

PERCEIVED SOCIAL SUPPORT, LONELINESS AND ANXIETY AMONG MALAYSIAN UNDERGRADUATE STUDENTS DURING THE COVID-19

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Students during the Covid-19

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APPROVAL FORM

This research paper attached here, entitled "Perceived Social Support, Loneliness, and Anxiety among Malaysian Undergraduate Students during the COVID-19" prepared and submitted by Tan Lei Gee in partial fulfillment of the requirements for the Bachelor of Social Science (Hons) Guidance and Counseling is hereby accepted.

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(Puan Anisah Zainab Musa)

Abstract

In recent years, the Coronavirus disease (COVID-19) has caused significant anxiety globally. This research aims to examine the relationships between anxiety, loneliness, and perceived social support in three dimensions, which are family support, friends' support, and significant others' support among undergraduate students in Malaysia. A cross-sectional study with 111 undergraduate students was conducted using the purposive sampling approach. The online survey was used to collect a large number of data. There are more female respondents (n = 65, 58.56%) than male respondents (n = 46, 41.44%) in this study who were between the age of 18 to 25 (M = 22.18, SD = 1.78). The instruments applied in this study are the Generalized Anxiety Disorder-7 Scale (GAD-7), Multidimensional Scale of Perceived Social Support (MSPSS), and UCLA-3 Loneliness Scale. The result showed that anxiety was significantly negatively correlated with perceived social support. The same findings also showed that anxiety which was having a significant negative relationship with perceived family support, friends' support, and significant others' support. On the other hand, loneliness showed a positive correlation with anxiety levels. Additionally, no gender difference was found in the present research. This study offers a constructive framework to mental health professionals and counsellors on how social supports influence individual mental health, so they can provide a suitable intervention for undergraduate students in dealing with anxiety and loneliness.

Keywords: Anxiety, Perceived Social Support, Family Support, Friends' Support, Significant Other, Loneliness

DECLARATION

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

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List of Abbreviations

GAD	Generalized Anxiety Disorder
MSPSS	Multidimensional Scale of Perceived Social Support
UCLA	University of California Los Angeles

Chapter 1

Introduction

Background of the Study

Anxiety appears to offer significant health advantages, according to scientific studies. In these few years, the Coronavirus disease (COVID-19) pandemic has prompted widespread anxiety around the globe. Symptoms of anxiety are such as panic, fear, and unease (Vanin, 2008). It can make people sweat, feel restless and tight, and cause the heart to race. COVID-19 has turned into a major catastrophe in many aspects, including health and wellness, society, and the economy. Physical restriction by governmental mitigation initiatives exhibited a minor but long-lasting effect on mood and well-being (Cao et al., 2020). People's mental health can be influenced by social aspects. Social support refers to support that individual receives from family, friends, and significant others (Kaniasty, 2020). An example of family support can be parents preparing the child to be socially readiness and well-mannered before children enrol in school (Joy, n.d.). Friends' support can increase people's sense of belonging and purpose (Sandhya, 2022). Significant others can be referred to as an acronym for a spouse, life partner, or someone in a long-term, romantic relationship (Bonny, 2022). Loneliness is a mental condition that occurs when people want to interact yet feel isolated (Lim et al., 2020). Since COVID-19 arose, it brings a huge effect on people's lifestyles, such as social activities, working, and study mode. COVID-19 impact factors considered the associated consequences of viral propagation, lockdowns, stay-at-home orders, reduced public transportation, education, and workplace suspensions, and reduced social connections, among other things (Santomauro et al., 2021). The movements are limited strictly and reduce people's engagement in society. Thus, an individual might be facing emotional down along

with limited social involvement in this pandemic. Hence, it is important to have an awareness of self-emotion cause no one knows when COVID-19 may come to an end.

Anxiety

Anxiety is a natural body response during stressful situations (Gutiérrez-García & Contreras, 2013). When confronted with a challenging situation in the workplace, while sitting for an exam, or while deciding on a significant choice, people may experience anxiety. Anxiety could offer people a jolt of energy and assist them in concentrating. However, for persons who suffer from anxiety disorders, that worry seems persistent and might become unbearable. Anxiety has an unidentified aetiology. Biological influences, neurological chemistry and biology, tension, and personal settings could all contribute in part (Shri, 2010). Intense anxiety may cause people to have avoidance in working, family gatherings, school, and any social relationships that could exacerbate or trigger the issues. Anxiety disorder symptoms can be controlled and treated using a variety of therapies. Anxiety disorder patients typically consider taking medication or attending counselling services.

Perceived Social Support

Perceived social support relates to how people see their social circle as sources of help when they need it (Prezza & Giuseppina, 2002). According to Ioannou et al. (2019), perceived social support relates to how individuals view family, friends, and significant others as providers of material, mental, and general assistance during situations of need. In general, perceived social support can come from a range of sources, such as family, friends, love partners, community links, and co-workers, among others (Li et al., 2021). Family members are a type of social group built by parents and their children. A friend can refer to a person or a group who values and trusts each other regardless the gender or family relations

(Gambetta, 2000). Significant others refer to a relationship with a close one, such as a husband or wife, girlfriend or boyfriend (Bonny, 2022). Social support improves one's standard of living and acts as a protective shield against hardship (Pocnet et al., 2016). Three types of social support are support from emotion, instrument, and information. When others give empathy, care, and love, they are considered emotional support. Material assistance, such as money or providing service, is referred to as instrumental support. The informational support provides information, advice, and suggestions. People who receive higher social supportable have better adaption in dealing with stress, grief, unemployment, and sickness (Hori & Kamo, 2018).

Family Support

Immediate family members or a combination of extended and immediate members of the family can form a familial support system (Childers & Rao, 1992). Emotionally secure and direct contact between members of supportive families is emphasized. According to Duford et al. (2017), supportive and healthy families exhibit the following characteristics: appreciation, quality time, good communication, excellent problem-solving abilities, and individual accountability. Giving thanks is a fantastic approach to improving family bonds. Family members can and should complement one another verbally to build relationships (Kirk et al., 2004). Parents have the responsibility to teach children effective problemsolving techniques. Children acquire how to engage with the environment around them from their parents, including how to deal with life's obstacles (Featherman et al., 2019). Parents could provide a good model for their children in dealing with life's difficulties and give them some liberty in resolving their own issues. Individual members of healthy families are held accountable for their actions and are helpful in times of need (Davis, 2018). Being able to depend on people is an important part of forming a cohesive family, but this is hampered if

somebody fails to deliver. In particular, it is critical to provide assistance to families who are experiencing difficulties. Supporting them through difficult times will pull the family closer together.

Friends' Support

As the old saying goes: "No man is an island". People seek to feel socially engaged with their family and friends and have a sense of belonging to a wider social community. It is insufficient to have only a single person in the network of support because it may become overly reliant on that individual and exhaust them. If the single individual that has been depending on is unavailable to be around, it may be awful. For this reason, having a lot of solid connections in the social circle is encouraged. Moreover, different individuals come out of various elements of the characters and play various functions in the relationships. Someone who knows who you are and what you require is a supportive friend (Costa & Kallick, 1993). True friends will stay for you through in, rain or shine. A minor conflict will not prevent the development of a strong connection (Kirby, 2021). According to Raypole (2020), friendships might keep people from getting isolated, but only genuine friends can help in avoiding loneliness. Friendship is described as a close bond between two or more people (Huang, 2008). Friendship is expressed via emotion and conduct (Huang, 2008; Spencer, 2012). Friendships between co-workers, subordinates, and superiors are referred to as "workplace friendships" (Austin, 2009; Lee, 2005; Mao & Hsieh, 2012). Workplace friendship has a significant influence on organisational productivity as well as job attitudes regarding employment (Song, 2005). Groups of friends are more engaged in the task and provide better results (Dotan, 2007).

Significant Others' Support

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A significant other is defined as someone with whom you have a romantic relationship, for example, a husband, spouse, wife, boyfriend, or girlfriend. Having a particular person in our lives may be a life-changing event, adding additional insight and delight to our daily lives (Johnson, 2021). It inspires people to see themselves in a stronger and better competent aspect when somebody loves and appreciates them as who they actually are. In the toughest moments, the company of a loved one is priceless because it allows us to glimpse the light within ourselves. There are a number of key factors that each and every relation revolves when it comes to forming the fundamentals of a strong connection. Trust, respect, compassion, and understanding are one of the qualities, but support is the most significant (Drageset et al., 2015). They necessitate the collaboration of two individuals in order to construct a house out of distinct aspirations. The best support and guidance occur in understanding and demonstrating empathy, not just from talking.

Loneliness

Loneliness is an undesirable emotional reaction to a sense of isolation. The definition from Killeen (1998) suggests that loneliness is a state of thought, not a state of isolation or being alone, regardless of the degree of social interaction. Meaning that no matter how frequently a person interacts with their social circle, they will still feel empty, alone, and unpleasant. Although people with feelings of loneliness typically seek human interaction, their mental state makes it hard for them to build relationships. Other people frequently view it as an unintentional separation, abandonment, or rejection. Situational circumstances such as isolation physically, relocation to a new place, and divorce could all contribute to loneliness. The loss of a loved one can also cause loneliness (Sbarra et al., 2015). Internal issues such as low self-esteem can also lead to loneliness. People who lack self-confidence often believe they are undeserving of other people's attention or respect, which can lead to depression and prolonged loneliness (Ibrahim & Abd-Alla, 2017). Unlike social isolation, loneliness is not measured by the level of social connections. Certain people experience loneliness as a result of social isolation, whereas others experience loneliness without being isolated and withdrawn.

Research Question

- 1. Is there a relationship between perceived social support and anxiety?
- 2. Is there a relationship between perceived family support and anxiety?
- 3. Is there a relationship between perceived friends' support and anxiety?
- 4. Is there a relationship between perceived significant others' support and anxiety?
- 5. Is there a relationship between loneliness and anxiety?
- 6. Do the females have higher anxiety than the males?

Research Hypotheses

- H_1 : There is a relationship between perceived social support and anxiety.
- H_2 : There is a relationship between perceived family support and anxiety.
- H_3 : There is a relationship between perceived friends' support and anxiety.
- H_4 : There is a relationship between perceived significant others' support and anxiety.
- H_5 : There is a relationship between loneliness and anxiety.
- H_6 : The female has higher anxiety than the male.

Research Objectives

- 1. To examine the relationship between perceived social support and anxiety.
- 2. To examine the relationship between perceived family support and anxiety.
- 3. To examine the relationship between perceived friends' support and anxiety.
- To examine the relationship between perceived significant others' support and anxiety.
- 5. To examine the relationship between loneliness and anxiety.
- 6. To identify the differences between males and females in anxiety.

Significance of Study

Theoretical Significance

Prior to 2020, mental illnesses were the primary causes of worldwide health-related burden, with depression and anxiety disorders contributing the most. The outbreak of COVID-19 probably increased several of the factors that contribute to negative psychological health. There is a necessity for current information on COVID-19's mental health effects in a way that supports health system interventions is critical. This serious outbreak has an impact on the young generation that they have never encountered before. The Movement Control Order (MCO) imposed by the Government of Malaysia prohibits individuals from making physical contact. As a researcher, this is a remarkable reason to look at the social impact and mental health of undergraduate students. The present study has theoretical relevance as it shows the association between perceived social support, and loneliness, on anxiety during COVID-19 among undergraduate students. It might also help researchers better comprehend social support, loneliness, and anxiety in the future. It is critical to evaluate published research in order to comprehend the present state of the study and how it relates to the

therapeutic procedure (Pandya & Kathuria, 2021). There are still many research gaps due to the inadequacy of related research in Malaysia. Last two years, Malaysian citizens have been subjected to restricted movement during the COVID-19 epidemic. Undergraduate students encounter changes in their study patterns and lifestyle radically. For example, students who are required to study online are not able to meet friends physically or are unable to return to their hometown due to MCO. This had a profound impact on students' social circles and emotional states. The degree of social support, loneliness, and anxiety in undergraduate students would differ. As a result of the pandemic, the present study differs from earlier studies. Throughout the different stages of the pandemic, it is necessary to continually update the relevant information (Santomauro et al., 2021).

Practical Significance

Counsellors engage with student clients who are dealing with a variety of psychological and emotional issues to assist them in making meaningful changes and improving their overall well-being. Students may be emotionally challenged, have low mood, anxiety, grief, or have social challenges that interfere with their abilities to manipulate daily life. Counsellors need to know how to deal with clients who have a higher sense of anxiety. Anxiety appears to offer significant health disadvantages, according to scientific studies. At the outset, anxiety prohibits a good approach to life. According to Langevin (2013), there is a positive relationship between students' anxiety and academic performance. This means that students' anxiety is critical in assisting them in improving the learning process. Thus, this study could bring some significant ideas on what is the issue that triggers the client to an emotional breakdown. Counsellors or related professionals can design a suitable treatment based on the study. Furthermore, by contributing to the body of knowledge, professionals will be more aware of the implications of managing anxiety from a social relationship context. As the current study focuses on the emotional factor, for example, loneliness and anxiety, and also the social circle aspect, including perceived social support from family, friends, and significant others.

Problem Statement

Anxiety is a common topic that has been studied by many academics. In contrast to previous studies, the current study focuses on the impact of COVID-19. Pandemics provoke widespread fear and concern, distressing life's normal flow (Menzies & Menzies, 2020). According to the World Health Organization (WHO), COVID-19 was evaluated to have mental ramifications on physiological health. The population that has been infected with the COVID-19 virus has been evaluated, and they have the highest score of anxiety and worry. COVID-19, as a result, has contributed to many anxiety prevalence reports. Such a pandemic keeps spreading, and high morbidity and mortality rates raise substantial stress and anxiety, negatively influencing human mental well-being (Bostan et al., 2020). In other words, there is a higher level of anxiety after COVID-19. Furthermore, there are other variants of human coronaviruses, such as Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) and Middle East Respiratory Syndrome (MERS-CoV-2) that have continued to provoke fear and worry in people in the recent three years. People understand that self-isolating and reducing physical contact can help in preventing the spread of the virus, but at a cost, people's mental health can be affected.

Early pandemics, such as the 1918 influenza pandemic or Spanish flu, are well-known. While Tuberculosis, Russian flu, cholera, Hong Kong flu, HIV, or AIDS are all considered recent pandemics. However, this research is concerned with the young generation, who have never previously faced any pandemic above but the current COVID-19 pandemic. In comparison to the general population, undergraduate students have constantly been

considered a vulnerable target group, experiencing greater anxiety levels, depression, drug misuse, and disordered eating. Furthermore, undergraduate students may have a difficult time dealing with academic stress. As a result of the COVID-19 pandemic, when their academic environment has significantly changed, the stress on this particular population's mental health is increased (Browning et al., 2021).

Due to MCO, students have to adjust to new learning approaches, such as using an online platform instead of attending a class or taking an exam physically. A number of issues have arisen as a result of the transition, involving not just technical issues and also psychological challenges among learners and lecturers (Arribathi et al., 2021). The student missed the opportunity to interact with lecturers and classmates physically. This will influence not only the students but also lecturers who are used to conventional teaching methods. For students to experience highly effective learning in online classes, it is essential to have a strong and smooth internet connection. In contrast, students without an excellent internet connection will not be able to catch up with their learning progress. Students might feel helpless and fret about the situation, despite their desire to learn. However, some students may take advantage by joining the online class. Such behaviour has rarely been discovered, and even those students are unconcerned about being caught by lecturers. Once the above positive reinforcement was formed, they became less motivated to study hard.

Furthermore, the students' social activities are being controlled due to the MCO or self-quarantine. Not only learning courses, but the university also provides a platform for students to join different societies and clubs: Dancing club, Psychology Society, Film Club, etc. However, owing to safety concerns, physical activities are forbidden by avoiding physical contact. Students who are not able to interact and play with friends physically all

rely on online meetings. Feelings of loneliness might arise during that period. Many sports activities are also restricted, including badminton, basketball, and gym workouts. Besides society activities, MCO brings changes to students' lifestyles. Taking restaurants as an example, many have closed during the MCO period, leaving students with fewer options for meals. Students are forced to adjust to a new lifestyle while also dealing with academic pressure.

COVID-19 and related educational or governmental mitigation initiatives exhibited a minor but long-lasting effect on first-year university students' mood and well-being. Externalizing problems and attention problems increased during COVID-19 (Cao et al., 2020). Students are afraid and concerned about the invisible virus that is spreading throughout others. Students are unable to sleep comfortably or concentrate on their studies as a result of their persistent worries and anxiety. Although there has been a rise in attention on the topic of anxiety throughout the world, much of the research focuses on the notion of anxiety, the context of mental or emotional states, and its relevance in psychological health aspects. Furthermore, research on anxiety is widespread and, at times, inconsistent. It holds back a general awareness of low anxiety as well as influences the advancement of therapeutic approaches. In view of the recent outbreak, anxiety, a previously proposed psychological concept, appears extremely relevant. Anxiety has a role in the development variety of psychological health conditions, especially during this COVID-19 pandemic. Here as a consequence, it has been proposed that psychological healthcare intervention programs should be expanded to include anxiety.

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Definition of Terms

Conceptual Definition

Anxiety. Anxiety refers to chronic free-floating anxiety accompanied by anxious apprehension or worries about many possible situations of daily routine (Crocq, 2017). The major diagnostic criteria for Generalized Anxiety Disorder (GAD) are continuous, unmanageable worrying about a variety of issues with the lack of corresponding triggers or in an inappropriate way to possibly given harm (Gottschalk & Domschke, 2017). Anxiety is described as a continuously distributed psychological response triggered by a particularly harmful circumstance with a low or unclear hazard or risk (Goes et al., 2018; Takagi et al., 2018).

Perceived Social Support. Shaleh et al. (2020) point out that social support is linked to anxiety as people can gain positive feelings from support, caring and love. According to the study by Ioannou et al. (2019), social support also enhances both mental and physical health. Suggested that social embeddedness, social network, and social climate were the antecedents of social support (Langford et al., 1997). Social support, defined as the feeling of being loved, valued, and engaged in a socially caring interpersonal group, has positive benefits on emotional well-being (Taylor, nd).

Loneliness. Loneliness has been linked to an increased risk of sadness, anxiety, and suicide (Beutel et al., 2017). Loneliness is defined as feelings of isolation rather than physical, and social exclusion (Hawkley & Cacioppo, 2010). Loneliness was once thought to be an uncomfortable condition with no redeeming qualities, a feeling that was scarcely distinguishable from constant pessimism or a melancholy state (Cacioppo & Hawkley, 2009). Loneliness has been described as an uncomfortable emotion that comes with the belief that

the amount, and especially the quality, of one's social contacts, is insufficient to meet one's social requirements (Pinquart & Sorensen, 2001).

Operational Definition

Anxiety. By using the Generalized Anxiety Disorder-7 Scale (GAD-7), we can define anxiety operationally. This is a unidimensional scale for general anxiety levels (Spitzer et al., 2006). It is a 7-item scale using a four-point Likert scale where 0 = Not at all, 1 = Severaldays, 2 = More than half the days, and 3 = Nearly every day. A higher score indicates a higher anxiety level. In the study of Spitzer et al. (2006), GAD-7 shows Cronbach $\alpha = .92$, which is a good internal consistency. And the .83 also shows good test-retest reliability.

Perceived Social Support. Perceived social support can be defined operationally by the Multidimensional Scale of Perceived Social Support, MSPSS by Zimet et al. (1988). It consists of 12 items on a seven-point Likert scale and is a self-evaluation. The score can be indicated where 1 = very strongly disagree, 2 = strongly disagree, 3 = mildly disagree, 4= neutral, 5 = mildly agree, 6 = strongly agree, and 7 = very strongly agree. A higher score shows that higher social support is perceived. Different items represent three subscales: Family Subscale (Items 3, 4, 8, and 11); Friends Subscale (6, 7, 9, and 12); Significant Other Subscale (1, 2, 5, and 10). Score sum across items respectively, then divide by 3. The internal consistency coefficient, Cronbach's alpha, is .88, showing high internal reliability (Mosqueda et al., 2015).

Loneliness. Loneliness can be measured by UCLA Loneliness Scale (Version 3), which is a unidimensional scale (Russell, 1996). A total of 20 items and preform in the self-reporting method by using a four-point rating score where 1 = never, 2 = rarely, 3 = sometimes, and 4 = always. A higher score suggests higher loneliness (Lasgaard, 2007). It

has been measured and shows excellent internal consistency, Cronbach's alpha is .96, and good test-retest reliability is .73 (Russell, 1996).

Chapter 2

Literature Review

Anxiety

According to Santomauro et al. (2021), the COVID-19 outbreak has resulted in a rise in the prevalence of anxiety and depressive disorders. The outbreak of COVID-19 has a direct effect on understudies who are trying to manage physical distance. In collecting data from 248 students in Indonesia, a study proved that the restriction of physical activities contributed to a higher level of anxiety (Ardan et al., 2020). Students are concerned that they will be affected and will not be able to accomplish daily tasks. The study suggested that adjusting psychological well-being is just as critical as keeping physical health while experiencing physical distance during a pandemic (Ardan et al., 2020). Many studies show a significant increment in the level of anxiety due to COVID-19. Yet, a study by Sanborn et al. (2021) showed that the anxiety level did not show a significant increase among athletes. Anxiety levels did not vary across those who competed in changing seasons.

The empirical study of Baroun (2006) also indicated that females have significantly higher anxiety scores than males. A similar result is shown in the study by Santomauro et al. (2021), females are more likely to have prevalent anxiety disorder and depressive disorder when are exposed to COVID-19. In the research from Ardan et al. (2020), a similar outcome was found where female students reported a higher level of anxiety during the pandemic. However, there have been different results in the study of Vloo et al. (2021), which highlighted that males are undergoing higher anxiety levels compared with females as a result of the protracted lockdown. While some of the studies suggested, that has no remarkable gender difference in COVID-related anxiety (Copeland et al., 2021; Ahmed et al., 2020; Liu et al., 2020). In comparison to older population groups, younger age groups have a greater risk of anxiety and depressive disorders (Santomauro et al., 2021). A study by Vloo et al. (2021) also agrees that young people appear to have greater depression and anxiety concerns than older people.

Perceived Social Support

Students were compelled to switch to online instruction, with no indication that faceto-face sessions would resume. Students' sense of safety and preparation to adjust to alternative learning techniques were influenced by the urgent circumstance and the unexpected need to shift lifestyle habits (Duan & Zhu, 2020), resulting in greater degrees of anxiety and stress (Unger & Meiran, 2020). Significantly, being aware of the presence and availability of social support resources may have aided in effectively coping with COVID-19related anxiety (Ma & Miller, 2020). Perceived social support was shown to be adversely linked with general anxiety in a survey of 3454 vocational students (Mai et al., 2021). In Turkey, the negative connection between social support and quarantine anxiety was also established in the research of 506 university students (Yalcin et al., 2021). The study done during the Chinese lockdown found a negative association between social support and anxiety symptoms (Ao et al., 2020).

However, several empirical studies have given different findings. There are less significant relations shown between social support and the association with fear, depression, anxiety, and stress (Alnazly et al., 2021). When obtaining more information about family issues caused markedly higher levels of anxiety among students in Thailand (Pramukti et al., 2020). Another study found that despite social support being substantially connected with anxiety, family support did not have a statistically significant relationship with anxiety (Li et al., 2021). This is due to the fact that acquiring more information from one's social circle might indirectly enhance students' worry and anxiety.

According to Stoliker & Lafreniere (2015), females showed higher levels of social support coping. However, in the study of Guo et al. (2021), females had a lower level of anxiety, depression, and stress than males. This is due to the fact that female respondents reported receiving greater social support in this study (Guo et al., 2021). Despite this evidence, most COVID-19 work examining the relationship between social support and anxiety has emphasized general social support instead of specialized social support from diverse sources.

Family Support

University students who are subjected to a significant reduction of adult scaffolding and parental monitoring and support have a broad impact on emotional well-being (Copeland et al., 2021). Despite the fact that just 0.55% of the participants had experienced a family or friend infected by COVID-19, a personal relationship was found to be a significant predictor of student anxiety (Copeland et al., 2021). Family support is vital in terms of emotional, financial, and physical support, as well as aiding in the development of health and wellness. Students who lived with parents, and had a stable economic income, were less likely to have anxiety (Copeland et al., 2021). Mental issues may be attributed to the absence of adaptive structure and function in family relationships throughout the quarantine period, particularly in younger students (Li et al., 2021).

Maintaining positive interpersonal interactions with family members may lessen anxiety among Spanish university students (Garvey et al., 2021). During the COVID-19 shutdown, a study of Spanish students studying social work found that stronger perceived

social support from family considerably lowered moderately to severe degrees of anxiety (Diaz-Jimenez et al., 2020). In Bangladesh, staying with family was proven to be a beneficial attribute in reducing anxiety among undergraduates (Dhar et al., 2020). Surprisingly, recent research has revealed that not all families have a favourable influence on students. When obtaining more information about family issues caused markedly higher levels of anxiety among students in Thailand (Pramukti et al., 2020). Another study found that although social support was substantially connected with anxiety, family support did not have a statistically significant relationship with anxiety (Li et al., 2021).

According to Guo et al. (2021), a substantial difference between the genders in reported family support was discovered, which contradicted previous results indicating females reported lower family support than males (Hannum et al., 2009). This finding might be attributed to the fact that the majority of undergraduate students are not married, and their families continue to support them as normal throughout the COVID-19 outbreak in China. As a result, females receive greater assistance from family, friends, and others since most people recognize that females require more support than males (Afifi, 2007).

Friends' Support

The people were more concerned regarding their family than their friends, according to research based on Chinese Online users, and preferred to receive psychological support from their families throughout the epidemic (Li et al., 2020b). More significantly, anxiety may be induced by a lack of social support during the lockdown phase. Stress at home, isolation problems, and lack of exposure outside directly were found as potential indicators for anxiety. In a study of French students under quarantine, friends and family support were indicated as significant protective factors (Bourion-Bedes et al., 2021). The study believes that having great connections will prove to be beneficial in dealing with anything life brings

to oneself (van Harmelen et al., 2017). Moreover, Stevic et al. (2021) discovered that friendship satisfaction enables individuals to experience less anxiety.

Notwithstanding the other findings, the participants from the study have a different perception of communication with friends (Juvonen et al., 2021). During COVID-19, the demand for communication electronically to interact with people is getting a raise. While the study reported when people try to keep in touch with more friends, it takes higher contact frequency, and this appears to raise rather than lessen people's anxiety (Juvonen et al., 2021). Adolescents also observed greater degrees of loneliness and anxiety in this study. Individuals' perceptions of risk and levels of anxiety have been indicated to increase when their family members and friends are sharing COVID-19-related information with them (Drouin et al., 2020; Dryhurst et al., 2020)

Significant Others Support

In response to studies proving the importance of relational coping for partners' relationship well-being (Hilpert et al., 2016; Parise et al., 2019), a plethora of studies have shown that coping positively as a pair in periods of crisis decreases partners' anxiety and enhances spouses' mental well-being while coping with both normative and non-normative life occurrences (Rottmann et al., 2015: Molgora et al., 2019; Alves et al., 2019).

There is a study on health and social care professionals in satisfaction with life and support from a partner during the COVID-19 outbreak. The findings showed that shared reality could help persons under pressure feel more support from their partner, resulting in relationship advantages for the partnership as a whole (Enestrom & Lydon, 2021). Support from significant others can help individuals in dealing with distress events (Donato et al., 2021). According to the research, having good partner support is critical for not just coping

with life events but also surviving through the outbreak (Vowels et al., 2021). Perceived partner support can help people in tolerating distress feelings during the outbreak, at the same time, maintain a close relationship (Balzarini et al., 2020).

However, in the study of Özmete & Pak (2020), the perceived special other support is not significantly important compared to the perceived family support, and perceived friend support contributes to mental health. A similar result was shown in the research from Alnazly et al. (2021). When it comes to various social supports, significant others' support is the least significant factor. While the family was the most important source of support, followed by friends (Alnazly et al., 2021).

Loneliness

Different from primary school and secondary school, university life is a critical period in the life of a young adult (Stoliker & Lafreniere, 2015). Students might face difficulty in managing the stress and demands that come with a university education. Other factors, such as living alone, financial support, and a new environment, can trigger a change in emotion (Jerusalem & Mittag, 1995). The study by Stoliker & Lafreniere (2015) suggests that loneliness feelings have a negative impact on academic performance. Loneliness has been associated with a multitude of negative biological and psychological effects in prior research (Shrira et al., 2020). People who have a confidant in life have shown a low level of loneliness, and on the contrary, its absence probably heightens the sense of loneliness (Green et al., 2001).

Research report that loneliness was associated with anxiety and the emotional impact of COVID-19's menace on physical health (Xiang et al., 2020). During this outbreak, participants report higher loneliness which brings in anxiety, depression, and stress (Varga et

al., 2021). Similar results were found in the study by McQuaid et al. (2021). In a dosedependent manner, loneliness was associated with anxiety and depression levels, which proves that the relationship between loneliness and anxiety is remarkable during this crisis. During and after prolonged isolation, children and adolescents are more prone to suffer higher levels of depression and, most likely, anxiety. As enforced isolation persists, this may become more of a problem (Loades et al., 2020). Previous research has found that social separation and loneliness as a result of residential restriction increase a person's incidence of mental distress, anxiety, and depressed mood, with a longer period of loneliness being a strong driver of negative outcomes of psychiatric signs and symptoms (Rauschenberg et al., 2020; Loades et al., 2020). During the coronavirus outbreak, student loneliness was at an alltime high. Protective factors for loneliness were found as resilience, coping mechanisms, and support networks (Labrague et al., 2021). Female adolescents indicated a higher level of loneliness as well as a higher anxiety level. Yet, in the other age categories, this gender disparity was not evident (McQuaid et al., 2021).

Anxiety and Perceived Social Support

Anxiety was negatively associated with perceived social support (Ma & Miller, 2020). This is in line with current and previous studies (Cao et al., 2020; Chen et al., 2020). The research studied the relationship between anxiety and perceived social support among 182 Chinese overseas students, according to the findings. Chinese overseas students had significant levels of anxiety, while perceived social support played a role in the study. Other factors resulting in anxiety are also prejudice from the media, worry about COVID-19, and confusing messages from social networks (Ma & Miller, 2020). Besides, social support from parents, teachers, and friends can recede anxiety and improve academic motivation (Camacho et al., 2021). Nevertheless, some studies also show that not every support will bring a negative impact on student anxiety (Pramukti et al., 2020; Li et al., 2021). Support from family is not significant association with anxiety (Li et al., 2021).

Anxiety and Loneliness

Many studies indicate that the sense of loneliness can contribute to the increment of some mental health issues, such as anxiety, distress, low self-esteem, sleeping issue, and depression. A study among university students about loneliness and anxiety also shows there is a positive relationship and other physiological symptoms (Odacı & Kalkan, 2010). According to another study by Richardson et al. (2017), the higher the loneliness, the higher the level of anxiety, depression, stress, and general mental health. However, there was no indication that having mental health issues made people feel lonelier over time. Some life events could bring lonely feelings, such as the beginning of the university or moving to a new place without family, friends, or social networks (Elmer et al., 2020). The study focused on social relationships and emotional health in Swiss undergraduates before and after COVID-19. The results show there is a significant increase in anxiety and loneliness during the crisis. Meanwhile, evidence suggests that loneliness is a risk factor for stress, sadness, and anxiety, according to a rapidly developing study on the effect of the latest situation on psychological health (Killgore et al., 2020a, b; Losada-Baltar et al., 2020; Palgi et al., 2020; Park et al., 2020; Tso & Park, 2020). However, Okruszek et al. (2020) have a different result on the relationship between loneliness and anxiety. This research studies the association between loneliness, anxiety, depression, and COVID-19 risk attitudes and emotional reaction in young individuals who engaged in social distancing during the outbreak in Poland. Surprisingly, there is no significant influence between loneliness and anxiety was discovered in COVID-19-related perception.

Perceived Social Support and Loneliness

Loneliness is caused by a discrepancy between one's desired and real social interactions (Peplau & Perlman, 1982). While statistical characteristics of social systems impact loneliness, it is mostly influenced by subjective assessments (Asher & Paquette, 2003). In a previous study on first-episode psychosis, patients mostly had no confidence in life (Macdonald et al., 2000). According to Morgan et al. (2008), first-episode patients are sevenfold more likely than the general group to lack a confidant. Perceived social support has been indicated to be related to the sense of loneliness, emotion, and psychiatric issue, especially if the individuals lack confidence in life (Sündermann et al., 2013)

Wang et al. (2018) pointed out that most of the studies focus on the association between perceived social support and mental disorder more widely than the association between loneliness and mental disorder, and hence is far more solidly established. Less research is found in mentioning loneliness as its independent variable for mental illness findings. Researchers tend to report that loneliness at the start of the study assumed depression and anxiety levels (Wang et al., 2018). A study looked into the links between loneliness in various social connections and psychopathology in undergraduates. According to the findings, the loneliness of family and peer-related was linked to anxiety, despair, and suicidal ideation, while romantic and peer-related loneliness was linked to social anxiety (Lasgaard et al., 2011). In other ways, only family-related loneliness was linked to intentional self-injury and disordered eating habits. Lasgaard et al. (2011) suggested that it is necessary to clarify loneliness symptoms in diverse social connections, particularly peers and familial interactions when exploring loneliness and psychopathology in adolescence. Perceived social support prevents individuals feel lonely in normative life and during unforeseen calamities,

which will aid in the discovery of solutions to reduce lonely people's anxiety amid this worldwide health issue (Xu et al., 2020).

Theoretical Framework

Social Impact Theory

In the contexts of interpersonal interaction and group dynamics, a contemporary notion of social impact has been proven to be significantly important. According to Social Impact Theory, the degree of influence an individual feels in a group setting is determined by the group's strength, the group's immediacy, and the number of people in the group (Latané, 1981). The strength dimension is comparable to social identity, and most models of social influence include it as an indicator of social influence. At the same time, this theory has outlined two essential variables: immediacy and number. Group strength refers to the power of the social status of the group. Strength is defined as how we are concerned about the individual or someone trying to affect us or whom we are comparing. (Neighbors et al., 2013). Physical or psychological proximity with the group is considered as the group's immediacy. As a result, a group with a large number of people (instead of a small number of people), strong power (instead of weak power), and closer distance (instead of far distance) might have the greatest impact on a person. Conformity, as well as other group actions, including obedience, majority and minority attitude, and the concept of social impact as a whole, are all explained by social impact theory. When people or groups affect the attitudes or behaviours of others through interactions or even simply their existence, this is referred to as having a social impact (Sedikides & Jackson, 1990). The individual's perspective of occurrences causes them to feel impacted, even though others do not intend to affect them. Theoretically, social impact is considered in relation to the social dynamics that affect people, forcing people to think or behave in a certain manner (Jackson, 1987). Any of the numerous

physiological and subjective experiences, motivations and feelings, thoughts and faiths, attitudes and behavioural patterns changes that happen within a person, human or animal, as a consequence of the real, inferred, or imagined existence or acts of others (Latané, 1981).

Conceptual Framework

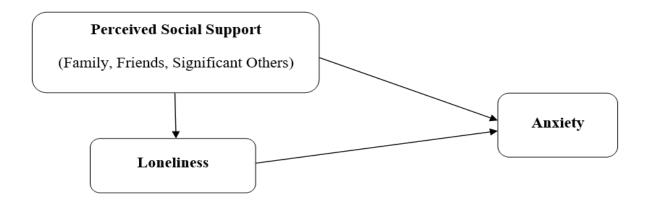


Figure 1.

The conceptual framework of "Perceived Social Support, Loneliness, and Anxiety among Malaysian Undergraduate Students during COVID-19."

The dependent variable (DV) in this study is anxiety, whereas the independent factors (IV) are loneliness and perceived social support (including support from family, friends, and significant others). During COVID-19, research aimed to examine how social impact (perceived social support) influenced people's emotional aspects (loneliness and anxiety). The diagram above shows that the lesser social supports (IV) perceived will cause a higher level of anxiety (DV). Also, the lesser social supports (IV) are perceived will cause a sense of loneliness (IV). Furthermore, those with poor emotional states, such as loneliness (IV) are more likely to experience anxiety. According to Social Impact Theory, strength, immediacy, and the number of people in the group can impact one's emotions. During COVID-19, many people underwent quarantine or self-isolation; with those factors, individuals were forced to be alone for a period depending on the situation. Physical immediacy can also influence

people's emotions. Therefore, the current study suggested that all the variables can bring impact each other. In short, social support and loneliness will influence anxiety.

Chapter 3

Methodology

Research Design

This study underwent a **cross-sectional design** in collecting data on the variables of anxiety, multidimensional social support, and loneliness level in a limited time period among undergraduate students in Malaysia (Hill & Hamm, 2019). Besides, this study was quantitative research as there will be a collection of numerical data. A quantitative technique was appropriate because the goals of this research were to learn more about the relationship between the variable of anxiety, social support, and loneliness among undergraduate students in Malaysia. This research is specifically aimed at undergraduate students as qualified respondents. The first-hand data as known as primary data was gathered data from the participants. It's a self-reported questionnaire since respondents were asked to fill out the responses without the help of a scholar. According to Martínez-Mesa et al. (2016), using a questionnaire to obtain a large number of statistics from participants is quick and convenient. A survey is a type of study that allows the researcher to obtain data from specific populations (Kumar, 2014). Thus, to collect data in a specific time period, a questionnaire was applied to obtain data. Aside from that, a web-based survey approach was enhanced for collecting data in order to distribute the questionnaire (Kumar, 2014). Because of the COVID-19 epidemic, people are trying to avoid physical engagement and contact, so a self-reported survey is appropriate in the present circumstances. Therefore, collecting data via online survey is also more productive and protects participants from infection at the same time. The three main components of the questionnaire include the Generalized Anxiety Disorder-7 Scale (GAD-7), the Multidimensional Scale of Perceived Social Support

(MSPSS), and the UCLA-LS3 Loneliness Scale. Respondent's answer is based on their most recent situation.

Sampling Procedure

Sampling Method

The **purposive sampling method** was applied in the present study to gain data productively. This is a non-probability sampling method. The researcher has decided on the respondents based on our own expertise and judgment; therefore, this sampling strategy is implemented (Martínez-Mesa et al., 2016). Instead of selecting responders at random, only those who fit our criteria, which include undergraduate students in years one through four, will be accepted. This is due to the fact that they can offer a more specific result of their anxiety level, perceived social support level, and loneliness level to the research. The collection of data will come to a stop when it achieves the intended quantity of data or the data collecting deadline (Martínez-Mesa et al., 2016).

Research Location

Through the use of a Google Form, the researchers conducted the investigation all around Malaysia. Due to the fact that the questionnaires have been delivered via online questionnaires, social media channels have been applied to promote the survey. Research questionnaires for this study have been distributed using social media sites, including Facebook, WhatsApp, and Microsoft Teams. Researchers can more easily and accurately target undergraduates by utilizing Microsoft Teams.

Ethical Clearance Approval

The process for obtaining ethical clearance from the university followed next. The approval have be acquired from the supervisor (Puan Anisah Zainab Musa), Head of the Department of Psychology and Counselling (Dr. Pung Pit Wan), and Dean of the Faculty of Art and Social Science (Dr. Lee Lai Meng). Moreover, before the data collection process begins, the UTAR Scientific and Ethical Review Committee ensure that no infringement of the ethical considerations. The application for ethical clearance was submitted once the present study proposal was completed in order to receive permission to progress to the data-collecting stage.

Sample Size, Power, and Precision

Sample Size

The sample size for Pearson's Product Moment Correlation was calculated using G*Power 3.1.9.4. (PPMC). According to Salim & Abdullah (2017), owing to the possibility of missing data, outliers, and non-responsive data, the sample size should be raised by 40% to 50%. This can help to increase the accuracy of the results. Thus, the total sample size of 84 has been added another 42 to prevent missing values, outliers, or non-engagement responses. Finally, the sample size in this study was n = 126.

Power Analysis

The sample size generator, G*Power 3.1.9.7 version, was used to generate the sample size for Pearson's Product-Moment Correlation (PPMC). The input power was .80, which suggests that the result has an 80% probability of being substantial. Furthermore, the margin of error was .05. For bivariate correlational analysis, the medium effect size is 0.3 (Cohen,

2013). For social support and anxiety, the effect size is .330, this shows the effect size is medium (Fasihi Harandi et al., 2017). Ma et al. (2014) suggest that the effect size of loneliness through anxiety was medium, which is .352. In short, the relationship between anxiety and perceived social support; between anxiety and loneliness both show a medium effect size.

In G*Power, for the test family, the "Exact" was selected, and the statistical analysis was "Correlation: Bivariate normal model." Then, the effect size for each variable was inserted accordingly. For two hypotheses, the moderate effect size of 0.3 was used. The overall sample size of the two relationships was: perceived social support and anxiety (n = 84) and loneliness and anxiety (n = 84). In short, G*Power proposed a minimum sample size of 84 for Pearson's Product-Moment Correlation.

The Procedure of Data Collection

Inclusion and exclusion criteria

The inclusion criterion for participants should be enrolled in any Malaysian institution to undertake their studies currently. Next, participants should also be between the ages of 18 and 25. Any ethnicity is accepted. Below the age of 18, over the age of 25, presently uninvolved in the study, students who have dropped out of university, and students who are studying overseas are all exclusion criteria. This was addressed because the researcher intended to look at the relationship between perceived social support, loneliness, and anxiety during COVID-19 in the Malaysian setting.

Procedures for Obtaining Consent

Prior to the questionnaires, the consent form has been appended. Before filling out the survey, participants had to fill out an informed consent form. Participants have affirmed their

agreement (or disagreement) regarding taking part in the research. They were then forwarded to the survey form after they agreed. They are not permitted to partake in the survey if they disagree with the consent. The objective of the research, confidentiality, voluntary involvement, and the researcher's contact information were all mentioned on the consent form.

Data Collection Procedures

After having ethical approval, the survey has to be delivered through internet platforms using Google Forms (Microsoft Teams, WhatsApp, Facebook, and Instagram). The study's purpose and consent form have been mentioned in the first part of the questionnaire. Participants have completed the variables questionnaire. The data has been obtained and then formatted in Excel for data organization. The data has been calculated using Jeffreys' Amazing Statistics Program (JASP) version 0.14.1.0. To exclude incomplete data, the researcher used an outlier test. Statistical analysis has been performed after the outliers have been removed in order to acquire descriptive and analytical data. This information reveals the outcome and facilitates the decision of whether to accept or reject the hypothesis.

Instrument

Instrument for Anxiety

In order to assess an individual anxiety level, the Generalized Anxiety Disorder-7 Scale (GAD-7) has been applied in the current research. It measures general anxiety on a single dimension (Spitzer et al., 2006). It is a total of 7 items with a 4-point Likert scale. The scale of 0 = Not at all, 1 = Several days, 2 = More than half the days, and 3 = Nearly every day. There is no reverse-scored on this scale. Instances of items include "Feeling nervous, anxious, or on edge", "Worrying too much about different things", and "Feeling afraid as if something awful might happen". The score result should be based on how often participants

experienced a particular scenario in the previous two weeks. The seven items have a sum-up score that ranges from 0 to 21. The lower the score indicates the lower the degree of anxiety. The score from 0 to 4 shows minimal anxiety; 5 to 9 shows mild anxiety; 10 to 14 shows moderate anxiety; 15 to 21 shows severe anxiety. According to Spitzer et al. (2006), this GAD-7 scale indicates Cronbach $\alpha = .92$, which is an excellent internal consistency, and also shows a good test-retest reliability which is .83.

Instrument for Perceived Social Support

The Multidimensional Scale of Perceived Social Support (MSPSS) by Zimet et al. (1988) can be applied to evaluate the degree of perceived social support from 3 different dimensions, which are family, friends, and the significant other (person with a romantic relationship or so call partner). Therefore, this is a multidimensional scale. It consists of a total 12-item on a 7-point Likert scale where 1 = Very Strongly Disagree, 2 = Strongly Disagree, 3 = Mildly Disagree, 4 = Neutral, 5 = Mildly Agree, 6 = Strongly Agree, 7 = Very Strongly Agree. There is no reverse scoring on this scale. Instances of items are "There is a special person who is around when I am in need", "My family really tries to help me", and "I can count on my friends when things go wrong". The sum-up score range is from 12 to 84. The scoring calculation for total perceived social support will be total across 12 items. The score range of 12 to 35 indicates low perceived social support, 36 to 60 indicates medium perceived social support, and 61 to 84 is high perceived social support. For Family Subscale, total up items 3, 4, 8, & 11; Friends Subscale, add up items 6, 7, 9, & 12; and Significant Other Subscale, sum across items 1, 2, 5, & 10. The score range of subscale, 4 to 11 indicates low perceived social support, 12 to 20 indicates medium perceived social support, and 21 to 28 is high perceived social support. The lower score, the lower degree of social support is

perceived. The internal consistency coefficient shows high internal reliability, where Cronbach's alpha is .88 (Mosqueda et al., 2015).

Instrument for Loneliness

Loneliness can be assessed using UCLA Loneliness Scale (Version 3) by Russell (1996). Version 3 is the second revised version of the UCLA Loneliness Scale. This version was more understandable for people with a lower level of education (Russell, 1996). This is a unidimensional scale. It is a self-administered survey that consists of 20 items. It uses a 4-point rating score where 1 = Never, 2 = Rarely, 3 = Sometimes, and 4 = Always. There are 9 reversed items which are items 1, 5, 6, 9, 10, 15, 16, 19, and 20. The score will be reversed where 1 = 4, 2 = 3, 3 = 2, and 4 = 1. Then, sum up the score with the remaining non-reversed items. Sample of items such as "How often do you feel that you lack companionship?", "How often do you feel alone?" and "How often do you feel that you are no longer close to anyone?". After totaling up the score from 20 items, the ranges are from 20 to 80. A lower score indicates a lower degree of loneliness (Lasgaard, 2007). It has been measured and indicates good internal consistency. Cronbach's alpha of .96, and good test-retest reliability is .73 (Russell, 1996). The different levels of loneliness are divided into 4 categories. The range of 20 to 34 indicates low; 35 to 49 is moderate; 50 to 64 showed moderately high; 65 to 80 means a high degree.

Pilot study

The actual study was preceded by a pilot study. A small-scale preparatory investigation known as a "pilot study" was administered to assess the viability of the study design. In order to evaluate the reliability, 30 samples in total were gathered. In essence, the

instruments' Cronbach's alpha was higher than the desirable range of .70 (Keith, 2017). The assessments or questionnaires used in this study demonstrated excellent reliability, according to the reliability test. Hence, no modifications were made to any of the instruments.

Table 3.1

Instruments	Amount of	Cronbach's alpha	Cronbach's alpha
	Items	Pilot Study	Actual Study
GAD-7	7	.73	.73
MSPSS	12	.92	.91
MSPSS (Family)	4	.77	.84
MSPSS (Friend)	4	.81	.83
MSPSS (Significant others)	4	.76	.88
UCLA-3	20	.85	.83

Instruments Reliability of Pilot study (n=30) and Actual Study (n=126)

Note. GAD-7 = Generalized Anxiety Disorder-7 Scale, MSPSS = Multidimensional Scale of Perceived Social Support, UCLA-3 = UCLA Loneliness Scale (Version 3)

Actual Study

In the actual study, the items were all maintained since the instruments showed Cronbach's alpha of .70 or above in the pilot study. The reliability of .70 and above for the instrument was acceptable (Keith, 2017). Therefore, there was no adjustment to the tools made in the actual study. The surveys were sent out via several social media, for example, WhatsApp, Instagram, and Microsoft Teams. The online survey helps in collecting data in a short period of time. There was a total of 126 data collected in the actual study. In the actual study, all the scales also showed a good Cronbach alpha value which is above .70 (refer to Table 3.1).

Chapter 4

Results

Descriptive Statistics

Demographic Characteristics

The demographic data of 111 respondents are shown in Table 4.1 below. For the gender, 58.56% of female respondents (n = 65), and 41.44% (n = 46) of male respondents. The 111 respondents were aged range between 18 to 25 (M = 22.18, SD = 1.78). Most of the respondents were age 23 (n = 39, 35.14%), while the respondents who were age 18 (n = 2, 1.80%) are the least. Most of the respondents who were involved in this study were Chinese (n = 80, 72.07%), Indian (n = 21, 18.92%), and Malay respondents (n = 3, 2.70%). The remaining 7 respondents are from other races (6.31%). The majority of the year of study of the participant is from Year 3 (n = 38, 34.23%). The second majority of the year of study is Year 4 (n = 37, 33.33%). There are a total 25 of Year 2 respondents (22.52%), while only 11 students from Year 1 responded (9.91%).

Table 4.1

		п	%	М	SD	Min	Max
Gende	r						
	Male	46	41.44				
	Female	65	58.56				
Age				22.18	1.78	18	27
	18	2	1.80				
	19	7	6.31				

Demographic Data of Participants (n = 111)

20	13	11.71
21	13	11.71
22	20	18.02
23	39	35.14
24	6	5.41
25	11	9.9
Race		
Malay	3	2.70
Chinese	80	72.07
Indian	21	18.92
Others	7	6.31
Year of Study		
Year 1	11	9.91
Year 2	25	22.52
Year 3	38	34.23
Year 4	37	33.33

Note: n = Amount of the respondents; % = Percentage; M = Mean; SD = Standard deviation; Min = Minimum value; Max = Maximum value

Descriptive Statistics of Topic-Specific Variables

Table 4.2. showed the score distribution of the respondents on generalized anxiety, perceived social support, perceived family support, perceived friends' support, and perceived significant others' support. The four classifications of scores in GAD-7 are minimal, mild, moderate, and high. The mean score for generalized anxiety is 9.41. Then, 10.81% of the respondents (n = 12) reported a low level of generalized anxiety. There are 41.44% (n = 46) of respondents reported mild anxiety levels, while 36.94% of respondents reported moderate anxiety (n = 41). 10.81% of respondents (n = 12) reported a high degree of anxiety.

In Perceived Social Suppor, the mean score is 49.65. There are 16 respondents (14.41%) who reported a low level of perceived social support. Most of the respondents reported moderate perceived social support, which is 64.87% (n = 72). The 23 respondents (20.72%) reported a high degree of perceived social support.

While the mean score of Perceived Family Support is 16.20. There are 17 respondents (15.32%) who reported a low level of perceived family support. Most of the respondents reported moderate perceived family support, which is 65.77% (n = 73). The 21 respondents (18.92%) revealed a high degree of perceived social support.

In Perceived Friends' Support, the mean score is 17.39. There are 12 respondents (10.81%) who reported a low level of perceived friends' support. Most of the respondents reported moderate perceived friends' support which is 63.07% (n = 70). The 29 respondents (26.13%) reported a high degree of perceived social support.

The mean score of Perceived Significant Others' Support is 16.07. There are 23 respondents (20.72%) who reported a low level of perceived significant others' support. Most of the respondents reported moderately perceived significant others' support which is 58.56% (n = 65). The 23 respondents (20.72%) reported a high degree of perceived social support.

For loneliness, the mean score is 40.92. There are 27.03% of the respondent (n = 30) revealed a low loneliness degree. There are 55.86% (n = 62) of respondents reported moderate loneliness, while 13.51% of respondents reported moderately high loneliness (n = 15). 3.60% of respondents (n = 4) reported high levels of loneliness.

Table 4.2

Distribution of Topic-Related Characteristics (n=111)

Generalized Anxiety			9.41	3.44	3.00	18.00
Low	12	10.81				
Mild	46	41.44				
Moderate	41	36.94				
High	12	10.81				
Perceived Social Support			49.65	13.12	24	80
Low	16	14.41				
Moderate	72	64.87				
High	23	20.72				
Perceived Family Support			16.20	5.11	4	28
Low	17	15.32				
Moderate	73	65.77				
High	21	18.92				
Perceived Friends' Support			17.39	4.98	8	28
Low	12	10.81				
Moderate	70	63.07				
High	29	26.13				
Perceived Significant Others' Support			16.07	5.49	4	28
Low	23	20.72				
Moderate	65	58.56				
High	23	20.72				
Loneliness			40.92	10.54	20	65
Low	30	27.03				
Moderate	62	55.86				
Moderately High	15	13.51				
High	4	3.604				

Note: n = Amount of the respondents; % = Percentage; M = Mean; SD = Standard deviation; Min = Minimum value; Max = Maximum value

Data Diagnostic and Missing Data

Frequency and Percentages Missing Data

According to Kang (2013), a variable's value that is failed to collect or incomplete is known as missing data (or missing values). Missing data should be excluded once it has been discovered in a study. In the present study, no missing data was found. This is because, in the Google Form, the researcher has set all the items that must be completed before the respondent proceeds to the next section.

Methods for Addressing Missing Data

Data collection is done via a Google Form. To prevent missing data, the researcher designed that all the questions on the form had to be answered. This setup ensures that respondents can only continue to the subsequent section after responding to the items. Therefore, this research had no missing data. Besides, the missing data detection can be completed by using Microsoft Excel. The missing data from rows A1 to AA2 will be detected by entering '=countblank(A1, AA2)'. Then, the responses with missing values would be removed.

Criteria for Post Data-Collection

The missing data in a study should not be above 20% as it will cause a substantial bias due to the high standard errors (Gyasi et al. 2017). Hence, it is important to rule out the response with a missing value. In this research, no missing value was shown.

Besides, the data with unengaged responses will be excluded as well. Especially with Likert scales, respondents may provide the same rating answer, even if a reversed question. It

is as known as an unengaged response (Awang et al., 2018). In MS Excel, entering '=STDEV.S(G2:AS2)' can detect the unengaged response from row G2 to AS2. If the score showed below .50, it would indicate an unengaged response (Gyasi et al. 2017). However, the smallest value is .54, which all above the value of .50. Hence, there was no unengaged data was deleted.

In addition, the outliers would violate the data's normality. To find the outliers, a boxplot have be utilized with JASP. After the calculation through JASP, 15 outliers were discovered. Eventually, a total of 111 participants were involved in the present study. To eliminate any data that might have an impact on normality, the data for kurtosis, skewness, and Shapiro Wilk also be analyzed.

Imputation of Missing Data

In post-data-collection exclusion, the response with below 80% of completeness will be eliminated. This is because the missing data will affect the accuracy and reliability of the study (Gyasi et al., 2017). If the missing data are ordinal level, then it will be imputed by their median. But since zero missing data was discovered in this study, there was no necessity for imputation.

Analyses of Data Distributions

In this research, the skewness, kurtosis, Shapiro Wilk, and JASP boxplot were presented to test the normality for the variables, including general anxiety level, perceived social support, and loneliness. By checking the normality of the data, we can evaluate the central tendency and choose which statistical test should be used to analyze the data (Mishra et al., 2019).

To assess the normalcy of the data, skewness, and kurtosis are performed. The skewness and kurtosis are expected to be in the range of ± 2.00 . Table 4.3 listed the value of skewness and kurtosis. The skewness of general anxiety level, perceived social support, perceived family support, perceived friend support, perceived significant others' support, and loneliness is -0.768, 0.236, 0.113, 0.184, 0.053, and -0.883 respectively. Except for general anxiety (-0.768) and loneliness (-0.883), most of the variables showed a positively skewed.

The Shapiro-Wilk test is used to test the data normality. If the *p*-value is below .05, the null hypothesis is rejected at a .05 significance level. Meanings, the data is non-normal. Hence, the assumption of the parametric test is not fulfilled. In this study, the Shapiro-Wilk test of the variables: perceived social support, perceived family support, perceived significant others' support, and loneliness is 0.110, 0.214, 0.398, and 0.319 respectively. The *p*-value above .05 showed the data are normal. However, the Shapiro-Wilk test of the variables, anxiety and perceived friends' support is below .05 which are 0.021 and 0.017. These results showed that the data is non-normal.

There are some outliers have been detected by using the JASP boxplot. The JASP boxplot for each variable is available in the Appendix for reference. The outlier is the data that markedly differs from the average data and may have undesirable impacts or cause deviation from the study (Aggarwal, 2016). Hence, any outliers have to be deleted to ensure that the result of the study is accurate (Aggarwal, 2016). The boxplot shows that there are 3 outliers in General Anxiety (Cases 8, 17, 62), and 12 outliers in Loneliness (Cases 13, 14, 15, 37, 38, 43, 82, 83, 84, 112, 114, 123). No outlier has been detected in the Multidimensional of Perceived Social Support.

Table 4.3

Result of the Normality Test

	Skewness	Kurtosis	Shapiro Wilk
Anxiety	0.179	-0.504	0.021
Perceived Social Support	0.250	-0.557	0.110
Perceived Family Support	0.164	-0.133	0.214
Perceived Friends' Support	0.296	-0.706	0.017
Perceived Significant Others' Support	0.049	-0.367	0.398
Loneliness	0.144	-0.371	0.319

Data Analysis

H₁: There is a relationship between perceived social support and anxiety.

Since the *p*-value of the Shapiro-Wilk test for Anxiety is .021, which is <.05, hence, the assumption of Pearson Product-Moment Correlation does not meet. Therefore, the non-parametric test, Spearman Correlation, was applied.

The relationship between anxiety and perceived social support was evaluated using Spearman Correlation. The findings are listed in Table 4.4, r(111) = .372, p < .001. Since the p-value is <.05, the null hypothesis is rejected. Hence, H_1 is accepted. This indicated that there was a strong relationship between anxiety and perceived social support. The correlation pointed in a negative direction, which means when perceived social support increases, the anxiety level will decrease or vice versa.

According to Guildford's Rule of Thumb, the relationship between perceived social support and anxiety was low. Guildford (1973) indicated that the correlation is considered as low if the *r* value is in the range from $\pm .2$ to $\pm .4$. If the *r* value is in the range of $\pm .4$ to $\pm .7$, it indicates that moderate relationship.

Table 4.4

Variable		Anxiety	Perceived Social Support
1. Anxiety	Spearman's rho	-	
	<i>p</i> -value	-	
2. Perceived Social Support	Spearman's rho	-0.372 ***	-
	<i>p</i> -value	< .001	-

Correlation between Anxiety and Multidimensional Perceived Social Support

H₂: There is a relationship between perceived family support and anxiety.

Spearman Correlation was applied to evaluate the relationship between perceived family support and anxiety. Table 4.5 indicated findings of r(111) = .471, p < .001. Since the p-value is < .05, the null hypothesis is rejected. Hence, H_2 is accepted. This indicated that the relationship between perceived family support and anxiety was significant. The correlation was in a negative direction, this implies the lower the perceived family support, the higher the anxiety level or vice versa. According to Guildford (1973), the correlation between perceived family support and anxiety was moderate as the r value is in the range of $\pm .4$ to $\pm .7$.

Table 4.5

Correlation between Anxiety and Perceived Family Support

Variable		Anxiety	Perceived Family Support
1. Anxiety	Spearman's rho	-	
	<i>p</i> -value	-	
2. Perceived Family Support	Spearman's rho	-0.471	-

Variable		Anxiety	Perceived Family Support
	<i>p</i> -value	<.001	-

H₃: There is a relationship between perceived friends' support and anxiety.

Spearman Correlation was applied to evaluate the relation between perceived friends' support and anxiety. Table 4.6 shows the findings of r(111) = .302, p < .001. Since the p-value is < .05, the null hypothesis is rejected. Hence, H_3 is accepted. This indicated that the perceived friends' support and anxiety have a strong relationship. The correlation was the negative direction, it implies that the lower the perceived friends' support, the higher the anxiety level or vice versa. According to Guildford (1973), the correlation between perceived friends' support and anxiety was low as the r value is in the range of $\pm .2$ to $\pm .4$.

Table 4.6

Variable		Anxiety	Perceived Friends' Support
1. Anxiety	Spearman's rho	-	
	<i>p</i> -value	-	
2. Perceived Friends' Support	Spearman's rho	-0.302**	-
	<i>p</i> -value	0.001	-

Correlation between Anxiety and Perceived Friends' Support

H_4 : There is a relationship between perceived significant others' support and anxiety.

The relationship between perceived significant others' support and anxiety was tested using Spearman Correlation. In Table 4.7, the results are shown r(111) = .276, p = .003. Since the *p*-value is <.05, the null hypothesis is rejected. Hence, H_4 is supported. This indicated that the perceived significant others' support and anxiety have a strong relationship. The correlation was negative direction indicating the lower the perceived significant others' support, the higher the anxiety level or vice versa.

According to Guildford (1973), the correlation between perceived significant others' support and anxiety was low as the *r* value is in the range of $\pm .2$ to $\pm .4$.

Table 4.7

Variable		Anxiety	Perceived Significant Others' Support
1. Anxiety	Spearman's rho	-	
	<i>p</i> -value	-	
 Perceived Significant Others' Support 	Spearman's rho	-0.276	-
	<i>p</i> -value	0.003	-

Correlation between Anxiety and Perceived Significant Others' Support

*H*₅ : *There is a relationship between loneliness and anxiety.*

The relationship between loneliness and anxiety was investigated using Spearman Correlation. Table 4.4 displays the findings, r(111) = .214, p = .024. The null hypothesis is rejected since the *p*-value is less than .05. Hence, H_5 is supported. This suggested that loneliness and anxiety have a significant relation. The correlation was the positive direction, meaning the loneliness increased, and the anxiety level will increase as well. According to Guildford (1973), the correlation between loneliness and anxiety was low as the *r* value is in the range of $\pm .2$ to $\pm .4$.

Table 4.8

Correlation between Anxiety and Loneliness

Variable		Anxiety	Loneliness
1. Anxiety	Spearman's rho	-	
	<i>p</i> -value	-	
2. Loneliness	Spearman's rho	0.214*	-
	<i>p</i> -value	0.024	-

H_6 : The female has higher anxiety than the male.

Since the *p*-value of the Shapiro-Wilk test for Anxiety is .021, which is <.05, hence, the assumption of an independent sample *t*-test does not been meet. Therefore, the Mann-Whitney *U* test, the non-parametric test was performed to test the. The result showed that the W=1660, p =.161. Therefore, H_0 was failed to be rejected. The findings of the Mann-Whitney *U*-Test revealed that female (*Median_{female}* = 13.000) is not statistically different from the anxiety level of males ($Median_{male} = 13.000$) at .05 level of significance. However, the Rank-Biserial Correlation, r = .110, showed that there was a small to medium effect size (Cohen, 1988).

Table 4.9

Independent Samples T-Test between Female and Male in Anxiety

	W	df p	Rank-Biserial Correlation
Anxiety	1660.000	0.16	1 0.110

Note. For the Mann-Whitney test, the effect size is given by the rank biserial correlation. *Note.* For all tests, the alternative hypothesis specifies that the group *female* is greater than the group *male.*

Note. Mann-Whitney U test.

Descriptive Statistics

	Anxiety	
	female	male
Valid	65	46
Missing	0	0
Mean	12.708	12.109
Median	13.000	13.000
Std. Deviation	3.055	3.199
Skewness	-0.697	-0.946
Std. Error of Skewness	0.297	0.350
Kurtosis	-0.002	0.660
Std. Error of Kurtosis	0.586	0.688

		W	df	р	Rank-Biserial Correlation
Shapiro-Wilk	0.942	0.916			
P-value of Shapiro-Wilk	0.005	0.003			
Minimum	4.000	4.000			
Maximum	17.000	17.000			

Chapter 5

Discussion and Conclusion

Discussion

The objectives of the present research were to examine the relationships between (1) perceived social support and anxiety; (2) perceived family support and anxiety; (3) perceived friends' support and anxiety; (4) perceived significant others' support and anxiety; and (5) loneliness and anxiety. Additionally, the current study also aims to identify (6) the differences between males and females in anxiety among undergraduate students.

Anxiety and Perceived Social Support

The findings of the Spearmen Correlation indicated the r (111) = .372, p <.001. Hence, the result revealed that Hypothesis 1 is supported. The findings in H_1 indicated that there has a strong negative relation between anxiety and multidimensional perceived social support. The negative r value showed the correlation was in a negative direction. This suggests that the perceived social support decreased, the level of anxiety increased, or vice versa. This result was in line with other past research (Ao et al., 2020; Ma & Miller, 2020; Mai et al., 2021; Yalcin et al., 2021).

According to Qi et al. (2020), the different social support levels significantly correlated with different anxiety levels. The mental health of students may be affected by a variety of factors. The fear of infectious diseases like COVID-19 may be one of the factors (Qi et al., 2020). Besides, the COVID-19 pandemic has spread globally throughout the present study. According to the newest update from the Ministry of Health of Malaysia (Kementerian Kesihatan Malaysia, KKM) in May 2022, positive cases of COVID-19 are

required to quarantine for 7 days from the day the positive test results are received. Because of the quarantine, the change in lifestyle may negatively impact the students' mental health (Horton, 2020).

One explanation for the result could be that social support can arrive in different forms or sources, which can support people manage and become more resilient to hardship in life (Gorman et al., 2022). Social support from family members, friends, or significant others who share empathy with an individual will lower their anxiety symptoms during this COVID-19 (Xiao et al., 2020). The basic types of social support are physical support, psychological support, social contact, feeling valued, self-worth affirmation, reliable support, guidance and advice, and material support (Xie et al., 2022). Social support raises one's feeling of selfefficacy and fosters greater empathy, admiration, confidence, and self-fulfillment, which can all support a person in maintaining comparatively stable emotions even under distress (Glozah, 2015).

Anxiety and Perceived Family Support

According to the findings, it showed that there has a significant negative correlation between anxiety and perceived family support. The result of the Spearmen correlation showed that r(111) = .471, p < .001. Therefore, Hypothesis 2 is supported. The negative rvalue showed the direction of the correlation was negative. Meaning, the perceived family support decreased, the anxiety level increased, or vice versa. This outcome was consistent with earlier studies (Badiee & Andrade, 2018; Islam, 2020; Jones et al., 2018; Kahn et al., 2017).

Sociocultural protective factors include family cohesiveness or the emotional connections that family members share with one another (Badiee & Andrade, 2018). One

study that included Latinx college students supported prior study results that indicate family cohesion is significantly correlated with psychological health (Dennis et al., 2018). Having supportive families is often beneficial to the well-being of youth who are depressed or anxious. One explanation from Islam (2020) was that living with family powerfully reassures people, which lowers anxiety and depressive symptoms during COVID-19. Besides, in research from Li and Xu (2020), family support provided an internal and external impact on better mental health. A supportive family system provides financial, information, and emotional support, which benefits one's development (Harmelen et al., 2016).

Anxiety and Perceived Friends' Support

The result showed that there has a strong negative correlation between anxiety and perceived friends' support. The result of the Spearmen correlation indicated that r (111) = .302, p <.001. Therefore, Hypothesis 3 is supported. The negative r value showed the correlation was negative direction. Meaning, the perceived friends' support decreased, the anxiety level increased, or vice versa. This outcome was congruent with earlier research (Coles et al., 2016; Coyle et al., 2019; Jones et al., 2018; Reid et al., 2016; Xu & Carless, 2016).

Peer and close friend support fosters general well-being and reduces the chance of adverse outcomes (Coyle et al., 2019). Many undergraduate students stay far from home, they, therefore, usually depend on other peers for assistance and support (Yasmin et al., 2020). One of the explanations for this is that peers and friends who are familiar with higher academic stress may be more able to offer understanding and empathy to one's psychological needs during this Covid-19 (Yasmin et al., 2020). Although peers may not be able to provide financial support, research showed that peers were helpful in explaining or clarifying class material which is the most important aspect of academic support (Thompson & Mazer, 2019).

Anxiety and Perceived Significant Others' Support

The result indicated a strong negative correlation between anxiety and perceived significant others' support. The result of the Spearmen correlation revealed that r (111) = .276, p =.003. Therefore, Hypothesis 4 is supported. The negative r value showed the negative direction. Meaning, the perceived significant others' support increased, and the anxiety level decreased, or vice versa. This finding was supported by past study (Elahi Shirvan & Taherian, 2018; Husky et al., 2020; Liu et al., 2020)

According to Parise et al. (2019), research demonstrated that a romantic relationship would help to reduce partners' anxiety and improves psychological health while dealing with significant life events. Maintaining a good relationship with the significant one can help an individual in tolerating undesired emotions during a crisis, meanwhile, improving the closeness of the relationship especially during facing COVID-related stressors (Balzarini et al., 2020). It can also be explained by the biological aspect. According to scientific research, when people fall in love, their bodies release feel-good hormones and neurochemicals that provide pleasurable reactions (Carter & Perkeybile, 2018). It can help in reducing a person's anxiety and loneliness levels.

Anxiety and Loneliness

The result showed a strong positive relation between anxiety and loneliness. The result of the Spearmen correlation revealed that r(111) = .214, p = .024. Hence, Hypothesis 5 is supported. The positive r value showed a positive direction. Meaning, the loneliness level increased, the anxiety level increased, or vice versa. The present finding showed similar to the past research (Rauschenberg et al., 2020; Stoliker & Lafreniere, 2015; Varga et al., 2021; Xiang et al., 2020).

According to the study by Richardson et al. (2017), loneliness level is significantly positively related to the level of anxiety, and general psychological well-being. Besides mental health, loneliness can also cause poorer quality of life, weaken physical health, and impact psychological well-being during this COVID-19 (Elmer et al., 2020). It suggests that prolonged "fight-or-flight" stress caused by loneliness can lower the function of the immune system (Valtorta et al., 2016). Basically, compared to people who do not suffer loneliness, those who do have a weaker immune system and more inflammation (Valtorta et al., 2016). It is understandable that loneliness increases stress levels, disrupts sleep, and is harmful to the body's health (Valtorta et al., 2016). In other words, loneliness can also worsen anxiety or depression.

Gender Difference in Anxiety

Mann-Whitney *U*-test indicates that the *p*-value is above .05, which is =.161. Hence, Hypothesis 6 was not supported. The median between females ($Median_{female} = 13.000$) and males ($Median_{male} = 13.000$) is not statistically different in anxiety. This result was not consistent with the past study, which indicates that females should report higher anxiety levels than males (Ardan et al., 2020; Baroun, 2006; Santomauro et al., (2021). Nevertheless, it was proven in some studies that anxiety was experienced equally by men and women (Ahmed et al., 2020; Copeland et al., 2021; Liu et al., 2020). One explanation from the study of van der Vegt & Kleinberg (2020), they have a significant gender difference when discussing different topics related to emotions. Men were more preoccupied with the economic system, while women were more concerned with family members and serious health issues. It demonstrates how different genders have their own particular concerns which might lead to anxiety. Hence, it can be explained the finding of no obvious gender difference in the anxiety level was found.

Implications

Theoretical Implications

The outcomes of this study increased the understanding of society about anxiety, perceived social support, and loneliness among undergraduate students in Malaysia. The current research applied the Social Impact Theory, which indicates that individuals are greatly impacted by others (Latané, 1981). This research pointed out how the social impact influences an individual's emotional aspects during COVID-19. According to Latané, (1981), the 3 main elements of social impact are group strength, immediacy, and the number of people in the group. In the present study, perceived social support is the variable that represents the social impact.

Furthermore, for the perceived social support, research also separates the variable into three specific dimensions, which are family support, friends' support, and significant others' support. The results offered evidence that there has a strong relationship between the abovementioned variables and anxiety. In short, the results of the present study strengthened the social impact theory, which demonstrates that it is reliable and valid in Malaysian contexts.

Practical Implications

The current study provides a better knowledge and comprehension of how social support brings impacts anxiety and loneliness. Considering the long-lasting impacts of COVID-19, the findings of this study give undergraduate students a framework to discover the underlying factors that could influence their anxiety level so they can handle anxiety in a better way. Accordingly, this study helps students become aware of the importance of the different dimensions of social support and encourages them to widen their social networks to obtain more social support. In university, if students face issues regarding anxiety and loneliness, they can seek counselling services. As a result, the ability to manage anxiety and

cope with it more positively can help undergraduate students maintain their psychological well-being.

Besides, counsellors and mental health professionals play a crucial role. Gaining a deeper understanding of the benefit of social support and the factor causing anxiety can help in providing a better mental health service. There is a need to identify the underlying issue and assist people to attain the best psychological well-being during and after COVID-19 (Seens et al., 2021). As counsellors, they can offer clients early intervention or suitable treatment plans for strengthening social support in order to reduce their anxiety levels. Furthermore, counsellors may want to provide webinars to students. These webinars could help students and raise awareness of the advantage of social support, and helpful resources for self-help during anxiety.

Limitation of Study

The first limitation of this study is the insufficient sample size for statistical measurements. The small sample size has led to the *p*-value of Shapiro-Wilk of the dependent variable, anxiety being below .05. Hence, all the tests applied are the non-parametric test. In comparison to parametric tests, non-parametric tests have less effective limitations (Hussain & Mahmud, 2019). If there were distribution-free, the results might or might not offer accurate results (Hussain & Mahmud, 2019).

The research design is the second limitation which is a cross-sectional study. Meanings the data is only collected once from the respondents. Hence, the data in this study is incapable of presenting longitudinal outcomes. Since the data was collected at once, there was insufficient to show the temporal relationship between exposure and findings (Solem, 2015). Therefore, the causal relationship between anxiety and other variables could become inaccurate over time.

Moreover, the instruments and online questionnaires applied in this study were selfreported surveys, which may cause misunderstanding among the respondents. The respondents answer the questionnaire without the help of researchers during the online survey. Hence, there could have a possibility of misunderstanding the instruction or items which leads to an inaccurate result.

Furthermore, the sampling method of the study should be considered as a limitation. The sampling method in this study is purposive sampling which may lead to a biased result. Examples of bias such as sampling bias or selection bias. The researchers selected respondents for their online survey based on their subjective assumptions. As a result, the biases might lead to an invalid finding.

Recommendation for Future Study

The first recommendation for the future study is to enlarge the sample size to improve the validity and reliability of the findings. According to Faber & Fonseca (2014), the sample size could impact the data's reliability. After removing the outliers and invalid data, the present study has 111 data that are valid to be used. Given the possibility of social desirability bias, a larger sample size might bring in a more accurate outcome. Hence, in future studies, an increment in sample size is recommended.

The use of a longitudinal study design in future research is also recommended in order to demonstrate a meaningful cause-and-effect relation between anxiety, social support, and other factors (Qi et al., 2020). The family relationship and peer interactions during COVID-19 require longitudinal studies (Wray-Lake et al., 2022). The fact that this is a cross-sectional

survey restricts the ability to make conclusions about causal relationships. Additional prospective and longitudinal research are required in the context of COVID-19 to evaluate the state of social support and mental health at various future junctures (Qi et al., 2020).

Moreover, future study is recommended to broaden the character of the participant to the tertiary education population. The post-secondary education, including those offered by public and private universities, colleges, technical training centers, and vocational schools, is considered tertiary education (Gerritsen-van Leeuwenkamp et al., 2017). The sampling method suggested is stratified sampling which is the technique of probability sampling (Sharma, 2017). For example, the researcher can divide the population into college students, undergraduate students, and postgraduate students, then select a random sample from the subgroup. As a result, the study's results can be generalized to a larger population instead of emphasizing a single population.

Conclusion

In summary, the objectives of the present study have all been fulfilled. This study has examined the relationship between anxiety, perceived social support, and loneliness and also identify the differences between males and females in anxiety. The findings revealed a strong negative relationship between anxiety and perceived social support, perceived family support, perceived friends' support, and perceived significant others' support. Meanings that the higher the perceived social support, the lower the anxiety. On the other hand, the result on the relationship between anxiety and loneliness also shows a significant positive relationship, which means that the higher the loneliness, the higher the anxiety. However, the result indicates that is no significant difference between males and females in anxiety. This study may be further researched with other variables to consider the possible cause of anxiety among undergraduate students in Malaysia.

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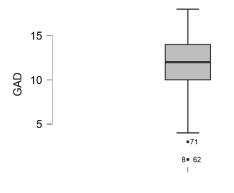
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Appendices

Appendix A

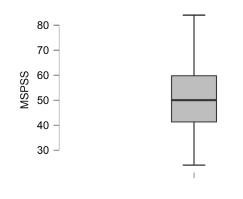
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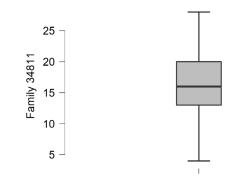
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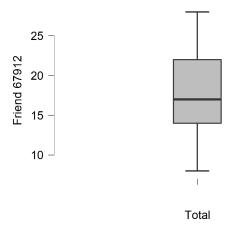


Perceived Family Support

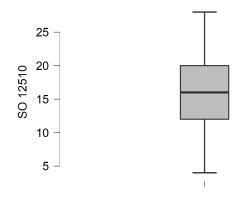


Total

Perceived Friends' Support

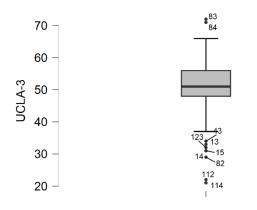


Perceived Significant Others' Support



Total

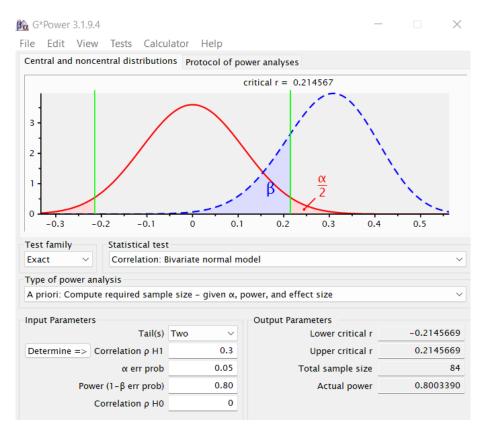






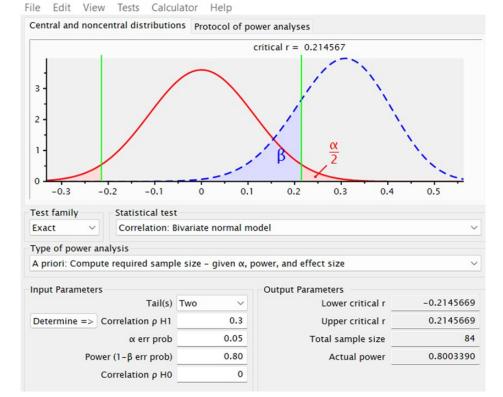
Appendix B

G*Power





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Appendix C

Reliability Test for Pilot Study

Single-Test Reliability Analysis (GAD)

Frequentist Scale Reliability Statistics		
Estimate	Cronbach's α	
Point estimate	0.733	
95% CI lower bound	0.547	
95% CI upper bound	0.852	

Single-Test Reliability Analysis (MSPSS)

Estimate	Cronbach's α
Point estimate	0.915
95% CI lower bound	0.857
95% CI upper bound	0.953

Single-Test Reliability Analysis (Family)

Frequentist Scale Reliability Statistics

Estimate	Cronbach's α
Point estimate	0.765
95% CI lower bound	0.577
95% CI upper bound	0.878

Single-Test Reliability Analysis (Friend)

Frequentist Scale Reliability Statistics		
Estimate	Cronbach's α	
Point estimate	0.809	
95% CI lower bound	0.655	
95% CI upper bound	0.901	

Single-Test Reliability Analysis (Significant Others)

Frequentist Scale Reliability Statistics		
Estimate	Cronbach's a	
Point estimate	0.755	
95% CI lower bound	0.574	
95% CI upper bound	0.868	

Single-Test Reliability Analysis (Loneliness)

Frequentist Scale Reliability Statistics

Estimate	Cronbach's α
Point estimate	0.851
95% CI lower bound	0.750
95% Cl upper bound	0.917

Reliability Test for Actual Study

Single-Test Reliability Analysis (GAD)

Estimate	Cronbach's α
Point estimate	0.727
95% CI lower bound	0.645
95% CI upper bound	0.793

Single-Test Reliability Analysis (MSPSS)

Frequentist Scale	Reliability	Statistics
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Estimate	$Cronbach's \ \alpha$
Point estimate	0.905
95% CI lower bound	0.877
95% CI upper bound	0.928

Single-Test Reliability Analysis (Family)

Frequentist Scale Reliability Statistics

Estimate	Cronbach's α
Point estimate	0.837
95% CI lower bound	0.784
95% Cl upper bound	0.879

Single-Test Reliability Analysis (Friend)

Frequentist Scale Reliability Statistics			
Estimate Cronbach's α			
Point estimate	0.831		
95% CI lower bound	0.777		
95% CI upper bound	0.875		

Single-Test Reliability Analysis (Sig Others)

requentist Scale Reliability Statistics		
Estimate	Cronbach's o	
Point estimate	0.881	
95% CI lower bound	0.843	
95% CI upper bound	0.912	

Single-Test Reliability Analysis (Loneliness)

Frequentist Scale Reliability Statistics

Estimate	Cronbach's α
Point estimate	0.832
95% CI lower bound	0.784
95% CI upper bound	0.871

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Supervisor Comment on Orginal 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	TAN LEI GEE
Candidate(s)	
ID Number(s)	20AAB00416
Programme / Course	Bachelor of Social Science (Hons) Guidance and Counselling,
Title of Final Year Project	Perceived Social Support, Loneliness and Anxiety among Malaysian Undergraduate Students during the Covid-19

Similarity	Supervisor's Comments (Compulsory if parameters of originality exceeds thelimits approved by UTAR)
Overall similarity index: <u>14</u> %	
Similarity by source Internet Sources: 10 % Publications: 6 % Student Papers: 6 %	
Number of individual sources listed ofmore than 3% similarity: 1	
Parameters of originality required and limits ap (i) Overall similarity index is 20% and below	v, and
 (ii) Matching of individual sources listed mu (iii) Matching texts in continuous block must Note: Parameters (i) – (ii) shall exclude quotes, bibliography and 	not exceed 8 words

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

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

Anisah

Signature of Supervisor

Date: 29/11/2022

Name: Anisah Zainab Musa

Signature of Co-Supervisor

Name:

Date:

Action Plan of UAPC3093 Project Paper II

Supervisee Tan Lei Gee

Supervisor Pn. Anisah Zainab Binti Musa

Task Description	Date	Supervisee' s Signature	Supervisor' s Signature	Supervisor's Remarks	Next Appointment Date/Time
Methodology					
Submit Chapter 3: Methodology			Anisah	The methodology part has been revised according to the examiners' comments and feedback.	
Amend Chapter 3: Methodology	15/11/2022	Geelei			17/11/2022
Results & Findings					
Submit Chapter 4: Results			Anisah	The analysis of results and findings needs to be revised according to my comments and feedback.	
Amend Chapter 4: Results	17/11/2022	Geelei			28/11/2022
Discussion & Conclusion					
Submit Chapter 5: Discussion		Geelei	Anisah	The discussion past is fine but has to support with the relevant citations and provide justification for the findings as well as limitations of the study.	
Amend Chapter 5: Discussion	28/11/2022				
Abstract	28/11/2022				
Turnitin Submission	28/11/2022			Generate similarity rate from Turnitin.com	
Amendment					
Submission of final draft				Submission of hardcopy and documents	
Oral Presentation					

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)

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Re: U/SERC/111/2022

1 June 2022

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 UAPZ3013/ UAPC3083. We are pleased to inform you that the application has been approved under <u>Expedited Review</u>.

The details of the research projects are as follows:

	Research Title	Student's Name	Supervisor's Name	Approval Validity
1.	The Relationship Between Self-Esteem, Social Support, Stress and Social Anxiety During the Transition to Endemic Stage of Covid-19 Among University Students in Malaysia	Loo Chi Ying	Pn Nur Shakila Binti	
2.	The Relationship Between Social Anxiety, Procrastination, Self-esteem and Internet Gaming Disorder Among University Student in Malaysia	Choo Yun En	Ibharim	1 June 2022 – 31 May 2023
3.	Perceived Social Support, Loneliness and Anxiety Among Malaysian Undergraduate Students During the COVID-19	Tan Lei Gee	Pn Anisah Zainab Binti Musa	

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.

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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

PERSONAL DATA PROTECTION NOTICE.

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

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- Your personal data may be transferred and/or disclosed to third party and/or UTAR collaborative partners including but not limited to the respective and appointed outsourcing agents for purpose of fulfilling our obligations to you in respect of the purposes and all such other purposes that are related to the purposes and also in providing integrated services, maintaining and storing records. Your data may be shared when required by laws and when disclosure is necessary to comply with applicable laws.
- Any personal information retained by UTAR shall be destroyed and/or deleted in 4. accordance with our retention policy applicable for us in the event such information is no longer required.
- 5. UTAR is committed in ensuring the confidentiality, protection, security and accuracy of your personal information made available to us and it has been our ongoing strict policy to ensure that your personal information is accurate, complete, not misleading and updated. UTAR would also ensure that your personal data shall not be used for political and commercial purposes.

Consent:

- By submitting or providing your personal data to UTAR, you had consented and 6. agreed for your personal data to be used in accordance to the terms and conditions in the Notice and our relevant policy.
- 7. If you do not consent or subsequently withdraw your consent to the processing and disclosure of your personal data, UTAR will not be able to fulfill our obligations or to contact you or to assist you in respect of the purposes and/or for any other purposes related to the purpose.
- 8. You may access and update your personal data by writing to us at_

Acknowledgment of Notice

-] I have been notified and that I hereby understood, consented and agreed per ſ UTAR above notice.
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Name: Date:

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

FACULTY OF ARTS AND SOCIAL SCIENCE UNIVERSITI TUNKU ABDUL RAHMAN

Date: 27/5/2022

SUBMISSION OF FINAL YEAR PROJECT

It is hereby certified that <u>Tan Lei Gee</u> (ID No.: <u>20AAB00416</u>) has completed this final year project titled "<u>Perceived Social Support, Loneliness</u> and Anxiety among Malaysian Undergraduate Students during the Covid-19" under the supervision of <u>Pn. Anisah Zainab Binti Musa</u> (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.

Yours truly,

Name:

TAN LEI GEE

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

UAPC3093 PROJECT PAPER II

Quantitative Research Project Evaluation Form

<u>TURNITIN</u>: '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:	
Perceived Social Support, Loneliness and Anxiety a	mong Malaysian Undergraduate Students
during the Covid-19	
Supervisor:	
Pn. Anisah Zainab Binti Musa	
Student's Name:	Student's ID
Tan Lei Gee	20AAB00416

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**".

l. Al	BSTRACT (5%)	Max Score	Score
a.	State the main hypotheses/research objectives.	5%	
b.	Describe the methodology:	5%	
	Research design		
	• Sampling method and sample size		
	Location of study		
	• Instruments/apparatus/outcome measures (if applicable)		
	Data gathering procedures		
с.		5%	
d.		5%	
	behaviour and outcomes.	270	
e.	Conclusions, implications, and applications.	5%	
υ.	Sum	25%	/25%
	Subtotal (Sum/5)	5%	/5%
lemar		570	
) METHODOLOGY (25%)	Max Score	Score
a.	Research design/framework:	5%	
	• 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.		
b.	Sampling procedures:	5%	
	• Justification of sampling method/technique used.		
	• Description of location of study.		
	• Procedures of ethical clearance approval.		
с.		5%	
	 Justification of sample size. 	_	
	 Achieved actual sample size and response rate. 		
	 Power analysis or other methods (if applicable). 		
d.		5%	
u.	Data collection procedures:	570	
	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).		
e.	Instruments/questionnaire used:	5%	
	• Description of instruments		
	Scoring system		
	Meaning of scores		
	Reliability and validity		
	Subtotal	25%	/25%
Remar		·	
. (B) METHODOLOGY – SINGLE-CASE EXPERIMENT	Max Score	Score
) METHODOLOGY – SINGLE-CASE EXPERIMENT 5%)	Max Score	Score

 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 radiomization and elements of study that were randomized (if applicable). Describe the method of recruitment. State the inclusion and exclusion criteria. Describe the method of radiomization and elements of study. Procedures of obtaining consent. Measures and materials used: Porecribe the direct of period of measures and materials. Describe the method of flat diversity of the intervention. Describe the method of flat diversity of the intervention. Describe the method of diversity the intervention. Describe the method of diversity the intervention. Describe the method of flat of the intervention. Describe the and justify all methods used to analyze data. Subtotal 25% /25% Remark: 				· · · · · ·	
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Accurate report and interpretation of confidence intervals			 each participant, trial for each session for each case, dropout and reason if applicable, adverse events if applicable 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. 		
Accurate report and interpretation of confidence intervals			 each participant, trial for each session for each case, dropout and reason if applicable, adverse events if applicable 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. Appropriate data analysis for each hypothesis or research 		
		с.	 each participant, trial for each session for each case, dropout and reason if applicable, adverse events if applicable 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. Appropriate data analysis for each hypothesis or research objective. 	5%	
or statistical significance.		с.	 each participant, trial for each session for each case, dropout and reason if applicable, adverse events if applicable 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. Appropriate data analysis for each hypothesis or research objective. Accurate interpretation of statistical analyses: 	5%	

• Accurate report of <i>p</i> values and minimally sufficient sets			
of statistics (e.g., <i>dfs</i> , <i>MS</i> , <i>MS error</i>).			
• Accurate report and interpretation of effect sizes.			
• Report any problems with statistical assumptions.			
Subtotal	20%	/20%	
Remark:			
4. DISCUSSION AND CONCLUSION (20%)	Max Score	Score	
a. Discussion of findings:	5%		
• Provide statement of support or nonsupport for all			
hypotheses.			
• Analyze similar and/or dissimilar results.			
• Justifications for statistical results in the context of study.			
b. Implication of the study:	5%		
• Theoretical implication for future research.			
Practical implication for programs and policies.			
c. Relevant limitations of the study.	5%		
d. Recommendations for future research.	5%		
Subtotal Remark:	20%	/20%	
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. 7 th 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	10%		
CONSULTATION ATTENDANCE with supervisor.			
**FINAL MARK/TOTAL		/100%	
		/100/0	

*****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 Aand 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%)
	Tan Lei Gee				
Date: 6/12	2/2022	Time: 9:30	a.m. – 10:00 a.m.	**Final Score: () / 40 marks ÷ 2 = () / 20 marks *to be converted into 20%
SCORE TRAITS	SCORE	EXCELLENT 4	GOOD 3	AVERAGE 2	LACKING 1
		PC	OSTER PRESENTATION PREP	ARATION	
Organisation		Title/author of paper clearly displayed. Concise presentation introduction, review of literatur methodology, findings and conclusions.		v of ideas of introduction, rev	view of Insufficient coverage of main
Competency		Student demonstrates competer knowledge of the subject by explaining the subject with deta Able to answer questions poster by the audience/examiners fluently with confidence.	information to enable audier ails. understand main ideas. Able	to disjointed ideas. to Student tried to answer the questions posted by the	andStudent is unable convey the information fluently to the audience/examiner.heaudience/examiner.Student is not able to answer the questions posted by the
Visual Presentation		Visually appealing poster with appropriate colours, organization and font sizes enhance readabil Strategically positioned graphic and text.	n, ity. enhances readability. Content	t size cluttered. Font size affec nt readability. Confusing co	what visuals lack appeal. Colours and layout cluttered. Hinders readability. Inconsistent font sizes and contant arrangement

Mechanics		The slides are flawless with no misspelling, punctuation, or grammatical errors. Provide essential sources and citations using 7 th 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 presentation. Does not read off slides.	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 has difficulty hearing presentation.	Presenter mumbles or talks very fast and speaks too softly for audience to hear and understand.
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