



SOCIAL ANXIETY, PERCEIVED STRESS LEVEL AND PERCEIVED SOCIAL SUPPORT
AS PREDICTORS OF SMARTPHONE ADDICTION AMONG UNDERGRADUATE
STUDENTS IN MALAYSIA

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Running head: SOCIAL ANXIETY, PERCEIVED STRESS LEVEL, PERCEIVED SOCIAL SUPPORT AND SMARTPHONE ADDICTION

Social Anxiety, Perceived Stress Level and Perceived Social Support as Predictors of
Smartphone Addiction among Undergraduate Students in Malaysia

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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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APPROVAL FORM

This research paper attached hereto, entitled “Social Anxiety, Perceived Stress Level and Perceived Social Support as Predictors of Smartphone Addiction among Undergraduate Students in Malaysia” prepared and submitted by Chua Pei Yi, Chuah Yi Ting and See Jie Sheng in partial fulfillment of the requirements for the Bachelor of Social Science (Hons) Psychology is hereby accepted.



Supervisor
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Abstract

The issue of smartphone addiction is rising consistently among university students due to the emerging technologies which may bring numerous negative psychological impacts to the excessive smartphone users. Present study was conducted to examine the social anxiety, perceived stress level and perceived social support as predictors of smartphone addiction among undergraduate students in Malaysia. In this study, a quantitative analysis research method and convenience sampling method were implemented. There were 118 university students who aged from 20 to 25 years old and self-declared as daily smartphone users were recruited in this study. The survey was distributed to the university students from different states in Malaysia through online platforms. Qualtrics was utilised to create the survey and IBM SPSS version 26 was used to analyse the data. The instruments include Social Interaction Anxiety Scale, Perceived Stress Scale, Multidimensional Scale of Perceived Social Support and Short Version of the Smartphone Addiction Scale were used. Simple and multiple linear regression analysis was applied to study the predictors of smartphone addiction. The result showed social anxiety positively predicted smartphone addiction, while perceived stress level and perceived social support were not significant in predicting smartphone addiction. Present study was expected to contribute to updating the psychology research database of social anxiety, perceived stress level and perceived social support as predictors of smartphone addiction among undergraduate students in Malaysia.

Keywords: Smartphone addiction, social anxiety, perceived stress level, perceived social support, undergraduate students

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Chapter 1

Introduction

Background of Study

The technology nowadays has been continuously improving. Based on the survey that had been recorded by Malaysian Communications and Multimedia Commission (MCMC) in 2018, smartphones had become the most common electronic device to access the internet which reported a 93.1% of internet users used smartphones to go online. Furthermore, the smartphone with internet access provides users with a variety of features such as social networking, messaging, navigating, and communicating (Aker et al., 2017). Students tend to use smartphones to learn and communicate with their peers (Alkhunaizan, 2019). For example, undergraduate students might spend a couple of hours per day searching for information in order to complete their assignments. Hence, students are more reliant on smartphones, and a life lacking electronic devices would be inconceivable (Wang et al., 2016).

Despite the fact that smartphones have improved people's lives in good ways, such as greater productivity and social networking, students' diminished control over smartphone usage can contribute to smartphone addiction (Hadi et al., 2019). Smartphone addiction can be generally referred to as the extent of obsessive or excessive use of a smartphone (Kim et al., 2014). There is mounting evidence that individuals overuse their phones in ways that interfere with their everyday lives and mental health (Tangmunkongvorakul et al., 2020). Smartphone addiction can cause users to experience physical health issues, sleep, emotional and behavioural disorders (Yang et al., 2021). According to Afroz (2016), 60.3% of undergraduate students were reported to be living with some form of dependence or addiction with smartphones. Despite being aware of the negative consequences, students are unable to

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control the usage of smartphones (Hadi et al., 2019).

A study conducted by Thatkar et al. (2021) revealed that social anxiety can positively influence smartphone addiction. Social anxiety, also known as a social phobia can be characterised by projecting tension and nervousness in the social setting. An individual with social anxiety tends to process the information by extremely focusing on the negative side (Wang & Zhang, 2021). In short, social anxiety can be compensated by an online environment which is to gain a sense of a secure environment without having to meet people in face-to-face settings (Anderson et al., 2017).

Furthermore, past studies revealed that perceived stress levels could predict smartphone addiction effectively (Chiu, 2014; Kuang & Fu, 2017). Perceived stress can be generally understood by the extent to which an individual views an external event as stress (Yang et al., 2021). When people undergo stressful events, they tend to obsess in the internet environment to relieve their negative emotions (Gómez-Guadix et al., 2015). For instance, they might be addicted to social media and online gaming. Therefore, the higher the perceived stress level, the higher the tendency for an individual to engage in smartphone addiction (Liu et al., 2018).

Excessive internet use and smartphone addiction are reduced when people's psychological well-being and social support are improved (Konan et al., 2018). Perceived social support is a belief that assistance is available once requested by a particular person, and it plays a crucial part in building relationships with one another (Barnett et al., 2021). Social support acts as a force to reduce the existence of psychosocial stress and mental health issues to keep one's away from negative events (Zhao & Peng, 2021) as it is a protective factor that is closely related

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to resilience (Siedentopf et al., 2021). Thus, it is expected that perceived social support is negatively associated with smartphone addiction.

Problem Statements

According to the study conducted, the researchers found that young adults are more likely addicted to smartphones compared to adolescents (Monacis et al., 2017). Among university students, more than a quarter of them have experienced smartphone addiction (Lei et al., 2020). Furthermore, due to the covid-19 pandemic, lockdowns were implemented and most of the physical activities such as outdoor activities and physical classes are prohibited. Hence, there is an increased internet access rate and social media usage by using electronic devices such as smartphones during the covid-19 pandemic (Pandya & Lodha, 2021).

Since students are more dependent on smartphones, the concern about excessive usage of smartphones among students is rising. The excessive usage of smartphones might lead to smartphone addiction which can be linked to various psychological complications (Matar Boumosleh & Jaalouk, 2017). Smartphone addiction seems to be associated with anxiety (Elhai et al., 2019), depression (Elhai et al., 2020), and insomnia (Chung et al., 2018). Other than that, smartphone addicts are unable to control themselves in performing repetitive behaviour such as excessive smartphone use. While, smartphone addiction will lead to poor communication with others (Ithnain et al., 2018).

In addition, there is insufficient evidence proving that social anxiety predicts smartphone addiction (Turgeman et al., 2020) and limited academic discussion about the predictors of smartphone addiction (Sok et al., 2018). Moreover, there are only limited studies on smartphone addiction conducted among undergraduate students in Malaysia (Singh & Samah, 2018). Hence,

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the relationship between social anxiety, perceived stress level, perceived social support, and smartphone addiction has yet to be studied in the context of undergraduate students in Malaysia.

This research is designed to have an enhanced understanding about smartphone addiction in the Malaysian context. In order to fill up the literature gaps, a quantitative analysis of questionnaires will be distributed to undergraduate students in Malaysia. While the findings can be used as the reference for future studies.

Research Questions

1. Does social anxiety positively predict smartphone addiction among undergraduate students in Malaysia?
2. Does perceived stress level positively predict smartphone addiction among undergraduate students in Malaysia?
3. Does perceived social support negatively predict smartphone addiction among undergraduate students in Malaysia?
4. Do social anxiety, perceived stress level and perceived social support significantly predict smartphone addiction among undergraduate students in Malaysia?

Hypotheses

1. Social anxiety positively predicts smartphone addiction among undergraduate students in Malaysia.
2. Perceived stress level positively predicts smartphone addiction among undergraduate students in Malaysia.
3. Perceived social support negatively predicts smartphone addiction among undergraduate students in Malaysia.
4. Social anxiety, perceived stress level and perceived social support significantly predict smartphone addiction among undergraduate students in Malaysia.

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Significance of Study

Previously, the studies regarding smartphone addiction conducted in Malaysia among undergraduate students were inadequate (Singh & Samah, 2018). First and foremost, this study predicted that smartphone addiction will be influenced by social anxiety, level of perceived stress, and perceived social support. This research is able to enlighten psychologists about the psychological issues that will lead to excessive use of smartphones among university students. Besides, the result of this study can inform therapists or psychologists about the future program or future direction for the study of smartphone addiction among university students.

Furthermore, the findings of this research can be contributed to the database of Psychology fields in Malaysia. Through this study, the psychologists are able to see the relationship between social anxiety, level of perceived stress, perceived social support, and smartphone addiction among university students. In summary, it is crucial to understand the variables that are predicting the occurrence of smartphone addiction among undergraduate students in order to conduct the prevention and intervention program in Malaysian context.

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Conceptual Definitions

Social Anxiety

Social anxiety is a collection of unpleasant or worried sensations about social interactions, as well as dysfunctional ideas about social situations like insecurity and lack of confidence in social performance (Heimberg et al., 2014). Social anxiety can cause devastating symptoms in persons who are forced to interact with others. Individuals always emphasize a sense of belonging, however, those who suffer from social anxiety may find it difficult to meet this need due to their dread of face-to-face encounters. Anxiety, despair, and an overall uneasy feeling are common symptoms of social anxiety, and they affect one's ability to interact in social situations.

Perceived Stress Level

The second variable is perceived stress. Perceived stress can be defined as the degree to which an individual views an external incident as stressful (Yang et al., 2021). The individual's interpretation and experience of the stress event determine whether or not the objective stress has an effect on them. Perceived stress can put a person in a stressful position, which is linked to the onset and recurrence of a variety of addictions, including problematic online gaming, substance misuse, and internet addiction. According to Othman et al. (2013) tertiary education is reviewed as a very stressful learning environment, with detrimental consequences for university students' psychological and physical well-being. Their ability to cope with stressful events and situations can determine individuals' stress levels.

Perceived Social Support

Besides, perceived social support refers to the cognitive view of an individual that he or she has reliable ties with others and receives assistance from them (Akturk & Budak, 2019). Social support can strengthen psychological endurance and it is mentioned that social support received within and outside the family helps an individual regulate a stressful

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circumstance and its potential negative implications. In some ways, understanding a person's supportive interaction is a subjective judgment based on assigning special meaning to the people with whom they interact. It is the quantity of social support acquired over a period of time via support resources (Akturk & Budak, 2019). Hence, people who receive social support are more likely to take on challenges and come up with answers to social and psychological issues (Konan et al., 2018).

Smartphone Addiction

According to Roberts and Pirog (2013), smartphone addiction is defined as a compulsive desire or compulsion to use a mobile phone regularly despite detrimental consequences to one's health. It is well established that increased smartphone use has negative consequences for interpersonal connections, physical and mental health, and day-to-day living (Akturk & Budak, 2019). Addiction needs to be assessed for repetitive behaviours that impair daily life and interpersonal connections. Addiction to smartphones is distinct from addictions to alcohol or drugs. Substance addiction is defined as the use of alcohol or drugs, whereas behavioural addiction is defined as the use of a smartphone (van Deursen et al., 2015). In behavioural addictions, the person is addicted to the behaviour or feeling triggered by the relevant action rather than the substance. In brief, it is crucial to understand the variables that predict smartphone addiction among undergraduate students as excessive use of smartphones has increasingly negative impacts on people that aroused great concern in society. This is to ensure the overall well-being of undergraduate students.

Operational Definitions

Social Anxiety

In this research study, the Social Interaction Anxiety Scale (SIAS) by Mattick and Clarke (1998) is a 20-item self-report scale that assesses social interaction anxiety, which is

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defined as "distress when meeting and conversing with other people." This tool was developed on the concept that social anxiety might manifest itself in two ways: situations involving social engagement with others and situations involving being scrutinized or watched by others (Herbert et al., 2014). Higher scores indicate higher levels of anxiety and vice versa.

Perceived Stress Level

Besides, Cohen et al. (1988) established the Perceived Stress Scale (PSS), which is the most widely used psychological measure for assessing stress perception. It is a scale that measures how stressful particular events in one's life are (Tan & Arshat, 2019). Items were selected to reflect how unexpected, unmanageable, and overburdened respondents' lives are. A higher score indicates a higher level of perceived stress and vice versa.

Perceived Social Support

Furthermore, Multidimensional Scale of Perceived Social Support (MSPSS) developed by Zimet et al. (1988) is a self-report measure of social support that is subjectively appraised. The items tended to break down into factor groups based on the source of social support including family, friends, and significant others (Konan et al., 2018). The higher the obtained score suggests an increase in perceived social support and vice versa.

Smartphone Addiction

Moreover, The Short Version of the Smartphone Addiction Scale (SAS-SV) is a tool for assessing smartphone addiction (Kwon et al., 2013). The scale's ranking is based on how closely each statement corresponds to the participants. A higher score indicates a higher tendency in smartphone addiction, and vice versa.

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Chapter 2

Literature Review

Social Anxiety and Smartphone Addiction

Present study hypothesizes that social anxiety will positively influence smartphone addiction. A study conducted by Darcin et al. (2016) revealed that social anxiety can predict smartphones directly. They further elaborate that individual with high social anxiety symptomstend to have higher risk of smartphone addiction. It is because the interaction through smartphones allows an individual to act spontaneously without having to concern how others perceive themselves. This indicates that individuals with social anxiety experience embarrassment of their functional and emotional issues in a presented social setting (Turgeman,2020). For instance, they may undergo an unpleasant feeling during face to-face talking, but feelgood while interacting with people online. Eventually, the preference for online interactions leads to a dysfunctional attachment to the smartphone devices (Erwin, 2004).

Nevertheless, certain studies have employed the parental networks which focused on the parent intervention while preventing smartphone addiction among users (Ching & Tak, 2017; Hwang & Jeong, 2015). It suggests that the parent provides the sense of security and supportiveness among the socially anxious individual to reduce the usage of smartphones. It is animportant element as it turns into a protective factor to prevent social anxiety in individuals who develop smartphone addiction (Choi et al., 2015). While better relationship engagement among the socially anxious individual and their family may reduce the tendency of smartphone addiction. The researcher reasons that a good relationship among parents and children can bufferan individual internet addiction by diminishing their level of social anxiety that derives from the

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satisfaction of the relationship (Ihm, 2017). Hence, social anxiety does not necessarily predict smartphone addiction (Annoni et al., 2021)

Perceived Stress Level and Smartphone Addiction

The perceived stress level has been found to be associated with smartphone addiction, especially among undergraduate students. The linkage between smartphone addiction and perceived stress level is well established by past studies. The study stated perceived stress could be the risk factor for the occurrence of excessive online gaming and internet addiction (Snodgrass et al., 2014; Jun & Choi, 2015). Besides, a previous study concluded that perceived stress is an effective predictor of smartphone addiction (Chiu, 2014; Cheng & Hong, 2017; Gao et al., 2018; Xu et al., 2019). The researchers explained that smartphones help people temporarily escape from negative emotions such as stress (Serra et al., 2021). According to Snodgrass et al. (2014), excessive smartphone use can serve as a means to cope with stress by distracting users from stressful events. Further discussion by the studies, playing games allowed young people to feel better and gain self-control while listening to music helped them to relieve their stress (Baranowski et al., 2016; Stewart

et al., 2019). Similar to the study conducted by Liuet al. (2018), there is a higher tendency for people to engage in smartphone addiction when they perceive more stress. Based on the cognitive-behavioural model, excessive internet use is the association of cognitive processes and dysfunctional behaviours (Davis, 2001). For instance, the compulsive use of smartphones to relieve stress (Gámez-Guadix et al., 2015). While, general strain theory explained that stressors will increase the tendency in triggering negative emotions which will lead to addictive behaviour in order to alleviate those negative emotions (Wang et al., 2021).

However, the findings of Wang et al. (2021) have also ascertained that psychological capital was the moderating variable between perceived stress level and smartphone addiction. Psychological capital is the protective factor that avoids people from being influenced by

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perceived stress. It attenuates the negative emotions and also the tendency to develop smartphone addiction. The researchers stated that psychological capital is able to attenuate the negative emotions that might be caused by the impact of perceived stress. It is found that university students who have lower levels of psychological capital seem to be experiencing more negative emotions, while students with higher levels of psychological capital did not experience negative emotions. This is because university students with higher psychological capital generally perceive stress as a manageable issue and able to cope with the situations quickly. In addition, the researchers revealed that not everyone who is exposed to stressful situations experiences negative emotions in the same way. Besides stressors, the evaluation and stress response of individuals toward stressful events also should be considered (Wang et al., 2021).

Perceived Social Support and Smartphone Addiction

A significant portion of the research looks at the addiction of smartphones as a result of attempting to increase social support levels through the use of information technology. The urge to create support ties in the user leads towards a more extensive use of terminals, which, in turn, might develop to a behavioural addiction (Herrero et al., 2019). In fact, individuals with a large social network are more likely to obtain psychological and social support from their family, friends and other significant people (Ihm, 2018). In compliance with numerous cross-sectional studies, individuals with lower levels of social support have higher risks getting smartphone addiction (Aker et al., 2017; Billieux et al., 2014; Ihm, 2018; Kim, 2017; Kwon et al., 2016; Herrero et al., 2019). Individuals who did not receive sufficient social support were shown to develop Internet addiction as a means of satisfying interpersonal interactions and establishing alternative social connections (Cevik & Yıldız, 2017). In fact, it appears that non-face-to-face communication is the preferable method of raising social support levels among those with

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high levels of loneliness and poor social support (Kim, 2017). These new communication opportunities can provide pathological compensation for people with low social support, which potentially leads to addictive behaviours (Cui & Chi, 2021). Therefore, as an individual's perceived social support level declines, the time engaging with smartphones increases, potentially leading to higher risk of smartphone addiction.

In contrary to the study, Zhao et al. (2021) mentioned that online social support can positively predict smartphone addiction. This can be explained by the source of perceived social support mostly are from online through the social platforms such as Messenger, WhatsApp, Instagram or other social games. In some ways, social platforms can be considered as social marketplaces where people can build their interpersonal interactions in order to find social attachments (Kwon et al., 2016). People are understood and valued when they share their emotion, information, and material, thereby establishing an identity and a sense of belonging (Zhao et al., 2021). This encourages individuals to overindulge in the online world, relying on applications for satisfying their needs or alleviating irritation. Thus, relying extensively on online social support will increase the likelihood of smartphone addiction. On the other hand, Yüksel and Baytemir (2010) discovered no significant relationship between the perceived social support from family, friends, and teachers with smartphone addiction. Similarly, Cevik and Yildiz (2017) found that perceived social support from family and friends has no relationship with smartphone addiction. However, the majority of their studies do not provide alternative explanations.

Social Anxiety, Perceived Stress Level, Perceived Social Support and Smartphone Addiction

According to the cognitive-behavioural model of pathological internet use (PIU) that was introduced by Davis (2001), cognitive components such as cognitive distortions and maladaptive cognitions can be the factors that cause people to be involved in problematic

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internet use. The researcher explained that individuals who are psychologically vulnerable toward stressful situations are more likely to develop psychological disorders. Furthermore, it is discovered that psychopathology such as depression and social anxiety will lead to uncontrolled internet use.

However, it is found that social support and stress have an inverse relationship (Gökçearsan et al., 2018). Social support plays the role in strengthening the individuals' psychological endurance when they encounter stressful situations. When individuals are confronted with stressful events, the sense of support that is given by the family or people around them is able to reduce perceived stress (Konan et al., 2018). When individuals' perceived stress level is low, the tendency to develop smartphone addiction is low as well (Liu et al., 2018). Besides, people living with high social anxiety experience cognitive dysfunctions such as forming negative thoughts about themselves. While, these maladaptive beliefs on how others perceive them during social interaction may affect them to avoid social situations (Kuru et al., 2018). Individuals who are less sociable in face-to-face communication have higher likelihood in developing excessive smartphone use as they tend to form connections and to receive support from others through online (Kim, 2018). In short, social anxiety, perceived stress, perceived social support are the contributory and persistence factors for excessive internet use (Davis, 2001).

Theoretical Framework

The cognitive-behavioural model of pathological internet use is introduced to describe the maladaptive cognitions and the excessive usage of the internet use. This theory highlights the cognitive process of an individual as the main input for abnormal behaviour. Therefore, cognitive distortions are the cognitive constructs that arise when information processing is ineffective or incorrect. Firstly, this model is closely related to social anxiety as dysfunctional thoughts and beliefs lead to distortion of thoughts which can be found in high social anxiety

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individuals (Kuru et al., 2018). In other words, an individual with social anxiety tends to view themselves as a negatively social object (Thatkar et al., 2021). For instance, they will overestimate how negatively other individuals evaluate their performance in a physical setting. It is because social anxiety creates pressure on the displayed behaviours of an individual, causing them to present more negative avoidance behaviour while interacting with others (Aurora & Coifman, 2021). These distortions of thoughts automatically feel that the Internet is the only comfortable environment as nobody would know their identity. While the safeness provided by the online environment could reinforce the behaviour of an individual continually addicted to the internet (Davis, 2001). Eventually, the misconception of an individual drives the motivation of staying in an online setting which is problematic behaviour.

This cognitive-behavioural model suggests that distorted thoughts are the proximate causation of abnormal behaviours such as addictive behaviours (Davis, 2001). There are proximal causes and distal causes that contribute to excessive internet use. According to the cognitive-behavioural model for pathological internet use, psychological and behavioural dysfunctions such as depression are the distal causes of addiction. While the diathesis-stress framework is used to explain the distal causes of excessive behaviours on the internet. Based on the diathesis-stress framework, people who are more vulnerable to a disorder have a higher tendency to develop maladaptive behavioural issues when they face a psychological event such as a negative life event that will bring stress. Moreover, the sensitivity of individuals toward stress and how they perceive the stress when they experience stressful events will influence individuals' internalizing problems (Xu et al., 2019). Besides, the cognitive-behavioural model suggests that the internet is used as a medium for mood regulation. For instance, when people are facing stressful events in daily life they tend to relieve their stress through using the internet.

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Consequently, this behaviour causes deficient self-regulation and causes individuals to lose self-control in internet usage which leads to addictive behaviours (Gámez-Guadix et al., 2015).

According to Davis' cognitive-behavioural model, a lack of perceived social support can lead to an excessive reliance on the Internet in the virtual world in search of similar aid, which can lead to problematic Internet use (Cui & Chi, 2021). People who perceive high levels of social support are linked to psychological resilience, high self-esteem, and subjective well-being, in addition to physical and mental health (Zhao et al., 2021). Some people tend to view social support as a sign of social approval, leading to the activation of positive self-schemas or undesirable characteristics. For example, people with low social support have a sense of lacking people to count on for help if needed. These distortions of thoughts bring individuals to seek for additional support in other platforms and to meet their psychological requirements from unsuitable sources (Cui & Chi, 2021).

The need for social support and reinforcement gained online lead to an increased desire to stay in a virtual social life. Thus, people with this belief have stronger motivation to use smartphones to obtain social support.

Unfortunately, the distortion of thought would only increase smartphone usage, resulting in more psychological issues. Hence, the negative thoughts may lead to the problematic behaviour of obsessiveness in smartphone use.

Conceptual Framework

Figure 1. The conceptual framework of “Social Anxiety, Perceived Stress Level, Perceived Social Support as predictors of Smartphone Addiction among Undergraduate Students in Malaysia”.

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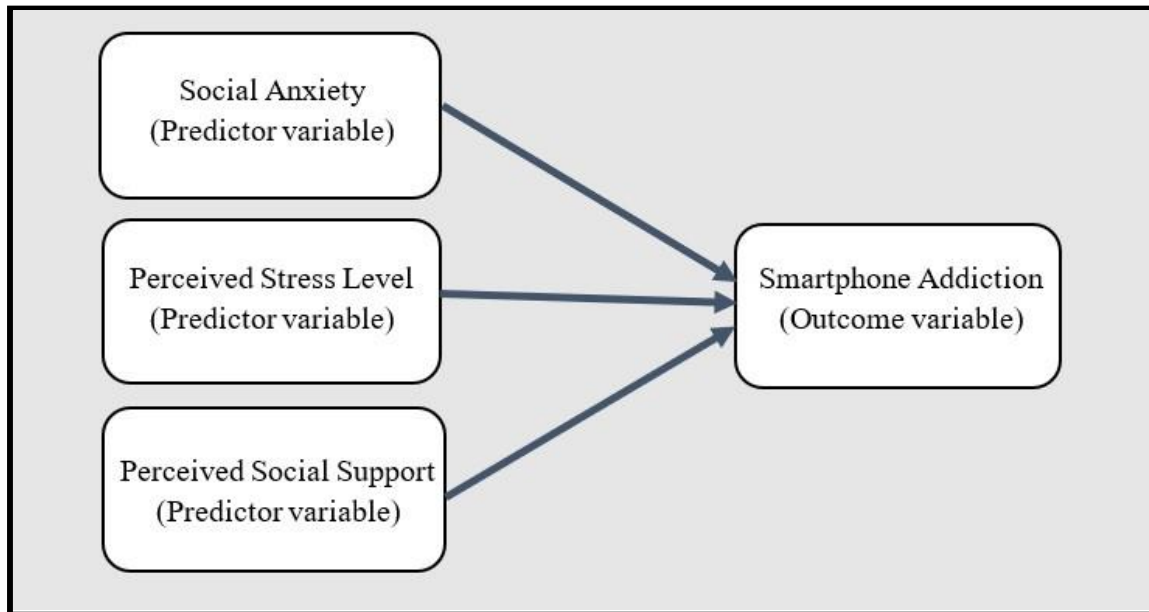


Figure 1 presented four variables social anxiety, perceived stress level, perceived social support, and smartphone addiction. Predictor variables are social anxiety, perceived stress level, and perceived social support, while the outcome variable is smartphone addiction. The research study will focus on social anxiety, perceived stress level, and perceived social support as predictors of smartphone addiction among undergraduate students in Malaysia.

Chapter 3

Methodology

Research Design

Present study implemented quantitative analysis research methods to measure the gathered data. Quantitative research refers to the numerical data analysis methods which are statistics. It is suitable in the study of social phenomena or human problems which are the nature of present study (Yilmaz, 2013). Additionally, cross-sectional analysis was applied to investigate the relationship of the variables. It was especially suitable to identify the prevalence of a behaviour (Setia, 2018; Sedgwick, 2014). In addition, the questionnaires were conveniently distributed to participants through online media platforms for analysis purposes.

Sampling Procedures

Sampling Method

A convenience sampling method was implemented in this study. It is a non-probability sampling method that collects data from people who are readily available to enrol in the study (Emerson, 2021). Additionally, the aforementioned sampling method was appropriate to current study as the participants were available on online platforms. Hence, the convenience sampling method used can reduce the time usage for searching the qualified participants.

Location of Study

Moreover, the location of the study was conducted in Malaysia with no restriction to any states. The study was carried out via an online platform to gather all the responses. This enabled current research to collect the data from university students in different states which can make the result more diverse. Furthermore, the recruitment of participants did not limit to any universities and colleges as long as the students are undergoing undergraduate programmes. Hence, it was more efficient to collect the data via online platforms.

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Ethical Clearance Approval

Lastly, this study was approved by Universiti Tunku Abdul Rahman (UTAR) Scientific and Ethical Review Committee (SERC) with the approval number U/SERC/299/2021. The ethical clearance is a crucial part for a research project to conform with the ethical guidelines and requirements. It is to ensure that the studies fully adhere to the guidelines whilst reducing the potential risk and preserving the participants. Therefore, the ethical clearance approval had been applied to ensure the study was conducted under appropriate, acceptable and responsible manner.

Sample Size

Based on the calculation from G*Power version 3.1 (Faul et al., 2009) with the parameters of effect size =.17 (small), alpha =.05, power =.95 and number of predictors =3 (Cohen, 1992), 106 samples was the minimum sample size. In this study, a total of 166 samples have been collected. The samples were then filtered and the incomplete responses were excluded from the data calculation. Lastly, 118 samples were included in the data analysis.

Data Collection Procedures

The target sample was undergraduate students in Malaysia. In this study, the inclusion criteria were undergraduate students from 18 to 25 years old in Malaysia and identified as daily smartphone users. The exclusion criterion was participants who have not been identified as a daily smartphone user which was asked in the questionnaire. Self-administered questionnaires were used for data collection through online survey software, Qualtrics. The link for the online survey was shared on several online platforms such as Messenger, WhatsApp, Instagram and Microsoft Teams. On the first screen of the survey, the objectives of study were explained, followed by confidentiality, willingness to engage, and researchers'

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contact information. The participants must agree to the informed consent (Appendix A) before they can begin the online survey. The survey required 10 minutes to complete on average. The participants remained anonymous throughout the entire process in order to protect their privacy. The collected data was secured with passwords that change regularly and the access was only limited to the researchers who conducted this study. The data collection began from 24th January 2022 to 28th February 2022 which lasted for 5 weeks.

Data Analysis Plan

The collected data was analysed using IBM Statistical Package for the Social Sciences version 26. Simple linear regression was implemented for hypothesis one to hypothesis three. While multiple linear regression was utilised for the last hypothesis. Firstly, the assumptions of the regression were analysed with the P-P plot, histogram, skewness, kurtosis, Kolmogorov-Smirnov, Mahalanobis distance, multicollinearity, normality, linearity and homoscedasticity of residuals based on the data collected. Besides, the mean and standard deviation of descriptive statistics were measured. The dependent variable was predicted using simple linear regression and multiple linear regression based on a collection of independent variables. Moreover, an additional analysis of correlation was tested to obtain a profound understanding on how social anxiety affects the significance of perceived stress level in predicting smartphone addiction under the multiple regression model. In this study, the dependent variable was smartphone addiction while independent variables were social anxiety, perceived stress level and perceived social support.

Instruments

Social Interaction Anxiety Scale (SIAS)

Social Interaction Anxiety Scale (SIAS) which is free for research use was utilised to measure social anxiety (Mattick & Clarke, 1998). This scale consists of twenty items which

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grade from 0 'not at all characteristic or true of me' to 4 'extremely characteristic or true of me'. Items are self-statements that describe one's normal cognitive, affective, or behavioural response to a variety of scenarios that required social contact in dyads or groups. The SIAS graded by adding up the ratings (after reversing items 5, 9 and 11), with total scores ranging from 0 to 80. Higher scores indicated higher levels of social anxiety, and vice versa.

According to prior findings on construct validity (Ries et al., 1998), it shown to be highly and significantly correlated (Social Phobia Scale-SIAS: $r = 0.73, p < 0.001$; SIAS-Social Phobia Anxiety Inventory: $r = 0.85, p < 0.001$), implying that they tap a similar construct. It held a high level of internal consistency ($\alpha = .93$) and a 1-month test-retest correlation coefficient of greater than .90. In research from Fitria (2021), the reliability of SIAS was acceptable which indicated that it can be utilised to evaluate the social anxiety among students in Malaysia.

Perceived Stress Scale (PSS)

Perceived Stress Scale (PSS) which is free for research use was applied to measure perceived stress level (Cohen & Williamson., 1988). The scale's assessment is based on how often individuals' lives have been unpredictable, uncontrolled, or overloaded in the previous month. PSS-10 is a ten-item survey with a five-point Likert scale range from 0 'Never' to 4 'Very Often' while items 4, 5, 7, and 8 were rated in reverse order. Higher score indicates a higher level of perceived stress, and vice versa. Research from Cohen and Williamson (1988), PSS-10 scores showed adequate internal consistency reliability value of .78 and .83 in another study by Lesage et al. (2012). Cohen and Williamson (1988) found moderate concurrent criterion validity with the level of stress experienced in an average week ($r = .39, p < .001$) and the frequency of stressful life events within the previous year ($r = .32, p < .001$). While, divergent validity was found with perceived health status ($r = -.22, p < .001$) and positive connections with psychosomatic symptoms ($r = .28$ to $.34, p < .001$) and health

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service consumption ($r = .22, p < .001$) indicated adequate convergent validity. In research from Al-Dubai et al. (2012), the psychometric properties of the Malay version of the PSS-10 were acceptable which indicated that it is an effective tool for evaluating stress among Malaysian students.

Multidimensional Scale of Perceived Social Support (MSPSS)

Multidimensional Scale of Perceived Social Support (MSPSS) which is free for research use was used to measure the perceived social support (Zimet et al., 1988). This scale comprises 12 items, is a 7-point Likert-type scale that varies from 1 'very strongly disagree' to 7 'very strongly agree'. MSPSS is a self-explanatory 12-item inventory that serves as a psychometrical instrument. The scale has a total score as well as scores on three subscales that assess perceived social support from family, friends, and significant others. The lowest possible score on each subscale is 4, while the greatest possible value is 28. The overall scales range from 12 to 84, with 12 being the lowest and 84 being the greatest. The higher the obtained score suggested an increase in perceived social support, and vice versa. Based on Zimet et al. (1990), the reliability score of the total scale was .88. Akturk and Budak (2019) found that the internal consistency coefficient was between .80 to .95 in the reliability results, indicating an acceptable level of internal consistency for the scale and subscales. Cronbach's alpha coefficient for the Multidimensional Scale of Perceived Social Support was .86 for Family subscale, .89 for Friend subscale, and .91 for Significant Other subscale. Moderate construct validity was supported by correlations between the MSPSS subscales and the Hopkins Symptom Checklist (HSCL) depression and anxiety subscales provided support for this prediction. Both depression ($r = -.24, p < .01$) and anxiety ($r = -.18, p < .01$) were significantly inversely associated with perceived family support. Friendship support was linked with depression symptoms ($r = -.24, p < .01$), but not with anxiety. The Significant Other subscale, as well as the scale as a whole, were both slightly but significantly associated

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with depression, $r = -.13$, $p < .05$, and the scale as a whole, $r = -.25$, $p < .01$. According to (Guan et al., 2013), this scale has a high reliability and validity that can be utilised as a simple screening technique among students in tertiary education of Malaysia.

Short Version of the Smartphone Addiction Scale (SAS-SV)

Short Version of the Smartphone Addiction Scale (SAS-SV) which is free for research use was applied to measure the smartphone addiction (Kwon et al., 2013). This scale has ten items based on self-reporting with a 6-point Likert scale ranging from 1 'strongly disagree' to 6 'strongly agree'. The scale's ranking is based on how closely each statement corresponds to the participants. The scores must add up to be measured, and they can vary from 10 to 60 points. Higher scores indicated higher tendency in smartphone addiction, and vice versa. Cronbach's alpha correlation coefficient of .911 was used to verify the SAS-SV internal consistency reliability (Kwon et al., 2013). This scale had been used in a number of recent studies across cultures, including Lopez-Fernandez (2017), who found Cronbach's alpha correlation coefficients of .88 and .90 for Spain and Belgium respectively and Noyan et al. (2015) who found a Cronbach's alpha correlation coefficient of .867 for Turkey. While concurrent validity was supported by the high correlation of SAS-SV with Smartphone Addiction Scale (SAS) and Smartphone Addiction Proneness Scale which were over .70 (Kwon et al., 2013). The Malay version of SAS-SV was tested in Malaysian context and it was proved reliable and valid by Ching et al. (2020).

Chapter 4**Result****Descriptive Statistics**

There was a total of 118 university participants who aged from 20 years old to 25 years old. Participants aged 22 years old occupied 62.7% which had the highest frequency while participants aged 25 years old occupied 0.8% which had the lowest frequency.

Table 1

Demographic Information of Participants - Age

Variable	Mean	SD
Age	21.96	.851

There was a total of 50 male and 68 female students who answered the online survey. Besides, the ethnicity of the participants included Chinese, Indian and Malay university students. Among the respondents, 55.1% (n= 65) were from Universiti Tunku Abdul Rahman, and 44.9% (n= 53) of them were from different universities. Those participants were from Universiti Utara Malaysia, Tunku Abdul Rahman University College, Universiti Sains Malaysia, Taylor's University and others.

Table 2

Demographic Information of Participants - Gender and Ethnicity

Variable	Frequency	Percentage (%)
Gender		
Male	50	42.4
Female	68	57.6
Ethnicity		
Chinese	104	88.1

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Indian	10	8.5
Malay	4	3.4

The mean score and standard deviation of the social anxiety, perceived stress level and perceived social support were presented in Table 3.

Table 3

Descriptive Statistic - Mean and Standard Deviation

Variable	N	Mean	Standard Deviation
Social Anxiety	112	54.27	12.774
Perceived Stress Level	112	29.44	4.953
Perceived Social Support	112	62.21	10.566
Smartphone Addiction	112	37.23	9.847

Data Diagnostic

Univariate Outliers and Boxplot

The outliers refer to the unusual data values which were distant from the normal data values and mightily influence the results (Hayden, 2005). The data values which are extremely high or low from the other values can be identified by boxplot. If any outliers were found in these distributions, they would be marked with a circle and the data file row number such as o⁴. In this study, there were some outliers shown in the boxplots, including the case numbers 1, 2, 4, 5, 6 and 7 (Appendix D1). Since univariate outliers were detected, the action of deleting outliers had been performed (Allen et al., 2014). After removing the outliers, there were 112 data values left and the analysis was repeated. However, after the analysis was reconducted, a new outlier of case number 9 was detected. Therefore, the offending data has been transformed to one unit lower than the largest non-outlier.

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Assumption of Normality

The assumption of each variable for social anxiety, perceived stress level, perceived social support and smartphone addiction were tested by using histogram and P-P plot. This study has performed the skewness and kurtosis as well as the Kolmogorov-Smirnov test. While the histogram (Appendix D2) for all of the variables were displayed in the form of bell curve, indicating that each of the variables have achieved normality. The data points for each of the variables that showed in the P-P plots (Appendix D3) were stuck closely to the diagonal line which indicated that the variable had achieved normality. The skewness and kurtosis values of variables are shown in Table 4. The values for each variable lie within the acceptable range of 2. Based on Gravetter and Wallnau (2014), the values of skewness and kurtosis which fall in the range of ± 2 can be accepted.

Table 4

Skewness and Kurtosis

Variable	Min	Max
	Skewness*	Kurtosis*
Social Anxiety	.098	-.585
Perceived Stress Level	-.150	.341
Perceived Social Support	-.365	-.089
Smartphone Addiction	-.232	-.144

*Refer to Appendix D4

The results of the Kolmogorov-Smirnov test were presented in Table 5. Kolmogorov-Smirnov test suggests that $p > .05$ are normally distributed. The results shows that three of the variables were significantly normal in which smartphone addiction $D(112) = .069, p = .200$, social anxiety $D(112) = .043, p = .200$, and perceived stress level $D(112) = .072, p = .200$.

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Based on the results, the perceived social support showed $D(112) = .094, p = .016$ which was significantly non-normal. However, the perceived social support has achieved normality in the histogram and P-P plot, thus it did not violate the normality. In addition, a significant result was stipulated in the Kolmogorov-Smirnov test due to the tiny deviation from mean once a huge sample size which was greater than 50 was implemented in the study. Hence, all the variables were achieved significantly normal.

Table 5

Kolmogorov-Smirnov Test

Variable	Kolmogorov-Smirnov		
	Statistic	df	Sig. (<i>p</i> -value)
Social Anxiety	.043	112	.200*
Perceived Stress Level	.072	112	.200*
Perceived Social Support	.094	112	.016
Smartphone Addiction	.069	112	.200*

Summary of Normality Test

Social anxiety, perceived stress level and perceived social support were tested with assumption of normality for the five indicators. The results showed all of the variables have attained the normality in histogram, P-P plot, skewness and kurtosis. However, the perceived social support showed significantly non-normal in the Kolmogorov-Smirnov test, while significantly normal in other normality tests. In this case, each of the variables have attained more than three indicators, which indicated all the variables have fulfilled the assumption of normality.

SA?
other assumptions?

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Data Analysis and Interpretation

Simple Linear Regression Analysis

Simple linear regression was utilised to examine if each independent variable significantly predicts smartphone addiction. Based on Table 6, social anxiety ($\beta = .448, p < .001$) and perceived stress level ($\beta = .286, p = .002$) were positively significant. While perceived social support ($\beta = .067, p = .486$) are not significantly predicting smartphone addiction among undergraduates in Malaysia as the p-value was greater than .05.

Table 6

Summary Table for Linear Regression Model

Model	Unstandardized Coefficients		Standardized Coefficients	
	B	Std. Error	Beta	Sig.
Social Anxiety	.346	.066	.448	.000
Perceived Stress Level	.569	.182	.286	.002
Perceived Social Support	.062	.089	.067	.486

a. Dependent Variable: Smartphone Addiction

Assumption of Multiple Linear Regression (MLR)

In order to ensure the assumptions were not violated, the independence of errors, normality, linearity, homoscedasticity of residuals and multicollinearity were conducted in this study.

Independence of Errors. Table 7 showed the results of the independence of error test among the predictors of social anxiety, perceived stress level and perceived social support. If the Durbin-Watson value is 1 or greater than 3, the assumption is violated. In this research, the

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value of Durbin Watson showed closer to 2, which was 2.195 implies that the variables are independent of each other and hence congruent to the assumption (Field, 2009).

Table 7

Model Summary of predictors

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Waston
1	.484 ^a	.234	.213	8.737	2.195

a. Predictors: (Constant), Social Anxiety, Perceived Stress Level, Perceived Social Support

b. Dependent Variable: Smartphone Addiction

Normality, Linearity and Homoscedasticity of residual. The scatterplot of the standard predicted value of smartphone addiction versus standard residuals was shown in Figure 2.

The results revealed that the residuals were distributed randomly and evenly, which met all the assumptions of normality. }

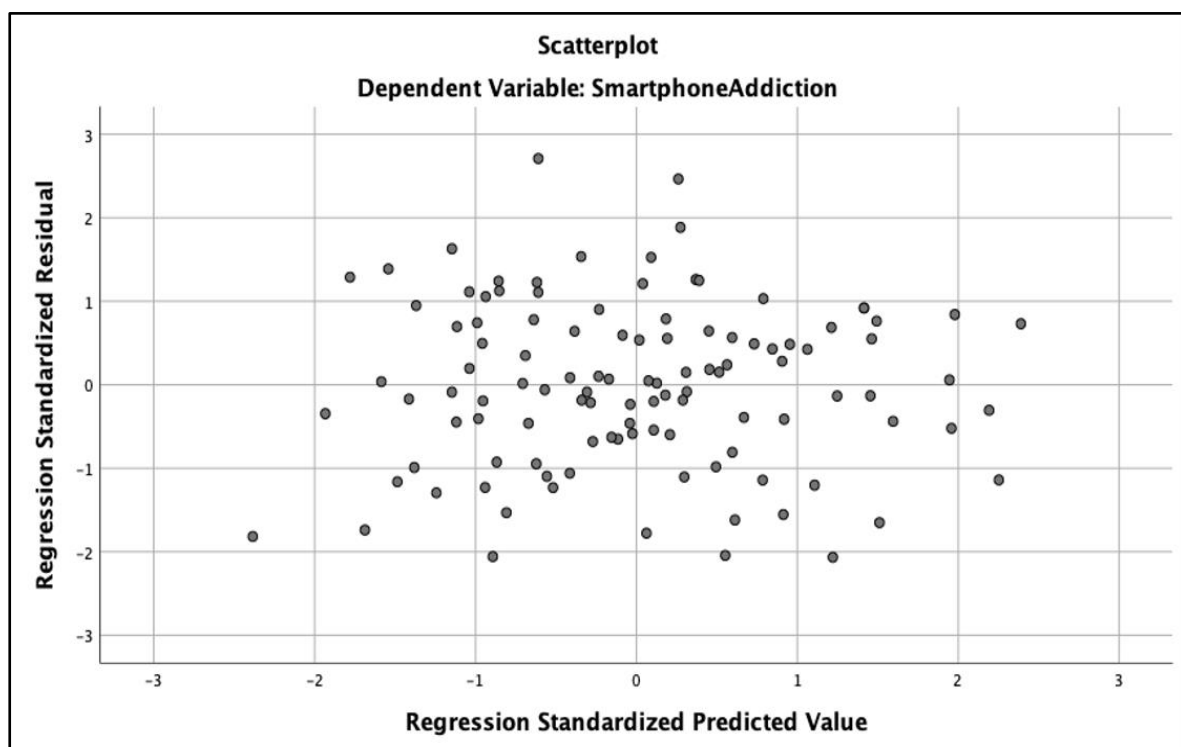


Figure 2: Scatterplots of standard of predicted value against standard residuals

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Multicollinearity. Table 8 presented the collinearity statistics tolerance and variance inflation factor (VIF). If the tolerance value is larger than .10 and the VIF value is lesser than 10, the assumption of multicollinearity is not violated (Hair et al., 2010). In this study, the tolerance value for social anxiety, perceived stress level and perceived social support were larger than .10 and the VIF value were lesser than 10 which means that there was no correlation between the independent variable and the other variables. As a result, the assumption of multicollinearity is not violated.

Table 8

Coefficient among Variables

Variable	Collinearity Statistics	
	Tolerance	VIF
Social Anxiety	.768	1.303
Perceived Stress Level	.767	1.303
Perceived Social Support	.955	1.047

Multivariate outliers and Influential cases. The data multivariate outliers were calculated using a casewise analysis. However, there were no multivariate outliers found in this study. Mahalanobis distance, Cook's distance, and Centered Leverage Value were used to reveal the multivariate outliers. For any cases in the data file, Mahalanobis distance did not surpass the critical χ^2 for $df = 3$ (at $\alpha = .001$) of 16.266 (Allen et al., 2014), implying that multivariate outliers were not detected. Since the maximum Mahalanobis Distance was 11.912, thus there was no concern regarding multivariate outliers.

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Table 9

Residuals Statistics

Residuals Statistics ^a			
	Minimum	Maximum	N
Mahal. Distance	.029	11.912	112
Cook's Distance	.000	.096	112
Centered Leverage Value	.000	.107	112

a. Dependent Variable: Smartphone Addiction

Multiple Linear Regression Analysis

Multiple linear regression was adopted to examine if smartphone addiction was significantly predicted by social anxiety, perceived stress level and perceived social support. The model showed a statistically significant result of $F(3,108) = 10.999, p < .001$ and held the variance of 21.3%. The F-statistic allows us to examine whether any of the independent variables is connected to the dependent variable on a global scale. Since the p-value for the F-statistic was smaller than .05, then at least one independent variable is related to the dependent variable. According to Table 11, social anxiety ($\beta = .423, p < .001$) showed positively significant and strong predictors to predict smartphone addiction as the standardised coefficient was close to 1. However, perceived stress level ($\beta = .116, p = .229$), and perceived social support ($\beta = .165, p = .058$) were not significant in predicting smartphone addiction among undergraduates in Malaysia as the p-value were greater than .05.

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Table 10

Summary of ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig (<i>p</i> -value)
1	Regression	2518.645	3	839.548	10.999	.000 ^b
	Residual	8243.319	108	76.327		
	Total	10761.964	111			

Table 11

Summary Table for Multiple Regression Model

Variable	Unstandardized		Standardized		Adjusted R ²
	Coefficients		Coefficients		
	B	Std. Error	Beta	Sig	
Social Anxiety	.326	.074	.423	.000	.213
Perceived Stress Level	.231	.191	.116	.229	
Perceived Social Support	.154	.080	.165	.058	

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Additional Analysis

The significance of perceived stress level was discovered to be inconsistent between the simple and multiple linear regression analysis. Hence, a bivariate Pearson's product-moment correlation was conducted to determine the strength and direction between social anxiety and perceived stress level (Allen et al., 2014). The correlation between them was positive and medium, $r(110) = .472$, $p < .001$. The effect size ranged from .3 to <.5 was considered as medium effect (Cohen, 1988). Besides, to understand how perceived stress level lost its significance in predicting the occurrence of smartphone addiction, a partial correlation was carried out to determine the relationship between the perceived stress level and smartphone addiction, while social anxiety was set as a control variable. The result of partial correlation was determined statistically non-significant, $r(109) = .094$, $p = .325$. This indicated the significant relationship between perceived stress level and smartphone addiction became non-significant when social anxiety was present.

Table 12

Bivariate Correlation

Variable	Perceived Stress Level	
Social Anxiety	Pearson Correlation	.472**
	Sig. (2-tailed)	.000
	N	112

Table 13

Partial Correlation

Control Variable	Variable	Perceived Stress Level	
Social Anxiety	Smartphone Addiction	Correlation	.094
		Sig. (2-tailed)	.325
		df	109

Chapter 5

Discussion and Conclusion

Discussion

Social Anxiety and Smartphone Addiction

Social anxiety was found to be significant in predicting smartphone addiction which aligned with the first hypothesis in present study. As expected, an individual with high social anxiety level tends to be related to the risk of smartphone addiction. In line with past study, Thatkar et al. (2021) mentioned that smartphone addiction can be predicted by social anxiety. Moreover, the statement was supported by Darcin et al. (2016), stating that social anxiety contains the avoidance of real-time relationship behaviour which stops a person from communicating with one another in real settings. The reason behind may be due to the distorted cognition that contains the overvaluation of the possibility or costs of different negative social settings (McManus et al., 2000). Therefore, an individual who suffers from social anxiety tends to have preventative behaviour and social isolation in order to prevent adverse feelings that they anticipate from the social interactions (Di Blasi et al., 2014).

According to Weinstein et al. (2015), a socially anxious individual tends to immerse or use the internet more frequently than others for social purposes. While the possible explanation could be due to the online relations induce less stress and anxiety compared to the real-world settings. Similarly, their real identity, personality traits and appearance would stay anonymous at the same time (Hall, 2011). In this case, an individual with social anxiety may perceive the online environment as a method to avoid real-time interactions. Eventually, the usage of smartphones and the internet can become problematic or to an addictive level.

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Perceived Stress Level and Smartphone Addiction

The result demonstrated perceived stress level was significant in positively predicting smartphone addiction, which in line with the hypothesis. In the hypothesis, it was expected that the higher perceived stress level will contribute to higher chances to engage with smartphone addiction. This result was consistent with the past studies of Cho et al. (2017) and Zhao & Lapierre (2020), perceived stress levels were able to predict the occurrence of excessive smartphone usage. Furthermore, the perceived stress level increases due to the unpredicted outbreak of the coronavirus pandemic (Zhao et al., 2021; Wang et al., 2020), which give rise to smartphone addiction (Peng et al., 2022).

According to the research of Shen and Wang (2019), the demanding or threatening circumstances that are stressful have higher probabilities in triggering the excessive smartphone use among young adults. They indicated that individuals exploit the use of smartphones as a stress coping strategy. Concurrently, life's stressors can act as a motivation for individuals to engage in smartphone addiction (Zhao & Lapierre, 2020). Stressors reinforce the usage of smartphones by removing unpleasant feelings such as stress and anxiety. When individuals face stressful situations, they tend to utilise smartphones to escape from reality and alleviate negative emotions (Serra et al., 2021).

Besides, researchers also found that perceived stress is one of the factors that could make people more vulnerable towards addictive behaviour such as smartphone addiction (Ruisoto & Contador, 2019). This has been explained in Cho et al. (2017) and Lei et al. (2020) studies that stress could affect individuals' self-control in developing smartphone addiction. The researchers stated that stress will reduce the individuals' self-control capabilities on controlling their own emotions or impulses and thus influence their decisions and behaviours in engaging smartphone addiction (Lei et al., 2020). According to Zhong et al. (2020), self-control is the limited resources that require lots of focus and effort. Self-

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control will be used up over time, for instance, muscle can be fatigued after repetitive behaviours. Hence, students who have experienced stressful events might have lower self-control in resisting the habitual behaviours, which influence their decision of spending excessive time on smartphones.

Perceived Social Support and Smartphone Addiction

In the current study, perceived social support was found not significantly predicting smartphone addiction among university students in Malaysia. The result was contrary to the hypothesis, perceived social support negatively predicts smartphone addiction. This finding was not in line with the assumption and past research evidence, which suggested that people who perceive low social support have higher risks in getting smartphone addiction (Aker et al., 2017; Billieux et al., 2014; Ihm, 2018; Kim, 2017; Kwon et al., 2016; Herrero et al., 2019). Hence, it is important to understand how the current result makes sense.

In parallel with the current research finding, Al-Kandari and Al-Sejari (2020) found that the association of social support and smartphone addiction was not significant. Similar study showed that perceived social support from family and friends did not predict smartphone addiction (Cevik & Yildiz, 2017). In the smartphone addiction scale, it consists of the items of always checking smartphones to make sure not missing any conversation on social media platforms (Kwon et al., 2013). They will check on their smartphones frequently to avoid missing stories and posts updated in social media. In this sense, Fear of Missing Out (FoMo) can be used to explain this situation which shows a constant desire to be updated on what others are up to. This social media usage habit causes people to have a strong desire to stay connected to others' lives through postings, statuses and likes (Ozer, 2020). Hence, the desire to stay updated might be stronger compared to the desire of seeking social support using a smartphone.

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Another plausible argument is that non-face-to-face communication has become a more prevalent part of our social connection in people's daily lives. Herrero et al. (2019) recently pointed out that it is common to find, for example, that all of the customers at a restaurant table are engaged in their smartphones, with no face-to-face interaction. This shows that social support is independent with the smartphone usage among the population. Despite people being able to perceive social support physically, they still engage a lot in media platform activities. This is because people in this technological era have high dependency on smartphones for academic, work and entertainment usage. In our study population, some people with high smartphone addiction perceive low social support while some people with high smartphone addiction perceive high social support. Thus, the linear relationship between perceived social support and smartphone addiction were not found which indicated not significant in this study.

Social Anxiety, Perceived Stress Level and Perceived Social Support and Smartphone Addiction

In multiple linear regression, social anxiety was positively significant while perceived stress level and perceived social support were non-significant to predict smartphone addiction. Furthermore, social anxiety was significant and perceived social support was found to be non-significant in both simple linear regression and multiple linear regression.

The result showed perceived stress level was significant in a simple linear regression, while lost its significance in the multiple linear regression. This can be explained by the presence of social anxiety in the multiple regression model. Researchers stated that individuals living with social anxiety tend to use online communications to avoid face-to-face interactions (Annoni et al., 2021). Social situations are found to be stressful for them as the interpersonal interactions involve non-verbal cues and face-to face feedback. Through online interactions in social media and virtual meeting platforms, they felt more relief and perceived

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lower stress as it does not require face-to-face interactions. Thus, the presence of social anxiety has detracted the statistical power of perceived stress level and influences its significance. *can be elaborated and explained further*

Implications of study

Current study presents the implications that are not merely for the awareness of the public but also applies to the clinical settings as well as the psychological field. However, there is a limited academic discussion regarding the predictors of smartphone addiction among undergraduate students in Malaysia (Sok et al., 2018; Singh & Samah, 2018). In this case, the current study is able to fill the literature gaps regarding the possible predictors of smartphone addiction in Malaysia context. Furthermore, the concepts of cognitive-behavioural model of pathological internet use have been adopted in present study. It is to provide an in-sights knowledge of the development of smartphone addiction in the psychology related field. *explain further*

Limitations

There are some limitations that need to be noted in this study. Firstly, the convenience sampling method used in data collection leads to an unequal number of respondents from each ethnicity. Most of the respondents are Chinese, thus these findings cannot be generalised (Emerson, 2021) and represent the whole population of undergraduate students in Malaysia.

Second, the smartphone addiction scale seems to be outdated due to the outbreak of pandemic. During the covid-19 pandemic, the use of smartphones has skyrocketed. However, the current smartphone addiction scale used was developed before the concepts of online teaching and learning was implemented during the covid-19 pandemic. The example for outdated items includes 'Using my smartphone longer than I had intended' (Kwon et al., 2013) which does not mention the motive of using a smartphone on a voluntary or

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involuntary basis. Thus, this scale might be slightly incompetence to predict smartphone addiction in the current condition.

explain further via scale

Lastly, there are many functions in smartphones which include communication, learning and entertainment (Serra et al., 2021). People use smartphones for different purposes in their daily life. However, the purpose of students using smartphones was not studied in this research, which led to limited information about students' smartphone usage. This unforeseen issue narrowed down the discussion and explanation for the occurrence of smartphone addiction among students.

Recommendations

In recommendations, some suggestions for future studies were discussed. First, stratified random sampling methods are recommended to better fit in diverse communities (Qualtrics, n.d.). By dividing the population into subgroups based on their gender, age or ethnicity and randomly selecting an equal number of participants from each subgroup can ensure the data collected is able to represent the population.

Besides, future researchers should develop more sophisticated smartphone addiction scales which are applicable in current pandemic conditions (Abendroth et al., 2020). The example of suggested items includes "Being forced to use smartphones to accomplish online work tasks like attending meetings or classes". Thus, the developed scale should be able to differentiate the online work purposes or entertainment purposes.

Lastly, the purposes of using smartphones should be asked in the questionnaire. There are plenty of reasons for using a smartphone such as for learning or entertainment. Once the purposes being asked, the findings would provide the researchers an insight understanding and broader perspectives regarding the motives of excessive smartphone usage among the students.

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Conclusion

Present study identified the causal relation of social anxiety, perceived stress level and perceived social support on smartphone addiction. Social anxiety was a significant factor that affects smartphone addiction while perceived stress level and perceived social support shows no causal relationship with smartphone addiction. These findings can illustrate a conceptual framework by identifying the significant role of variables in predicting smartphone addiction. Additionally, the findings are beneficial for future smartphone related intervention programs or awareness campaigns. On the other hand, future replication of study is recommended to include the updated smartphone addiction scales in which the items can be applicable during the pandemic condition. Lastly, the study is important to be conducted as smartphone addiction has been perceived as an urgent matter in this rapid-growing digital age (Hawi & Samaha, 2017).

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Appendices

Appendix A

Personal Data Protection Statement and Consent Form



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DU012(A)

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 and/or UTAR collaborative partners 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.



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Consent Form for Research

Participation and Personal

Data Protection

Title of Project: Social Anxiety, Perceived Stress Level and Perceived Social Support as Predictors of Smartphone Addiction among Undergraduate Students 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 UTAR students for the purpose of their Final Year 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	NO
I will be asked to complete a questionnaire about social anxiety, perceived stress level and perceived social support as predictors of smartphone addiction among undergraduate students in Malaysia.	<input type="checkbox"/>	<input type="checkbox"/>
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	<input type="checkbox"/>	<input type="checkbox"/>
I may ask at any time for my data to be withdrawn from the project	<input type="checkbox"/>	<input type="checkbox"/>
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	<input type="checkbox"/>	<input type="checkbox"/>
I will remain anonymous at all times in any reports or publications from the project	<input type="checkbox"/>	<input type="checkbox"/>
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.	<input type="checkbox"/>	<input type="checkbox"/>

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.

If you have any inquiries, please do not hesitate to contact the researchers via email.

peiyichua@utar.my (Chua Pei Yi)

ting.1017@utar.my (Chuah Yi Ting)

seejiesheng00@utar.my (See Jie Sheng)

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.

Name:

Date:

Signature

Appendix B1

Smartphone Addiction Scale-Short Version (SAS-SV)

A. Smartphone Addiction Scale-Short Version (Kwon et al., 2013)

Based on your current situations, to what extent do you agree with each statement according to the following scale:

<i>Not At All</i>	<i>Slightly</i>	<i>Moderately</i>	<i>Very</i>	<i>Extremely</i>
0	1	2	3	4

	0	1	2	3	4
A1) Missing planned work due to smartphone use.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A2) Having a hard time concentrating in class, while doing assignments, or while working due to smartphone use.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A3) Feeling pain in the wrists or at the back of the neck while using a smartphone.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A4) Won't be able to stand not having a smartphone.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A5) Feeling impatient and fretful when I am not holding my smartphone.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A6) Having my smartphone in my mind even when I am not using it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A7) I will never give up using my smartphone even when my daily life is already greatly affected by it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A8) Constantly checking my smartphone so as not to miss conversations between other people on Twitter or Facebook	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A9) Using my smartphone longer than I had intended.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A10) The people around me tell me that I use my smartphone too much.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Appendix B2

Social Interaction Anxiety Scale (SIAS)

B. Social Interaction Anxiety Scale (Mattick & Clarke, 1988)

The questions in this scale ask you how you feel the statements in characteristic or true for you. Indicate the degree of how you feel about each statement according to the following scale:

<i>Not at All</i>	<i>Slightly</i>	<i>Moderately</i>	<i>Very</i>	<i>Extremely</i>
0	1	2	3	4

	0	1	2	3	4
B1) I get nervous if I have to speak with someone in authority (teacher, boss, etc.).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
B2) I have difficulty making eye-contact with others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
B3) I become tense if I have to talk about myself or my feelings.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
B4) I find difficulty mixing comfortably with the people I work with.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
B5) I find it easy to make friends my own age.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
B6) I tense-up if I meet an acquaintance in the street.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
B7) When mixing socially I am uncomfortable.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
B8) I feel tense if I am alone with just one other person.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
B9) I am at ease meeting people at parties, etc.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
B10) I have difficulty talking with other people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
B11) I find it easy to think of things to talk about.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
B12) I worry about expressing myself in case I appear awkward.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

B13) I find it difficult to disagree with another's point of view.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
B14) I have difficulty talking to attractive persons of the opposite sex.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
B15) I find myself worrying that I won't know what to say in social situations.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
B16) I am nervous mixing with people I don't know well.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
B17) I feel I'll say something embarrassing when talking.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
B18) When mixing in a group I find myself worrying I will be ignored.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
B19) I am tense mixing in a group.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
B20) I am unsure whether to greet someone I know only slightly.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Appendix B3

Perceived Stress Scale (PSS)

C. Perceived Stress Scale (Cohen, 1994)

The questions in this scale ask you about your feelings and thoughts during the LAST MONTH. In each case, you will be asked to indicate how often you felt or thought a certain way according to the following scale:

<i>Never</i>	<i>Almost Never</i>	<i>Sometimes</i>	<i>Fairly Often</i>	<i>Very Often</i>
<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>

	0	1	2	3	4
C1) In the last month, how often have you been upset because of something that happened unexpectedly?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
C2) In the last month, how often have you felt that you were unable to control the important things in your life?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
C3) In the last month, how often have you felt nervous and "stressed"?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
C4) In the last month, how often have you felt confident about your ability to handle your personal problems?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
C5) In the last month, how often have you felt that things were going your way?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
C6) In the last month, how often have you found that you could not cope with all the things that you had to do?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
C7) In the last month, how often have you been able to control irritations in your life?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
C8) In the last month, how often have you felt that you were on top of things?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
C9) In the last month, how often have you been angered because of things that were outside of your control?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
C10) In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Appendix C1

R Value and Effect Size of Predictors

Formula used to calculate effect size for each predictor: $f^2 = \frac{R^2}{1-R^2}$

There was a positively high Pearson correlation ($r = 0.562$; $p < 0.01$) between problematic smartphone use and social anxiety, suggesting that problematic smartphone use is associated with high levels of social anxiety. There was a positive moderate Pearson correlation ($r = 0.569$; $p < 0.01$) between problematic smartphone use and the social fear subscale of the LSAS and a positive moderate Pearson correlation ($r = 0.537$; $p < 0.01$) between problematic smartphone use and the social avoidance subscale of the LSAS, both suggesting that problematic smartphone use is associated with moderate levels of social anxiety. See Figure 1 for the correlation between problematic smartphone use and social anxiety.

Effect Size of Social Anxiety

$$f^2 = \frac{0.562^2}{1 - 0.562^2}$$

$$= 0.4616$$

TABLE 1 | Means, standard deviations, and correlations of the main study variables.

Variable	1	2	3	4	5	6	7	8
1. Gender	—							
2. Age	-0.13*	—						
3. Only child	0.11*	0.01						
4. Home location	0.04	0.13*	0.46*	—				
5. Perceived stress	-0.01	-0.07	0.01	0.01	—			
6. Negative emotions	-0.03	0.06	-0.02	0.00	0.20*	—		
7. Psychological capital	0.15*	-0.05	-0.01	-0.04	0.03	-0.42*	—	
8. Smartphone addiction	-0.04	0.05	0.04	0.05	0.18*	0.31*	-0.29*	—
M	1.81	20.5	1.42	1.39	31.96	22.14	123.55	39.08
SD	0.40	1.40	0.50	0.49	3.45	6.31	16.73	9.89

N = 769. *SD*, standard deviation. * $p < 0.01$.

Effect Size of Perceived Stress

$$f^2 = \frac{0.180^2}{1 - 0.18^2}$$

$$= 0.0335$$

Table 7. Pearson correlation coefficient significance test results regarding university students' social support perceptions and their smartphone addiction

	<i>Smartphone Addiction Level</i>
<i>Social Support Perception Level</i>	-.136

p=.002

Effect Size of Perceived Social Support

$$f^2 = \frac{(-.0136)^2}{1 - (-0.136)^2}$$

$$= 0.0188$$

Average effect size of 4 predictors:

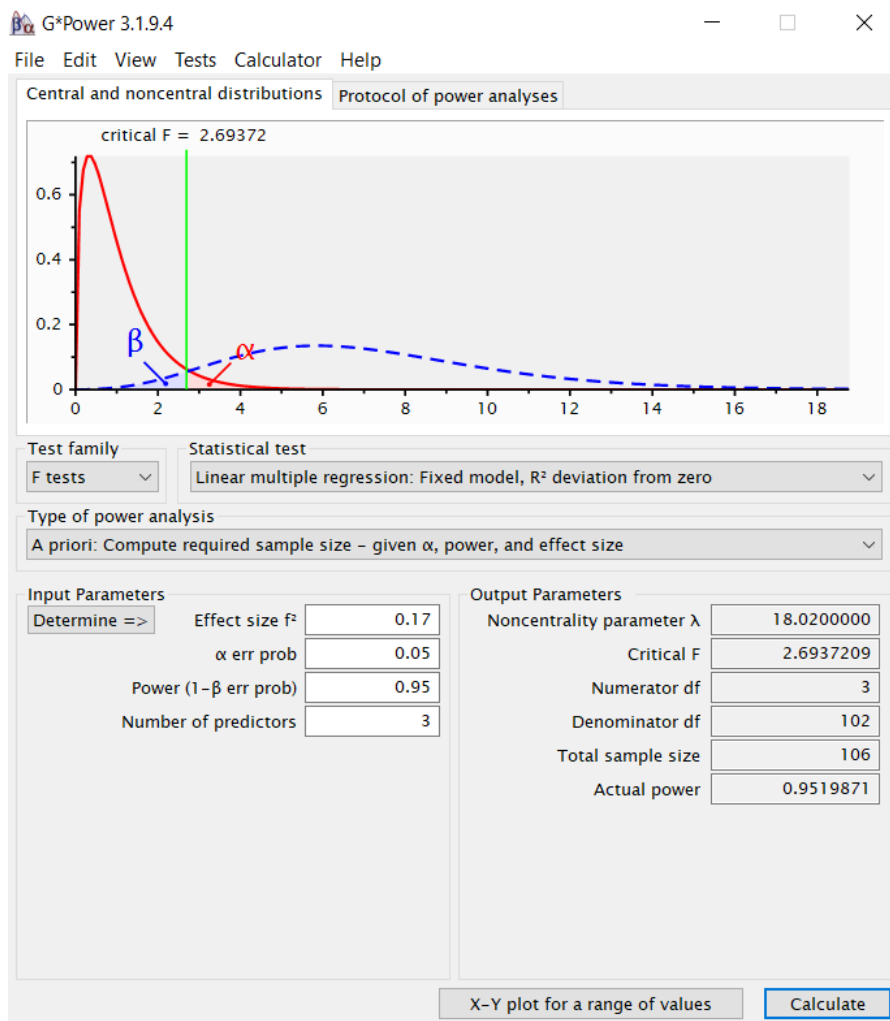
$$\frac{0.4616 + 0.0335 + 0.0188}{3}$$

$$= \frac{0.5139}{3}$$

$$= 0.17$$

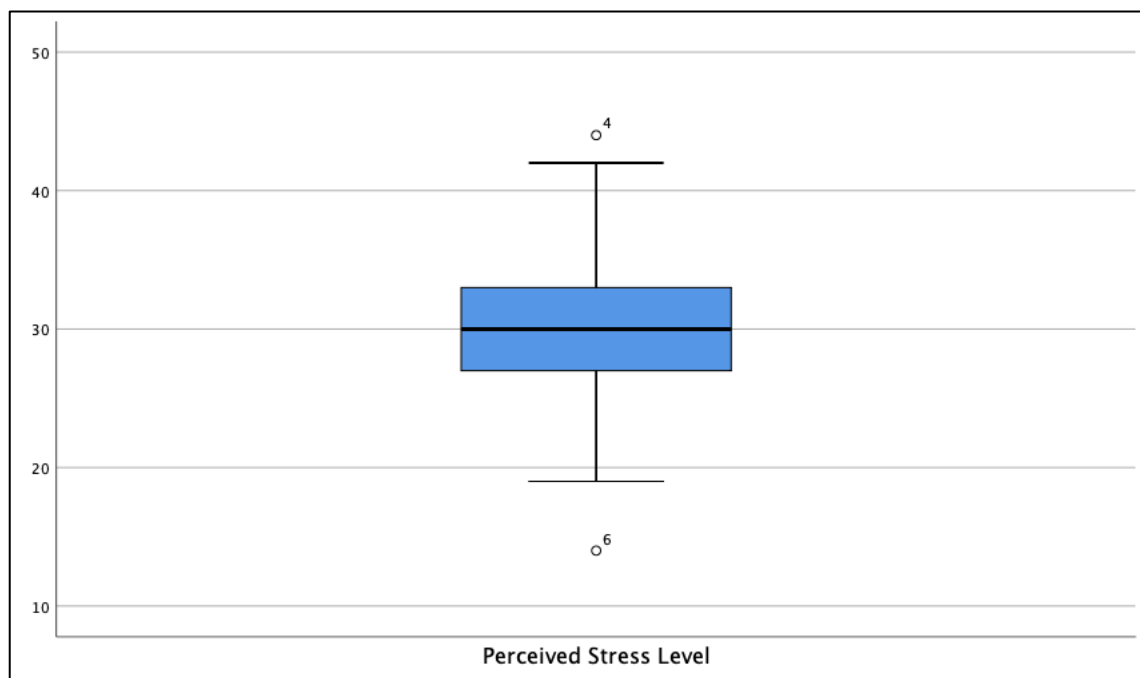
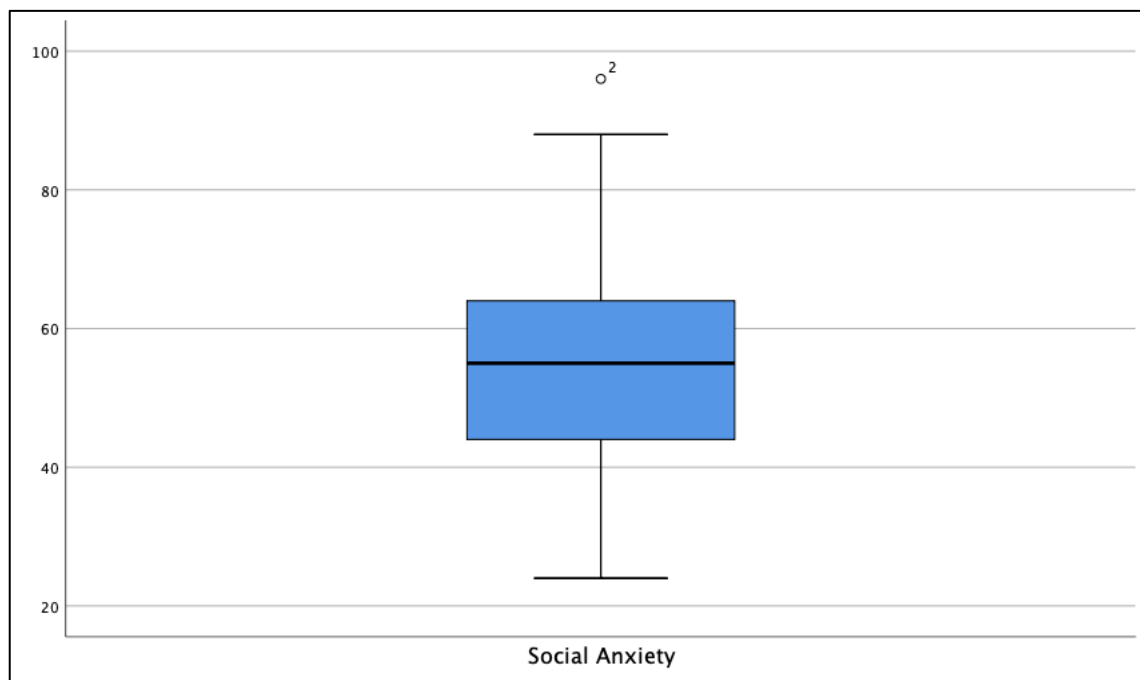
Appendix C2

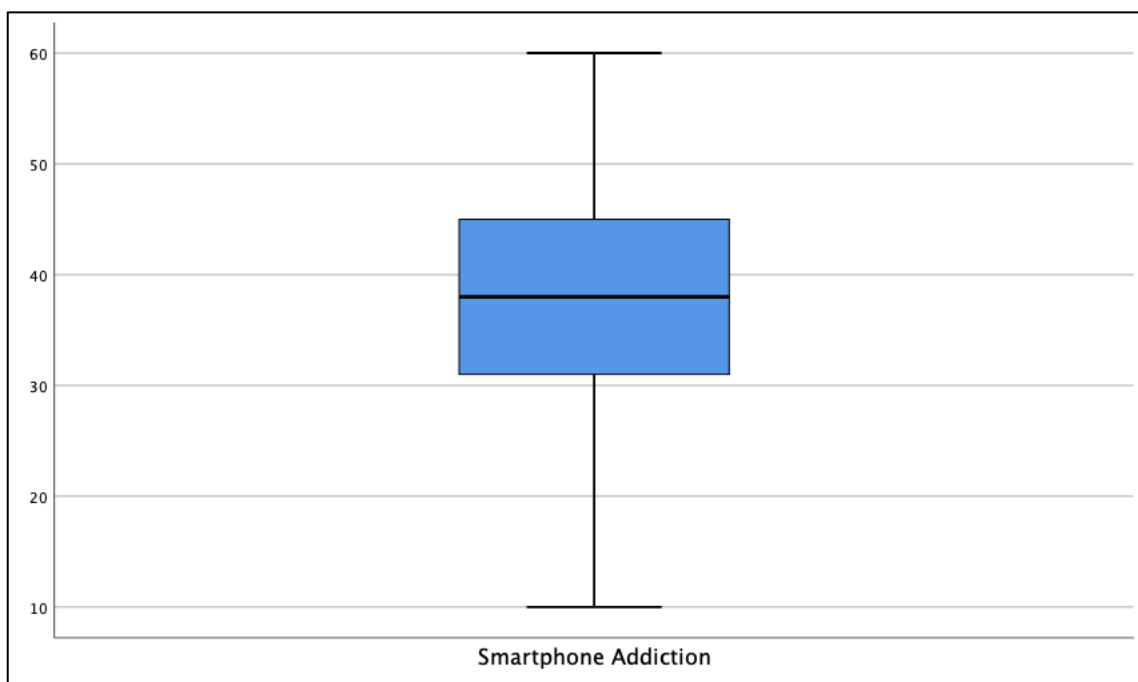
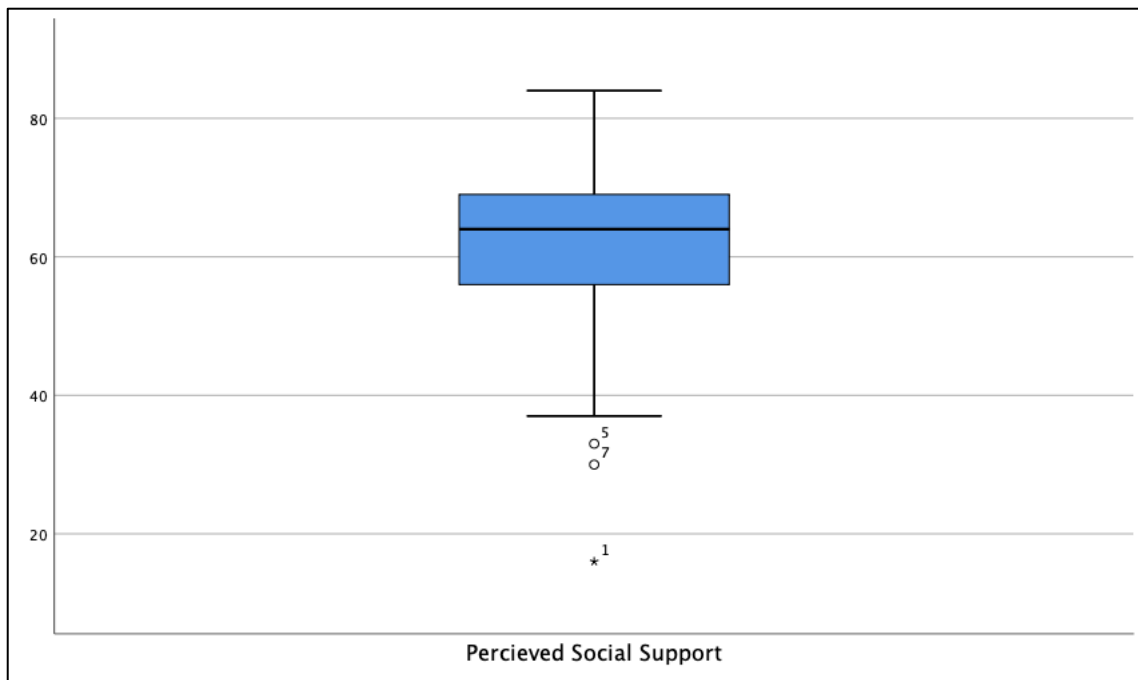
Sample Size Calculation



Appendix D1

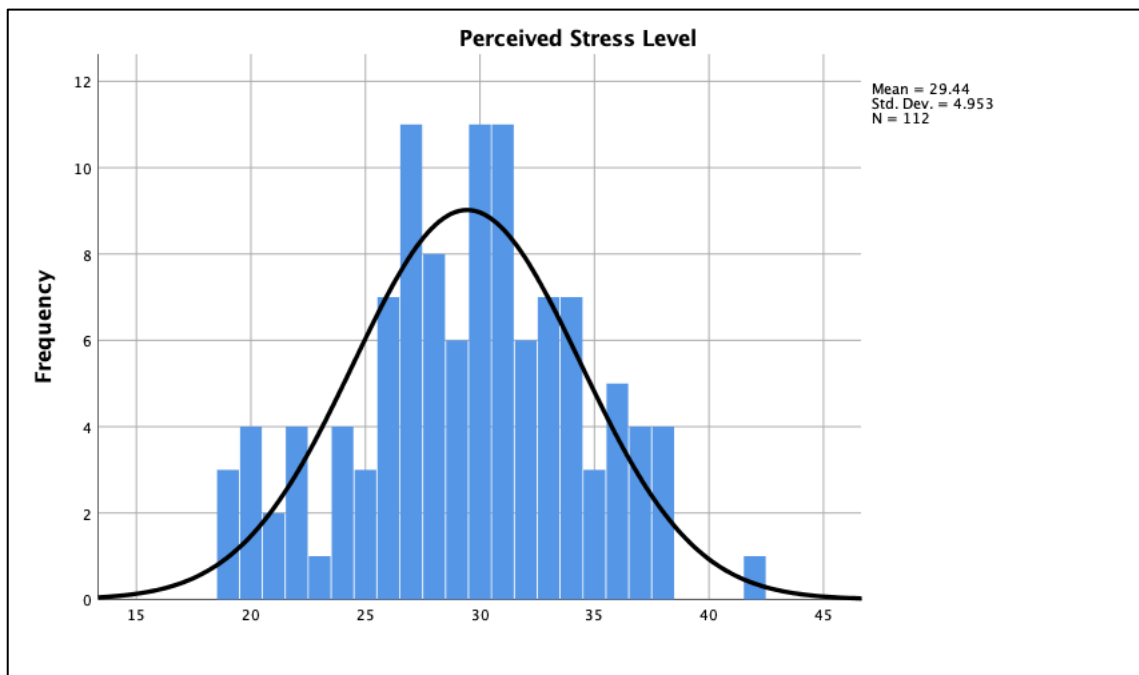
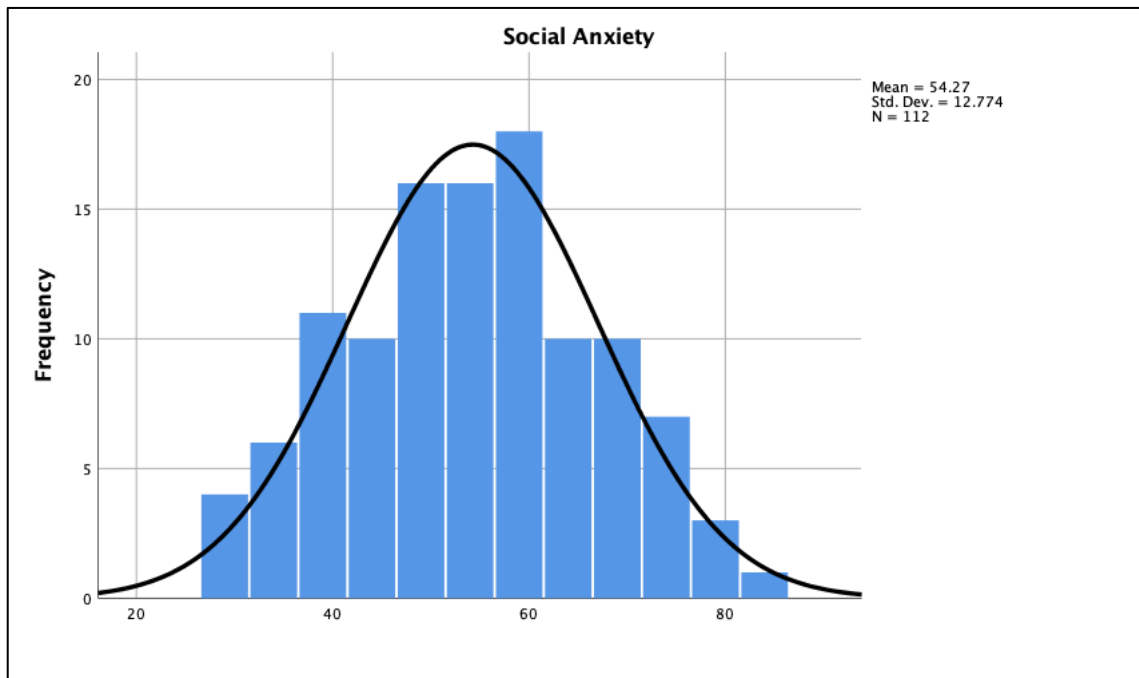
Boxplot

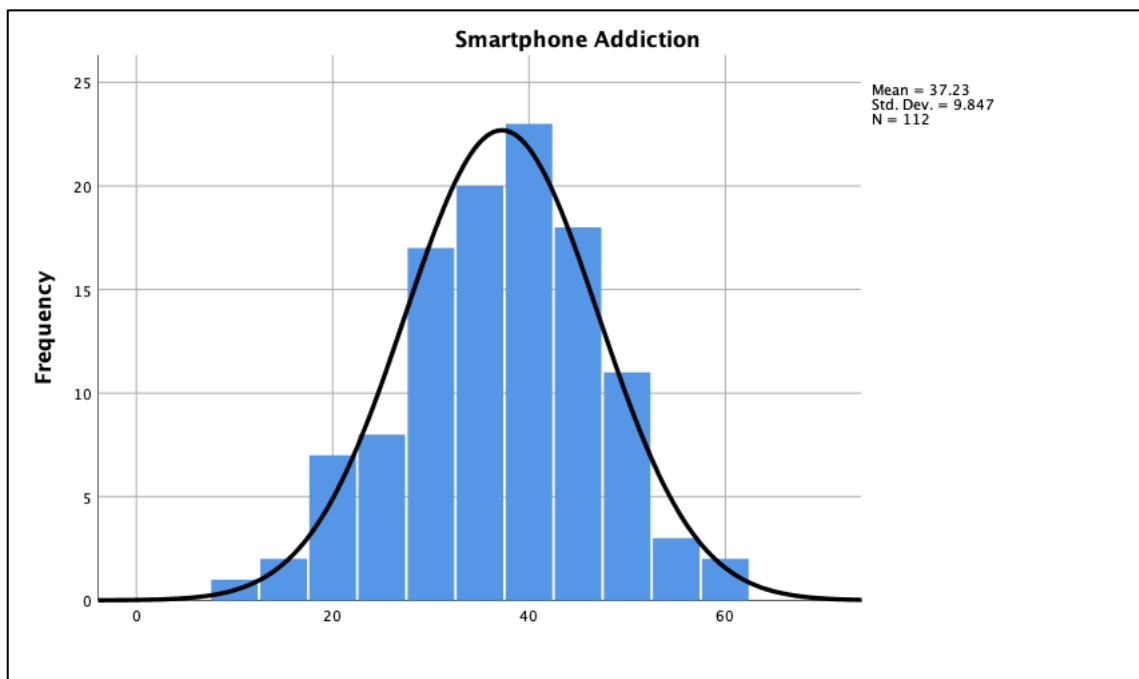
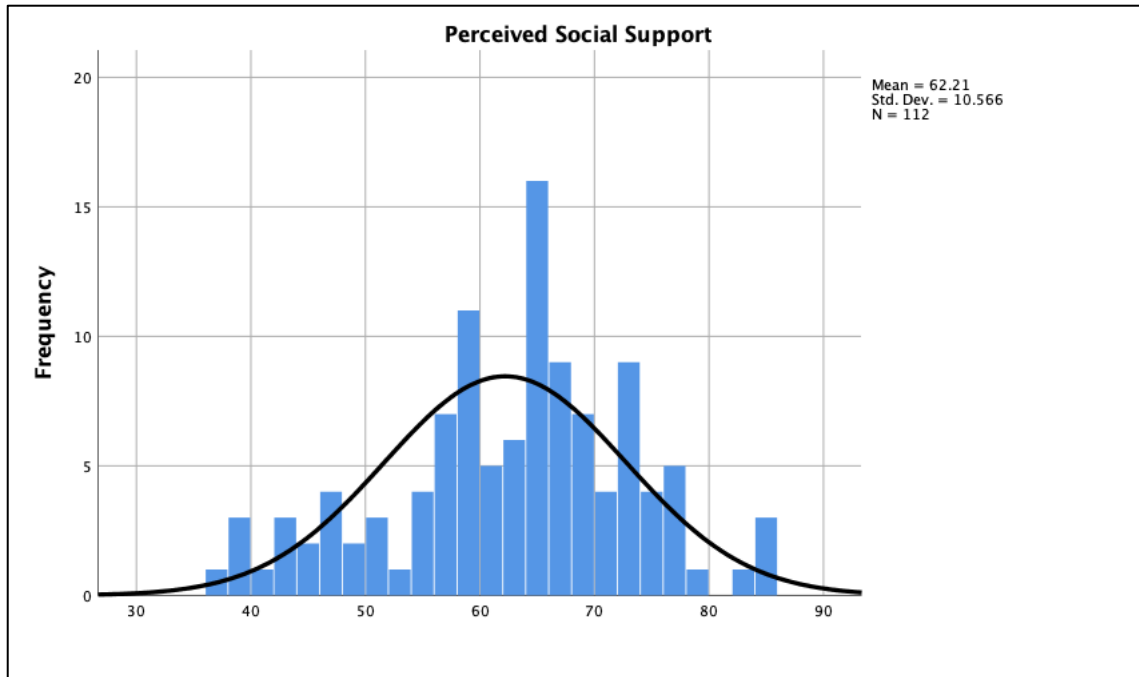




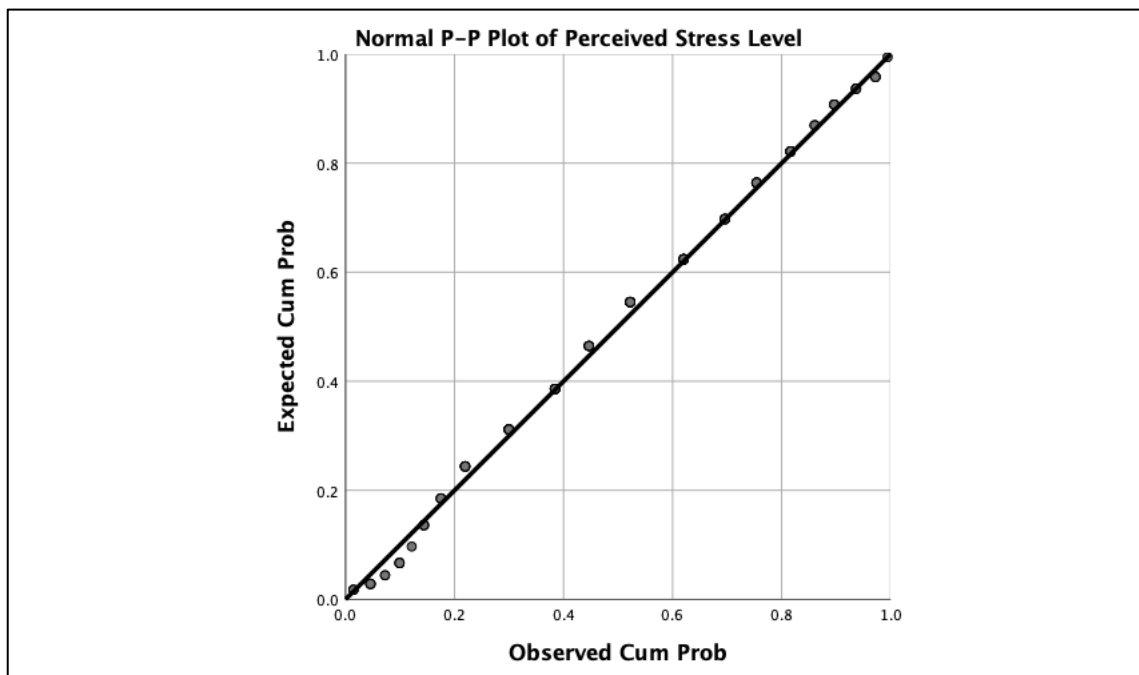
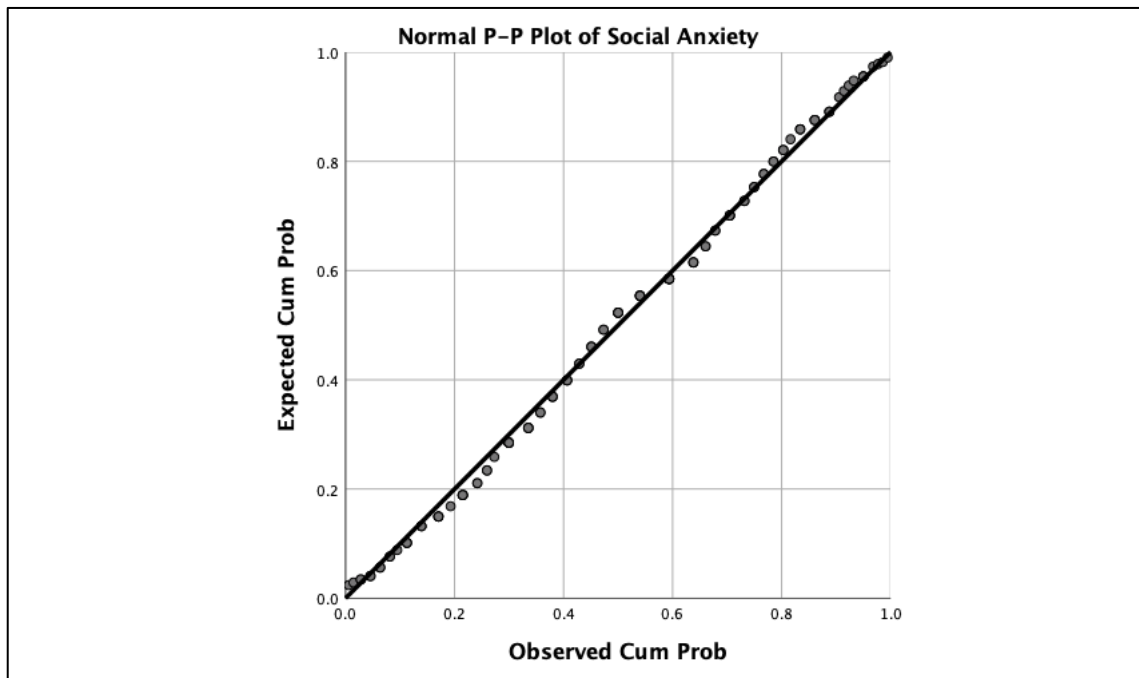
Appendix D2

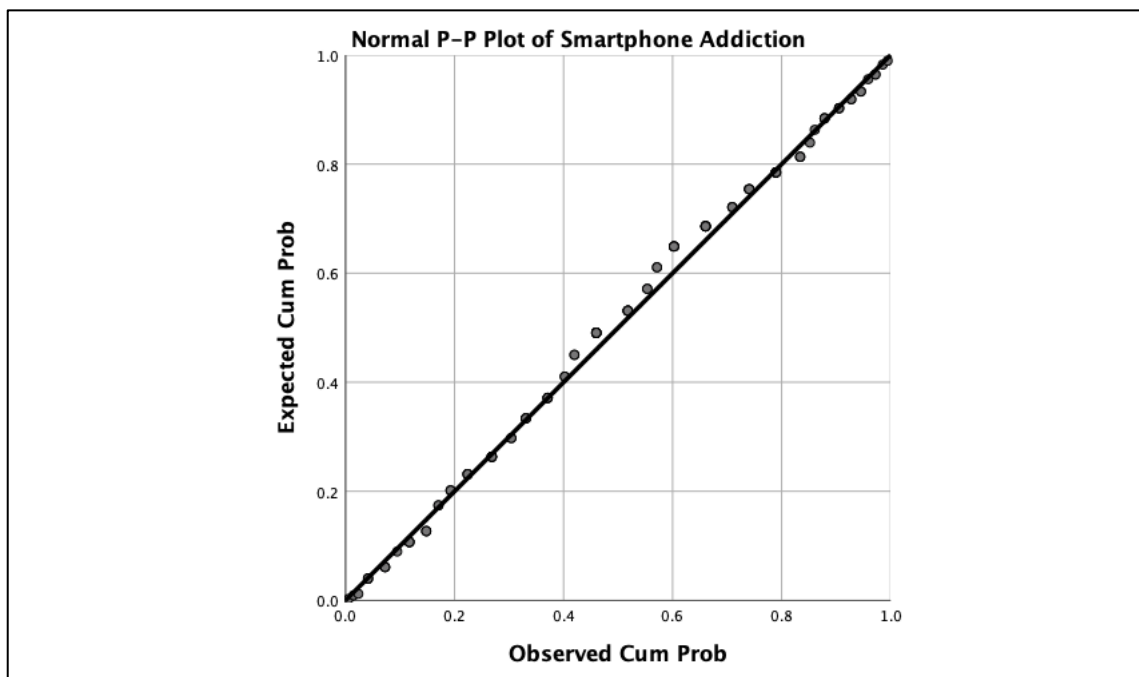
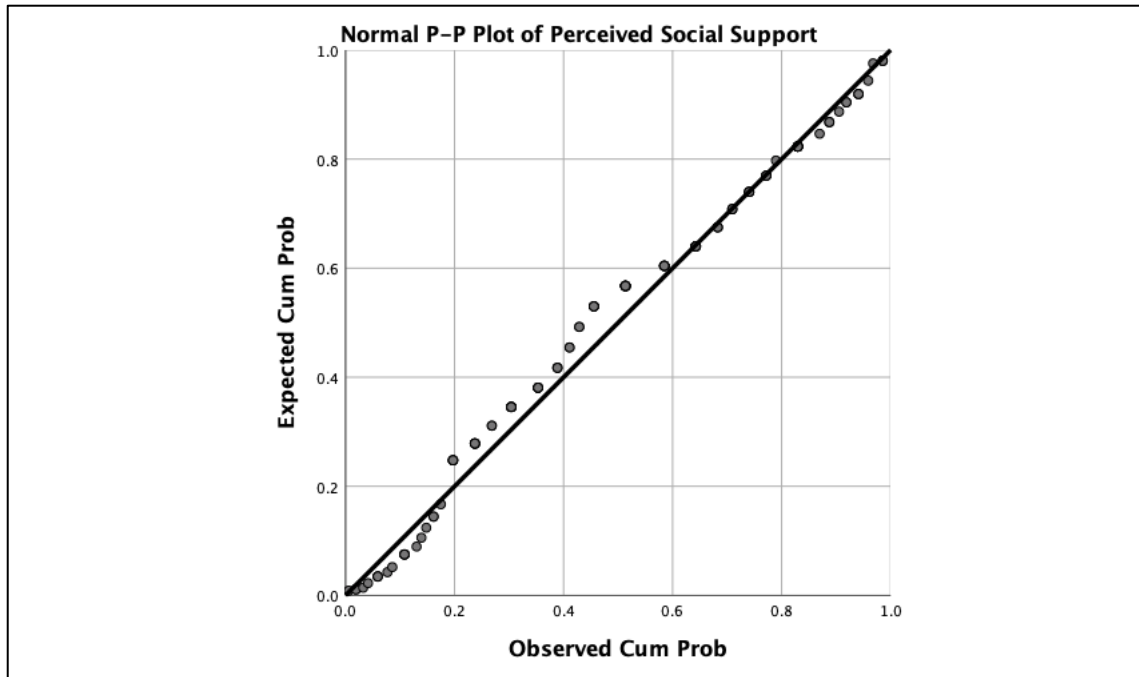
Histogram





Appendix D3

P-P Plot



SOCIAL ANXIETY, PERCEIVED STRESS LEVEL AND PERCEIVED SOCIAL SUPPORT AS PREDICTORS OF SMARTPHONE ADDICTION AMONG UNDERGRADUATE STUDENTS IN MALAYSIA

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UAPZ 3023 Final Year Project II

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--

Supervisor: Mr. Tay Kok Wai

Student's Name:	Student's ID
1. Chua Pei Yi	1. 18AAB01776
2. Chuah Yi Ting	2. 18AAB05183
3. See Jie Sheng	3. 18AAB01678

INSTRUCTIONS:

Please score each descriptor based on the scale provided below:

1. Please award 0 mark for no attempt.
2. For criteria 7:
Please retrieve the marks from "Oral Presentation Evaluation Form".

1. ABSTRACT (5%)	Max Score	Score
a. State the main hypotheses/research objectives.	5%	4
b. Describe the methodology: <ul style="list-style-type: none"> ● Research design ● Sampling method ● Sample size ● Location of study ● Instruments/apparatus/outcome measures ● Data gathering procedures 	5%	5
c. Describe the characteristics of participants.	5%	4
d. Highlight the outcomes of the study.	5%	4
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Sum	25%	20 /25%
Subtotal (Sum/5)	5%	4 /5%
Remark:		
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b. Sampling procedures: <ul style="list-style-type: none"> ● Justification of sampling method/technique used. ● Description of location of study. ● Procedures of ethical clearance approval. (Provide reference number of approval letter) 	5%	4
c. Sample size, power, and precision: <ul style="list-style-type: none"> ● Justification of sample size. ● Achieved actual sample size and response rate. ● Power analysis or other methods (if applicable). 	5%	4.5
d. Clear explanation of data collection procedures: <ul style="list-style-type: none"> ● Inclusion and exclusion criteria ● Procedures of obtaining consent ● Description of data collection procedures ● Provide dates/duration of recruitment repeated measures or follow-up. ● Agreement and payment (if any) 	5%	4.5
e. Explanation of instruments/questionnaire used: <ul style="list-style-type: none"> ● Description of instruments ● Scoring system 	5%	5

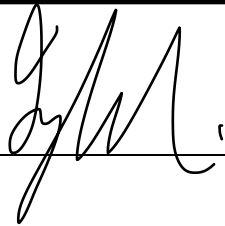
<ul style="list-style-type: none"> • Meaning of scores • Reliability and validity 		
Subtotal	25%	22 /25%
Remark:		
3. RESULTS (20%)	Max Score	Score
a. Descriptive statistics: <ul style="list-style-type: none"> • Demographic characteristics • Topic-specific characteristics 	5%	4
b. Data diagnostic and missing data: <ul style="list-style-type: none"> • Frequency and percentages of missing data. (if applicable) • Methods employed for addressing missing data. (if applicable) • Criteria for post data-collection exclusion of participants. • Criteria for imputation of missing data. • Defining and processing of statistical outliers. • Analyses of data distributions. • Data transformation (if applicable). 	5%	4.5
c. Appropriate data analysis for each hypothesis or research objective.	5%	4
d. Accurate interpretation of statistical analyses: <ul style="list-style-type: none"> • Accurate report and interpretation of confidence intervals or statistical significance. • Report of <i>p</i> values and minimally sufficient sets of statistics (e.g., <i>dfs</i>, <i>MS</i>, <i>MS error</i>). • Accurate report and interpretation of effect sizes. • Report any problems with statistical assumptions. 	5%	4.5
Subtotal	20%	17 /20%
Remark:		
4. DISCUSSION AND CONCLUSION (20%)	Max Score	Score
a. Constructive discussion of findings: <ul style="list-style-type: none"> • Provide statement of support or nonsupport for all hypotheses. • Analyze similar and/or dissimilar results. • Rational justifications for statistical results. 	8%	6
b. Implication of the study: <ul style="list-style-type: none"> • Theoretical implication for future research. 	4%	1.5

• Practical implication for programs and policies.			
c. Relevant limitations of the study.	4%	1.5	
d. Recommendations for future research.	4%	2	
Subtotal	20%	11	/20%
Remark:			
5. LANGUAGE AND ORGANIZATION (5%)	Max Score	Score	
a. Language proficiency	3%	2	
b. Content organization	1%	1	
c. Complete documentation (e.g., action plan, originality report)	1%	1	
Subtotal	5%	4 /5%	
Remark:			
6. APA STYLE AND REFERENCING (5%)	Max Score	Score	
a. 7 th Edition APA Style	5%	4.5 /5%	
Remark:			
62.5			
*ORAL PRESENTATION (20%)	Score		
	Student 1	Student 2	Student 3
Subtotal	15.9 /20%	15.9 /20%	15.9 /20%
Remark:			
PENALTY	Max Score	Score	
Maximum of 10 marks for LATE SUBMISSION (within 24hours), or POOR CONSULTATION ATTENDANCE with supervisor.	10%		
*Late submission after 24hours will not be graded			
	Student 1	Student 2	Student 3
**FINAL MARK/TOTAL	78.4 /100%	78.4 /100%	78.4 /100%

*****Overall Comments:**

Overall, a satisfactory work with good adherence to APA format
Chapter 5 can be further improved.

Signature: _____



Date: _____

21/04/22

Notes:



1. **Subtotal:** The sum of scores for each assessment criterion
2. **FINAL MARK/TOTAL:** The summation of all subtotal score
3. Plagiarism is **NOT ACCEPTABLE**. Parameters of originality required and limits approved by UTAR are as follows:
 - (i) **Overall similarity index is 20% or below**, and
 - (ii) **Matching of individual sources listed must be less than 3%** each, and
 - (iii) Matching texts in continuous block must **not exceed 8 words**

Note: Parameters (i) – (ii) shall exclude quotes, references and text matches which are less than 8 words.

Any works violate the above originality requirements will NOT be accepted. Students have to redo the report and meet the requirements in **SEVEN (7)** days.

*The marks of “Oral Presentation” are to be retrieved from “**Oral Presentation Evaluation Form**”.

**It is compulsory for the supervisor/examiner to give the overall comments for the research projects with A- and above or F grading.

Action Plan of UAPZ 3023 (group-based)Final Year Project II for Jan & May trimester						
Supervisee's Name:		Chua Pei Yi, Chuah Yi Ting, See Jie Sheng				
Supervisor's Name:		Mr. Tay Kok Wai				
Task Description	Duration	Date/Time	Supervisee's Signature	Supervisor's Signature	Supervisor's Remarks	Next Appointment Date/Time
Methodology, Data Collection & Data Analysis	W1-W2					
Finding & Analysis Discuss Findings & Analysis with Supervisor Amending Findings & Analysis	W3-W6	18/2/2022, 1:00pm 23/2/2022, 1:00pm 02/3/2022, 1:00pm 05/3/2022, 10:30am	Peiyi Yiting Jason			23/2/2022, 1.00pm 02/3/2022, 1:00pm 5/3/2022, 10:30am 10/3/2022, 11:30am
Discussion & Conclusion Discuss Discussion & Conclusion with Supervisor Amending Discussion & Conclusion	W7-W9	10/3/2022, 11:30am 12/3/2022, 6:00pm 24/3/2022, 11:30am 26/3/2022, 10:00am 01/4/2022, 12:30pm	Peiyi Yitina Jason			12/3/2022, 6.00pm 24/3/2022, 11:30am 26/3/2022, 10.00am 01/4/2022, 12.30pm
Submission of first draft*	Monday of Week 10	submit the first draft to Turnitin.com to check similarity rate				
Amendment	W10					
Submission of final FYP (FYP I + FYP II)*	Monday of W11	final submission to supervisor				
Oral Presentation		Oral Presentation Schedule will be released and your supervisor will inform you				

- Notes:**
1. The listed duration is for reference only, supervisors can adjust the period according to the topics and content of the projects.
 2. *Deadline for submission can not be changed, one mark will be deducted per day for late submission.
 3. Supervisees are to take the active role to make appointments with their supervisors.
 4. Both supervisors and supervisees should keep a copy of this record.
 5. This record is to be submitted together with the submission of the FYP II.

Universiti Tunku Abdul Rahman			
Form Title : Sample of Submission Sheet for FYP/Dissertation/Thesis			
Form Number : FM-IAD-004	Rev No: 0	Effective Date: 21 June 2011	Page No: 1 of 1

**FACULTY OF ARTS AND SOCIAL SCIENCE
UNIVERSITI TUNKU ABDUL RAHMAN**

Date: 4th April 2022

SUBMISSION OF FINAL YEAR PROJECT

It is hereby certified that Chua Pei Yi (ID No: 1801776) has completed this final year project entitled “Social Anxiety, Perceived Stress Level and Perceived Social Support as Predictors of Smartphone Addiction among Undergraduate Students in Malaysia.” under the supervision of Mr. Tay Kok Wai (Supervisor) from the Department of Psychology, Faculty of Arts and Social Science.

I understand that University will upload softcopy of my final year project in pdf format into UTAR Institutional Repository, which may be made accessible to UTAR community and public.

Yours truly,



Name:
Chua Pei Yi

Universiti Tunku Abdul Rahman			
Form Title : Sample of Submission Sheet for FYP/Dissertation/Thesis			
Form Number : FM-IAD-004	Rev No: 0	Effective Date: 21 June 2011	Page No: 1 of 1

**FACULTY OF ARTS AND SOCIAL SCIENCE
UNIVERSITI TUNKU ABDUL RAHMAN**

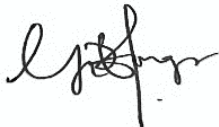
Date: 4th April 2022

SUBMISSION OF FINAL YEAR PROJECT

It is hereby certified that Chuah Yi Ting (ID No: 1805183) has completed this final year project entitled “Social Anxiety, Perceived Stress Level and Perceived Social Support as Predictors of Smartphone Addiction among Undergraduate Students in Malaysia.” under the supervision of Mr. Tay Kok Wai (Supervisor) from the Department of Psychology, Faculty of Arts and Social Science.

I understand that University will upload softcopy of my final year project in pdf format into UTAR Institutional Repository, which may be made accessible to UTAR community and public.

Yours truly,



Name:
Chuah Yi Ting

Universiti Tunku Abdul Rahman			
Form Title : Sample of Submission Sheet for FYP/Dissertation/Thesis			
Form Number : FM-IAD-004	Rev No: 0	Effective Date: 21 June 2011	Page No: 1 of 1

**FACULTY OF ARTS AND SOCIAL SCIENCE
UNIVERSITI TUNKU ABDUL RAHMAN**

Date: 4th April 2022

SUBMISSION OF FINAL YEAR PROJECT

It is hereby certified that See Jie Sheng (ID No: 1801678) has completed this final year project entitled “Social Anxiety, Perceived Stress Level and Perceived Social Support as Predictors of Smartphone Addiction among Undergraduate Students in Malaysia.” under the supervision of Mr. Tay Kok Wai (Supervisor) from the Department of Psychology, Faculty of Arts and Social Science.

I understand that University will upload softcopy of my final year project in pdf format into UTAR Institutional Repository, which may be made accessible to UTAR community and public.

Yours truly,

Sheng

Name:
See Jie Sheng

Universiti Tunku Abdul Rahman			
Form Title : Supervisor's Comments on Originality Report Generated by Turnitin for Submission of Final Year Project Report (for Undergraduate Programmes)			
Form Number: FM-IAD-005	Rev No.: 0	Effective Date: 01/10/2013	Page No.: 1 of 1



FACULTY OF ARTS AND SOCIAL SCIENCE

Full Name(s) of Candidate(s)	Chua Pei Yi Chuah Yi Ting See Jie Sheng
ID Number(s)	18AAB01776 18AAB05183 18AAB01678
Programme / Course	Bachelor of Social Science (Hons) Psychology
Title of Final Year Project	Social Anxiety, Perceived Stress Level and Perceived Social Support as Predictors of Smartphone Addiction among Undergraduate Students in Malaysia.

Similarity	Supervisor's Comments (Compulsory if parameters of originality exceeds the limits approved by UTAR)
Overall similarity index: <u>13</u> % Similarity by source Internet Sources: <u>9</u> % Publications: <u>9</u> % Student Papers: <u>8</u> %	
Number of individual sources listed of more than 3% similarity: <u>0</u>	
Parameters of originality required and limits approved by UTAR are as follows: (i) Overall similarity index is 20% and below, and (ii) Matching of individual sources listed must be less than 3% each, and (iii) Matching texts in continuous block must not exceed 8 words <i>Note: Parameters (i) – (ii) shall exclude quotes, bibliography and text matches which are less than 8 words.</i>	

Note Supervisor/Candidate(s) is/are required to provide softcopy of full set of the originality report to Faculty/Institute

Based on the above results, I hereby declare that I am satisfied with the originality of the Final Year Project Report submitted by my student(s) as named above.



 Signature of Supervisor

Name: Tay Kok Wai

Date: 04/04/2022

 Signature of Co-Supervisor

Name: _____

Date: _____