents, 5.8% of Malay and 6.8% of other races. As Malaysia is a multicultural and multiethnic country, the large number gap among the races may cause over-representation of one race over the others. Therefore, such findings might not be able to generalize to the entire population in Malaysia.

Besides that, the sample size of the individuals who were married was relatively small compared to the participants who were single and in a relationship. Most of the participants were single (51.5%) and in a relationship (36.6%), but only a small number of married individuals were able to be recruited (11.9%). Therefore, it might be hard to do the comparison since there is no equal number of participants who are in different relationship status. Consequently, the result regarding married couples may be under-represented and is difficult to generalize to the married population in Malaysia.

Moreover, this study examines mainly from the perspective of heterosexual individuals as those who have a different sexual orientation only comprised 7.6% of the total sample size. However, it is also important to include individuals of a sexual minority group because they could be using social media or dating applications more in order to look for a potential sexual partner. Eventually, people with a different sexual identity (i.e. homosexual, bisexual or pansexual) may be more susceptible to the risk of sexting. As this paper did not specifically include them as our research subjects, the result may not be able to provide a complete picture of sexting behaviour from different groups of people.

Last but not least, the use of cross-sectional study in the present study only enables the exploration of variables on sexting behaviour at one specific point of time. Therefore, it might not be able to reflect the actual cause-and-effect relationship pertaining to sexting behaviour. As the behaviour of sexting could change over the life span, the present study was not able to explore the underlying reason behind these changes. Hence, this study could not provide sufficient information about sexting behaviour.

Recommendations

There are several recommendations for the future researchers in order to enrich the literature on sexting behaviour. Firstly, future researchers should collect data by using proportionate sample size with a ratio that is able to represent the Malaysian ethnicity population. According to the Department of Statistics Malaysia (2019), the estimated population in Malaysia according to ethnicity was 69.3% for Bumiputera which includes Malay and indigenous people, while the percentage for Chinese, Indian and other ethnicity were 22.8%, 6.9% and 1.0% respectively. Future researchers should refer to the latest percentage of ethnic groups in the country for data collection so that the results are able to generalize the Malaysian population.

Secondly, the results in the present study might be biased due to the unequal number of participants in terms of relationship status. For more accurate findings in future, it is important to make sure that the number of participants from each relationship status, which includes single, in a relationship and married, is equally distributed so that each group will be represented accordingly. This is to avoid the occurrence of overrepresentation or underrepresentation of certain groups, which would affect the overall result of the research.

Besides, future researchers could include and explore the role of sexual orientation in sexting behaviour to achieve different perspective, or in other words, understand the

differences of sexting among different group of people. This is because majority of the participants from current sample are heterosexual, so future researchers may study the sexting behaviours among people from other sexual orientation type as well, which are usually homosexual and bisexual, so that researchers can fully understand and get to know the differences or similarities of sexting behaviour among people from different sexual orientation.

Lastly, future researchers should consider adopting longitudinal study with repeated observations on the participants, as it allowed the researchers to see how the behaviour of sexting could change over time. Particularly, future researchers could examine how changes in predictors (i.e. self-esteem level, sensation seeking level, perceived peer pressure) were related to changes in sexting behaviours over time. By understanding this difference, eventually they would be able to explore the possible reasons for these changes. This is especially useful for the clinicians, parents, educators or public in general, so that they are able to achieve better insight on this issue and aware of the potential impact of sexting.

Conclusion

The topic of sexting has been widely discussed by mass media as a “risky behaviour” because it could potentially bring negative impacts to a person. Given that such behaviour often being portrayed as a dangerous behaviour, people might think that it would prevent or at least reduce the chances of engaging in sext. Unfortunately, the fact is, several studies have found that the prevalence rate of sexting has only been accelerated throughout the years. This has become a serious concern among the public because people seem to be neglecting its potential negative outcomes. Therefore, over the years, many researchers have attempted to explore the underlying reasons behind sexting, so that they could explain on the growing number of sexting behaviour. Yet, the behaviour of sexting is not a widely research topic in Malaysia as only one qualitative study related to sexting was able to found. Their results have

revealed the commonness of sexting among teenagers as most of them claimed to practice sexting almost every day.

For this reason, the present study aimed to find out whether sexting behaviour is also practice by Malaysian young adults, and if so, what is the prevalence rate. As expected, finding from the present study showed that sexting is indeed prevalent in Malaysia because 72.5% of them have reported to engage in sexting. Therefore, another goal in our study is to find out which predictors can best predict the behaviour of sexting. The results show that sexual sensation seeking is the only significant predictor in this study as self-esteem has no association with sexting and perceived peer pressure does not significantly predict sexting behaviour. Moreover, our findings also demonstrated that there is no gender difference in sexting behaviour; and those who are in a relationship sext more than single participants, while married individuals do not significantly differ from those who are single and in a relationship. With these findings, the present study has enriched the literature of sexting, as well as providing new insights to the professionals in Malaysia. Such findings might be particularly useful for the health care professionals or any other relevant parties, because they it could provide them insight about what makes people to sext, or which individual characteristics tend to sext. By understanding this information, perhaps it could help them to develop effective interventions that aimed to alleviate the negative impacts associated with sexting.

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Appendix A

Questionnaire

Factors Affecting Sexting Behaviour Among Young Adults in Malaysia

Q1 Participant Information Sheet

Introduction

We would like to invite you to participate in this research project, which aims to examine “Factors affecting sexting behaviour among young adults in Malaysia”. Your participation in this survey is highly appreciated.

Why am I doing the project?

This is a project conducted by undergraduates from Universiti Tunku Abdul Rahman. It is hoped that the project could provide useful information for practitioner and policy maker to draw effective program to deal with sexting behaviour.

What will you have to do if you agree to take part?

Will your participation in the project remain confidential? If you agree to take part, your name will not be recorded on the questionnaires and the information will not be disclosed to other parties. Your responses to the questions will be used for the purpose of this project only and you can be assured that if you take part in the project you will remain anonymous.

What are the advantages of taking part?

You may find the project interesting and enjoy answering questions about the things regarding sexting behaviour. Once the study is finished it could provide information about the predicting factors of sexting behaviour, which is useful in providing effective measures to deal with the negative impact of sexting behaviour.

Are there any disadvantages of taking part?

It could be that you are not comfortable talking about your participation in the behaviour of sexting. Do you have to take part in the study? No, your participation in this project is entirely voluntary. You are not obliged to take part, you have been approached by using purposive approach with a view that you might be eligible in taking part but this does not mean you have to. If you do not wish to take part, you do not have to give a reason. Similarly, if you do agree to participate you are free to withdraw at any time during the project if you change your mind.

Q2 Personal Data Protection Statement

In accordance with Personal Data Protection Act 2010 (“PDPA”) which came into force on 15 November 2013, Universiti Tunku Abdul Rahman (“UTAR”) is hereby bound to make notice and require consent in relation to collection, recording, storage, usage and retention of personal information.

Notice:

1. The purposes for which your personal data may be used are inclusive but not limited to:--
 - For assessment of any application to UTAR
 - For processing any benefits and services
 - For communication purposes
 - For advertorial and news
 - For general administration and record purposes
 - For enhancing the value of education
 - For educational and related purposes consequential to UTAR
 - For the purpose of our corporate governance
 - For consideration as a guarantor for UTAR staff/ student applying for his/her scholarship/ study loan

2. Your personal data may be transferred and/or disclosed to third party including but not limited to the respective and appointed outsourcing agents for purpose of fulfilling our obligations to you in respect of the purposes and all such other purposes that are related to the purposes and also in providing integrated services, maintaining and storing records. Your data may be shared when required by laws and when disclosure is necessary to comply with applicable laws.

3. Any personal information retained by UTAR shall be destroyed and/or deleted in accordance with our retention policy applicable for us in the event such information is no longer required.

4. UTAR is committed in ensuring the confidentiality, protection, security and accuracy of your personal information made available to us and it has been our ongoing strict policy to ensure that your personal information is accurate, complete, not misleading and updated. UTAR would also ensure that your personal data shall not be used for political and commercial purposes.

Q3

Consent Form for Research Participation and Personal Data Protection

Title of Project: Factors Affecting Sexting Behaviour Among Young Adults in Malaysia

NOTE: This consent form will remain with the UTAR researchers for their records.

I understand I have been asked to take part in the research project specified above by a group of researchers from UTAR for the purpose of their research project. I have had the project explained to me, and I have read the Explanatory Statement, which I keep for my records.

I understand that:

	Yes (1)	No (2)
I will be asked to complete a questionnaire about factors affecting sexting behaviour among young adults in Malaysia. (1)	<input type="radio"/>	<input type="radio"/>
My participation is voluntary, that I can choose not to participate in part or all of the project, and that I can withdraw at any stage of the project without being penalised or disadvantaged in any way. (2)	<input type="radio"/>	<input type="radio"/>
I may ask at any time for my data to be withdrawn from the project. (3)	<input type="radio"/>	<input type="radio"/>
No information I have provided that could lead to the identification of any other individual will be disclosed in any reports on the project, or to any other party. (4)	<input type="radio"/>	<input type="radio"/>
I will remain anonymous at all times in any reports or publications from the project. (5)	<input type="radio"/>	<input type="radio"/>
It is my sole responsibility to look after my own safety for the above project. In the event of any misfortune or accidental injury involving me, whether or not due solely to personal negligence or otherwise, I hereby declare that UTAR shall not be held responsible. (6)	<input type="radio"/>	<input type="radio"/>

Q4

- By submitting this form, I hereby authorise and consent to UTAR processing (including disclosing) my personal data and any updates of my information, for the purposes and/or for any other purposes related to the purpose.
- I acknowledge that if I do not consent or subsequently withdraw my consent to the processing and disclosure of my personal data, UTAR will not be able to fulfil their obligations or to contact me or to assist me in respect of the purposes and/or for any other purposes related to the purpose.

Please feel free to contact any of the researchers listed below if you have any inquiries:

Ms Adeline Seah Wei Xuan (adeline05038@1utar.my)

Ms Lee Xin Lin (xinlin1997@1utar.my)

Ms Lim Shar Minn (sharminn@1utar.my)

Acknowledgment of Personal Data Protection Notice

- I have been notified by you and that I hereby understood, consented and agreed per UTAR above notice.
- I disagree, my personal data will not be processed.

Skip To: End of Survey If By submitting this form, I hereby authorise and consent to UTAR processing (including disclosing)... = I disagree, my personal data will not be processed.

Q5 Age: _____

Q6 Sex

- Male
- Female

Q7 Sexual preference

- I am attracted to opposite sex
-
- Others: (Please specify)_____

Q8 Race

- Malay
- Chinese
- Indian
- Others: (Please specify)_____

Q9 Nationality

- Malaysian (1)
-

Q10 Current living state (e.g., Perak)

Q11 Employment status

- Employed, Occupation: _____
- Unemployed
-
-

Q12 Current relationship status

- Single
- In a relationship: (Please specify the duration of relationship, e.g., 3 months)

- Married: (Please specify the duration of marriage, e.g., 1 year)

-

Display This Question:

If Current relationship status = In a relationship: (Please specify the duration of relationship, e.g., 3 months)

Q13 Please select if you are currently

- Cohabiting [Unmarried couples who have a sexual relationship and live together for a sustained period of time. (Please specify the duration of cohabitation, e.g., 2 years.)]

- Non-cohabiting

Q14

Please respond to the following questions regarding sexting behaviours based on how it has been defined below. Please indicate **How Often** each of the statement below is descriptive of you.

NOTE: We define **SEXTING** as: **sending, receiving** and **sharing** sexually suggestive or provocative **messages** and/or **photographs**, primarily between mobile phones (although

some of the questions will ask about other media forms as well, such as Facebook, Snapchat, Instagram).

	Never (1)	Rarely (A few times) (2)	Occasionally (2-3 / month) (3)	Often (2-3 / week) (4)	Frequently (daily) (5)
How often have you " received " suggestive or sexually charged <u>text</u> messages? (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How often have you " received " provocative or suggestive <u>pictures</u> by text message? (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How often have you responded to provocative or suggestive <u>text or picture messages</u> you " received "? (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How often have you " received " provocative suggestive <u>pictures or messages</u> over the <i>internet</i> (i.e. Facebook, Snapchat, Instagram)? (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How often have you " sent " suggestive or sexually charged <u>text</u> messages? (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How often have you " sent " provocative or	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

suggestiv
e
pictures by text
messages? (6)

How often has someone responded to a suggestive or sexually charged text or picture message you "**sent**"? (7)

How often have you "**sent**" provocative or suggestive pictures or messages over the *internet* (i.e. Facebook, Snapchat, Instagram)? (8)

How often have you publicly "**posted**" suggestive or provocative pictures on *internet* (i.e. Facebook, Snapchat, Instagram)? (9)

Q15 How many people have you exchanged provocative pictures or texts with?

Q16

On average, I usually exchange sexts with (*You are allowed to select more than one answer*)

I don't sext

Someone I barely know

Friends of casual acquaintances who I am attracted to

Someone I am dating

Someone I am in a committed relationship with (i.e., boyfriend/girlfriend, marriage partner)

Q17

Below is a list of statements dealing with your general feelings about yourself.

Please indicate how strongly you **Disagree** or **Agree** with each statement.

	Strongly disagree (1)	Disagree (2)	Agree (3)	Strongly agree (4)
On the whole, I am satisfied with myself. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
At times, I think I am no good at all. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel that I have a number of good qualities. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am able to do things as well as most other people. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel I do not have much to be proud of. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I certainly feel useless at times.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel that I'm a person of worth, at least on an equal plane with others. (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I wish I could have more respect for myself. (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
All in all, I am inclined to feel that I am a failure. (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I take a positive attitude toward myself. (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q18

A number of statements that some people have used to describe themselves are given below. Read each statement and then select how well you **Believe** the statement describes you.

	Not at all like me (1)	Slightly like me (2)	Mainly like me (3)	Very much like me (4)
I like wild "uninhibited" sexual encounters. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The physical sensations are the most important thing about having sex. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My sexual partner probably think I am a "risk taker". (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When it comes to sex, physical attraction is more important to me than how well I know the person. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoy the company of sensual people. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoy watching "X-rated" videos. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am interested in trying out new sexual experiences. (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel like exploring my sexuality. (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I like to have new and exciting sexual experiences and sensations. (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I enjoy the sensations of intercourse without a condom. (10)

Q19

Please indicate **How Often** each of the statement below is descriptive of you.

	Almost never (1)	Seldom (2)	Sometimes (3)	Often (4)	Almost always (5)
How often do your friends push you to do things that you don't want to do? (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How often do your friends try to get you to do things that you don't like? (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How often do your friends pressure you to do the things that he or she wants? (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q20

Please indicate the extent to which you agree with the following statements on scale from **Strongly Disagree** to **Strongly Agree**.

	Strongly disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly agree (5)
It is important to me that people are attracted to me. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel proud when people (of the gender I'm attracted to) compliment the way I look. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I want people (of the gender I'm attracted to) to look at me. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I love to feel sexy. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I like showing off my body. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel complimented when people "check me out" as I walk past. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I wear revealing clothing, I feel sexy/sexually attractive and in control. (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel empowered when I look good. (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q21

Listed below are a few statements about your relationships with others. How much is each statement **True** or **False** for you?

	Definitely false (1)	Mostly false (2)	Don't know (3)	Mostly true (4)	Definitely true (5)
I am always courteous even to people who disagreeable. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There have been occasions when I took advantage of someone. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I sometimes try to get even rather than forgive and forget. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I sometimes feel resentful when I don't get my way. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
No matter who I'm talking to, I'm always a good listener. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Default Question Block

Appendix B

Ethical Approval For Research Project



UNIVERSITI TUNKU ABDUL RAHMAN

Wholly Owned by UTAR Education Foundation (Company No. 136217-M)

Re: U/SERC/10/2020

21 January 2020

Dr Chie Qiu Ting
Head, Department of Psychology and Counselling
Faculty of Arts and Social Science
Universiti Tunku Abdul Rahman
Jalan Universiti, Bandar Baru Barat
31900 Kampar, Perak.

Dear Dr Chie,

Ethical Approval For Research Project/Protocol

We refer to the application for ethical approval for your students' research projects from Bachelor of Social Science (Hons) Psychology programme enrolled in course UAPZ3023. We are pleased to inform you that the application has been approved under condensed review.

The details of the research projects are as follows:

	Research Title	Student's Name	Supervisor's Name	Approval Validity
1.	The Role of Emotional Reactivity, Learned Helplessness and Persistence in Distress Tolerance Among University Students in Malaysia	1. Chai Liang Ying 2. Lee Ju Jan 3. Sim Kah Soon	Mr Ho Khoo Hoong	21 January 2020 – 20 January 2021
2.	Effects of Neurofeedback Games on Affects and Anxiety Among Undergraduate Students	1. Ling Gong Shuan 2. Ng Kuan Sian 3. Tan Pui Chin	Mr Phoh Kai Shuan	
3.	Effects of School-based Neurodiversity Literacy Program on Knowledge, Attitude and Behavioral Intention Among Adolescents in Malaysia	1. Liow Jia Li 2. Pui Jia Yi 3. Wong Xiao Zui	Ms Sanggari a/p Krishnan	
4.	The Relationship of Emotional Exhaustion and Workplace Apathy on Job Performance Among Human Resource Professional in Malaysia	1. Chua Yu Hong 2. Chai Jia Yi 3. Moh Jia Hui	Dr Zainab Chaudhry	
5.	The Impact of Social Media and Peer Influence on Perceived Body Image Among Undergraduate Students	1. Cheah Shan Yi 2. Kok Sook Yan 3. Yeap Nai Ying	Pa Winwabida binti Kamarul Zaman	
6.	The Relationship of Self-esteem and Self-efficacy on Career Adaptability Among Undergraduate Students in Malaysia	1. Keng Ai Hsiong 2. Ooi Shin Ying 3. Paul Liang Choy Pui	Ms Ting Soo Ting	
7.	Motives of Gaming and Needs Frustration as Predictors of Internet Gaming Disorder Among Mobile Gamers	1. Ho Jia Yit 2. Lim Jui Yan 3. Lun Ka Han	Ms Sarvarubini a/p Naimor	
8.	A Study of the Relationship between Social Media Addiction, Self-efficacy and Anxiety Level on Academic Procrastination Among Undergraduates in Malaysia	1. Teo Zhi Yuan 2. Chong Jia Min 3. Chong Xin Yi	Ms Komathi Lokithasan	
9.	Life Satisfaction: Influences of Dark Triad and Internet Addiction Among Emerging Adults	1. Deva Darshini a/p Megan 2. Ong Chu Ying 3. Sandra Leo Wei		

Kampar Campus : Jalan Universiti, Bandar Baru, 31900 Kampar, Perak Darul Ridzuan, Malaysia

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Tel: (603) 9086 0288 Fax: (603) 9010 8868

Website: www.utar.edu.my



	Research Title	Student's Name	Supervisor's Name	Approval Validity
10.	The Effects of Conformity and Self-esteem Towards Cyberbullying Among Undergraduate Students in Malaysia	1. Woon Suk Yuen 2. Ng Su May 3. Wong Wai Kin	Dr Chia Qiu Ting	21 January 2020 – 20 January 2021
11.	Factors Affecting Sexting Behaviour Among Young Adults in Malaysia	1. Adeline Seah Wei Xuan 2. Lee Xin Lin 3. Lim Shar Min	Mr Tan Soon Ann	
12.	Sexual Desire, Sexual Satisfaction and Personality Traits as Predictors to Cybersexting Behaviour Among Emerging Adults in Malaysia	1. Sharwynn Quay Short Nuan 2. Ramesh a/l Mohan 3. Lee Xin Kai		
13.	Religiosity, Self-perceived Effect of Pornography Usage and Pornography Usage Among Emerging Adults in Malaysia	1. Jasmine Ng Hai-Ying 2. Sharmilah a/p Rajendran 3. Tan Cheok Ting		
14.	Sexual Communal Motivation and Marital Satisfaction: Mediating Effect of Sexual Satisfaction	1. Dui Wan Ting 2. Yung Sun Yee		

The conduct of this research is subject to the following:

- (1) The participants' informed consent be obtained prior to the commencement of the research;
- (2) Confidentiality of participants' personal data must be maintained; and
- (3) Compliance with procedures set out in related policies of UTAR such as the UTAR Research Ethics and Code of Conduct, Code of Practice for Research Involving Humans and other related policies/guidelines.

Should the students collect personal data of participants in their studies, please have the participants sign the attached Personal Data Protection Statement for records.

Thank you.

Yours sincerely,



Professor Ts Dr Faidz bin Abd Rahman
Chairman

UTAR Scientific and Ethical Review Committee

c.c. **Dean, Faculty of Arts and Social Science**
Director, Institute of Postgraduate Studies and Research



Appendix C

Turnitin Originality Report

Factors affecting sexting behaviour among young adults in Malaysia

ORIGINALITY REPORT



PRIMARY SOURCES

1	Submitted to University of Huddersfield Student Paper	1%
2	Submitted to Universiti Teknologi MARA Student Paper	1%
3	www.tandfonline.com Internet Source	1%
4	Submitted to Universiti Tunku Abdul Rahman Student Paper	1%
5	Submitted to City University of Hong Kong Student Paper	1%
6	Submitted to Walden University Student Paper	<1%
7	Submitted to Swinburne University of Technology Student Paper	<1%
8	Submitted to Sunway Education Group Student Paper	<1%