A STUDY OF SMARTPHONE ADDICTION, FEAR OF REJECTION AND INTERPERSONAL COMMUNICATION SKILLS AS PREDITORS OF SOCIAL CONNECTEDNESS AMONG MALAYSIAN UNDERGRADUATE STUDENTS

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A study of smartphone addiction, fear of rejection, and interpersonal communication skills as predictors of social connectedness among Malaysian undergraduate students

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APPROVAL FORM

This research paper attached here, entitled as “A study of smartphone addiction, fear of rejection, and interpersonal communication skills as predictors of social connectedness among Malaysian undergraduate students” prepared and submitted by Dewayne Kuek Hui En in partial fulfillment of the requirements for the Bachelor of Social Science (Hons) Guidance and Counselling is hereby accepted.

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Supervisor
(Mr Ho Khee Hoong)

Date: _____

Abstract

Social connectedness is commonly referred to as a sense of being part of a group and community which is also considered a fundamental human need that may have an impact on one's health and well-being. However, many studies show a rise in emotions of disconnection, loneliness, and exclusion among undergraduates. Thus, the present study mainly aims to examine the relationships between social connectedness (SC), smartphone addiction (SA), fear of rejection (FOR), and interpersonal communication skills (ICS) among undergraduate students in Malaysia by using the cross-sectional research design. While 240 Malaysian' respondents were recruited by purposive sampling and answered the Google Forms online questionnaire that was shared via Instagram, Messenger, Microsoft Teams, WhatsApp, and WeChat. The respondents were 18 to 25-year-old university students from Malaysia (M = 21.8; SD = 1.43). Overall, it had more female respondents (n= 153; 65.1%) than male respondents (n= 82; 34.9%). The reliable instruments used were the Social Connectedness Scale-Revised (SCS-R), Smartphone Addiction Scale-Short Form (SAS-SV), Fear of Rejection Scale, and Interpersonal Communication Competence Scale-Short Form (ICCS-SF). The hypotheses were tested through Pearson product moment correlation and multiple linear regression analysis. The study's findings showed that there is a significant relationship between social connectedness with SA (negatively) and FOR (negatively), and ICS (positively). In addition, the finding showed that SA may not significantly predict social connectedness, but FOR (negatively) and ICS (positively) can significantly predict social connectedness. In conclusion, this study has provided significant knowledge on the relationship between social connectedness, SA, FOR, and ICS. It may benefit future research and counsellor to create an effective intervention plan to aid their clients.

Keywords: social connectedness, smartphone addiction, fear of rejection, interpersonal communication skills, undergraduate students, Malaysia

DECLARATION

I declare that the material contained in this paper is the end result of my 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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List of Abbreviations

SC	Social Connectedness
SA	Smartphone Addiction
FOR	Fear of Rejection
ICS	Interpersonal Communication Skills
SCS-R	Social Connectedness Scale-Revised
SAS-SV	Smartphone Addiction Scale-Short Version
ICCS-SF	Interpersonal Communication Competence Scale-Short Form
PPMC	Pearson’s Product-Moment Correlation
MLR	Multiple Linear Regression

Chapter 1

Introduction

Background of the Study

Social connectedness is a person's subjective sense of how strongly they feel a significant role in their social and emotional connection (Savci & Aysan, 2017). There is a study found that lower the social connectedness is significantly associated with increased screen time during COVID-19 since there has some unanticipated changes brought by the pandemic such as the restriction at home to achieve social isolation and reduce infection risk (Majumdar et al., 2020). Therefore, the social interaction between people also decreased during the pandemic and increased how much time people spend in front of screens. Significantly, some studies proposed that during the COVID-19 outbreak, screen time has grown (Pandya & Lodha, 2021; Trott et al., 2022). As a result of school closings during the pandemic, all students have spent more time on screens because they may need to take courses via online. According to Arundell et al. (2021) reported that there is a negative relationship between screen time and social connectedness, the lower the social connectedness, social relationships, and society’s well-being, the higher the screen time. Other than that, the social connectedness for the students at school involves thoughts and feelings about how well they are welcomed, appreciated, and respected by other students and teachers in the university's social environment, but it may result in poor social connectedness and increase the fear of rejection when students have the excessive screen time (Gökbulut, 2019).

Around the world, the screen time rate varies to different degrees. Based on the statistics from Data Reportal, people throughout the world spend six hours, and 58 minutes every day in front of a screen (Moody, 2022). Since 2013, daily screen time has climbed by about 50 minutes. Besides, the typical American spends seven hours and 4 minutes per day

staring at a screen. Then, South Africans watch screens for ten hours and 46 minutes every day, meanwhile, users in India have increased their average daily screen time by more than 30 minutes, spending a total of seven hours and 18 minutes on the screen. Other than that, generation Z who is currently aged 10 to 25 spends almost nine hours a day on screens on average (Moody, 2022). According to Statista Research Department, the typical Malaysian spends 141 days a year online, or nine hours and 18 minutes staring at a screen, on average (Murugiah, 2022). Additionally, Malaysians go onto social media for three hours and one minute per day.

Meanwhile, concerns about the effects of excessive screen time on both physical and mental health have been raised. According to Allen et al. (2019) report connections between controlled use of digital technology and well-being, but prolonged screen time has been linked to several poorer mental health, including psychological issues, poor emotion regulation, and an increased likelihood of depression or anxiety. Hence, a university should provide counselling services to students who are at high risk of excessive screen use because it may influence their psychological well-being. Yet, many educational resources and support services for mental health in university are now being provided to students who faced this issue during the pandemic via online platforms (Nagata et al., 2020). Additionally, mental health care services may provide counselling and therapy sessions via telehealth, which may be carried out in front of screens (Nagata et al., 2020). Student counsellors are crucial to deal with the increased screen time once it brings negative disturbance to the students.

Besides, smartphone addiction was discovered as a factor related to social connectedness (Savci & Aysan, 2017). Smartphone addiction may be defined as “behavioural addiction” (Shapira et al., 2003; Savci & Aysan, 2017). University students have been highlighted as one of the most significant groups and the biggest users’ group of smartphones, despite the fact that smartphone usage is rising among all economic and age

groups (Al-Barashdi et al., 2015). The findings showed that over 10% of the undergraduates displayed signs of smartphone addiction while 68.8% of the students were aware that smartphones were bad for them (Szpakow et al., 2011). Meanwhile, 71.9% of undergraduates hadn't ever turned off their phones. The study revealed that there is a significant factor in the relationship between smartphone use and social connectedness. Social connectedness decreases if smartphones use limits genuine social interactions and results in isolation and rejection (Allen et al., 2014).

Fear of rejection (FOR) was found to associate with social connectedness (Niu et al., 2022). FOR is a character trait that is described by someone with excessive sensitivity to social refusal. Individuals who are more likely to fear rejection always act as anxiously or aggressively, interpret it easily, and respond to it intensely (Gao et al., 2019). People who are sensitive to rejection are believed to be extremely aware of social cues for rejection in addition to having a lower tolerance for responding to it, so it may contribute to more severe emotional states (Romero-Canyas et al., 2010). Then, individuals who regularly have bad social experiences which may result in fear of rejection in the future and enhance their unfavorable beliefs about interpersonal interactions, and lead to low social connectedness (Niu et al., 2022). Therefore, there is the relationship between social connectedness and fear of rejection.

Interpersonal communication skills may be the factor that is strongly tied to social connectedness (Kern et al., 2013). Interpersonal communication is the term used to describe the psychological separation or action between two or more people and it always contains the exchange of verbal and nonverbal signals. The study revealed that university students typically communicate with their immediate family and friends in school most of the time who are tolerant or readily forgiven (Wang, 2015). That is because university students are now focusing on their academic work, hardly ever communicate with others intentionally,

and they may struggle to resolve conflict situations with people outside their circle, therefore is significant for them to master certain fundamental communication skills so that they can interact with others effectively (Wang, 2015). If there are low and poor interpersonal communication skills, it may lead to conflict between people and result in low engagement in social later. Hence, it is important to encourage university students to take initiative and form relationships that are constructive and healthy. Also, this indicate that there is the relationship between social connectedness and interpersonal communication skills.

Social connectedness always can reduce excessive screen time by increasing the connection between people and forming positive relationships (Gökbulut, 2019). A healthy person who is more socially connected may also have greater psychological health, which lowers the likelihood of increasing screen time. Social connectedness brings a substantial benefit to academic settings, especially university students such as reducing stress of the students (Gökbulut, 2019). Thus, there is a need to learn more about these factors, smartphone addiction, fear of rejection, and interpersonal communication skills with social connectedness among university students in Malaysia.

Problem Statement

Social connectedness among undergraduates in recent years has not been as high as anticipated (Gökbulut, 2019). That is because people all now live busy and stressful lifestyles in the modern era, people now always have to manage jobs, education, interests, self-care, and other responsibilities. Therefore, social relationships frequently get neglected. Besides, the increased screen time also keeps them disconnected from nature and even from others. Since our daily lives have undergone significant change, which is internet technology, so it also changes the way that young people communicate. Young people's time spent with others in the actual world is steadily decreasing as social media apps increase in popularity and people become more connected to the online world (Tateno et al., 2019). Additionally, some

students replace online relationships with actual interactions, but it doesn't appear to function so well, only leaving them with a high level of loneliness and other issues (Tateno et al., 2019). Therefore, Wi-Fi itself does not satisfy people's basic social needs; in order to survive, individuals require face-to-face interaction. Smartphone may only be able to strengthen rather than replace social connections. In fact, the truth is undergraduates are now experiencing a period of true disconnectedness right now.

However, social connectedness is needed for every human no matter how old the person is. When young adults are having high levels of social connectedness, it may link to a wide range of advantageous consequences, such as greater emotional well-being and significantly reduced substance abuse, and improved health (Jorgenson et al., 2018). Meanwhile, it may also lead to a reduction in depressive symptoms, loneliness, and social isolation (Jacobson & Rowe, 1999). Ideally, everyone is expected to have a close relationship with a group, family, and community (O'Rourke et al., 2018). For example, adults may have a group of close friends who provide emotional support, a healthy relationship with their own family members, and a community with strong social ties where everyone feels accepted like neighbours. If it is specific to the educational setting, undergraduates are ideally expected to have a good social connection with college friends, and teachers and always feel belong to the institution, thus it may result in academic motivation. Hence, social connectedness is significant for everyone and should be a concern.

Especially during the COVID-19 pandemic, social connection between people has changed and undergraduate students went through the transition from traditional classroom teaching to online learning and for roughly 10 weeks, a proportion of the public was quarantined at home. Therefore, 85% of undergraduates stated that their use of smartphones doubled significantly while they were in quarantine, with almost 42% using them for over 6 hours each day which may result in smartphone addiction (Saadeh et al., 2021). However,

aside from the fact that smartphone addiction is a behavioural concept that is commonly discussed in various studies, the connection between smartphone addiction and social connectedness is not adequately supported in the literature. Since the majority of previous studies tended to concentrate on various types of addiction, like addiction to online games, the internet, or social media (Karabatak & Alanoglu, 2022; Wu et al., 2016; Çırak & Dost, 2022). As a result, current findings related to other technologies addiction may have limited generalizability to explain smartphone addiction since different technologies offer distinct characteristics and patterns to fulfil the various demands of people. Therefore, the study about the relationship between smartphone addiction and social connectedness is needed. Additionally, despite the fact that there have been a number of previous research looking at the relationship between smartphone addiction and social connectedness (Savci & Aysan, 2017; McIntyre et al., 2015), these studies were carried out in a foreign context. Thus, the relationship between smartphone addiction and social connectedness among undergraduates in Malaysia is strongly needed to investigate.

Furthermore, there is lack of research about the correlation between fear of rejection and social connectedness in Malaysia settings. Most of the study on fear of rejection and social connectedness is done in western nation, there is only few studies in non-Western nation, however there is lack of study in the local context. For example, the prevalence of fear of rejection was higher in Japan than in Canada (Sato et al., 2014). Another study also proposed that Hong Kong Chinese people likely to be higher sensitive to rejection in order to maintain their social connectedness if compared with Canadian people (Lou & Li, 2017). However, these findings might not be appropriate in the context of Malaysia. In addition, several studies also have been done in the cultural contexts which are Western culture and Chinese culture about the differences in fear of rejection and social connectedness (Ding et al., 2020). Culture plays the significant role in developing social connectedness in Chinese.

So, Chinese culture is great emphasis on individuals to look out for peer acceptance or to sustain positive social interactions in Chinese society, so this also lead them become less sensitive in fear of rejection (Chen, 2012; Greenfield et al., 2006). However, it may not be applicable in Malaysia's cultural context. As a result, the study about the relationship between fear of rejection and social connectedness among undergraduates in Malaysia is needed to examine.

Besides, there is also lack of studies examine the correlation between social connectedness and interpersonal communication skills in Malaysia context. Although there have various of studies in foreign context have examined the relationship between social connectedness and interpersonal communication skills, however it is still limited (Rothschild, 2015; Bloch, 2018; Kern et al., 2014). That is because Polit and Beck (2010) pointed that research settings and target participants are consider as an important aspect to take into account when generalising study' findings. Thus, the study about the relationship between social connectedness and interpersonal communication skills among undergraduates in Malaysia is needed to investigate.

In short, there is a lack of research findings about the relationship between social connectedness, smartphone addiction, fear of rejection, and interpersonal communication skills in the Malaysian context. Therefore, it's critical to understand the problems that affect social connectedness in order to comprehend and improve it among undergraduate students. Additionally, this study seeks to fill in any gaps in the literature by examining the relationship between social connectedness, smartphone addiction, fear of rejection, and interpersonal communication skills among Malaysian undergraduate students. Taken together, this study aims to examine the relationship between social connectedness, smartphone addiction, fear of rejection, and interpersonal communication skills among Malaysian undergraduate students.

Significance of Study

Theoretical Significance

The need to belong theory has been used in this study. This study can be of theoretical significance by confirming the relationship between social connectedness, smartphone addiction, fear of rejection, and interpersonal communication skills among Malaysian undergraduate students. Additionally, it might contribute better knowledge and understanding to the next studies on the relationship between social connectedness, smartphone addiction, fear of rejection, and interpersonal communication skills. Also, this study may be unique since research on the correlation between social connectedness, smartphone addiction, fear of rejection, and interpersonal communication skills among Malaysian undergraduate students has recently been lacking. There are various studies that focus on only a few variables in the foreign context (Rothschild, 2015; Savci & Aysan, 2017; McIntyre et al., 2015; Preti et al., 2018; Gao et al., 2019). Therefore, this study will contribute to addressing the research gap in the context of Malaysia.

Moreover, this research study is unique in the local context since it will provide a new understanding of undergraduates' social connectedness, smartphone addiction, fear of rejection, and interpersonal communication skills after experiencing the COVID-19 pandemic since they are also facing the unknown changes like new regulations that restrict movement and social isolation (Majumdar et al., 2020). The most important was it brings a major disruption of the current system in education which is face-to-face learning mode. The COVID-19 outbreak has given undergraduates an opportunity to open the door to the introduction of online education (Pokhrel & Chhetri, 2021). Therefore, this study will aid in focusing on undergraduates' social connectedness, smartphone addiction, fear of rejection, and interpersonal communication skills to see whether COVID-19 has brought a significant impact on them or not. Hence, the level of social connectedness, smartphone addiction, fear

of rejection, and interpersonal communication skills may significantly change due to the pandemic. In short, by contrasting the concept with the situation before and during the COVID-19 outbreak, this research study aids in supporting the theory.

Practical Significance

Counsellor may benefit from this study since improving social connectedness is considered one of the significant interventions when dealing with a client's issue, every counsellor would like to strengthen the client's social support and connection with others since it may improve the client's condition (Martino et al, 2015). Therefore, this study has provided new insight and effectiveness for counsellor when dealing with clients' issues by focusing on smartphone addiction, fear of rejection, and interpersonal communication skills to improve social connectedness since these are all indicators of low social connectedness. Counsellor may provide interventions to undergraduates in improving social connectedness such as social skills training that improves interpersonal communication skills, also interventions that deal with smartphone addiction when the client has shown the symptoms of addiction, and cognitive restructuring to deal with negative thoughts on fear of rejection. Hence, counsellor may be beneficial from this study because it provides new perspectives for counsellor about some ways to improve social connectedness.

In addition, this research study is also significant for undergraduate students since they may know the factors that influence their level of social connectedness in this study. Therefore, it may help them to increase awareness about the importance of social connectedness and ways of preventing low social connectedness which avoids smartphone addiction, being aware of their own fear of rejection, and improving interpersonal communication skills. Then, when undergraduate students experience social isolation or any difficulties in life, they may realize the causes and reduce the uncertainty because they may know how to cope with the situation. As a result, undergraduate students who are able to be

aware of the causes of low social connectedness and deal with them may result in better psychological well-being and academic motivation in school (Gökbulut, 2019). Hence, this study is also significant for undergraduate students.

Furthermore, this study is also significant for the educators in the school. That is because it may also increase awareness for educators about the importance of social connectedness since it influences the academic motivation of students. Therefore, educators may pay attention to this area by organizing some programs such as enhancing interpersonal communication skills to improve social connectedness. In addition, when educators examine how interpersonal communication skills can promote social connectedness among undergraduates in Malaysia could also focus specifically on promoting social connectedness. Hence, this study is important for educators.

Research Objectives

The study's primary objective is to examine the relationships between social connectedness, smartphone addiction, fear of rejection, and interpersonal communication skills among undergraduate students in Malaysia. In order to achieve this, several particular objectives have developed. These objectives are as follows:

1. To examine the negative relationship between social connectedness and smartphone addiction.
2. To examine the negative relationship between social connectedness and fear of rejection.
3. To examine the positive relationship between social connectedness and interpersonal communication skills.
4. To examine whether smartphone addiction negatively predict social connectedness.

5. To examine whether fear of rejection negatively predict social connectedness.
6. To examine whether interpersonal communication skills positively predict social connectedness.

Research Question

1. Is there a negative relationship between social connectedness and smartphone addiction?
2. Is there a negative relationship between social connectedness and fear of rejection?
3. Is there a positive relationship between social connectedness and interpersonal communication skills?
4. Does smartphone addiction negatively predict social connectedness?
5. Does fear of rejection negatively predict social connectedness?
6. Do interpersonal communication skills positively predict social connectedness?

Research Hypotheses

H_1: There is a negative relationship between social connectedness and smartphone addiction.

H_2: There is a negative relationship between social connectedness and fear of rejection.

H_3: There is a positive relationship between social connectedness and interpersonal communication skills.

H_4: Smartphone addiction negatively predict social connectedness.

H_5: Fear of rejection negatively predict social connectedness.

H_6: Interpersonal communication skills positively predict social connectedness.

Conceptual Definitions

Social Connectedness

By synthesizing the definitions from Rothschild (2015) and Lee et al. (2001), social connectedness has defined as the ability to connect with people and feel more socially linked, also viewed as a more extensive aspect of the self that is less susceptible to occasional relationship shifts, while it also reflects how a person feels about their bigger social environment, which contains both their close relationships and the community as a whole.

Smartphone Addiction

A short definition from Al-Barashdi et al. (2015) and Moattari et al. (2017), smartphone addiction considered as people who are so consumed with their smartphones that they ignore other aspects of their lives, also characterized by the inability to stop using a smartphone despite its negative impacts on individuals, including negative financial issues, poor emotional health, physical health, and social impacts.

Fear of Rejection

Nafees & Jahan (2019) have defined fear of rejection as the unrealistic assumption that nobody is going to accept you for who you are, whatever you believe in, and what you have done, it may be built on by repeated rejection in the prior period. It is a form of intense stress that a person experiences in reaction to a variety of circumstances.

Interpersonal Communication Skills

By synthesizing the definitions from Devito (2018) and Gardner (2011) have described interpersonal communication as the exchange of information between two parties who have already formed a connection and interpersonal communication skills defined as a person's capacity to cooperative joining group communication by using both verbal and

nonverbal language, also the person may be observant and sensitive to personal feelings as well as others around them.

Operational Definitions

Social Connectedness

The social connectedness scale revised, or SCS-R comprises 20 items that are used to assess the level of social connectedness in individuals (Lee & Robbins, 1995). The social connectedness scale is using six-point Likert scale from 1 to 6, 1 indicates a strongly disagree and 6 indicates a strongly agree. There have ten negative items of this SCS-R added up with the ten items that were positively stated to get a scale score that would range from 20 to 120. A higher score on this social connectedness scale indicates a higher level of social connection in the person.

Smartphone Addiction

The smartphone addiction scale-short version or SAS-SV includes 10 items to measure the addictive behaviour on smartphones (Kwon et al., 2013). SAS-SV is using six-point Likert scale from 1 to 6, 1 indicates a strongly disagree and 6 indicates a strongly agree. The total score of the smartphone addiction scale with a greater score indicates a higher level of smartphone addiction.

Fear of Rejection

The fear of rejection scale with 15 items is used in this study to examine an individual's level of fear of rejection (Nafees & Jahan, 2019). The fear of rejection scale is using a 7-point Likert scale from 1 to 7, 1 = Never, 2 = Very Seldom, 3 = Seldom, 4 = Sometimes, 5 = Often, 6 = Very Often and 7 = Always. The range of the scale's upper and

lower limits scores is 15 to 105. The higher the score on the fear of rejection scale means the higher level of rejection sensitivity.

Interpersonal Communication Skills

The interpersonal communication competence scale-short form or ICCS-SF contains 10 items to evaluate the level of interpersonal communication competence (Spitzberg & Hurt, 1987). ICCS-SF is using 5-point Likert scale from 1 to 5, 1 = Almost Never, 2 = Seldom, 3 = Sometimes, 4 = Often, and 5 = Almost Always. There has only one reverse item in ICCS-SF which is item 5. The total score of the interpersonal communication competence scale with a higher score indicates a higher level of individual interpersonal communication competence.

Chapter 2

Literature Review

Social Connectedness

Social connectedness is a basic human desire and can be defined as how closely the relationship with people, groups, and communities is, therefore it may have a greater impact on individuals' health and happiness (O'Rourke et al., 2018). Social connectedness can be characterized by feelings of loving for others, being cared for by other people, and having a sense of being part of a group or society (O'Rourke et al., 2018). A definition proposed by Lee & Robins (1995), social connectedness is more closely associated with one's present social interactions since it is an essential part of the human experience. Through interaction with others, people tend to socially connect with others, express their feelings and experiences with others, and be welcomed and understood by others, this also ensures the person is not alone and isolated. However, social connectedness may shift with changes in the present relationship and significant social achievements or losses (Williams & Galliher, 2006).

A strong social connectedness seems to have a variety of impacts on psychological, cognitive, and physical health, whereas a low social connectedness is linked to some negative outcomes (Baumeister & Leary, 1995; Williams & Galliher, 2006; Savci & Aysan, 2019; Pandya & Lodha, 2021). People with high levels of social connectedness have been discovered to be more socially interactive and develop relationships or friendships more effectively, while the people who have poor social connectedness find themselves uncomfortable in social contexts, seem to be more vulnerable to experiencing interpersonal behaviours, and express greater dissatisfaction with their romantic relationships (Lee & Robins, 1995; Rothschild, 2015). Another conclusion from Lee et al. (2001) about the negative outcomes of low social connectedness is they frequently perceive themselves as

outsiders, hardly join in the group, and always think others are having negative feedback towards them, although people with low social connectedness are still willing to form relationships with others, nonetheless, they still experience a general feeling of distance from others which negatively impacts their capacity to engage in social interaction. Other studies showed low social connectedness also may lead to the issues like lower self-confidence, anxiety, and a sense of loneliness (Baumeister & Leary, 1995; Savci & Aysan, 2019; Baumeister & Robson, 2021; Jorgenson et al., 2018) while greater life satisfaction for people with high social connectedness (Blau et al., 2016; Jorgenson et al., 2018). Additionally, it was discovered that having a strong social connectedness protects oneself from psychological distress, bullying, aggressive behaviour, and addiction (Baumeister & Leary, 1995; Savci & Aysan, 2019).

Some studies also proposed that social connectedness is especially important for undergraduates since it may directly influence students' life satisfaction, academic achievement, and student's engagement (Kahu, 2013; Krumrei-Mancuso et al., 2013; Jorgenson et al., 2018). Additionally, a study among undergraduate students in Saudi Arabia also indicates that social connectedness for undergraduates is associated with increased social engagement, favorable perceptions towards other people, better social skills, and mental health conditions (Jdaitawi, 2015). Two categories of connectedness can be distinguished for undergraduates. These studies define social connectedness as the feeling that students have when they are satisfied with their interpersonal interactions and existing social groups (Jorgenson et al., 2018; Sidelinger & Booth-Butterfield, 2010). The second type of social connectedness for undergraduates is they build a sense of connection to their university by having a sense of approval and belonging in their own groups, courses, and faculty (Jorgenson et al., 2018; Sidelinger & Booth-Butterfield, 2010).

There have several studies claimed that men and women would have different needs for social connectedness (Lee & Robbins, 2000; Rothschild, 2015). Based on the study about social connectedness among undergraduates by Rothschild (2015), there is no significant difference in the level of social connectedness between men and women, but they do have different kinds of relationships that fulfilled their desire for connectedness. For female students to form social connectedness, they are more prefer the closeness that results from a trustworthy relationship with others, while male students may need to acknowledge their own self-worth and get achievement from their social context in order to develop social connectedness (Lee & Robbins, 2000; Rothschild, 2015). Meanwhile, the authors in these studies also have proposed out this significant difference are associated with how male, and female define themselves differently as female students view themselves as dependent and cooperative, but male students are more likely to be independent.

A study by Gökbulut (2019) stated that if undergraduates overuse their smartphones, it may also lead to a decrease in social connectedness. Undergraduates who have a high sense of belonging at school perform better academically, experience less stress, and are less likely to quit. Besides, a study by Savci and Aysan (2017) proposed that individuals who are addicted to smartphones may experience loneliness, social isolation, and a breakdown in interpersonal relationships. This inhibits the individual from being socially connected or decreases the level of social connectedness that already exists. Then, when an individual is having low social engagement and a sense of loneliness, it may lead to poor interpersonal communication skills and lastly result in low social connectedness (Rothschild, 2015). Besides, repeated social isolation can make people more sensitive to rejection, which could lead to lower social connectedness suffering (Gao et al., 2019). Therefore, fear of rejection is a significant predictor of social connectedness. Hence, all these variables are associated with social connectedness.

Smartphone Addiction

Smartphone addiction can be represented as constant reading for texts or notifications, a longer time for phone usage, psychological dependence, such as anxiety or discomfort when there is no phone around, and lastly, interrupts with some life roles and interpersonal relationships (Lin et al., 2016). All of these are considered the characteristics of smartphone addiction. According to several studies which stated that university students have the highest prevalence of excessive smartphone use because it helps undergraduates in improving interpersonal interaction and open up opportunities for them in forming relationships with others by using smartphone (Hong et al., 2012; Shambare et al., 2012; Al-Barashdi et al., 2015; Saadeh et al., 2021). Another study in China by Casey (2012) revealed that undergraduates are also mostly shown smartphone addiction symptoms which are strongly and adversely associated with the quantity of social communication. Also, the findings above indicated that the risk of addiction increased according to one's level on the loneliness and introvert scales. Therefore, this study found that loneliness and gender had the strongest effects on strengthening social connectedness, whereas face-to-face social interactions with peers had the greatest effect on social connectedness (Casey, 2012).

Besides, several studies have linked smartphone use to a decline in academic performance. According to Szpakow et al. (2011) stated that the majority of students were aware of the negative effects that using a smartphone had on their life which is significant academic performance reduction. Meanwhile, another study also indicates that excessive smartphone usage not only affects academic performance in school but also declines students' time management ability and leads to academic procrastination (Hong et al., 2012). Additionally, some research has examined how gender affects smartphone addiction., the result showed that female students are spending more time on smartphones to enhance their social connectedness because females are more focused on fulfilling their need for approval

and connection (Pawłowska & Potembska, 2011; Hakoama & Hakoyama, 2011; Chung, 2011; Chóliz, 2012), while the male was discovered to had a higher likelihood of behavioural addiction if compare with a female because they are more likely to spend time on playing games and social media rather than managing their interpersonal relationships (Villella et al., 2011). Similarly, a study in Malaysia about the purposes of Malaysia's undergraduates in using smartphones and there showed a similar finding to other studies in the foreign context which is female students used smartphones mostly for social communication, chatting with friends, and comfort (Balakrishnan & Raj, 2012).

Moreover, a higher level of smartphone addiction was found to be associated with a lower level of social connectedness in several studies (Pandya & Lodha, 2021; Savci & Aysan, 2017; McIntyre et al., 2015). Excessive smartphone users have been found to experience more loneliness as a result of reducing time spent in "reality" with their close friends and family (Shen & Williams, 2011). However, this study discovered that only individuals who had significant social support noticed an increase in social connectedness when they have excessive smartphone use (McIntyre et al., 2015). Excessive smartphone users who have low social support may not result in high social connectedness.

Furthermore, smartphone addiction was also found to be associated with fear of rejection. The studies from Blackhart et al. (2021) and Allred (2020) revealed that people with a high level of fear of rejection tends to spend much time on their smartphone and communicate with others through their smartphone since it may reduce social interaction with others and reduce the risks of being rejected by others. Therefore, smartphone addiction may be mediated through fear of rejection.

Another study in Malaysia about the relationship between smartphone addiction, interpersonal communication skills, and academic performance among undergraduates

revealed that interpersonal communication competency decrease when people get addicted to smartphone and also result in low social connectedness (Celikkalp et al., 2020). However, there has a study of nursing school students in Korea showed that there is no significant relationship between smartphone addiction and interpersonal communication skills (Lee et al., 2017).

Fear of Rejection

The definition of rejection is the act of denying others or the situation of being rejected by others (Nafees & Jahan, 2019). Everyone faces the ongoing risk of being rejected because there is always a chance that something will fail while doing anything challenging. Then, fear of rejection can be defined as always thinking negatively that everyone is going to reject you, while it may be because of negative past experiences such as constantly being rejected by people, so it makes the person more vulnerable in fear of rejection (Gao et al., 2019).

When people have a higher fear of rejection, they would be anxious and stressed when dealing with an unfamiliar situation. A study conducted by Nafees & Jahan (2019) stated that people who are worried or afraid of rejection may stay away from making specific decisions because they fear being rejected or embarrassed. Besides, another study found that people who are experiencing stress tend to disconnect or avoid dealing with circumstances that raise critical questions because they are afraid of being rejected later (Niu et al., 2022). A lack of involvement in interpersonal and group contacts has also been linked to fear of rejection (Shapiro et al., 2011). Therefore, fear of rejection may directly influence their social engagement and social connectedness since individuals who are vulnerable to rejection are often more prone to predict negatively, misinterpret, and react emotionally to social rejection (Caculidis-Tudor et al., 2021).

Furthermore, there are also several studies focused on why individuals will develop a fear of rejection in their life and the results showed young adults' rejection sensitivity may be considerably increased by negative social experiences, physical neglect from significant others, and interpersonal problems in school, while if the young adults have become the discrimination victims also have a tendency to anticipate rejection in the future (Feinstein et al., 2012; Rosenbach & Renneberg, 2014; Niu et al., 2022). All of these factors may lead the person to have more negative self-emotions and lower self-esteem towards self which is appeared to be connected to higher levels of fear of rejection, it also led to a decrease in social interaction (Preti et al., 2018). That is because the person with the fear of rejection already put a high assumption of being rejected, so in order to avoid rejection by others, the person tends to decrease social activity and resulting in low social connectedness. Besides, individuals that are sensitive to rejection may be more prone to both internal and external problems such as depression (Gao et al., 2019). As a result, repeated social isolation can make people more sensitive to rejection, which could lead to lower social connectedness suffering.

Additionally, a study from Nafees & Jahan (2019) also proposed that when someone is being refused by others, they may experience a variety of negative emotional states that could lead to low self-confidence, aggressiveness, and other violent acts. In contrast hand, approval by others helps in boosting a person's self-esteem. The statement above is also supported by another study from Bayer et al. (2021), the authors stated that the impact of acceptance by others is better than being rejected since the bad experiences tend to produce stronger pain and frustration, which may promote future anxious behaviours and reduce the social activity later. Therefore, the study also found that fear of rejection can predict self-esteem (Preti et al., 2020). When the person has a high level of fear of rejection, the person may have a low level of self-esteem, also this may promote the person reducing social interaction and social

connectedness later to avoid possible rejection (Preti et al., 2020). Findings from another study showed that young adults' fear of rejection is adversely associated with self-esteem and interpersonal communication skills and is strongly connected to social withdrawal and stress (Watson & Nesdale, 2012). Hence, fear of rejection may lead the person to feelings of loneliness, and low engagement in society and result in low social connectedness.

Also, Fontana et al. (2018) stated that there may be a correlation between fear of rejection and smartphone addiction, with fear of rejection being a factor in causing smartphone addiction. So far, there is no study showing that smartphone addiction will make the person more vulnerable to fear rejection. Besides, fear of rejection was also found to be significantly negatively linked with interpersonal communication skills since people with a fear of rejection may decrease social communication, especially with strangers (Christman, 2012).

Interpersonal Communication Skills

Interpersonal interaction is vital to day-to-day functioning since people will always communicate with others on this planet. Essentially, people will interact with one another in the workplace, university, church, even at home with family members, or in everyday contexts. The majority of adults communicate with others up to 80–90% of the time in a day (Jalaludin & Ihkasan, 2014). Interpersonal communication can be considered the process of exchanging experiences and views with others (Devito, 2018). Hence, interpersonal communication skills are significant to predict good interpersonal communication with others. Devito (2018) stated that humans have a wide range of innate communication skills that develop over time. These interpersonal communication skills are described as specific behaviours that are demonstrated during interpersonal interactions such as questioning, sharing, and receiving advice, using appropriate language, making eye contact, reflecting on feelings, and observing several non-verbal cues like gestures, postures, and facial

expressions. Here are some of the main examples of interpersonal communication skills. According to Gardner (2011), it was mentioned that those with high interpersonal communication skills and the ability to properly use both verbal and nonverbal cues may interact with others more successfully.

A study in Indonesia by Barseli et al. (2018) proposed the idea that interpersonal communication skills are significant for every student since it is an ability for them to communicate with every friend and teacher in school. If students have faced difficulties in the interpersonal communication process, it definitely will hinder a person's ability to express their inventiveness and improve their high academic performance, while affecting their social connectedness in school. It has also been found that effective interpersonal communication competence is crucial for success in every setting such as academics, work, and others. Regardless of the formal or informal circumstances, everyone may need to interact with people from different cultural backgrounds, therefore how people apply their interpersonal communication skills is important in forming the first impression and social connection in the future (Okoro et al., 2017). Moreover, if the person is having good communication skills, it may result in a good interpersonal relationship and significantly lead to a positive emotional condition (Chasombat, 2014). In contrast, a study found that young adults who have poor interpersonal communication skills tend to result in the feeling of lonely, and not happy with their current social connection and depression, therefore this also may lead to low social connectedness for them (Rothschild, 2015).

Similarly, another study by Mendo-Lázaro et al. (2018) stated that there is an association between interpersonal communication skills and social connectedness for students. The authors stated that interpersonal communication skills appear in the form of behavioural patterns that allow for the expression of thoughts and most importantly strengthen connections with other. The development of interpersonal communication skills

for people is learning to express their own's feelings in order to develop social bonds. Hence, if students are able to share their feelings effectively with others, they may function effectively inside a social circle, and lastly, it may result in greater social connectedness.

However, a study in Malaysia conducted by Chan et al. (2020) reviewed that smartphone users may also influence the undergraduates' interpersonal communication competence and social connectedness, when they have higher usage of smartphones, they tend to reduce the interaction in "reality", and it may decline the interpersonal communication ability and then have an effect on the development of their connections. Furthermore, another study in Malaysia by Rauch et al. (2014) showed that students in Malaysia always spend time using their phones but it does not result in enhancing their social connectedness for them while it only reduces their ability to interact.

Social Connectedness and Smartphone Addiction

The usage of the smartphone may always lead to the formation or development of social connectedness. The finding above is also supported by Quinn and Oldmeadow (2013), who discovered that young adults who used their smartphone for several purposes like managing social media tend to feel more sense of socially connected if compare with young adults who are less likely to use their smartphone. Besides, another study highlights how using a smartphone may deepen relationships and fosters a feeling of connectedness (Davis, 2012). The finding showed that when people are able to use their smartphone wisely and properly, it may bring a great benefit towards social connectedness, whereas when the smartphone is used overly, this may seriously affect social connectedness for the person. Hence, these studies can prove that there is a significant relationship between social connectedness and smartphone addiction.

Moreover, studies highlighted that if the level of smartphone addiction is higher, it may disrupt actual interpersonal contacts, which lowers social connectedness (Shen & Williams, 2010; Savci & Aysan, 2017). However, Chayko (2014) has reviewed social connectedness as one of the motivations and need for human to achieve, while it also encourages people to interact with each other; therefore, this study argues that social connectedness may be enhanced by smartphone usage. Hence, smartphone addiction may directly influence a person's social connectedness due to reduce actual interaction with other people and loneliness.

Based on the study by Shen and Williams (2010), they have given a comprehensive explanation of the negative correlation between social connectedness and smartphone addiction. When people excessively use the smartphone, it may limit a person's ability to engage and connect with others in their real social context, which makes them disconnect from it. When cut off from the real social situation, a person may begin to feel as if the connections with other people are meaningless (Shen & Williams, 2010). Thus, smartphone addiction negatively influences and predicts social connectedness.

Social Connectedness and Fear of Rejection

A study conducted by Bernstein and Claypool (2012) found that there is a significant relationship between fear of rejection and social connectedness. As indicated by the high fear of rejection, which should cause people to avoid interactions, people with low fear of rejection may be more confident in seeking social engagement and resulting in stable social connectedness. Moreover, other studies also reported that those with higher fear of rejection express greater unhappiness in their interpersonal interactions, which would be associated with increased distrust, conflict, and lower peer support in their relationship, therefore it may result in social withdrawal and feelings of lonely (Watson & Nesdale, 2012; Schaam et., 2020). Hence, it may result in low social connectedness because individuals with higher fear

of rejection may be unwilling to interact with unknown people because they would like to protect themselves from future rejection, which unintentionally restricts the opportunities for stronger social connectedness (Watson & Nesdale, 2012; Schaam et., 2020). Thus, these studies concluded that fear of rejection is highly associated with social connectedness.

A study conducted by Niu et al. (2022) aims to examine whether undergraduates' experiences of social withdrawal and depression are influenced by their fear of rejection. 762 undergraduates participated in this study and the finding found that fear of rejection plays an important role in influencing the person's social withdrawal and this also indicates lower social connectedness. Bayer et al. (2021) also present an experimental study on the topic of fear of rejection with 108 participants, the findings showed that those with higher fear of rejection may experience less satisfaction with their social connections since they already make an assumption of future rejection from others. Hence, this also indicates that there is a relationship between social connectedness and fear of rejection.

Social Connectedness and Interpersonal Communication Skills

A study from Bloch (2018) has examined the correlation between social connectedness and interpersonal communication skills followed by another variable and there is a positive relationship between interpersonal communication skills and social connectedness. That is because people with high interpersonal communication skills may contribute to the formation of the relationship more effectively, then the person also may feel connected with people more easily if compare with a person who is having poor interpersonal communication skills (Mauss et al., 2011; Bloch, 2018).

Moreover, if the person is having a deficit of interpersonal communication skills, they are more likely to experience lower social connectedness because people with low social competence may pose the risks of being rejected and social withdrawal later (Rothschild,

2015). In addition, another study from Wainer et al. (2013) focused on undergraduates who display the characteristic of a broader autism phenotype and the findings discovered that they showed less interest in connections, higher loneliness, poorer relationships with friends, and more unpleasant interpersonal relationships. Therefore, it indicates that despite the fact that undergraduate students may not fit into any diagnostic group and still be able to perform effectively in their academics, however, their lack of interpersonal communication skills may still have a negative effect on their capacity in developing social connections (Wainer et al., 2013). Based on the review above, it can be concluded that interpersonal communication skills can be one of the significant predictors of social connectedness. Furthermore, Kern et al. (2014) studied university nursing students' social connectedness and the result showed that interpersonal competencies were closely analyzed as a requirement for social connectedness.

Prediction of Social Connectedness, Smartphone Addiction, Fear of rejection and Interpersonal Communication Skills

Savci and Aysan's (2017) study reported that smartphone addiction can significantly predict the person's social connectedness ($p < .001$). In this study, the result showed that smartphone addiction is negatively influence social connectedness. Similarly, other studies also discovered that smartphone addiction will have detrimental effect and predict the social relationship for the person (Akhouri & Kehksha, 2016; Celikkalp et al., 2020). Researchers showed that smartphone overuse can predict the symptoms of social isolation among students between the ages 18 to 20 in a study, which also predicted the level of social connectedness (George et al., 2018). However, according to another study's findings, social connectedness was adversely predicted mobile phone addiction. If the undergraduates have higher sense of social connectedness in school setting, their addiction to smartphone may decline (Gökbulut, 2019). In contrast, there is a study about how the young adults' use of social media by

smartphone brings the negative effect on social communication and connection. This study has examined the different result, smartphone addiction had no significant prediction of social connectedness (Gjylbegaj & Jararaa, 2018).

The study conducted that smartphone addiction and peer relationships can be the significant predictor of social connectedness (Savci & Aysan, 2019). Then, those who fear rejection more frequently use smartphones. Because of this, it is believed that fear of rejection predicts both peer relationships and smartphone addiction. Then, fear of rejection is positively predicting the social withdrawal among undergraduates ($p < .001$) which may directly predict the social connectedness for undergraduates too (Niu et al., 2022). Moreover, study by Meehan et al. (2019) also stated the same result which is sensitive to rejection may negatively predicted social connectedness. Also, based on the study from Gökbulut (2019), the finding showed that undergraduates' social connectedness in school may negatively predict the fear of rejection. Hence, this study' finding is different from other studies.

According to Cruz-Urrutia's (2021) study, it proposed that interpersonal communication skills is consider as important element in develop the social connectedness among undergraduate students. Another study by Kern et al. (2014) found that a university nursing students' ability to engage into connectedness can be predicted based on how skilled they are on their interpersonal communication skills. In addition, another research also supported that interpersonal communication competence is positively predicted the social connectedness ($p < .001$) (Rothschild, 2015). However, there were still some results indicated discrepancy between some of these three variables, thus it is vital to look into how smartphone addiction, fear of rejection, interpersonal communication skills and social connectedness relate to one another among Malaysian undergraduates.

Theoretical Framework

The Need to Belong Theory

The need to belong theory is proposed by Baumeister and Leary (1995) and it is one of the most basic humans drives that humans need to achieve which is the need to connect with humans and belong to groups. This theory has been directly explained to social connectedness, in order to fulfill this need, two requirements must be met: Initially, there must be regular, enjoyable contact with a particular group of people, and secondly, such connections had to be taken place within the framework of a lasting and strong emotional concern for people's well-being. Relationships lacking these elements would not fulfill a person's need for connectedness. It is crucial to remember that social interactions with others do not necessarily need to be overwhelmingly good in order to fulfill the need for connectedness actions (Baumeister & Leary, 1995). Communication with a continuously different series of people is found to be less satisfying and fulfilling than continuous contact with the same people as long as interactions are positive, stable, and include genuine emotional care, so the need to belong is met. Based on the need to belong theory, Baumeister and Leary (1995) directly proposed that a lack of a sense of connectedness is not good because when the person is not feeling like they belong, they may result in a significant deficit and some negative consequences in their psychological health. Not only is belonging beneficial, but the need to belong is a strongly held-human drive that influences human thoughts, emotions, and actions (Baumeister & Leary, 1995; Allen et al., 2021). Hence, every human must have a connection with others in their life. Also, study on belonging is now crucial in order to solve some of the current societal core difficult problems such as loneliness.

Besides, smartphone addiction also can be explained by the need to belong theory since the need to belong theory focused on people always seeking connection with others in

their social circle, so the impact of smartphones on people's daily lives has been steadily growing because people always use the application in smartphone to stay connected with people (Diefenbach & Borrmann, 2019). The need to belong is the key motivator for using a smartphone because it offers the chance for people to interact with others and possibly satisfy connectedness desires (Diefenbach & Borrmann, 2019). Therefore, the usage of smartphones rises due to the desire in developing social connectedness. However, the study showed that the constant presence of a smartphone in social contexts may decrease interpersonal connectedness, and face-to-face communication with others (Przybylski& Weinstein, 2013). This has shown several negative consequences such as poorer interpersonal relationships, lower social competence, and higher feelings of lonely. Thus, the need to belong can be positively associated with and predicted the overuse of smartphones (Diefenbach & Borrmann, 2019; Wang et al., 2017). Besides, a study conducted by Iannone et al. (2018) examined the association between social media use, belonging demands, and interpersonal rejection, while explained by the need to belong theory. As a result, the findings showed that those with a strong need for belonging used the applications in smartphones to satisfy that need, especially individuals who were being rejected frequently.

In addition, the need to belong theory can be used to support the need for interpersonal communication skills. Since the need to belong theory promotes that everyone needs positive relationships and connection with others, therefore contact with unknown people would be appealing as the first action before people get into further lasting connections later, therefore interpersonal communication skills are significant for everyone to practice well (Baumeister & Leary, 1995). That is because the level of interpersonal communication competence can directly influence people’s first impressions and interpersonal relationships later. Thus, interpersonal communication skills are positively

associated with a sense of belonging and connectedness which is considered a basic human need (Rothschild, 2015).

Although the need to belong theory has been tested and confirmed, research also indicates that individuals who have their needs for belonging and connectedness unfulfilled may display aggressive, avoidant, and untrusting behaviours which may also result in fear of rejection (Baumeister & Leary, 1995; Smart-Richman & Leary, 2009; Perna, 2020). Even though aggressive and untrusting acts seem to go against the nature of developing social connectedness, however, these behaviours do have a critical survival purpose. People with higher fear of rejection will be more likely to use avoidant or untrusting behaviour as a form of self-protection to avoid rejection (Smart-Richman & Leary, 2019). However, avoidance behaviours will increase the probability of withdrawal when they are being rejected by others while it may also motivate them to look for new social sources to gain social acceptance (Smart-Richman & Leary, 2019). Hence, it showed that establishing connectedness, acting aggressively, fear rejection, and avoiding behaviours are all outcomes of the basic need for belonging.

Taken together, the need to belong theory offer an effective framework for examining the relationship between social connectedness, smartphone addiction, fear of rejection, and interpersonal communication skills.

Conceptual Framework

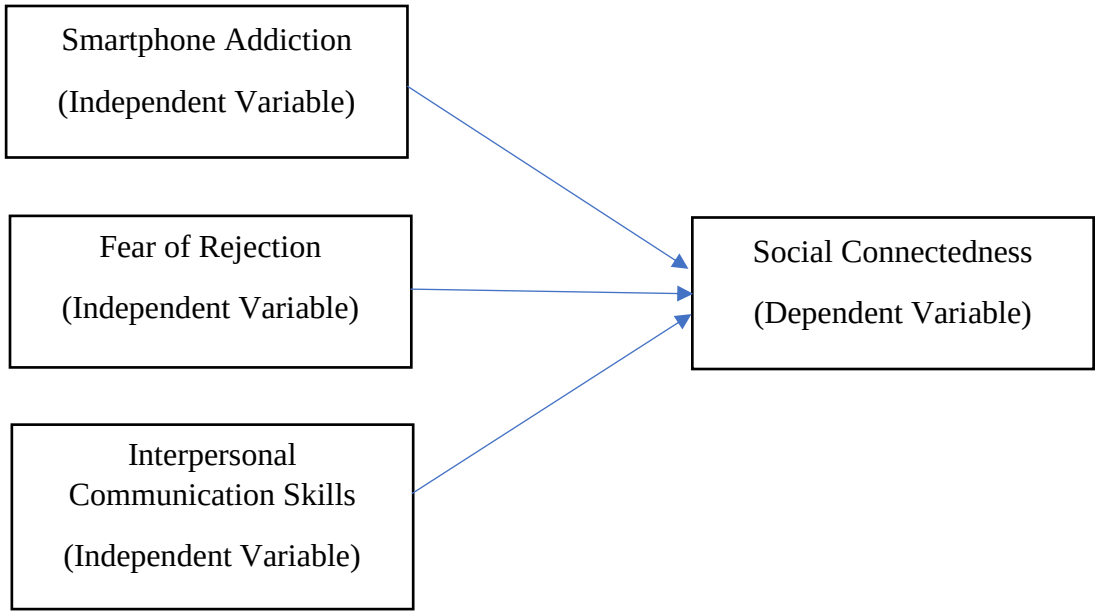

Figure 1. *The conceptual framework of "Smartphone addiction, fear of rejection, and interpersonal communication skills as predictors of social connectedness among undergraduates in Malaysia"*

This study aims to examine how undergraduates' smartphone addiction, fear of rejection, and interpersonal communication skills correlate with social connectedness. In this study, social connectedness is considered as the dependent variable (DV) which is an outcome, while smartphone addiction, fear of rejection, and interpersonal communication skills are considered as independent variables (IV) which are the causes. Besides, a quantitative research method will be used and identify the correlation model, followed by a regression model between smartphone addiction, fear of rejection, interpersonal communication skills, and social connectedness which are categories under correlation and regression analysis.

Chapter 3

Methodology

Research Design

The quantitative research design was used in the present study which mean the step-by-step process for gathering, evaluating, interpreting, and presenting findings from research (Williams, 2007). The quantitative research focuses on evaluating and measuring variables to present findings. While it always includes the use of both numeric data and statistical methods to examine that data in order to provide results and draw the conclusion (Apuke, 2017). The quantitative research method used in this study because the current study's goal was to gather data that consisted of number values and generate statistical analyses to evaluate the current study' hypotheses and come out with the findings (Apuke, 2017). Also, it helps in investigating the current situation that has an impact on individuals by generates reliable information that can be explained in detail using statistical and numerical data (Watson, 2015). Also, the researchers may use the quantitative research design to increase a deeper understanding and comprehension of the social environment (Watson, 2015). Hence, the primary data was used in this study which mean the data that has been collected directly from the targeted respondents by the researcher (Tran & Khuc, 2021). Social connectedness, smartphone addiction, fear of rejection, and interpersonal communication skills among Malaysian undergraduates were the four main types of data that gathered for this study and all these data were first collected through researchers from direct sources which are questionnaires.

Besides, the cross-sectional study known as the researchers gathered information from a wide range of respondents all at one time which included the respondents’ exposures and outcomes (Dermatol, 2016). So, the cross-sectional study is also suitable to use since this research is aim in determine the correlation between each variable. Given that the purpose of

the present study was to investigate the relationship between social connectedness, smartphone addiction, fear of rejection, and interpersonal communications skills among undergraduates in Malaysia. Additionally, this research design enabled it possible to conduct a study effectively and economically (Setia, 2016).

Additionally, the survey approach was implemented in this study which mean that obtaining data from a group of respondents by posing a variety of questionnaires (Gürbüz, 2018). The reasons of using this survey method are because it allowed the researchers to collect and analyse data from a relatively large study population at one time (Ponto, 2015). Also, due to its cheaper costs and capacity to reach large populations, many researchers employ the survey approach to gather data in a short amount of time (Gürbüz, 2018). The questionnaires used in the present study to obtain data through the targeted respondents. A self-report questionnaire consisting of four reliable psychometric instruments and a demographic question was presented to respondents. Moreover, respondents can complete a self-report questionnaire without the help of an interviewer or another third party.

Sampling Procedures

Sampling Method

Non-probability sampling has been used as the sampling method in the present study, which refers to a sample that will not be randomly selected but incorporates the opinion of researchers (Showkat & Parveen, 2017). Non-probability sampling was selected because it was able for this study to be carried out effectively and quickly since it was a method that was accessible and cost-effective for recruiting study participants (Showkat & Parveen, 2017). Purposive sampling, a non-probability sampling technique, was applied in this study. The researchers gathered the data from the targeted respondents that met the study criteria. If a respondent has fulfilled the inclusion requirements (refer to Data Collection Procedures), they were qualified to participate in the study. The researchers collected the data until it

achieves the desired number of data or the allocated time. Additionally, the advantages of purposive sampling are cost and time savings, as well as focusing on a relevant target group that matches the inclusion requirements, therefore it will provide the best answer for the research objectives (Etikan et al., 2016). Hence, participants in this study should be recruited according to the inclusion criteria such as Malaysian undergraduate students who are 18- to 25 years old, currently enrolled in Malaysian universities and hold smartphone with Internet subscription for at least one year.

Participants

The targeted participants in this study should be Malaysian undergraduate students who are 18- to 25 years old and currently enrolled in Malaysian universities (Ursu et al., 2021; Tetik & Albulut, 2022). The reasons for choosing this targeted population are that they are more prone to have lower social connectedness due to the higher time spent on their screen (Dwajani et al., 2020; Gökbulut, 2019). According to Dwajani et al. (2020) proposed that between the ages of 18 and 25, the majority of undergraduate students, specifically 76.5%, have increased the amount of time they spend looking at screens to a range of 5 to 10 hours per day, therefore it also leads to higher risks of social withdrawal, depression, and anxiety, while also contributing to stressful interpersonal interactions. When undergraduates have spent less time to contact with people outside and just spend their time indoors with screens, it may directly affect their mental health, academic performance, academic motivation, and social connectedness (Dwajani et al., 2020; Gökbulut, 2019). Thus, it was decided to conduct the current study to examine social connectedness among Malaysian undergraduate students between the ages of 18 and 25. Besides, the targeted participants should be holding a smartphone with an Internet subscription for at least one year. That is because, without the internet, smartphone addiction is unlikely to develop. Basically, smartphone users are addicted to social media and games which are needed an internet

connection (Savci & Aysan, 2017). Therefore, this inclusion requirement is set to ensure the targeted participants may be more aligned with smartphone addiction that match the interest of this research while reducing the risk of non-significant outcomes (Martínez-Mesa et al., 2016).

Location of Study

A self-reporting online questionnaire was created by using Google Forms. Then, Google Forms was shared on a variety of social media websites, such as Email, Instagram, Messenger, Microsoft Teams, WhatsApp, and WeChat to get the respondents as much as possible. The researchers collected the data from undergraduates in Malaysia who come from 13 states and three federal territories.

Ethical Clearance Approval

The university ethical clearance protocol has applied in the current study by obtaining approval from the research supervisor (Mr. Ho Khee Hoong), Head, Department of Psychology and Counselling (Dr Pung Pit Wan), and Dean of Faculty of Arts and Social Science (Dr Lee Lai Meng). Furthermore, this research proposal has submitted to UTAR Scientific and Ethical Review Committee to be sure that no ethical issues were present before beginning data collecting. After the present research proposal was finished, the application for ethical clearance was made in order to get permission to start the data-gathering process. The collection of data in this study has been started after receiving the approval of ethical clearance. (U/SERC/18/2023)

Sample Size, Power, and Precision

Sample Size

The final amount for the sample in the current research study was (n = 240). Followed by Maxwell (2000), the current study has included three number of predictors, so the sample size in the current study will be needed a minimum 218 number of respondents to answer the

questionnaire. However, the 218-sample size of this study will be added up to 10% since there may have risks of receiving incomplete data and unengaged data (Salkind, 2012). Hence, it may also ensure the reliability of data by adding 10% of the sample size since every outlier and insufficient data has been removed, while there still have enough sample size in gathering the data after removal. Thus, after being increased by 10%, the current research had a sample size of (n = 240).

Power Analysis

At first, the researchers used the G*Power version 3.1.9.7 to determine the size of the sample through Pearson's product-moment correlation (PPMC) by using the effect sizes obtained from the pilot study. Hypothesis 1, 2, and 3 will be calculated by G*Power 3.1.9.7 version and the suggested sample size is 63, so it will be not sufficient based on the correlation research context (Schönbrodt & Perugini, 2013). The test family chosen is "Exact", while the statistical test is chosen the "Correlation Bivariate normal model". Besides, the effect size which is obtained from the pilot study was 1.222. Then, the power analysis is 0.80 which indicates that 80% probability the result will show significance, while the margin of error is .05.

For the calculation of Hypothesis 4, 5, and 6 which are the prediction, G*Power 3.1.9.7 version uses multiple linear regression (MLR) to calculate it. "T-tests" will be used in the test family, while the statistical test is "Linear multiple regression: Fixed model, single regression coefficient" to run out the MLR. After calculating by using the 1.222 effect sizes obtained from the pilot study, the suggested sample size is 14 which is considered an extremely small sample size for this correlation research context (Kang, 2021). A sample size that is too small will likely fail to determine the significant effect of the researcher's interest (Kang, 2021). Then, the power analysis is 0.80 which indicates that 80% probability the result will show significance, while the margin of error is .05.

Therefore, the calculation of the sample size for this study was not done using G*Power 3.1.9.7 version since it provides a smaller number of sample sizes, and it may not be appropriate in this research context. The sample correlation coefficients only begin to consistently match the actual population correlation coefficient once the researchers reach a minimum sample size of about 100 (Schönbrodt & Perugini, 2013). So, the small sample sizes are often highly inaccurate in the results. Thus, the correlational study may need a larger sample size to determine the results accurately (Schönbrodt & Perugini, 2013).

Lastly, the researchers have used the suggested sample sizes by Maxwell (2000), 218 respondents were needed when there are three predictors in this research. Meanwhile, the sample size will be added up to 10% since there may have risks of receiving incomplete data and unengaged data. Hence, the total of 240 sample sizes will ensure the reliability and precision of the outcomes.

Data Collection Procedures

Inclusion and Exclusion Criteria

This study had three inclusion requirements that participants were required to meet. If they fulfilled the following inclusion criterion, respondents would qualify to participate in the current study: (i) Respondents should be Malaysian, (ii) Young adults between the ages of 18 – 25, and (iii) Respondents should be taking undergraduate studies currently in Malaysia, (iv) Respondents who possess smartphone with Internet subscription, which the respondents have been using for at least one year. Besides, there have some exclusion criteria in this study which are respondents who took undergraduate studies in other countries, not Malaysia, or respondents who were either currently participating in student exchange programs or those who did not provide complete responses to the online survey were not considered as participants in the study.

Procedures for Obtaining Consent

The participants' consent form was taken by using a Google Forms online questionnaire. The informed consent will be collected in section A of the questionnaire which included the Research Participation Consent Form and the Privacy Notice for Personal Information. Participants were required to read all the details and agree on the informed consent form. The consent forms page in Google Forms included information about the survey, are objective of this research study, private and confidentiality, voluntary participation, and the researchers' contact details, Therefore, it also allows participants to get in touch with them if they encountered any issues while doing the survey. Also, the participants were informed that their survey results and personal information will keep in anonymous and undisclosed, while the result is solely utilized for academic intentions. In addition, informed consent also assured that all participation is entirely willing and without any form of coercion. But participants are free to withdraw from the study without facing any consequences whenever participants feel uncomfortable throughout the process.

Data Collection Procedures

The online questionnaire form was conducted by Google Forms, then shared on several social media websites which included Instagram, Messenger, Microsoft Teams, WhatsApp, and WeChat. After the participants agree on the first page of informed consent and know the aims of the study, they may continue to answer the questionnaire based on four variables which are social connectedness, smartphone addiction, fear of rejection, and interpersonal communication skills. Data collection was carried out over a period of three weeks, specifically from February 20, 2023, to March 12, 2023. After the data collection has been completed, the whole data from all the participants were moved into excel and arranged the data. Then, the arranged data was transformed into Jeffreys's Amazing Statistics Program (JASP) version 14.0 to analyze and compute the data. The incomplete data and outliers need

to be removed after calculation, then the researchers may continue to conduct data analysis by using JSAP to evaluate whether the hypothesis should be rejected or not.

Instruments

There will be various instruments used in this study which included of Social Connectedness Scale (Lee & Robbins, 1995), the Smartphone Addiction Scale-Short Version (Kwon et al., 2013), Fear of Rejection (Nafees & Jahan, 2019), and Interpersonal Communication Competence Scale-Short Form (Spitzberg & Hurt, 1987).

20-Item Social Connectedness Scale-Revised (SCS-R)

The Social Connectedness Scale-Revised (SCS-R) was created by Lee and Robins (1995) to measure how connected people feel to others in their immediate social circle. The SCS-R is made up of all 20 items which involved ten reverse items (items 3, 6, 7, 9, 11, 13, 15, 17, 18, and 20). This SCS-R is employs six-point Likert scale ranging from 1 to 6, where 1 = Strongly Disagree, 2 = Disagree, 3 = Slightly Disagree, 4 = Slightly Agree, 5 = Agree, and 6 = Strongly Agree. After reversing the scores of items with negative wording, they are combined with the items that have positive wording, therefore giving a total scale score that falls within the range of 20 to 120. The total score indicates that higher SCS-R scores are reflective of a stronger sense of social connectedness. The scale also showed a very good internal consistency of .94 (Lee et al., 2001). Also, this Social Connectedness Scale-Revised has shown good concurrent validity by testing the correlations with loneliness (r = -.80).

10-Item Smartphone Addiction Scale-Short Version (SAS-SV)

The Smartphone Addiction Scale-Short Form (SAS-SV) was established by Kwon et al. (2013) to detect smartphone addiction behaviour. SAS-SV included six components in measuring smartphone addiction which is a disturbance in normal functioning, pleasant anticipation, disengagement, relationship focused on the internet, addiction, and tolerance. Besides, SAS-SV employs a six-point Likert scale ranging from 1 to 6, where 1 = Strongly

Disagree, 2 = Disagree, 3 = Slightly Disagree, 4 = Slightly Agree, 5 = Agree, and 6 = Strongly Agree. There is no reverse item in this scale and the total scale score can range from 10 to 60. The total score can be concluded that the higher the score, the higher the smartphone addiction behaviour of the respondents. In order to distinguish between males who are not addicted to smartphones and those who are, the cut-off number for males is 31 points, while for females it is 33 points (Kwon et al., 2013). This SAS-SV also showed an overall very high internal consistency of .911 (Kwon et al., 2013). Besides, this scale showed great and satisfactory concurrent validity (Kwon et al., 2013).

15-Item Fear of Rejection Scale

The Fear of Rejection Scale was published by Nafees and Jahan (2019) to purposely measure the level of fear of rejection for an individual. This Fear of Rejection Scale is newly developed in recent years to address this significant social issue. The 15-item scale is mostly asked about a wide range of daily situations, particularly those involving interpersonal and group interaction to measure the level of fear of rejection. Specifically, the fear of rejection scale has divided into three components which are withdrawal (Items 1, 2, 3, 4, 5, and 6), sensitivity to rejection (Items 7, 8, 9, 10, and 11), and make people pleasant (Items 12, 13, 14, and 15). The Fear of Rejection Scale is using a 7-point Likert scale from 1 to 7, 1 = Never, 2 = Very Seldom, 3 = Seldom, 4 = Sometimes, 5 = Often, 6 = Very Often and 7 = Always. There are two reverse items in this scale which is item 5 (e.g., “I am comfortable with people from different backgrounds”) and item 12 (e.g., “I find myself trying to impress others”), then the score was reversed. The total scale score can range from 15 to 105, while it can be concluded that a greater score represents a stronger feeling of fear of rejection. Furthermore, the total Cronbach's Alpha for this scale is .79 (Nafees & Jahan, 2019). Also, the internal consistency showed that there is excellent reliability. Construct validity has also been tested which results in highly excellent construct validity (Nafees & Jahan, 2019).

10-Item Interpersonal Communication Competence Scale-Short Form (ICCS-SF)

The Interpersonal Communication Competence Scale-Short Form (ICCS-SF) was created by Spitzberg and Hurt (1987) to evaluate an individual's interpersonal communication skills in social context. In this 10-items, all items represent one component of communication behaviour and the whole scale has focused on 10 components (e.g., "environmental control, disclose about oneself, understanding others, social comfort, confidence, altercentrism, interaction management, openness, responsiveness, and immediacy") (Spitzberg & Hurt, 1987). ICCS-SF is using 5-point Likert scale from 1 to 5, 1 = Almost Never, 2 = Seldom, 3 = Sometimes, 4 = Often, and 5 = Almost Always. There has only one reverse item in ICCS-SF which is item 5 in components of altercentrism (e.g., "My conversations are pretty one-sided"). The total scale score can range from 10 to 50 which can be concluded that the greater the score represents the greater the individual's interpersonal communication skills. Moreover, Cronbach's Alpha for ICCS-SF was found to be .71 (Spitzberg & Hurt, 1987). Then, this ICCS-SF also showed satisfactory concurrent validity (Spitzberg & Hurt, 1987).

Pilot Study

Before conducting the actual research study, the researchers run out a pilot study. Therefore, small-scale preparatory research known as a "pilot study" was conducted to assess the reliability and practicality of this research study. In order to evaluate the reliability, 30 samples in total were gathered from different platforms such as Instagram, Messenger, Microsoft Teams, WhatsApp, and WeChat. After getting the 30 respondents' data, the researchers started to arrange and analysed the data to see whether all the instruments are reliable or not. Based on (Keith, 2017), the cut-off of Cronbach's alpha reliability analysis for the present study is .70 and above which is fall into the acceptable range to ensure that the instrument is reliable and consistent. Based on the result, most of the instruments have shown

above 0.7 which is good reliability except the Interpersonal Communication Competence Scale-Short Form (ICCS-SF). This ICCS-SF has shown 0.690 which is below 0.7, the acceptable range of reliability. Therefore, the deletion item has been done to increase the overall reliability by removing the low-reliable item which is item 6. Thus, ICCS-SF also showed good reliability which is above 0.7 after the deletion of the item.

Actual Study

Regarding the study conducted, the total of 240 number of respondents has been collected, however only 235 number of respondents has been chosen. In this case, the minimum target sample size (*n*= 218) still has achieved without the 10% increment. The data received are being filtered in accordance with this study's specific demographic criteria. Besides, the reliability test for every instruments also have been run out and all instruments have shown the great reliability (Refer to table 3.1).

Table 3.1

Reliability of Instruments in Pilot Study (n= 30) and Actual Study (n=235)

Variable	Number of Items	Cronbach's alpha Pilot Study	Cronbach's alpha Actual Study
SCS-R	20	.92	.95
SAS-SV	10	.77	.90
FORS	15	.78	.89
ICCS-SF	10	.73	.87

Note. SCS-R= Social Connectedness Scale-Revised, SAS-SV= Smartphone Addiction Scale-Short Form, FORS= Fear of Rejection Scale, ICCS-SF= Interpersonal Communication Competence Scale-Short Form; *In ICCS-SF, item 6 has been deleted to increase the alpha from .69 to .87.

Chapter 4

Results

Descriptive Statistics

Demographic Characteristics

The following table, labelled as Table 4.1, displays the demographic details of the respondents involved in this research study. The study involved a total number of 235 respondents whose ages were between 18 until 25 years old (M = 21.8, SD = 1.43). 34.9% of the respondents in this study are male (n= 82), whereas 65.1% of the respondents are female (n= 153). Besides, 13.2% of the respondents are Malay (n = 31), 71.5% of the respondents are Chinese (n = 168), and 15.3% of the respondents are Indian (n = 36). Also, every respondent has taken a full-time degree program in Malaysia. 46.4% of the respondents in this study have come from Universiti Tunku Abdul Rahman (n = 109), then the remaining 53.6% of the respondents come from other universities in Malaysia. The study consisted of respondents from various academic years and semesters, with 3.8% (n= 9) from Year 1 Semester 1, 6.8% (n= 16) from Year 1 Semester 2, 6% (n= 14) from Year 1 Semester 3, 9.4% (n= 22) from Year 2 Semester 1, 12.3% (n= 29) from Year 2 Semester 2, 6.8% (n= 16) from Year 2 Semester 3, 6% (n= 14) from Year 3 Semester 1, 12.8% (n= 30) from Year 3 Semester 2, 27.7% (n= 65) from Year 3 Semester 3, 3.4% (n= 8) from Year 4 Semester 1, 2.6% (n= 6) from Year 4 Semester 2, and 2.6% (n= 6) from Year 4 Semester 3.

Table 4.1

Demographic Information of Participants (n = 235)

	n	*%*	*M*	*SD*
Age			21.8	1.43
Gender				
Male	82	34.9		
Female	153	65.1		
Race				
Malay	31	13.2		
Chinese	168	71.5		
Indian	36	15.3		
Year of Study				
Year 1 Semester 1	9	3.8		
Year 1 Semester 2	16	6.8		
Year 1 Semester 3	14	6.0		
Year 2 Semester 1	22	9.4		
Year 2 Semester 2	29	12.3		
Year 2 Semester 3	16	6.8		
Year 3 Semester 1	14	6.0		
Year 3 Semester 2	30	12.8		
Year 3 Semester 3	65	27.7		
Year 4 Semester 1	8	3.4		
Year 4 Semester 2	6	2.6		
Year 4 Semester 3	6	2.6		

Note, n = number of cases; % = percentage; M = mean; SD = standard deviation

Descriptive Statistics of Topic-Specific Variables

Table 4.2 below reported the mean and standard deviation on social connectedness, smartphone addiction, fear of rejection, and interpersonal communication skills. The mean score of social connectedness was 60.8 (*SD* = 18.08). Besides that, the mean score of smartphone addiction was 38.3 (*SD* = 9.94). Furthermore, fear of rejection had to get a mean score of 64.2 (*SD* = 13.78). Lastly, the interpersonal communication skills' mean score was 27.3 (*SD* = 6.38). Overall, the results indicate that respondents are having moderately low social connectedness, moderate level of smartphone addiction, moderately high level on fear of rejection, and a moderately low level on interpersonal communication skills.

Table 4.2

Frequency Distribution of Topic-Specific Characteristics (i.e., Social Connectedness, Smartphone Addiction, Fear of Rejection, and Interpersonal Communication Skills) (n =235)

Variables	*M*	*SD*
Social Connectedness	60.8	18.08
Smartphone Addiction	38.3	9.94
Fear of Rejection	64.2	13.78
Interpersonal Communication Skills	27.3	6.38

Note. M = mean; SD = standard deviation

Data Diagnostic and Missing Data

Frequency and Percentages Missing Data

After the data arranging and filtering, no missing data was found in the present study. Besides, there were two unengaged responses included in the study which are case 41 and 47. Therefore, case 41 and 47 have been deleted since it is still sufficient to get the least number of respondents when deleted the cases, which is 218.

Methods for Addressing Missing Data

The missing data can be checked and detected by Microsoft Excel by executing the formula “=COUNTBLANK (A2:BT2)”, A2 to BT2 means the data for all instruments in this study. If the outcome of the data computation for missing data was 0, which means that there are no missing data. Also, Google Forms also help in avoiding missing data since all respondents must complete the entire questionnaire before moving on to the next section, or else Google Forms will automatically notify them that they still have blanks with such questions and request them to fill it out before continuing. Hence, there was an absence of missing data in the current study.

Criteria for Post Data-Collection Exclusion of Participants

Based on the exclusion criteria, respondents above 25 years old were excluded from this study. Therefore, cases 231 and 234 were excluded since they are above 25 years old which are two females.

The unengaged response throughout the study will be excluded based on the following exclusion criteria. To find unengaged responses, the standard deviation for every respondent's Likert scale response was evaluated by using the formula "=STDEV.S(K2: BP2)," where K2 to BP2 are the answers to the questions. The response was labelled as a

problematic set of data if the value was less than 0.5 (Pamu, 2017). Hence, the responses are removed because they were marked as unresponsive.

Moreover, the outlier detected by JASP 0.14.1.0 also needs to be removed since the data's normality will also be broken by the outliers. In JASP 0.14.1.0, the outlier in the data set can be analysed by using a boxplot. One outlier has been found by using JASP and removed which is case 18 (refer to Chapter 4, Analyses of Data Distributions). Furthermore, the normality of the data set also will be analysed by using kurtosis, skewness, and the Shapiro-Wilk test.

Criteria for Imputation of Missing Data

The cases must be deleted if the completed data have below 80% since it may affect the reliability and consistency when there is too much missing data. However, if the collected data contained less than 20% missing data, it may be replaced by median values if the data is under the ordinal level, while nominal data is replaced by mode. Therefore, here are the ways to imputation missing data in this study. As there were no absent data in the current study, so the researchers may not perform any imputation on missing values.

Analyses of Data Distributions

Normality of Variables. For all the variables in this study which are social connectedness, smartphone addiction, fear of rejection, and interpersonal communication skills, the normality tests used were skewness, kurtosis, Shapiro-Wilk, and boxplot. In the current study, the outliers detected through skewness, kurtosis, and boxplot were eliminated. (Refer to Chapter 4, Skewness, Kurtosis, and Boxplot). Testing for normality is significant because it affects the use of both parametric and nonparametric tests as well as measurements of distribution and central tendency (Mishra et al., 2019).

Skewness and Kurtosis. To establish significant normality, skewness, and kurtosis were used in this study. Skewness and kurtosis were primarily utilized to identify outliers based on their values. An increase in the values of skewness and kurtosis indicates an increase in the outliers' quantity (George & Mallery, 2010). To demonstrate a normal distribution, values for skewness and kurtosis around -2 and +2 are seen as acceptable (George & Mallery, 2010). The skewness of social connectedness, smartphone addiction, fear of rejection, and interpersonal communication skills were -0.352, -0.311, 0.009, and -0.456 according to Table 4.3. Besides that, the kurtosis values for social connectedness, smartphone addiction, fear of rejection, and interpersonal communication skills were -0.603, -0.482, -0.578, and -0.367. Most of the variables in this study were negatively skewed except for fear of rejection. Also, all variables have shown negative values of kurtosis which represent the platykurtic distribution.

Table 4.3

Skewness, Kurtosis, and Shapiro Wilk Table

	Skewness	**Kurtosis**	**Shapiro Wilk**	***p*-value of Shapiro-Wilk**
Social Connectedness	-.352	-.603	.968	< .001
Smartphone Addiction	-.311	-.482	.979	.002
Fear of Rejection	.009	-.578	.987	.026
Interpersonal Communication Skills	-.456	-.367	.964	< .001

Boxplot and Outliers. The boxplot showed that only one variable has the outlier (Refer to Appendix B). There is one outlier (case 18) in fear of rejection. Other than that, other variables such as social connectedness, smartphone addiction, and interpersonal communication skills do not contain any outlier based on the boxplot result. Outliers make the data more inconsistent, which reduces statistical power (Gress et al., 2018). Hence, eliminating outliers can make the findings statistically significant and reduce the bias in this study. So, the outlier (case 18) should be removed to guarantee the study's accuracy.

Data Analysis

H_1: There is a negative relationship between social connectedness and smartphone addiction.

The assumptions of Pearson Product-Moment Correlation (PPMC) were observed, which included normality of distribution according to Skewness and Kurtosis (see Table 4.3). Therefore, the assumption of PPMC was fulfilled.

To investigate if there was a statistically significant relationship between social connectedness and smartphone addiction, a PPMC was computed. The results of PPMC revealed that, r (234) = -.523, $p < .001$. The result explained that there was a significant negative relationship between social connectedness and smartphone addiction. The correlation was negative, indicating that as social connectedness decreased, smartphone addiction increased. Hence, H_1 is supported.

Using Guildford's rule of thumb, the correlation between social connectedness and smartphone addiction was moderate as the r-value is within the range of ±.4 to ±.7.

H_2: There is a negative relationship between social connectedness and fear of rejection.

The assumptions of Pearson Product-Moment Correlation (PPMC) were observed, which included normality of distribution according to Skewness and Kurtosis (see to Table 4.3). Therefore, the assumption of PPMC was fulfilled.

To explore whether there was a significant statistical association between social connectedness and fear of rejection, PPMC was computed. The findings of PPMC revealed that, r (234) = -.686, $p < .001$. The result showed that there was a significant inverse correlation between social connectedness and fear of rejection. The direction of the relationship was negative, implying that as social connectedness decreased, fear of rejection increased. Hence, H_2 is supported.

Using Guildford's rule of thumb, it can be proved that correlation between social connectedness and fear of rejection was moderate as the *r*-value is within the range of ±.4 to ±.7.

H_3: There is a positive relationship between social connectedness and interpersonal communication skills.

The assumptions of Pearson Product-Moment Correlation (PPMC) were observed, which included normality of distribution according to Skewness and Kurtosis (see to Table 4.3). For bivariate normality, the Shapiro-Wilk test resulted in $p = .112$, which was higher than .05. Therefore, the PPMC's assumption was fulfilled.

To explore whether there was a significant statistical association between social connectedness and interpersonal communication skills, a PPMC was computed. The findings of PPMC revealed that, r (234) = .820, $p < .001$. The result revealed a significant positive correlation between social connectedness and interpersonal communication skills. The

direction of the correlation was positive, indicating that higher levels of social connectedness were associated with higher levels of interpersonal communication skills. Hence, H_3 is supported.

Using Guildford's rule of thumb, the correlation between social connectedness and interpersonal communication skills was strong since the *r*-value falls between ±.7 to ±.9.

Table 4.4

Pearson Product Moment Correlation among Variables (n = 235)

Variable		SC	SA	FOR	ICS
1. SC	Pearson's r	—			
	p-value	—			
2. SA	Pearson's r	-0.523***	—		
	p-value	< .001	—		
3. FOR	Pearson's r	-0.686***	0.651***	—	
	p-value	< .001	< .001	—	
4. ICS	Pearson's r	0.820***	-0.428***	-0.528***	—
	p-value	< .001	< .001	< .001	—

*Note. SC = Social Connectedness; SA = Smartphone Addiction; FOR = Fear of Rejection; ICS = Interpersonal Communication Skills; *** p* < .001

H_4: Smartphone addiction negatively predict social connectedness.

H_5: Fear of rejection negatively predict social connectedness.

H_6: Interpersonal communication skills positively predict social connectedness.

Based on the table below, the assumptions of Multiple linear regression (MLR) were observed which including linear relationship, absent of outliers, the absence of multicollinearity, independence of observation, and homoscedasticity. According to Durbin-

Watson, the statistic is 1.993. It does not violate the assumption of autocorrelation because it is between 1.5 and 2.5 (Refer to Table 4.8). The assumption of collinearity was not violated as the tolerance values are all over 0.1 and VIF values are all below 5, indicating that the data was normal and free of outliers (Refer to Table 4.7). Based on Casewise diagnostics, it showed that the Standard Residual is all within ± 3.29, and Cook's Distance is all less than 1. As a result, there are no multivariate outliers. Therefore, the assumption of MLR was fulfilled.

MLR was conducted to investigate how well smartphone addiction, fear of rejection, and interpersonal communication skills predict social connectedness. The result was statistically significant, F (3, 231) = 241.747, p< .001. The identified equation to explain this correlation was social connectedness = -0.076 *(Smartphone Addiction)* – 0.430 *(Fear of Rejection)* + 1.777 *(Interpersonal Communication Skills)*.

It was found that smartphone addiction (β = - .042, p = .332) not significantly predicted social connectedness since the p-value was greater than .05. However, fear of rejection (β = - .327, p < .001) and interpersonal communication skills (β = .626, p < .001) is significantly predicted social connectedness. According to adjusted R-squared value which is 0.755. It means that 75.5% of the variance for social connectedness could be accounted for by the factors of smartphone addiction, fear of rejection, and interpersonal communication skills. Based on Cohen (1988), the effect size of f^2 = 3.132 indicates very largely.

In conclusion, interpersonal communication skills were the greatest predictor of social connectedness, followed by fear of rejection. However, smartphone addiction failed to predict social connectedness. Hence, H_4 was not supported, while H_5 and H_6 were supported.

Table 4.5

Result of Regression Model

	df	*F*	*p*	*Adjusted* R^2	R^2
Regression	3	241.747	< .001	0.755	0.758
Residual	231				
Total	234				

Note. Dependent Variable = Social Connectedness. Predictors = Smartphone Addiction, Fear of Rejection, and Interpersonal Communication Skills

Table 4.6

Result of Regression Coefficient

	t	Unstd. *β*	Std. *β*	*p*
Smartphone Addiction	-0.971	- .076	- .042	.332
Fear of Rejection	-7.161	- .430	- .327	< .001
Interpersonal Communication Skills	16.305	1.777	.626	< .001

Note. Dependent Variable = Social Connectedness. Unstd. β = Unstandardized. B; Std. β = Standardized. β

Table 4.7

Collinearity Statistic of Tolerance and VIF

	Tolerance	VIF
Smartphone Addiction	0.567	1.765
Fear of Rejection	0.500	2.000
Interpersonal Communication Skills	0.708	1.412

Note. Dependent Variable = Social Connectedness

Table 4.8

Independent Error Test

Model	Durbin-Watson
1	1.993

Note. Dependent Variable = Social Connectedness. Predictors = Smartphone Addiction, Fear of Rejection, and Interpersonal Communication Skills

Chapter 5

Discussion and Conclusion

Discussion

In the current research study, the associations between social connectedness, smartphone addiction, fear of rejection, and interpersonal communication skills were investigated. Also, the present study investigated whether smartphone addiction, fear of rejection, and interpersonal communication skills can predict social connectedness.

Social Connectedness and Smartphone Addiction

Hypothesis 1 posited social connectedness is inversely correlated with smartphone addiction, the result of Pearson Product-Moment Correlation (PPMC) showed that there was a significant negative relationship between social connectedness and smartphone addiction, which means that the lower the social connectedness, the higher the smartphone addiction. Besides, the result also revealed that there existed a moderate correlation, r (234) = -.523, p < .001 between social connectedness and smartphone addiction. Hence, H_1 in this study is supported while the result is also consistent with other research studies in the past which mentioned that there was a negative relationship between social connectedness and smartphone addiction (Mclntyre et al., 2015; Savci & Aysan, 2017; Davis, 2012; Shen & Williams, 2010).

Based on the discussion from Davis (2012), it can be concluded that excessive technology usage may negatively affect social relationships and connectedness between others. If the person used the smartphone overly until affecting their daily functioning, a person may withdraw from their true social environment as a result of overly smartphone use (Bian & Leung, 2014). However, if the people used their smartphones properly and responsibly such as having high self-control and without addiction. Therefore, smartphone use may greatly enhance interpersonal relationships and fosters social connectedness. Since

social connectedness is one of the fundamental human needs, so smartphone use also can help meet this need. It is reasonable to conclude that communication technologies such as smartphones, play a significant part in the growth and maintenance of social connection since they link individuals who live in different countries around the world and allow them to become aware of and interact with one another (Chayko, 2014; Davis, 2012). Hence, it also proved that social relationships and connectedness between others may being negatively affected when people addicted to their smartphone (Davis, 2012).

Besides, another study also proposed a similar explanation which is using a smartphone to the degree of addiction may prevent real social interactions, which lowers social connectedness (Shen & Williams, 2010). That is because social interaction in the real social context plays a role in the development of social connectedness. Hence, it is possible to claim that individuals who frequently utilize their phones overly were susceptible to experiencing decreased social connectivity. (Shen & Williams, 2010).

Moreover, those who are addicted to smartphones may experience loneliness, social isolation, and a failure in social interactions. This inhibits the person from being socially connected and even decreases the level of social connectedness that already exists (Mclntyre et al., 2015; Allen et al., 2014). Some studies also explained that smartphone-addicted people always grow lonely since they have little time to spend with their loved ones. As a result, it causes them to become socially isolated, social bonds decrease, and social connectedness becomes lower (Bian & Leung, 2014; Bozoglan et al., 2013). Throughout this context, it may be claimed that smartphone addicts experience loneliness, while those who feel loneliness experience a decline in social connectedness. Additionally, the researchers highlight that feel lonely is a potential risk for a social disconnectedness (Bian & Leung, 2014; Bozoglan et al., 2013). In short, there is a negative relationship between social connectedness and smartphone

addiction in this study and the result is consistent with some past studies as well (Mclntyre et al., 2015; Savci & Aysan, 2017; Davis, 2012; Shen & Williams, 2010).

Social Connectedness and Fear of Rejection

Hypothesis 2 proposed that social connectedness is inversely correlated with fear of rejection, the result of the Pearson Product-Moment Correlation (PPMC) showed that there was a significant negative relationship between social connectedness and fear of rejection, which means that the lower the social connectedness, the higher the fear of rejection. Besides, the result also revealed that there existed a moderate correlation, r (234) = -.686, $p < .001$ between social connectedness and fear of rejection. Hence, H_2 in this study is supported while the result is also consistent with another research study in the past which mentioned that there was a negative relationship between social connectedness and fear of rejection (Shapiro et al., 2010; Niu et al., 2022; Schaan et al., 2020; Watson & Nesdale, 2012).

As fear of rejection is defined as worried, anxiety, and always making predictions of being rejected, it indicates that those with a high level of fear of rejection are probably more socially disconnected and have lower social connectedness (Watson & Nesdale, 2012). That is because findings explained that previous rejections may also have an impact on how the person engages with new people in the future, when people are rejected before, it could also cause people more vulnerable to the fear of rejection and avoid social interactions (Schaan et al., 2020). People tend to withdraw from others if they think that the potential of being rejected in the current situation is high in order to prevent the rejection, thus the social interaction and connection also decrease due to the fear of rejection (Watson & Nesdale, 2012; Schaan et al., 2020).

The findings are also aligned with this study by explaining the outcomes that people with the fear of rejection avoid making new social connections and joining multiple cultural

groups, while only willing to stay within the small group of their current friends in order to avoid the threats, uncertain social situations (Shapiro et al., 2011). Also, the study has demonstrated that being anxious in a context is a strong reason not to engage in anxious circumstances for a person with the fear of rejection (Watson & Nesdale, 2012). That is because people with a fear of rejection may consider intergroup interactions extremely uncomfortable and stressful since they expected the out-group members might see them adversely (Shapiro et al., 2011). As a result, those who worry or fear rejection from members of the outside group may avoid having relationships with peers from outgroup members which results in lower social connectedness.

Based on the research findings from Niu et al. (2022), the result also showed that people with a fear of rejection may be negatively related to social connectedness and interaction because those who are highly sensitive to rejection are more prone to anticipate, interpret, and react negatively to rejection from others. Also, the researchers mentioned that if the person has fewer social interactions, it may result in the development of fear of rejection in people, which may only worsen social connectedness for that person later (Bungert et al., 2015; Niu et al., 2022). So, it can be considered a vicious cycle. Specifically, lower social connectedness may increase and enhance people's sensitivity to rejection.

Social Connectedness and Interpersonal Communication Skills

Hypothesis 3 posited social connectedness is positively correlated with interpersonal communication skills, the result of Pearson Product-Moment Correlation (PPMC) showed that there was a significant positive relationship between social connectedness and interpersonal communication skills, which means that the higher the social connectedness, the higher the interpersonal communication skills. Besides, the result also revealed that there existed a strong correlation, r (234) = .820, p < .001 between social connectedness and

interpersonal communication skills. Hence, H_3 in this study is supported while the result is also consistent with other research studies in the past which mentioned a negative correlation between social connectedness and interpersonal communication skills (Bloch, 2018; Rothschild, 2015; Kern et al., 2014).

In order to build up social relationships and connections, it is significantly depending on different components of interpersonal communication skills. For example, communication skills like self-disclosure, capacity for initiating effective interpersonal communication, and positive emotional support all seem to be especially important for social connectivity satisfaction and development (Bloch, 2018). Therefore, if people have good interpersonal communication skills verbally and non-verbally, it may enable successful communication with others while enhanced the social connectedness. This result is consistent with an earlier study that found a link between social connectedness and interpersonal communication skills (Bloch, 2018).

Besides, past research also found that people who might face psychological issues like depression and anxiety may have lower interpersonal communication skills, therefore it may result in a decrease in social support, minimal interpersonal relations, and weaker social connectedness (Campbell et al., 2010). Hence, this finding is also consistent with current research findings. There is also one previous study focused on people with low social connectedness, people concluded that they are having poorer interpersonal communication skills which significantly contributes to both low self-esteem and decreased social skills (Seppala et al., 2013).

Those who lacking in interpersonal communication skills are especially prone to feeling socially disconnected (Rothschild, 2015). That is because those with insufficient interpersonal communication skills are known to find it difficult to make and maintain

friendships, and as a result, they may be more vulnerable to the negative effects of disconnectedness (Rothschild, 2015). Also, people with a lack of interpersonal communication skills may frequently challenging to form and sustain relationships with others. As a result, these people will be difficult to fulfill their social connectedness needs, which may result in detrimental effects like loneliness. These findings are in line with past research that discovered a connection between social connectedness and interpersonal communication skills (Rothschild, 2015; Wainer et al., 2013). In short, the higher the social connectedness, the higher the interpersonal communication skills.

Smartphone Addiction Predicts Social Connectedness

Hypothesis 4 posited smartphone addiction may not be the predictors of social connectedness, the result of Multiple Linear Regression (MLR) showed that smartphone addiction (β = - .042, p = .332) could not significantly predict the social connectedness; hence, H_4 is not supported in this study. Nonetheless, this finding was aligned with the findings from the Yang et al. (2022) study, which found that smartphone addiction could not predict social connectedness. However, the majority of research findings have shown inconsistent findings which indicated that social connectedness might be predicted by smartphone addiction (Savci & Aysan, 2017; Abu-Taieh et al., 2022; Twenge et al., 2018). The inconsistent result may be explained by the role of personality, previous studies discovered that not all the person addicted to smartphones may reduce their social connectedness, but it is still dependent on their personality traits (Yang et al., 2022; Blackwell et al., 2017). Different personality traits showed different needs and motivations towards excessive usage of their smartphone. For example, those who are extraversion may easily get addicted to smartphones, however, they still enjoy being in group interaction and connecting with others face-to-face and online (Blackwell et al., 2017). In contrast, when people with neuroticism are addicted to smartphones, they tend to utilise smartphones to get

attention and approval from others in order to form social connectedness (Blackwell et al., 2017). Thus, this indicates that predicting social connectedness simply based on smartphone addiction is insufficient.

Furthermore, it can be explained in terms of the measurement tool that has been used in the present study which is the Smartphone Addiction Scale – Short Version (SAS-SV). The SAS-SV primarily focuses on behavioural addiction, such as compulsive use and withdrawal symptoms (e.g., "Feeling impatient and fretful when I am not holding my smartphone") and is less likely to assess the various aspects of smartphone use, such as Internet-based relationship (Luk et al., 2018). In contrast, the original 33-item Smartphone Addiction Scale (SAS) substantially covers items relevant to Internet-based relationships (e.g., "Feeling that my smartphone buddies understand me better than my real-life friends"), which is associated with the social aspect (Grieve et al., 2013), that is not present in the short-form version. The SAS-SV mainly assesses smartphone addiction in the intrapersonal context, while no social component is involved. Therefore, this may be one of the factors that lead to an insignificant result. Despite the favorable length of SAS-SV that made the study questionnaire shorter in order to increase the data quality (Levordashka, 2006), the short version scale might be risky for use as it may have neglected some components that are important for the study (Meng et al., 2019). Thus, this may contribute to the non-significant result of smartphone addiction as a predictor of social connectedness.

Fear of Rejection Predicts Social Connectedness

Hypothesis 5 posited fear of rejection may be the predictors of social connectedness, the result of Multiple Linear Regression (MLR) showed that fear of rejection (β = - .327, p < .001) can significantly predict social connectedness; hence, H_5 is supported in this study. Therefore, it can be proven that students who have a high level of fear of rejection will

negatively lead to low social connectedness. Also, this finding was aligned with the findings in the past (Watson & Nesdale, 2012; Schaan et al., 2020; Niu et al., 2022; Gökbulut, 2019). Based on the previous study, the researchers discussed that the fear of rejection concept is crucial because it causes people to respond negatively to rejection with feelings and actions that may cause the person to shift from disappointment to feeling isolated and depressed (Watson & Nesdale, 2012). Besides, fear of rejection also makes people more likely to interpret rejection easily and anticipate it with anxiety. Crucially, it can also affect how other people behave socially and can significantly contribute to social disconnectedness (Watson & Nesdale, 2012).

Other studies also showed consistent result which stated that people with a fear of rejection may directly impact their social connection with others, even in safety situations, fear of rejection still affect social interaction (Schaan et al., 2020; Gökbulut, 2019). That is because people with high fear of rejection always display social avoidance behaviours that may pose obstacles for them to engage with others and form meaningful relationships. The disengagement from social interactions increases the risk of facing loneliness, which boosts fear of rejection while resulting in social disconnectedness (Schaan et al., 2020). Thus, fear of rejection can significantly predict social connectedness. Another study also comes with a similar explanation which is people who fear rejection whether from direct or indirect experience, they are strongly predict being rejected every time they come across a social context (Nafees & Jahan, 2019). This irrational assumption of rejection may leave them with enduring scars such as people may be less likely to practice positive ways of handling disagreement, while they may also lack self-confidence (Nafees & Jahan, 2019; Niu et al., 2022). Thus, this may also affect people's social connectedness. In short, there is a predictive relationship between fear of rejection and social connectedness.

Interpersonal Communication Skills Predicts Social Connectedness

Hypothesis 6 posited interpersonal communication skills may be the predictors of social connectedness, the result of Multiple Linear Regression (MLR) showed that interpersonal communication skills ($\beta = .626$, $p < .001$) can significantly predict social connectedness; hence, H_6 is supported in this study. Therefore, it can be proven that students who have a high level of interpersonal communication skills will positively lead to high social connectedness. Also, this finding was aligned with the findings in the past (Rothschild, 2015; Bloch, 2018). The studies stated that people with high interpersonal communication skills may lead supportive and positive relationships with others if compare with people with low interpersonal communication skills. That is because people with low interpersonal communication skills may have difficulty expressing themselves, observing social cues, and maintaining boundaries with others, while also having low self-confidence which may make it challenging for them to develop and maintain social connectedness (Rothschild, 2015).

Besides, establishing and maintaining connectedness is dependent heavily on effective communication (Cruz-Urrutia, 2021; Wainer et al., 2013). This can be explained that stronger connections and a greater sense of connectedness can result from the capacity for clear communication, attentive listening, and understanding of others' viewpoints which are all consider as the interpersonal communication skills. Those with good interpersonal communications skills are able to build rapport, trust, and understanding with others, which results in more satisfying relationships, while strengthening social connectedness (Cruz-Urrutia, 2021). On the other hand, those with poor communication skills could find it difficult to make and keep friends, which makes them feel lonely and isolated, and lastly result in social disconnectedness (Cruz-Urrutia, 2021). Hence, there is a predictive relationship between social connectedness and interpersonal communication skills.

Implications

Theoretical Implications

This study's findings supported the need to belong theory (Baumeister & Leary, 1995), which emphasized the importance of a sense of belonging among Malaysian university students in academic settings with the variables of smartphone addiction, fear of rejection, and interpersonal communication skills. The need to belong theory (Baumeister & Leary, 1995) was used in the current study to look at the significant variables that affect social connectedness. According to the findings in the present study, fear of rejection showed a significant negative relationship with social connectedness, while also predicted social connectedness negatively (Watson & Nesdale, 2012; Schaan et al., 2020; Niu et al., 2022; Gökbulut, 2019). Besides, interpersonal communication skills were also found to be a significant positive relationship with social connectedness and the best predictor of social connectedness in this study (Rothschild, 2015; Bloch, 2018). Consequently, the findings and evaluation of the present study supported the need to belong theory, demonstrating that it is still reliable and applicable to research in Malaysia. In short, the results of the present study may help to fill gaps in the literature among Malaysian undergraduate students.

However, the present findings also provide insight into the correlation between smartphone addiction and social connectedness. The study revealed a significant association between social connectedness and smartphone addiction, but there was no significant predictive relationship between smartphone addiction and social connectedness which was not consistent with the previous studies (Savci & Aysan, 2017; Abu-Taieh et al., 2022; Twenge et al., 2018). This means that people with lower social connectedness might not be affected by high excessive usage of the smartphone. The non-significant finding between smartphone addiction and social connectedness might indicate that the need to belong theory

is not applicable to smartphone addiction and social connectedness among Malaysian university students. In short, the significant difference between the present study and previous studies may draw researchers' focus on this topic with the goal of determining the causes of the discrepancies, which can be a major contribution to the body of existing research. Furthermore, the present study provides a new perspective for future researchers investigating smartphone addiction in Malaysia.

Practical Implications

The findings of this study can be advantageous for undergraduates as it can enhance their knowledge and comprehension about social connectedness, smartphone addiction, fear of rejection, and interpersonal communication skills. Since social connectedness is important for everyone no matter how old you are, therefore, undergraduate students also may know what can significantly contribute or lessen to their social connectedness in this study. Hence, various negative consequences of lower social connectedness such as loneliness and social isolation can be avoided for undergraduate students, while they also have an idea of what to do to enhance their social connectedness. Besides, this study also increases the undergraduates' self-awareness about the importance and impact of social connectedness, then get more aware of their own social needs and motivated to enhance their social bonds. Practically, people who have had poor social experiences or relationships, such as being excluded from social groups, should receive extra attention.

Moreover, counsellor also plays an important role in the practical context since undergraduate students may always seek help from the counsellor in their university when they are facing any difficulties such as social isolation or poor interpersonal relationship which may lead to lower social connectedness (Jorgenson et al., 2018; Savci & Aysan, 2019). Therefore, counsellor may gain a clear understanding of social connectedness, smartphone

addiction, fear of rejection, and interpersonal communication skills. Counsellor may help students who are facing lower social connectedness by evaluating their fear of rejection and interpersonal communication skills. In particular, counsellor may provide appropriate treatment plans or techniques like training for social skills which can be used to prevent students from being excluded and increase their social competence (Niu et al., 2022); additionally, appropriate cognitive therapy can also be used to alter how they define, relate, and cope with negative social interactions or events (Niu et al., 2022), since it may help to reduce their fear of rejection, boosting their self-confidence, and lowering their likelihood of becoming depressed.

Lastly, the relevant authorities in educational settings such as the Ministry of Education and the school also can play a role of guidance for the undergraduates. With the knowledge of knowing the relationship between social connectedness, smartphone addiction, fear of rejection, and interpersonal communication skills, they may work together to propose some programs to increase students' social connectedness and increase their awareness about the cause and effect of social connectedness.

Limitations of Study

Firstly, the limitation is the short instrument used in this study which is Smartphone Addiction Scale – Short Version (SAS-SV), it has not able to cover all components of smartphone addiction in only 10 items. Therefore, it is risky to cause an insignificant result in this study (Meng et al., 2019). In order to consider the total length for all instruments not too long to ensure the data quality, therefore, the researchers used the SAS-SV at the first (Levordashka, 2006). However, the original 33-item Smartphone Addiction Scale would be more suitable in this research context even though it requires more time, it is still acceptable. That is because an effective questionnaire should have around 25 to 30 items while it is

manageable in 15 minutes in order to sustain the respondents' commitment and concentration (Sharma, 2022).

Second, the limitation can be the likelihood of giving inaccurate information on self-report surveys. Since all questionnaires are done it online by themselves, the respondents might not be honest when answering the questions (Demetriou et al., 2015). The respondents might answer in a publicly acceptable manner, which is a tendency called social desirability bias. However, there also have some problems that weaken the surveys' reliability and validity such as response bias, which is the likelihood for someone to answer in a particular way on the question (Demetriou et al., 2015). For instance, respondents can be more prone to respond with higher points or lower points depending on the question's content since the respondents expected a "good result" in the questionnaire. For example, a question in the interpersonal communication skills scale was measured about how likely the respondents can “put themselves in others’ shoes”. Some of the participants might believe that the absence of these actions and thoughts is those of a "non-empathetic or selfish individual." Hence, they may fail to respond to the genuine answer.

Third, the cross-sectional research methodology used in this study may make it challenging to conclude the causes of the variables which included social connectedness, smartphone addiction, fear of rejection, and interpersonal communication skills because the response and result were only once assessed (Solem, 2015). Since the researchers only collect the data once for every variable. However, every variable in this research for the respondents may alter across time as a result of external factors and experiences. The researchers also stated that social connectedness is not born with us, it all depends on people’s life experiences and practices over many years (O’Rourke et al., 2018). Hence, in this study, the cross-sectional research method was only applied to determine the prevalence of an event

happening at a particular period. Also, the current finding may be explained through cross-sectional research, excluding the pattern of changes in social connectedness across time.

Lastly, the limitation is the demographics of the respondents. In this research study, most respondents (71.5%) are Chinese, which may not be the best representative of Malaysia's multiracial community. Since this research was primarily aimed at undergraduate students, Chinese students represented a major proportion of the respondents in this study. This demonstrates that other races are underrepresented, and the results may not represent all undergraduates.

Recommendations for Future Study

Firstly, as an alternative to the cross-sectional research approach employed in this study, it is advised that longitudinal research methodology be used in future studies. In a longitudinal study, separate data collections from the same respondents can be collected at two different times (Taris & Kompier, 2014). Additionally, it enables a study to investigate the causal connection between the variables. Hence, this is the rationale behind why longitudinal research is recommended over cross-sectional research in the fields of social science (Wang, 2013). Also, the longitudinal approach enables a study to look at how the variables change with time (Sedgwick, 2014). As a result, a longitudinal research method may overcome the limitation of the present study by gathering data at two separate times, which can result in a more extensive knowledge of the relationship between all variables (SC&SA&FOR&ICS) and the changes that occur over time.

Besides, future research may pay attention to gender and race differences in terms of social connectedness and the predictors. According to Lee and Robbins (2020), they stated that the motivation for both genders to form social connectedness is the difference. Therefore, future research may focus on investigating differences between genders or races in social

connectedness or other predictor variables, thus the sample size must be proportionate also to ensure the generalizability of the result.

Third, the recommendation can further be investigating additional protective factors or individual differences, such as personality traits based on social connectedness (Yang et al., 2022). As the current study discovered, social connectedness may not be negatively predicted by smartphone addiction significantly. In contrast to smartphone addiction, other factors may have a stronger ability to predict social connectedness. For example, future studies may add up the personality traits scale to examine how personality traits may affect social connectedness followed by other predictors' scales. Also, there is a lack of research in Malaysia that focuses on the predictive connection between protective characteristics and social connectedness. Hence, undergraduates and school counsellors may find it helpful in addressing issues related to poor social connectedness.

Lastly, indirect survey questioning can be used to deal with social desirability bias. Indirect questioning is the practice of asking respondents to respond based on the perspectives of others rather than their own (Ried et al., 2022). As a result, the respondents taking part will be motivated to answer honestly since they believe that their replies won't be judged. For example, it is advised to avoid the use of "you" in every questionnaire, so the respondents may view the questions as neutral and non-threatening (Ried et al., 2022).

Conclusion

In short, the objectives of the current research study have been achieved by investigating the relationship between social connectedness, smartphone addiction, fear of rejection, and interpersonal communication skills, while also investigating whether smartphone addiction, fear of rejection, and interpersonal communication skills can significantly predict social connectedness. The findings explained that there is a significant

negative relationship between social connectedness and smartphone addiction. Also, findings show that there is a significant negative relationship between social connectedness and fear of rejection. Then, the findings also revealed that there is a significant positive relationship between social connectedness and interpersonal communication skills. Besides, findings also show that smartphone addiction may not significantly predict social connectedness, but fear of rejection and interpersonal communication skills may significantly predict social connectedness. Hence, this research study should be further examined in the future to explore other possible causes of social connectedness among undergraduates in Malaysia.

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Appendix A

Sample Size Calculation (Maxwell, 2000)

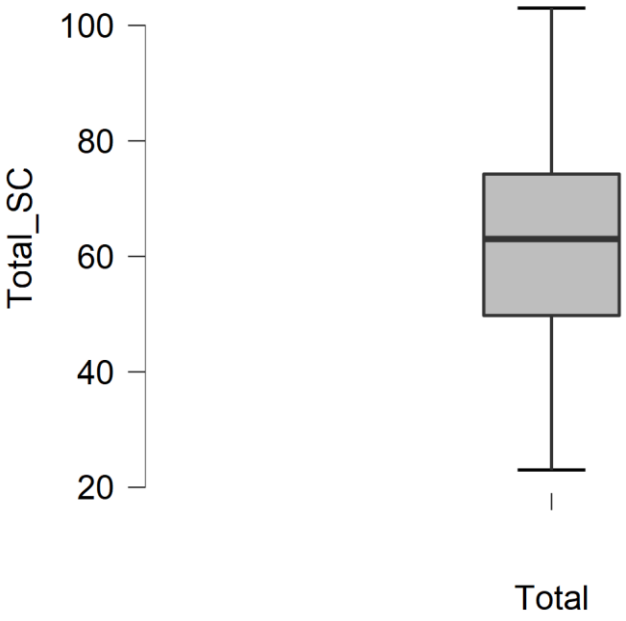
Table 5
Necessary Sample Size (N) for Power to Equal .80 as a Function of Number of Predictors (p) When All Zero-Order Correlations Are Medium

No. of predictors	Sample size
2	141
3	218
4	311
5	419
6	543
7	682
8	838
9	1,009
10	1,196

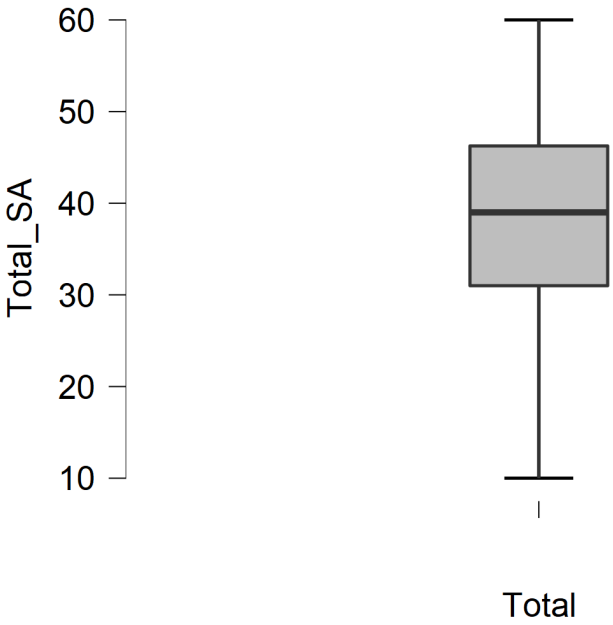
Appendix B

Boxplot for Each Distributions with Outliers

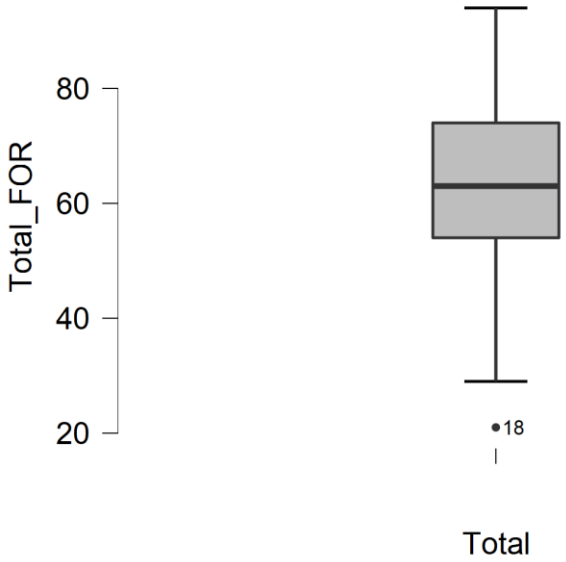
Social Connectedness



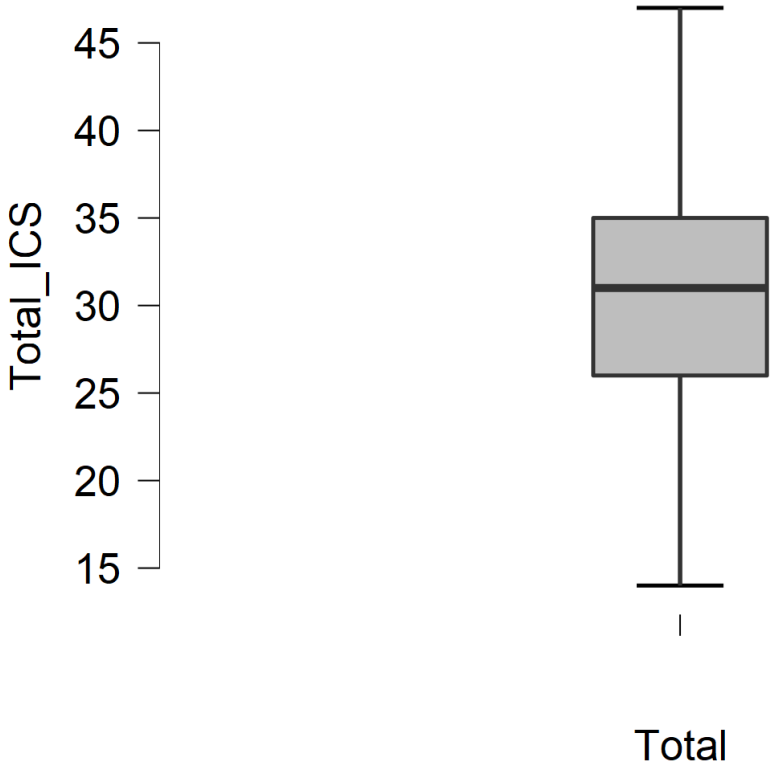
Smartphone Addiction



Fear of Rejection



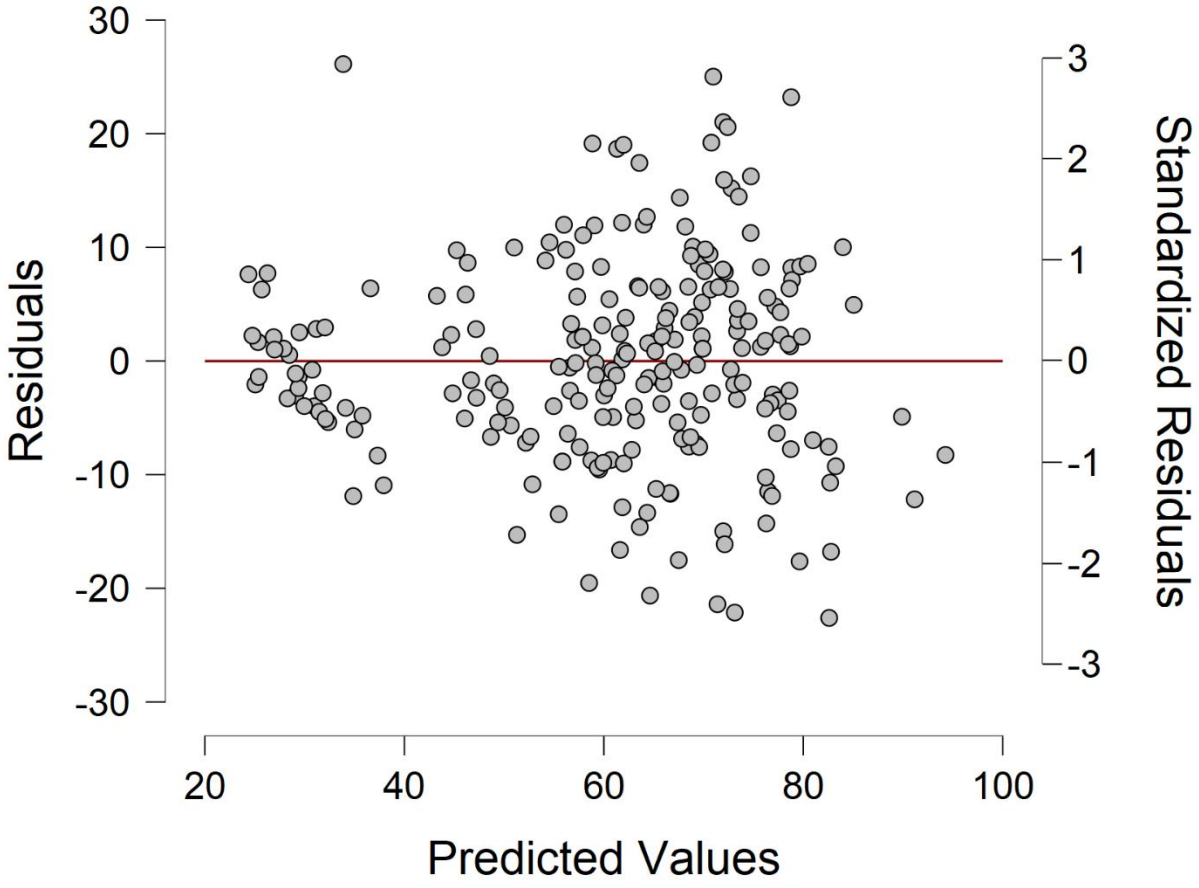
Interpersonal Communication Skills



Appendix C

Scatterplot of Assumptions for Linearity, Residual Normality, and Homoscedasticity

Residuals vs. Predicted



Appendix D

Descriptive Statistics

Social Connectedness Scale-Revised (SCS-R)

Descriptive Statistics

	Total_SC
Valid	235
Missing	0
Mean	60.826
Std. Deviation	18.082
Skewness	-0.352
Std. Error of Skewness	0.159
Kurtosis	-0.603
Std. Error of Kurtosis	0.316
Shapiro-Wilk	0.968
P-value of Shapiro-Wilk	< .001
Minimum	23.000
Maximum	102.000

Smartphone Addiction Scale-Short Version (SAS-SV)

Descriptive Statistics

	Total_SA
Valid	235
Missing	0
Mean	38.319
Std. Deviation	9.941
Skewness	-0.311
Std. Error of Skewness	0.159
Kurtosis	-0.482
Std. Error of Kurtosis	0.316
Shapiro-Wilk	0.979
P-value of Shapiro-Wilk	0.002
Minimum	10.000
Maximum	60.000

Fear of Rejection Scale

Descriptive Statistics

	Total_FOR
Valid	235
Missing	0
Mean	64.217
Std. Deviation	13.776
Skewness	0.009
Std. Error of Skewness	0.159
Kurtosis	-0.578
Std. Error of Kurtosis	0.316
Shapiro-Wilk	0.987
P-value of Shapiro-Wilk	0.026
Minimum	29.000
Maximum	94.000

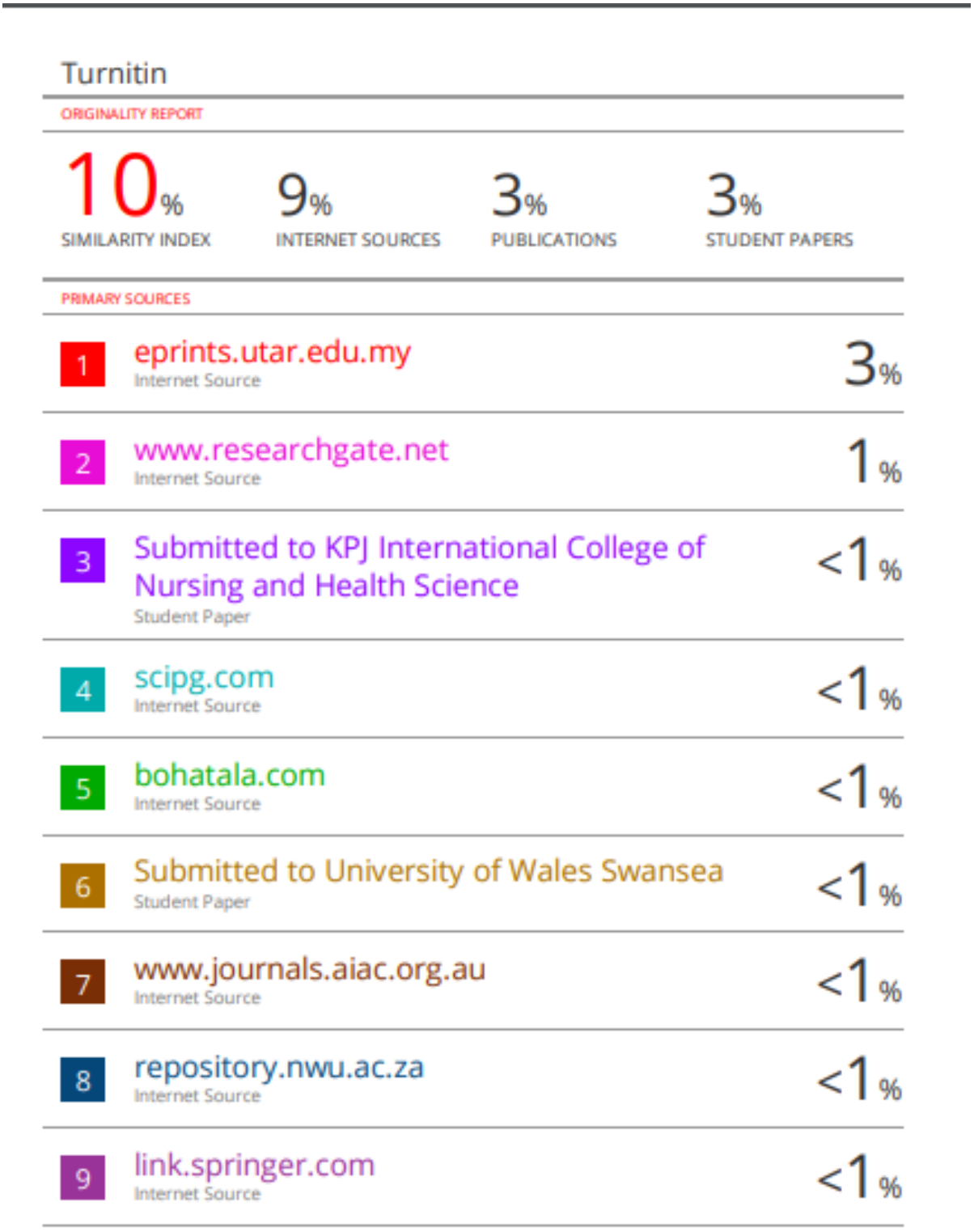
Interpersonal Communication Competence Scale-Short Form (ICCS-SF)

Descriptive Statistics

	Total_ICS
Valid	235
Missing	0
Mean	27.272
Std. Deviation	6.375
Skewness	-0.454
Std. Error of Skewness	0.159
Kurtosis	-0.347
Std. Error of Kurtosis	0.316
Shapiro-Wilk	0.964
P-value of Shapiro-Wilk	< .001
Minimum	12.000
Maximum	42.000

Appendix E

Turnitin Report



Turnitin

ORIGINALITY REPORT

10%	9%	3%	3%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	eprints.utar.edu.my Internet Source	3%
2	www.researchgate.net Internet Source	1%
3	Submitted to KPJ International College of Nursing and Health Science Student Paper	<1%
4	scipg.com Internet Source	<1%
5	bohatala.com Internet Source	<1%
6	Submitted to University of Wales Swansea Student Paper	<1%
7	www.journals.aiac.org.au Internet Source	<1%
8	repository.nwu.ac.za Internet Source	<1%
9	link.springer.com Internet Source	<1%

Supervisor Comment on Original Report

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.: 1of 1

FACULTY OF ARTS AND SOCIAL SCIENCE

Full Name(s) of Candidate(s)	Dewayne Kuek Hui En
ID Number(s)	19AAB03513
Programme / Course	Bachelor of Social Science Guidance and Counselling
Title of Final Year Project	Smartphone addiction, fear of rejection, and interpersonal communication skills as a predictor of social connectedness among undergraduates in Malaysia

Similarity	**Supervisor's Comments (Compulsory if parameters of originality exceeds the limits approved by UTAR)**
Overall similarity index: 10 % **Similarity by source** Internet Sources: 9 % Publications: 3 % Student Papers: 3 %	
Number of individual sources listed of more than 3% similarity: 0	

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

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.

Daniel Ho

Signature of Supervisor

Name: Ho Khee Hoong

Date: 19 Apr 2023

Signature of Co-Supervisor

Name: _____

Date: _____

Action Plan

Action Plan of UAPC3093 Project Paper II

Supervisee Dewayne Kuek Hui En

Supervisor Mr. Ho Khee Hoong

Task Description	Date	Supervisee's Signature	Supervisor's Signature	Supervisor's Remarks	Next Appointment Date/Time
Methodology Submit Chapter 3: Methodology Amend Chapter 3: Methodology	10/4/2023 12/4/2023	Dewayne	Daniel Ho		
Results & Findings Submit Chapter 4: Results Amend Chapter 4: Results	23/3/2023 25/3/2023	Dewayne	Daniel Ho		
Discussion & Conclusion Submit Chapter 5: Discussion Amend Chapter 5: Discussion	10/4/2023 15/4/2023	Dewayne	Daniel Ho		
Abstract	10/4/2023	Dewayne	Daniel Ho		
Turnitin Submission	17/4/2023	Dewayne	Daniel Ho	Generate similarity rate from Turnitin.com	
Amendment	18/4/2023	Dewayne	Daniel Ho		
Submission of final draft	21/4/2023	Dewayne	Daniel Ho	Submission of hardcopy and documents	
Oral Presentation	25/4/2023	Dewayne	Daniel Ho		

Notes:
1. **Deadline for submission cannot be changed, mark deduction is as per faculty standard.**
2. **Supervisees are to take the active role to make appointments with their supervisors.**
3. **Both supervisors and supervisees should keep a copy of this action plan.**
4. **This Action Plan should be attached as an appendix in Project Paper 2.**

UNIVERSITI TUNKU ABDUL RAHMAN DU012(A)

Wholly owned by UTAR Education Foundation Co. No. 578227-M

Re: U/SERC/18/2023

10 January 2023

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

Dear Dr Pung,

Ethical Approval For Research Project/Protocol

We refer to the application for ethical approval for your students' research project from Bachelor of Social Science (Hons) Guidance and Counselling programme enrolled in course UAPC3083/UAPC3093. We are pleased to inform you that the application has been approved under Expedited Review.

The details of the research projects are as follows:

	Research Title	Student's Name	Supervisor's Name	Approval Validity
1.	Emotion Regulation Among Undergraduates in Malaysia: Distress Tolerance, Mindfulness, and Positive Reappraisal	Ching Kai Xuan	Mr Ho Khee Hoong	10 January 2023 – 9 January 2024
2.	A Study of Smartphone Addiction, Fear of Rejection, and Interpersonal Communication Skills as Predictors of Social Connectedness Among Malaysian Undergraduate Students	Dewayne Kuek Hui En		
3.	Help-seeking Behaviour Among Male University Students: Mental Health Literacy, Self-stigma and Conformity Towards Masculine Norms	Mah Jin Sheng		
4.	A study of depression, stress, and pornography consumption among undergraduate students in Malaysia	Chua Jing Yi	Mr Lee Wei Rong	
5.	The Relationship between Spiritual Intelligence, Cognitive Flexibility and Perceived Stress among Undergraduates in Malaysia	Tanita Sadiq		
6.	The Effects of Different Cooperative Communication Mechanics on the Problem-Solving Skills and Creativity Levels of University Students	Jeremy Lam Yew Kong	Ms Kavitha a/p Nalla Muthu	
7.	The Effectiveness of CBT on Big Five Personality Traits and Internet Aggression in Undergraduate Students: A Single Subject Study	Teoh Wen Qi		
8.	The Effectiveness of Acceptance and Commitment Therapy (ACT) on Social Appearance Anxiety and Self-Compassion Among Malaysian Undergraduate Students: A Single Case Study	Wong Yik Theng		
9.	Understanding the Psychological Well Being of Covid-19 Survivors	Legasree a/p Ravi Chandran	Ms Komathi a/p Lokithasan	
10.	A Phenomenological Exploration of Counselling Students' Experiences with Group Counselling Sessions	Ng Jia Wei		

	Research Title	Student's Name	Supervisor's Name	Approval Validity
11.	A Study of the Relationship Between Perceived Social Support, Self-Efficacy, And Academic Stress Among Undergraduate Students in Malaysia	Amanda Lim Xin Yi	Pn Anisah Zainab Binti Musa	10 January 2023 – 9 January 2024
12.	Post Covid-19 Pandemic: Motivation, Autonomy, Relatedness, Self-competence Among Malaysian Undergraduate Students	Chai Jow Yee		

The conduct of this research is subject to the following:

(1) The participants' informed consent be obtained prior to the commencement of the research;

(2) Confidentiality of participants' personal data must be maintained; and

(3) Compliance with procedures set out in related policies of UTAR such as the UTAR Research Ethics and Code of Conduct, Code of Practice for Research Involving Humans and other related policies/guidelines.

(4) Written consent be obtained from the institution(s)/company(ies) in which the physical or/and online survey will be carried out, prior to the commencement of the research.

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

Thank you.

Yours sincerely,

Professor Ts Dr Faidz bin Abd Rahman
Chairman
UTAR Scientific and Ethical Review Committee

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

FACULTY OF ARTS AND SOCIAL SCIENCE
UNIVERSITI TUNKU ABDUL RAHMAN

Date: 21 April 2023

SUBMISSION OF FINAL YEAR PROJECT

It is hereby certified that Dewayne Kuek Hui En (ID No.: 011211-01-1150) has completed this final year project titled "A study of smartphone addiction, fear of rejection, and interpersonal communication skills as predictors of social connectedness among Malaysian undergraduate students" under the supervision of Mr. Daniel Ho Khee Hoong (Supervisor) from the Department of Psychology and counselling, 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.

_____
Name: Dewayne Kuek Hui En

UNIVERSITI TUNKU ABDUL RAHMAN

FACULTY OF ARTS AND SOCIAL SCIENCE

DEPARTMENT OF PSYCHOLOGY AND COUNSELLING

UAPC3093 PROJECT PAPER II

Quantitative Research Project Evaluation Form

TURNITIN: ***'In assessing this work you are agreeing that it has been submitted to the University-recognised originality checking service which is Turnitin. The report generated by Turnitin is used as evidence to show that the students' final report contains the similarity level below 20%.'***

Project Title: A study of smartphone addiction, fear of rejection, and interpersonal communication skills as predictors of social connectedness among Malaysian undergraduate students.	
Supervisor: Daniel Ho Khee Hong	
Student's Name: Dewayne Kuek Hui En	Student's ID; 19AAB03513

INSTRUCTIONS:

Please score each descriptor based on the scale provided below:

1. Please award 0 mark for no attempt.
2. Please mark only **3(A)** or **3(B)** for **Proposed Methodology**.
3. 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%	
b. Describe the methodology: • Research design • Sampling method and sample size • Location of study • Instruments/apparatus/outcome measures (if applicable) • Data gathering procedures	5%	
c. Describe the characteristics of participants.	5%	
d. Highlight the outcomes of the study or intervention, target behaviour and outcomes.	5%	
e. Conclusions, implications, and applications.	5%	
Sum	25%	/25%
Subtotal (Sum/5)	5%	/5%
Remark:		

2. (A) METHODOLOGY (25%)	**Max Score**	**Score**
a. Research design/framework: • For experiment, report experimental manipulation, participant flow, treatment fidelity, baseline data, adverse events and side effects, assignment method and implementation, masking (if applicable). • For non-experiment, describe the design of the study and data used.	5%	
b. Sampling procedures: • Justification of sampling method/technique used. • Description of location of study. • Procedures of ethical clearance approval.	5%	
c. Sample size, power, and precision: • Justification of sample size. • Achieved actual sample size and response rate. • Power analysis or other methods (if applicable).	5%	
d. Data collection procedures: • Inclusion and exclusion criteria. • Procedures of obtaining consent. • Description of data collection procedures. • Provide dates defining the periods of recruitment or repeated measures and follow-up. • Agreement and payment (if any).	5%	
e. Instruments/questionnaire used: • Description of instruments • Scoring system • Meaning of scores • Reliability and validity	5%	

Subtotal	25%	/25%
Remark:		
2. (B) METHODOLOGY – SINGLE-CASE EXPERIMENT (25%)	**Max Score**	**Score**
a. Research design/framework: • Identify the design, phase and phase sequence, and/or phase change criteria. • Describe procedural changes that occurred during the investigation after the start of the study (if applicable). • Describe the method of randomization and elements of study that were randomized (if applicable). • Describe binding or masking was used (if appliable).	5%	
b. Participants AND Context AND Approval: • Describe the method of recruitment. • State the inclusion and exclusion criteria. • Describe the characteristics of setting and location of study. • Procedures of ethical clearance approval. • Procedures of obtaining consent.	5%	
c. Measures and materials used: • Operationally define all target behaviours and outcome measures. • Reliability and validity. • Justify the selection of measures and materials. • Describe the materials.	5%	
d. Interventions: • Describe the intervention and control condition in each phase. • Describe the method of delivering the intervention. • Describe evaluation of procedural fidelity in each phase.	5%	
e. Data analysis plan: • Describe and justify all methods used to analyze data.	5%	
Subtotal	25%	/25%
Remark:		
3. RESULTS (20%)	**Max Score**	**Score**
a. Descriptive statistics/Sequence completed: • Demographic characteristics • Topic-specific characteristics	5%	

• For single-case study, report the sequence completed by each participant, trial for each session for each case, dropout and reason if applicable, adverse events if applicable		
b. Data diagnostic and missing data (if applicable): • Frequency and percentages of missing data (compulsory). • Methods employed for addressing missing data. • Criteria for post data-collection exclusion of participants. • Criteria for imputation of missing data. • Defining and processing of statistical outliers. • Data transformation. • Analyses of data distributions.	5%	
c. Appropriate data analysis for each hypothesis or research objective.	5%	
d. Accurate interpretation of statistical analyses: • Accurate report and interpretation of confidence intervals or statistical significance. • Accurate report of *p* values and minimally sufficient sets of statistics (e.g., *dfs*, *MS*, *MS error*). • Accurate report and interpretation of effect sizes. • Report any problems with statistical assumptions.	5%	
Subtotal	20%	/20%
Remark:		
4. DISCUSSION AND CONCLUSION (20%)	**Max Score**	**Score**
a. Discussion of findings: • Provide statement of support or nonsupport for all hypotheses. • Analyze similar and/or dissimilar results. • Justifications for statistical results in the context of study.	5%	
b. Implication of the study: • Theoretical implication for future research. • Practical implication for programs and policies.	5%	
c. Relevant limitations of the study.	5%	
d. Recommendations for future research.	5%	
Subtotal	20%	/20%
Remark:		
5. LANGUAGE AND ORGANIZATION (5%)	**Max Score**	**Score**
a. Language proficiency	3%	
b. Content organization	1%	

c. Complete documentation (e.g., action plan, originality report)	1%	
Subtotal	5%	/5%
Remark:		
6. APA STYLE AND REFERENCING (5%)	**Max Score**	**Score**
a. 7th Edition APA Style	5%	/5%
Remark:		
***ORAL PRESENTATION (20%)**	**Score**	
Subtotal	/20%	
Remark:		
PENALTY	**Max Score**	**Score**
Maximum of 10 marks for LATE SUBMISSION, or POOR CONSULTATION ATTENDANCE with supervisor.	10%	
****FINAL MARK/TOTAL**	/100%	

*****Overall Comments:**

Signature: _____ **Date:** _____

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.

UNIVERSITI TUNKU ABDUL RAHMAN
FACULTY OF ARTS AND SOCIAL SCIENCE
DEPARTMENT OF PSYCHOLOGY AND COUNSELING

INDIVIDUAL ORAL PRESENTATION EVALUATION FORM (FACE TO FACE/VIRTUAL PLATFORM)

UAPC3093 PROJECT PAPER II

Student's Name	ID	*Total (40%)	**Final score (20%)
Dewayne Kuek Hui En	19AAB03513		

**Final Score: ( ) / 40 marks ÷ 2 = ( ) / 20 marks
***to be converted into 20%**

Date: _ 25 April 2022_____ Time: _____

SCORE / TRAITS	SCORE	EXCELLENT 4	GOOD 3	AVERAGE 2	LACKING 1
POSTER PRESENTATION PREPARATION					
Organisation		Title/author of paper clearly displayed. Concise presentation of introduction, review of literature, methodology, findings and conclusions.	Shows title/author. Adequately presents introduction, review of literature, methodology, findings and conclusions.	Shows title/author. Presents main ideas of introduction, review of literature, methodology, findings and conclusions.	Title/author are missing. Insufficient coverage of main points of introduction, review of literature, methodology, findings and conclusions.
Competency		Student demonstrates competent knowledge of the subject by explaining the subject with details. Able to answer questions posted by the	Student is able to provide sufficient information to enable audience to understand main ideas. Able to answer questions posted by the	Student is able to provide basic information with vague and disjointed ideas. Student tried to answer the questions posted by	Student is unable convey the information fluently to the audience/examiner. Student is not able to answer the questions

		audience/examiners fluently with confidence.	audience/examiners with noticeable interval.	the audience/examiner using common-sense rather than evidence-based answer.	posted by the audience/examiner.
Visual Presentation		Visually appealing poster with appropriate colours, organization, and font sizes enhance readability. Strategically positioned graphics and text.	Overall visually appealing. Organisation of content enhances readability. Appropriate font size enhances readability. Content arrangement easily understood. Graphics enhances text.	Visual appeal is adequate. Colours and layout somewhat cluttered. Font size affects readability. Confusing content arrangement. Graphics help to highlight some content.	Visuals lack appeal. Colours and layout cluttered. Hinders readability. Inconsistent font sizes and content arrangement Mismatch of graphics and text.
Mechanics		The slides are flawless with no misspelling, punctuation, or grammatical errors. Provide essential sources and citations using 7th edition APA style.	2 – 3 misspelling, punctuation and/ or grammatical errors in the slides. Provided excessive and cluttered sources and citations.	4 misspelling, punctuation and/ or grammatical errors detected in the slides. Inconsistent citation styles detected.	Slides are riddled with multiple spelling, punctuation and/ or grammatical errors. Does not cite sources.
SCORE / TRAITS	**SCORE**	**EXCELLENT 4**	**GOOD 3**	**AVERAGE 2**	**LACKING 1**
VERBAL SKILLS					
Enthusiasm		Demonstrates a strong, positive feeling about topic during entire presentation.	Occasionally shows positive feelings about topic.	Shows little positive feelings toward topic presented.	Shows absolutely no interest in topic presented.
Delivery		Uses a clear voice and speaks at a good pace so audience can hear	Presenter's voice is clear. The pace is a little slow or fast at times. Audience can hear presentation.	Presenter's voice is low. The pace is much too rapid/slow. Audience	Presenter mumbles or talks very fast and speaks too softly for audience to hear and understand.

		presentation. Does not read off slides.		has difficulty hearing presentation.	
Language		Excellent and competent use of subject-related vocabulary and correct pronunciation.	Presentation shows competent use of subject-related vocabulary and correct pronunciation.	Some parts of lapse into colloquialism with inappropriate vocabulary and pronunciation.	Mostly inappropriate vocabulary and pronunciation.
NON-VERBAL SKILLS					
Eye Contact		Student maintains eye contact with audience, seldom returning to notes.	Student maintains eye contact most of the time but frequently returns to notes.	Student occasionally uses eye contact, but still reads most of report.	Student reads all of report with no eye contact.
Body Language & Facial Expression		Movements seem fluid. Displays relaxed, self-confident nature about self, with no-mistakes. Appropriate facial expression without a zoned-out or confused expression.	Made movements or gestures that enhance articulation. Makes minor mistakes, displays little or no tension. Occasionally demonstrate either a zoned-out or confused expression during presentation.	Rigid movement or descriptive gestures. Displays mild tension; has trouble recovering from mistakes. Occasionally demonstrate both zoned-out or confused expressions during presentation.	No movement or descriptive gestures. Tension and nervousness are obvious; has trouble recovering from mistakes. Consistently zoned-out or displays confused expression during presentation.
Timing		Within 10 to 15 minutes of allotted time.	Within 17 minutes of allotted time OR too short (<10 minutes).	Within 20 minutes of allotted time OR too short (<5 minutes).	Too long (>20 minutes) or too short (<3 minutes).
***TOTAL**					

Comments:

_____

_____

_____

Evaluated by:

_____

(NAME OF EVALUATOR: _____)

Department of Psychology and Counseling
Faculty of Arts and Social Science
UTAR Perak Campus