THE RELATIONSHIP BETWEEN SELF-ESTEEM AND

PSYCHOLOGICAL WELL-BEING ON STRESS AMONG

UNDERGRADUATE STUDENTS IN MALAYSIA

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APPROVAL FORM

The research paper attached is entitled as " The Relationship between Self-Esteem,

Psychological Well-Being on Stress among Undergraduate Students in Malaysia" prepared

and submitted by Foo Zyon Khang, Loh Zhi Yuan and Yugambegai Vijaya Kumaran in

partial fulfillment of the requirements for the Bachelor of Social Science (Honours)

Psychology is hereby accepted.

_____   **Date:** _____

Supervisor:

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Abstract

Stress is one of the most common phenomena among undergraduate students due to the increasing difficulty in tertiary education. Analyze the predictors for stress is going to help people to tackle with stress. Therefore, the current study is to investigate self-esteem and psychological well-being is a negative predictor toward stress among undergraduate students. This study used quantitative and cross-sectional research design. In this study, a total of 177 participants recruited by using convenience sampling method targeting undergraduate students from Universiti Tunku Abdul Rahman (UTAR), involving a total of 71 male students and 106 female students. Online questionnaire has been distributed across various social media platform such as Facebook, Whatsapp and Instagram. The participants' age range must fall in between 18 to 24. The statistical analysis that has been used in this study is multiple linear regression on determining the predictors toward stress. The results in current study revealed that self-esteem negatively predicts stress while psychological well-being positively predicts stress among the undergraduate students. Thus, the hypothesis for self-esteem as negative predictor on stress is accepted but the hypothesis for psychological well-being as negative predictor on stress is rejected. In terms of practical implications, the findings may be useful for educationist, counselors and even parents as a reference to emphasize on what is important as a predictor toward stress. Future studies should emphasize on longitudinal study to examine the significant differences between two different time frames.

Keywords: Self-esteem, Psychological well-being, Stress

DECLARATION

We declare that the material contributed in the attached paper is the product of our own effort and that due acknowledgment have been given to the authors of ALL the sources in the bibliography and references section.

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Abbreviations

1. RSES   Rosenberg Self-Esteem Scale

2. PWB   Psychological Well-Being

3. SSI   Student Stress Inventory

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Chapter I

Introduction

1.0 Introduction

In this chapter, few aspects of why this research is being conducted will be explained. Background of study explains previous research on relationship between stress and self – esteem and stress and psychological well-being. Participants from the age range of 18 to 25 are chosen to participate in the study. Problem statement and significance of study describes the reason why the variables are chosen particularly for the study as well as how various types of stress can affect undergraduate student's mental and physical health. Research objectives, research questions, hypotheses and conceptual and operational definitions on stress, self – esteem, psychological well-being will be thoroughly explained.

1.1 Background of Study

Tertiary education is always considered as being stressful for students. The competitive environment in university leads to the increase of stress among university students as well. Students had to face different kinds of challenges such as homesickness, academic pressure, financial issues, maintaining body health, and relationships with people surrounding them (Vasugi & Hassan, 2019). According to Sun & Zoriah (2015), academic-related stress is the most commonly mentioned as the source of stress. Furthermore, stress often occurs when an individual is facing an unfamiliar environment or experience. The transition of students from secondary school to university can be used as an example as it also represents the transition from adolescent to adulthood which results in stress due to a totally different environment (Dyson & Renk, 2006). Based on a local study, stress was one of the common prevalence psychological distresses with the statistic of 65% present among 449

undergraduate students (Fauzi et al., 2021). It showed that the presence of stress exceeding half of the students indicates a dangerous situation.

Past study showed that there was a significant relationship between stress and self-esteem among undergraduate students (Edwards et al., 2010). People with high self-esteem are capable to bear the incoming stress due to the high sense of personal worth (Edwards et al., 2010). A similar explanation has been made stating that self-esteem can be used as a protective barrier to handle the stress which indicates that the level of self-esteem is able to influence the level of stress (Farhan & Khan, 2015). Self-esteem generally regarded as an individual's overall evaluation of self. Hence, people with higher self-esteem are able to value their advantages and have a sense of identity to control the level of stress avoiding the consequence of overwhelming stress which might tear apart their mental health.

Past study showed that there was a significant relationship between stress and psychological well-being among undergraduate students (He et al., 2018). People with high psychological well-being tend to experience less stress (Sugiura et al., 2005). A systematic review made by Li & Hasson (2020) came out with a similar result of higher psychological well-being resulting in lower stress level while high level of stress usually associated with low level of psychological well-being. According to Huppert (2009), psychological well-being helps to accommodate negative emotions to a certain level without interfering with an individual's daily life. It can be referred to as one of the coping mechanisms against stress as it helps to relieve the burden of stress.

The age range between start from 18 to 25 is significantly associated with stress (Pozos-Radillo et al., 2014). Stress is one of the negative emotions which has a certain impact towards personality growth. Stress has a negative impact towards a student's academic performance, mental health and physical health (Shankar & Park,2016). Anything that is

related to stress should be examined and worked on to avoid the development of chronic

stress which is the worst case scenario. Based on the reason above, this study will examine

the predictors between self-esteem and psychological well-being on stress among

undergraduate students in Malaysia.

1.2 Problem Statement

Stress is the main component that students always encounter in their university or

college. According to Jia & Loo (2018), the undergraduate students in Malaysia experience a

high level of perceived stress which is 37.7%, this indicates that one third of the students in

Malaysia possess high levels of stress while in tertiary education. A study from Malaysia also

found out that the prevalence rate of mental disorders was found to be highest among young

people aged 16 to 24 (Hamzah et al., 2019).

Obviously, the transition from secondary school to college definitely carries few

challenges to the undergraduate students. Students are moving towards adulthood and their

responsibility is increasing, which is characterized by few qualities that need to be prepared

towards society such as independence, initiative and self-regulation (Burke et al.,2016). The

transition of life during their college or university life will have an impact on interrupting

students' life roles and contribute to psychological distress (Lane et al., 2017). In fact, the

transition of life might increase their stress level when students need to carry out different

responsibilities when they grow older.

According to Goode (1960), the theory of role strain argued that role strain is a theory

that explains the perceived difficulty in carrying out role responsibilities. For example,

students are required to study multiple subjects to fulfill multiple tests in a semester in order

to pass in that particular semester. This indicates that students are required to meet multiple

demands as a student, when the demand is not met expectation, the role as a student may

cause psychological distress to them as the student has to face multiple difficulties due to the conflicting demands in their college.

Other than that, a study from Ramli et al. (2018) argued that cultural pressure is one of the reasons that students in Malaysia suffer from excessive stress. Cultural pressure instills the ideology that students are advised to achieve excellent academic grades before graduation so that they are able to grab an opportunity to develop an outstanding career in the future (Ramli et al., 2018). Hence, students are expected to put tremendous effort in order to perform very well in their academics and this creates higher pressure on them.

Studies also reported that students who feel homesick tend to acquire higher levels of stress when entering university or college (Andrew & Wilding, 2004). Students who are homesick might not be coping with their stress well as stress can occur occasionally in any situation when students fail to adapt to the problem they possess. Therefore, the common negative consequences of stress may lead to decreased motivation and induce negative feelings and emotion if the students failed to manage their own stress well. In more serious circumstances, suicidal thoughts will occur around the student's mind as well.

A study from Kok & Goh (2011) stated it was discovered that nearly 7% of adolescents had suicidal thoughts, and more than half of them followed through on their plans. This indicates that the importance of the mental health of undergraduate students in Malaysia should be taken into deep consideration as excellent mental health allows students to feel, think and act rationally in their life. Hence, it is vital to examine the underlying relationship that correlates with stress in order to help students to develop high quality mental health.

Few past studies have investigated the similar stress topic in the research of undergraduate students (Jia & Loo, 2018; Ganesan et al., 2018), yet there are still insufficient similar research fields especially in terms of the Malaysia context. Therefore, current study

will emphasize on a deeper look on the correlation of stress with self-esteem and psychological well-being.

1.3 Research Objective

There are 2 objectives for this current study. The primary objective of this study is to analyze is self-esteem negatively predicts on stress among undergraduate students in Malaysia. The secondary objective on the other hand, is to analyze is psychological well - being negatively predicts on stress among undergraduate students respectively.

1.4 Significance of Study

The purpose of this study is to investigate the predictors between self-esteem and psychological well-being on stress among undergraduate students in Malaysia. According to Asif et al. (2020), stress has been highly affecting university students among other variables such as anxiety and depression. Therefore, it can be concluded that this research has its importance to contribute to the literature by analyzing is the predictors self-esteem and psychological well-being predicts on stress among undergraduate students in Malaysia

The significance of choosing these variables for research is that past researches have focused in very limited Western and Non-western countries (Xiang et al., 2017, Kim et al., 2014). Studies that focus on self-esteem, psychological well-being and stress of undergraduate students in Malaysia are yet to be conducted. Thus, this research hopes to fill in the literature gap in Malaysian context and to serve as an allusion for future researchers.

The findings obtained at the end of this study will benefit the society as a whole as self-esteem, psychological well-being of every individual has an impact on the upcoming generation. As great psychological well-being can help promote better living for an individual, when analyzed thoroughly on the relationship upon stress, surely it gives a better solution for

society's well being. Other than that, self-esteem can also affect individuals as this concept evaluates how a person represents themselves in the society. The significance of choosing self-esteem of undergraduate students is because students from this level of education learn a lot about who they are and what they represent and stress can have a vast effect on their level of self-esteem.

As education plays a vital role in every student's life, managing stress is quite an important aspect in order to achieve what they wish for. Thus, universities that can be able to understand the well-being of students, will be able to produce better trained individuals in the society. When a student's performance gets better, the more literate the society will be in the future. For the researchers, the current study will give an insight about the correlation between psychological well-being, stress and self esteem and whether these correlations are significant or not. This ensures to spread awareness of the existence of stress among undergraduate students as a whole.

1.5 Research Questions

1. Does Self-Esteem negatively predicts stress among undergraduate students in Malaysia?
2. Does Psychological Well-Being negatively predicts stress among undergraduate students in Malaysia?

1.6 Hypotheses

1. Self-Esteem negatively predicts stress among undergraduate students in Malaysia
2. Psychological Well-Being negatively predicts stress among undergraduate students in Malaysia

1.7 Conceptual Definitions

Stress. Stress is defined as a feeling of being unable to cope or handle the overwhelming pressure which comes from the surrounding or self (Fasoro et al., 2019). Furthermore, anything that brings challenges or threatens a person's well-being is referred to as stress (Abdel Wahed & Hassan, 2017). Along with the burden on an individual, stress arises when things remain unsolved with the limited resources of the individual (Khan et al., 2013). Stress has become one of the components in students' lives as it is influential enough in affecting student's coping strategy based on the demands of academic life (Khan et al., 2013). Hence, stress is commonly seen in university students as they have to take care of their study and life as well.

Self-esteem. The term Self-esteem is frequently defined as the subjective evaluation of one's own self-esteem (Orth & Robins, 2014). As reported by Cast & Burke (2002), where they argued that self-esteem consists of two distinct measures which are competence and worth. These measures are evaluated differently in the aspect of self-esteem. Firstly, competence refers to the individual's efficacy in which the individual perceives themselves as a capable and successful person (Cast & Burke, 2002). On the other hand, the dimension of worth indicates the extent of an individual feeling good about themselves and developing a sense of worth and preciousness in their life (Stets & Burke, 2014).

Psychological Well-Being (PWB). Psychological well-being is often defined as living a feel-good life with prolonged effectiveness (Huppert, 2009). It is a very subjective part of life, where feeling good does not only focus on happiness but also the aspects of motivation, endearment, and the ability to perform well in daily life. Other scholars such as Matteucci & Soncini (2021) stated that psychological well-being indicates how a person's life consists of

the choice of freedom, life satisfaction, discovering the purpose of life, building healthy

relationships with people, self-esteem as well as self-acceptance.

1.8 Operational Definition

Stress. The variable stress was measured by Student Stress Inventory (SSI), this scale

consisted of the different elements of stress such as physical stress, interpersonal relationship

stress, academic stress and environmental stress. The scale consisted of 40 items and the

score was computed by summing up all the scores that an individual obtained. The higher

score indicates the higher level of student stress.

Self-esteem. The variable self-esteem was measured by the Rosenberg Self-esteem Scale.

This scale consisted of 10 items in order to measure self-esteem. The score was computed by

summing up the total score that an individual obtained. The higher score indicates the higher

level of self-esteem.

Psychological well-being. The variable psychological well-being was measured by the

shortened 18-item version of the Psychological Well-being scale (PWB). This instrument

consisted of 18 items in order to measure psychological well-being. The score was computed

by summing up the total score that an individual obtained. The higher score indicates the

higher level of psychological well-being.

1.9 Summary

First chapter of this study has described the few elements of research starting from

background of study, problem statement, research objectives, significance of study, research

questions, hypotheses, and lastly conceptual and operational definition of variables used in

the study.

Chapter II

Literature Review

2.0 Introduction

This chapter abridges the literature related to the study starting from analyzing past studies on the research topic on self - esteem and stress and psychological well-being and stress. Theoretical framework and conceptual framework were explained at the end of the study.Literature on Theory of Hardiness has been explained in the theoretical framework.

2.1 Self-esteem and Stress

Self-esteem can be referred to as how people perceive or evaluate themselves in both positive and negative ways based on their own thoughts on self-capability (Rosenberg, 1965). Self-esteem also has a role of strengthening one's emotion or acting as a buffer when enduring horrible or unpleasant experiences (Cast & Burke, 2002). It can be used as a predictor towards a person's success as it matters a lot in the aspect of life domain (Orth & Robins, 2014). Interestingly, self-esteem is associated with the social life of people as it motivates people to seek connection with each other and maintain it (Pyszczynski et al., 2004). Gender does matter when it comes to affect the level of self-esteem as male possess higher self-esteem compared to females (Moksnes & Espnes, 2013).

Self-esteem is an important aspect as it affects a lot of psychological traits in its own ways. It is associated with mental and physical well-being, life satisfaction, and emotional intelligence (Schwager et al., 2019; Moksnes & Espnes, 2013; Fakaruddin & Tharbe, 2018). Other than that, self-esteem has a positive correlation with confidence which has a certain amount of impact towards academic achievement (Yasin et al., 2020). It means that people with high levels of self-esteem tend to have a higher level of confidence. Furthermore, self-

esteem has a significant relationship when it comes to self-handicapping as people with higher levels of self-esteem tend to have lower levels of self-handicapping (Kong et al., 2012). Furthermore, self-esteem has a positive relationship with academic performance in terms of tertiary education (Terblanche et al., 2020). It has to be highlighted as it helps to enhance the students' academic performance and even develop professional lives in their field of study. Getting to know self-esteem associated with multiple life traits, it showed how important can be with self-esteem when it comes to affecting the individual development.

On the other hand, stress is widely known for its negative emotion characteristics which would harm people in its own way. Eventually, when an individual is facing stressful events, that person is not just facing stress, but also multiple negative emotions such as depression and anxiety (Ramón-Arbués et al., 2020). According to Baker (2004), stress is negatively associated with students' performance in terms of academic commitment and achievement. In other words, a lower level of stress will result in a higher level of performance. Baker (2004) also found out that there was a significant relationship between stress and self-esteem as well. Furthermore, stress seems to be affecting physical health as well because it raises the potential of getting heart disease (Gianaros & Wager, 2015). An interesting finding stated that there was a positive relationship between stress and motivation (Struthers et al., 2000). The explanation given is that the coping mechanism aids in transforming stress into motivation which means when stress threatens academic performance, the level of motivation rises. The effect of stress can be two-sided and it depends on the culture, environment, race and gender.

According to Dixon & Kurpius (2008), self-esteem is negatively associated with stress. This study was taken in a public university along with the participation of 455 students. The age range is between 18 and 23 years old along with 256 females and 199

males. The findings in this study stated that there is no significant relationship in gender affecting self-esteem. However, females tend to have higher stress compared to male. It can be explained by how different males and females when dealing with negative emotion as females struggle to deal with it and react with frustration (Calvarese, 2015). In other words, males might try to avoid stressful or frustrating events but females try to deal with it. It showed the difference in terms of gender when coping with stress due to different ways in addressing it. The attitude on addressing stress is different since it also determines personality. The limitations of this study mentioned the problem of self-report bias. It is concerning as there might be slightly inaccurate answers getting from the participants. The factor such as gender role differences in both self-esteem and stress is not consistent as well.

A study made by Eisenbarth (2012) proposed that self-esteem has a significant relationship with stress too. The study has a large sample size of 713 participants, consisting of 296 males and 417 females with the age range of 18 to 26. The study found out that self-esteem is beneficial in coping with stress. Students with poor self-esteem tend to avoid solving problems rather than involving themselves to handle the feelings of stress and depression (Eisenbarth, 2012). It is supported by one of the past studies, stating that people with higher self-esteem have the confidence in handling stressful events and get through it (Dolbier et al., 2010). It showed that the high level of self-esteem plays a role as a resiliency toward stress, avoiding the overwhelming emotions crumbling an individual's mental state of health.

Next, past study made based on nursing students found out that self-esteem and stress changed across time (Edwards et al., 2010). The age range is considered as wide due to ranging from 18 to 46. The study took 8 months to gather all the required data. It showed that students at the beginning of the training had the lowest self-esteem while at the end of the

training had the highest level of self-esteem. While the stress level is also similar to self-esteem, high in the beginning while low in the end of training. The study explained that it was due to the lack of knowledge toward the current field of study, resulting in the students having lower self-esteem and higher stress. When the training was almost completed, the students felt confident with the knowledge and skills learned which prepared them to step in the professional field. Based on this study, it is obvious that self-esteem is negatively correlated with stress.

A cross-sectional study has been with the context of the Middle East, stating that there was a significant inverse relationship between stress and self-esteem (Aboalshamat et al., 2017). About 645 students took part in the study with the mean age of 24. An interesting finding has been discovered as students who came from high income families tend to have a higher level of self-esteem (Aboalshamat et al., 2017). This finding can be supported by Twenge & Campbell (2002) as socioeconomic or self-esteem has a significant positive relationship. Higher self-esteem people hold more assets compared to people with lower self-esteem, considering higher self-esteem people take the risk in investing assets (Chatterjee et al., 2009).

Another study found out that there is a significant relationship between self-esteem and stress (Yıldırım et al., 2017). The study involved a total of 514 students. The study also stated the importance of self-esteem when it acts as one of the requirements in coping with stress. In short, students with higher self-esteem are able to cope with stress more effectively, due to the high level of confidence to endure stressful events. Self-esteem has the capability in protecting the mental health of a person, as it has an impact towards the cognitive aspect of mind in reacting to negative stressors (Feng et al., 2019). Self-esteem has the mediating role towards negative emotion which can be categorized under one of the coping mechanisms

people have. Just as mentioned before, self-esteem can act as a barrier to avoid the collapse of the concept of self.

The mindset of believing in the potential of self to go through any hardship is something which undergraduate students need. It helps them to change the pace in university as its commonly known tertiary education tends to be stressful due to a lot of things that need to be taken care of. Students not just focus on academic performance, but also have to complete any specific assignment given which definitely requires time to complete it. Understanding the importance of self-esteem is to provide ways to elevate stress encountered by the undergraduate students, while striving for a better quality of life and mental health.

2.2 Psychological well-being and Stress

Psychological well-being is a very complex concept of psychology as there are various meanings assigned for the concept. According to Ryff (1995), as young adults transition to adulthood, certain dimensions of PWB increase. That would be, aspects such as freedom in decision making and sense of environment. Even though, optimistic relationship with others does not increase as young adults age, it does not decrease and remains the same level in later life. Other than that, PWB focuses on not just happiness, but also about how a person lives their life with much satisfaction and growth (Maaulot et al; 2015)..

PWB has a very significant effect on every human's lives. Especially, students who are undergoing tertiary level of education. It can be because of the transition from secondary level to tertiary level where the course of study differs, and the fact that there are biological and physiological changes in aging process. Undergraduate students are often affected with stress. According to research by Jia & Loo, (2018), undergraduate students are affected by perceived stress and if it prolongs for a long period of time, it can develop into stress-related disorders.

According to Liu et al., (2019), Chinese undergraduate students as they move from first year to consecutive years during their course of study, suffer with great deal of stress with a mean score of 5.54 on the first year, 5.84, highest in the second year, 5.50 and 4.77 in third and fourth year respectively. Despite alarming score in the first two years, students adapted to the stress, and it can be seen to reduce slightly during the last years of their studies. However, the stress level of students was still much high compared to depression and anxiety level of students. It was predicted that students may have introduced with complex topics and subjects of their course during the first and second years which causes fear among students which affect PWB and their stress levels. Similar study also suggests that university life of students affects their PWB as their psychological distress increases during first few trimesters after their university entry. (Bewick et al., 2010).

Besides, a systematic meta-analysis was done by Li & Hasson, (2020) with 12 articles from China, United Kingdom, Spain, India, Turkey, Australia, Thailand, and South Africa with over 3736 nursing students. The results indicated that stress was part of students PWB and when it decreases, stress may arise at a higher level. Despite the differences among various countries, and scarcity of studies compared globally, the study identified that there might be adverse outcomes for nursing students due to the strain on PWB. Another study which was carried upon Nursing students as well found that students tend to be affected by greater amount of stress during their last few stages of their training, i.e placement (Smith & Yang, 2016). Moreover, the final year nursing students are also affected by the added responsibilities as senior nurse in clinical settings. The student's psychological well being becomes vulnerable which then leads to higher level of stress when handling stressful situations. This shows that PWB predicts stress among undergraduates.

According to Segrin et al., (2007) good social skills help to generate better PWB in university students. This is because, when students have better social skills, they tend to

communicate better than those with low social skills. They are able to interact with others without making any violations of the norms of the society. Such people would acquire great cognitive skills thus reducing their stress levels when experiencing life events. A similar study by Segrin, (2017) pointed out that poor social skills can cause mental and physical health issues. This can lead to a negative affect on PWB which then can lead to being stressed when approached with similar situations.

One of the major findings of the study on Factors Associated with The Psychological Well-Being and Distress of University students, was that being optimistic can help students to overcome their psychological distress and increase their PWB (Burris et al., 2009). This is because when one believes that they are often experiencing good outcomes in life tend to view things in a positive way. Positive perception of life can reduce psychological disorders such as depression and psychological distress.

A collective study on Korean students regarding their PWB and Academic stress shows that Koreans have greater emphasis on academic achievement. Fulfilling parent's wishes, getting good grades are all factors that relates to striving for great academic achievements. This can affect the student's PWB which places a great pressure on students where among other nations, youths from Korea have high academic stress (Ahn & Baek, 2012). The findings of the study also emphasized on suicidal rates among youth due to inflicted academic stress possibly from parents. Expecting too much with overloaded work can affect their well-being. Moreover, according to research by Uraz et al., (2013), there are many sources of stress among the dental students in Turkey. It can be seen that relative to first and second years of study, third, fourth and fifth years of study has a very huge effect of stressors on the students. For instance, not caring about personal life, not being able to be independent financially, fear of failure, worried about health detriment, and living adjustments are all the few stressors of fifth

year students of dentistry. Not being able to relax and having psychological strains from social and academic life can lead to high stress levels and affect their performance.

According to recent research by Ngbea and Kwaghgbah (2021), various elements of academic stress such as "Teacher Stress, Result Stress, Test Stress, Psychological Health Group Studying Stress, Peer Stress, Time Management and Self-inflicted Stress" when increased, can affect student's mental health. Anxiousness upon academic also can make students susceptible to stressful situation and affect their psychological condition. When these two stressors are both inflicting upon students, it will harm their psychological state and can lead to psychiatric conditions (Deb et al., 2015).

Other than that, a Malaysian study by Shaaban (2017), students who work part time during university years are also affected by stress from work. It's very normal for students to go for work during college days mainly to get some pocket money, or to help family's financial situations or even to get working experience. Even though, there are many benefits to working while studying, the negative effect would be work stress. For instance, students who work at fast food restaurants, tend to stay late to close down after operation hours to clean the place for hygienic purpose. This can affect the student's sleep cycle and might create health issues due to lack of sleep. Work stress such as communicating with problematic customers can affect their mental health and thus makes it difficult for them to go through with it and end up being burnout.

However, research on undergraduate student's stress, PWB, mental health functioning and self-regulation capacity by Durand et al; (2015) found out that student's psychological well-being was not much affected with increase in stress level. This finding is very unique as compared to previous studies. The researchers suggests that this could be the reason because they are not adjusting themselves to the situation and if they don't it might lead to stressful situation where their level of PWB will be significantly affected.

SELF-ESTEEM, PSYCHOLOGICAL WELL-BEING AND STRESS

2.3 Theoretical Framework

The theory of Hardiness was initially proposed by Kobasa (1979) which explained the hardiness theory is characterized as a personality type that is correlated in maintaining an individual's health and competence under the existence of stress (Mund, 2016). The hardiness theory is able to explain the relationship between self-esteem, psychological well-being and stress among students. Scholar has found out that individuals who tend to be hardy will positively correlate with their psychological well-being and lower their stress level (Skomorovsky, 2011). The hardiness theory allows individuals to respond to tough situations in a different perspective. There are three components of Hardiness in which explaining how certain individuals behave in a way, the three main components of Hardiness Theory, which is 3C , Commitment, Control and Challenges.

The term commitment is defined as the involvement of an individual towards a certain activity or task in their life. An individual with hardiness will develop a dedication in their life, a study has found out that hardiness and self-esteem is positively correlated (Ghalyanee, 2016), as a student with a hardy personality they will instill commitment due to being highly motivated in their academics in order to achieve good grades. As a result, an individual will face less stress when they perform well academically due to their personal commitment.

Besides, the term control is defined as the extent of an individual having the ability to take control of their life or having a sense of control in their life. Researchers have found out that there is a connection between hardiness and locus of control in the student perspective (Maslova, 2021). Individuals with a hardy personality tend to develop a belief that they have the ability to control the outcome of certain conditions. On the other hand, if an individual feels there is no control of their lives, the individual might feel powerless and this may lead them to psychological distress.

Furthermore, the third component of Hardiness Theory is challenge. An individual perceives the obstacles as a challenge rather than perceive them as a difficulty for them to pass through, the reason that an individual will perceive the problem as a challenge is that challenge will help them develop personal growth and maintain positive mental health (Kobasa, 1979). This theory explains the role of hardiness that contributes several reasons why individuals are able to be resilient in stressful circumstances. Therefore, the theory of hardiness is closely linked with the three variables in this study which are Self-esteem, Psychological Well-being and Stress.

2.4 Conceptual Framework

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┌─────────────────────────┐
│ Psychological Well-being │ ──────────┐
│  (Independent Variable)  │            ↘
└─────────────────────────┘          ┌──────────────────────┐
                                      │       Stress         │
                                      │ (Dependent Variable) │
┌─────────────────────────┐          └──────────────────────┘
│      Self-Esteem        │            ↗
│ (Independent Variable)  │ ──────────┘
└─────────────────────────┘
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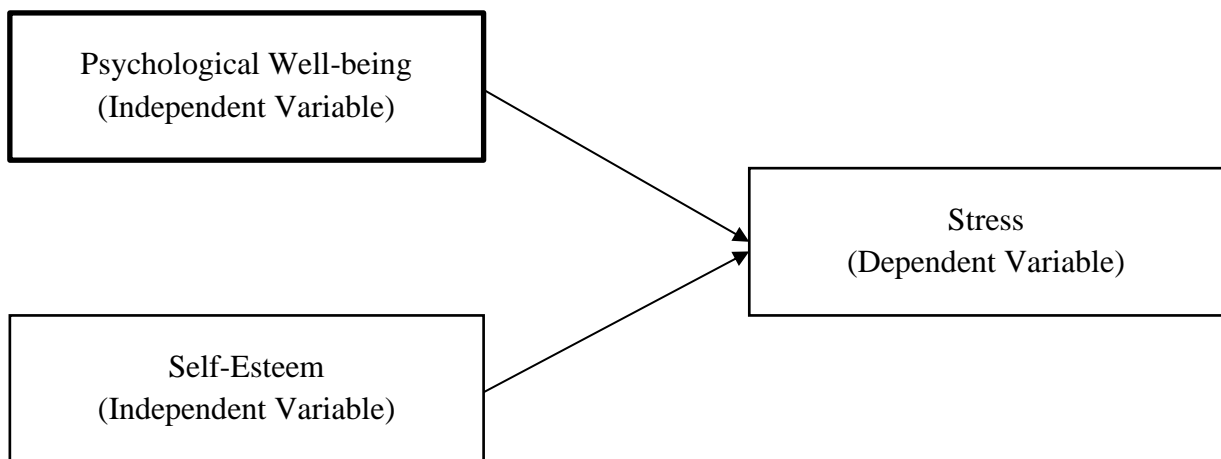
Figure 1: Predictors of Stress Among Undergraduate Students in Malaysia

Figure 1 shows the relationship of psychological well-being, self-esteem and stress in this study. This study aims to identify the relationship between psychological well-being, self-esteem and stress among undergraduate students in Malaysia. As shown above, psychological well-being and self-esteem serves as the independent variable and stress serves as a dependent variable in this study. Past study has shown support that psychological well-being and self-esteem are the predictors of stress among college students (Saleh et al., 2017).

In this study, researchers keen to predict there is a negatively predicts between psychological well-being and self-esteem on stress in the Malaysia context.

Therefore, this study would focus on studying the prediction between psychological well-being, self-esteem and stress among undergraduate students in Malaysia.

2.5 Conclusion

Based on what has been stated in the literature, it can be found that self-esteem and psychological well-being has a significant relationship with stress. Some research suggests that self – esteem has negative correlation with stress (Dixon & Kurpius, 2008; Edwards et al., 2010) whereas some findings proves that self –esteem helps students to cope with stress effectively (Yıldırım et al., 2017; Eisenbarth, 2012). However, another finding suggests that higher income in families increases self-esteem of students (Aboalshamat et al., 2017). This is a very distinctive finding that can be derived from the study that enables the researchers to understand the relationship between stress and self-esteem.

Other than that, there are findings that suggest that stress can affect psychological well – being of students in a negative way (Jia & Loo, 2018). Some researchers found that first year and second year university students undergo high level of stress that can affect their well-being (Liu et al. 2019) whereas various researchers found that certain types of studies that requires practical application on human health in real life such as dentistry and nursing has higher level of stress at the near end of their studies where placements and training will happen (Li & Hasson, 2020; Uraz et al., 2013). Other researchers also found that being perfect in everything can also bring negative effects on psychological- well-being and low levels of optimism, social skills can also increase stress and lead to low psychological well-being (Burris et al., 2009 ;Segrin 2017). Other types of stress such as academic stress and work stress of part time

workers among undergraduates can also have a negative effect on their psychological well-being (Ahn & Baek, 2012; Ngbea and Kwaghgbah 2021; Shaaban, 2017).

Even though many researchers as mentioned before have focused on the relationship between stress and psychological well-being and self –esteem of undergraduate students, very limited research has been focused in Malaysia (Shaaban, 2017). Western society may have different cultural values and norms that are very distinctive from Asian culture and especially in a multicultural country like Malaysia. Therefore, this study can be a stepping stone for other researchers to focus on this topic on university students as the findings can help students as well as administration to focus on coping with stress and managing their mental and physical health.

Chapter III

Methodology

3.0 Introduction

In this chapter, the methodology that has been used in this study will be explained. The topics of discussion would be research design, sampling method, sample size, participants chosen, location of study, data collection procedures, measurement and design of instrument and lastly data analysis of results that will be collected upon distribution of survey.

3.1 Research Design

The current research design is using quantitative research method. Quantitative research involves calculation and analysis of data for every measurement used (Watson, 2015). Furthermore, cross-sectional research design will be used in the current research. Cross-sectional study is known as a type of observational study design, as it investigates the outcome and the exposure of the population (Setia, 2016). Cross-sectional study has two different types of research which are descriptive and analytical. In this study, analytical research will be prioritized as the main focus. Cross-sectional study has several benefits which are cost efficient and able to be carried out in a short period of time (Setia, 2016). The current research has the main objective of finding out the relationship between self-esteem and stress along with the relationship of psychological well-being and stress. The data will be collected from the online questionnaire and the data of participants will be kept undisclosed.

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3.2 Sampling Method

In this study, the sampling method that has been be used to match the criteria of current condition is the convenience sampling method. Convenience sampling method is a type of non-probability sampling method that can retrieve data directly from a targeted sample such as the sample students from Universiti Tunku Abdul Rahman (UTAR). Study also found out that convenience sampling method is also considered as a less-time consuming and cost-effective sampling method to obtain the sample participants (Speak et al., 2018). The survey tools that will be used to distribute questionnaire is using Qualtrics, which is a survey tool specifically for Psychology students to collect data, and the survey tool will be provided to participants in different social media platforms such as Facebook, WhatsApp and Instagram. Before distributing the survey questions to the qualified participants, ethical approval has been approved by the member of UTAR Scientific and Ethical Review Committee during the date of 17 December 2021 (Reference number: U/SERC/290/202).

3.3 Location

As the study focused on emerging undergraduate students in Universiti Tunku Abdul Rahman (UTAR), the distribution will be across campuses which are Kampar and Sungai Long campus. UTAR is a private not-for-profit research-based education institute that has over nine faculties and 129 programmes in various fields. The questionnaire has been distributed to UTAR students via online platforms such as WhatsApp or Microsoft Teams using a survey link.

3.4 Sample Size

In order to calculate the sample size of this study, G*Power has been used in order to calculate the statistical power of. G*Power is a statistical software that functions as calculating the statistical power of a particular statistical test in order to calculate the expected sample size of a study (Faul et al., 2009). G*Power 3.1.9.4 version has been used to identify the expected sample. Given that the effect size of this study is $f2 = 0.1475$ and power =.95 while the number of predictors is 2. Therefore, the result for expected sample size after calculation for this study is 108 participants. The initial sample size that has been retrieved from participants is 246 respondents. After data filtration process has taken place, such as the removal of unqualified data, the final actual sample size of this research is consisted of 177 respondents.

3.5 Participants

The current research targets emerging adults in Malaysia. According to Sawyer et al. (2018), new understanding on the age range of emerging adults or youths in other terms can be between 10 to 24 years old. However, in Malaysia, adolescents are falling between the age range of 15 to 24 (Department of Statistics Malaysia, 2021). Particularly students who proceed to tertiary education should finish *Sijil Peperiksaan Malaysia* (SPM) at the age of 17 or more before entering universities, colleges, Matriculation, STPM and other options. So, the age range for students chosen for this study is between 18-24 years old undergraduates from Universiti Tunku Abdul Rahman.

3.6 Data Collection Procedures

There are several inclusion and exclusion criteria that need to be adhere in this research. The first criteria is that the participants must be aged in between 18 to 24 years old

of undergraduate students. The second criteria is that the participants must be a student from Universiti Tunku Abdul Rahman (UTAR) Kampar campus. Assuming that the participants does not fulfill the both criteria above, the data from participants will be excluded in this study. Furthermore, the researcher has provided a brief background of the study before obtaining a consent from the participants. Informed consent has been attached at the first page of the online questionnaire so the participants were able to read through and decide whether to proceed to the questionnaire. The informed consent has the purpose to provide important details such as the purpose of study, the rights to participate voluntarily, potential risk and confidentiality. Participants were informed that all their personal data will be kept confidential and their data will only be used for the purpose of study. Participants who wished not to disclose their information their data would not be processed during the data analysis.

Besides, the research has been carried out through data collection. The data collected was mainly from the online questionnaire. The online questionnaire will be designed using the online questionnaire platform called Qualtrics. As the questionnaire will be ready to be used, a link will be generated to access the online questionnaire. Famous social media platforms (e.g. Facebook) or any social media messaging applications (e.g. Messenger, Whatsapp, WeChat and Microsoft Teams) were the primary platforms where the link will be shared. The link given redirects any visitor to the online questionnaire. The duration to complete the questionnaire is approximately 5 to 10 minutes. The overall data collection process consisted of 2 months starting from 6 January 2022 to 6 March 2022, the research study solely based on the volunteering from participants and no prepayment will be given to the respondents for their participation. The researcher appreciates the effort from UTAR undergraduate students by providing their valuable response on the research topic.

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3.7 Instruments

3.7.1 Rosenberg Self-esteem Scale (RSES)

Rosenberg Self-Esteem Scale. Rosenberg Self-Esteem Scale (RSES) is a widely used instrument to assess one's self-esteem including the measurement of both positive and negative feelings about self. The scale is a unidimensional model and it equalizes discrimination based on a standard model. It is a self-report type instrument consisting of 10 items to evaluate self-esteem. The scale for RSES is a 4-point Likert scale ranging from 1=*Strongly Disagree*, 2=*Disagree*, 3=*Agree* to 4=*Strongly Agree*. In the scale, there are 5 reverse scoring items (2,5,6,8,9) while another 5 items are positive scoring items (1,3,4,7,10). The negative scoring items indicate negative Self-Esteem while the positive scoring items indicate positive Self-Esteem. The scoring method is calculated by summing up all the items in the scale; higher score indicates higher level of self-esteem of an individual. By using item no.5 which was negative worded as an example for reversed scoring item, "I feel I do not have much to be proud of."

The internal consistency of RSES has a value of Cronbach's alpha ranging from .85 to .88 (Martín-Albo et al., 2007). A study made by Dhingra (2013) reported that the reliability of positive Self-Esteem subscale has the value ranging from .67 to .83 while the reliability of negative Self-Esteem subscale has the value ranging from .63 to .76. When comparing with this study, the internal consistency value of Cronbach's self-esteem scale that consist of 10 items is .915 which indicates excellent internal consistency, while the positive and negative Self-Esteem subscale has the Cronbach's alpha value of .879 and .848 respectively. The validity for RSES is tested using Confirmatory Factor Analysis (CFA) as it is a better option for testing validity and reliability of an instrument in terms of two separate

factors (Fromont et al., 2017). According to McMullen & Resnick (2013), the validity of RSES for each item has a range of value from .45 to .75.

3.7.2 Shortened 18-item version Psychological Well-being scale (PWB)

Psychological well-being scale of 18 items were created by psychologist Ryff & Keyes (1995). This version of scale is the shortest version of the original scale which has 42 items in comparison. It is used to measure the psychological well-being of adults. The scale takes about 5 minutes to finish and it consists of a Likert scale of point where 1 indicates *strongly agree*, 2 indicates *somewhat agree*, 3 indicates *a little agree,* 4 indicates *neither agree nor disagree*, 5 indicates *a little disagree*, 6 indicates *somewhat disagree* and lastly 7 indicates *strongly disagree*. There are 10 reversed score items which are Q1, Q2, Q3, Q8, Q9, Q11, Q12, Q13, Q17, Q18. The scoring would be reversed where point 1 will indicate *strongly disagree* (point 7), point 2 will indicate *somewhat disagree* (point 6), point 3 will indicate *a little disagree* (point 5), point 4 remain the same with the original scoring (point 4), point 5 will indicate *a little agree* (point 3), point 5 will indicate *somewhat agree* (point 2) and lastly point 7 will indicate *strongly agree* (point 1). Other than that, Ryff's Psychological well-being scale of 18 items include 6 sub-elements of PWB which are Environmental Mastery (Q4, Q8 and Q9), Self-Acceptance (Q1, Q2 and Q5), Autonomy (Q15, Q17, and Q18), Purpose in Life (Q3, Q7, and Q10), Positive Relations with Others (Q6, Q13, and Q16) and lastly, Personal Growth (Q11, Q12, and Q14).

The higher the score, the higher the psychological well-being of participants. Examples of items given in the scale would be "I live one day at a time and don't really think about the future", and "I tend to be influenced by people with strong opinions. Internal consistency has been reported at .92 using Cronbach alpha in a study by Prasad et al. (2020). Moreover, in research by Chiang et al. (2019), it has been found that each subscales showed

high in Cronbach alpha coefficient scores where environmental mastery, positive relation with others, personal growth, purpose in life, self - acceptance scored .72, .75, .81, .77, .75 respectively. However, subscale autonomy was at .57 but showed great construct validity among other subscales. Table 3.1 shows the comparison between the reliability of shortened 18-item version of Psychological Well-being scale, as shown in the table where the internal consistency of the PWB scale is .91 which indicates excellent internal consistency, while the subscale scores where environmental mastery, positive relation with others, personal growth, purpose in life, self – acceptance and autonomy scored.75, .72, .54, .52, .80 and .61 respectively. The comprehensive score for psychological well-being scale was at 0.88. They also found that the criterion validity of the test with perceived health was preferable. However, in another study reliability of all the dimensions were reported to be low (Clarke et al., 2001).

Table 3.1 *Reliability of Shortened 18-item version Psychological Well-Being scale*

Scale/Subscale	No. of Items	Cronbach Alpha	
		Past Study	Actual Study
18-item PWB Scale	18	.92	.91
Environmental Mastery	3	.72	.75
Positive Relation with Others	3	.75	.72
Personal Growth	3	.81	.54
Purpose of Life	3	.77	.52
Self-Acceptance	3	.75	.80
Autonomy	3	.57	.61

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3.7.3 Student Stress Inventory (SSI)

The Student Stress Inventory was initially developed by Arip et al. (2015) in order to measure student's stress. After a couple of years, Arip et al. (2018) proposed a revised version of the manual for Student Stress Inventory 2019 edition. The manual for Student Stress Inventory eases the researcher to keep them understanding the content of Student Stress Inventory (SSI) better. The Student Stress Inventory consisted of four different aspects that will be measured from a student's perspective. Physical stress, interpersonal relationship, academic stress and environment stress are the main four components that will be measuring the student stress in this instrument. According to Drost (2011) where he argued that the adequate reliability of the test for the particular instrument should be .7, the whole scale and subscale of Student Stress Inventory (SSI) consisted of good reliability. The reliability for the Student Stress Inventory as a whole is .857, while the reliability for each of the subscales which are physical stress, interpersonal relationship, academic stress and environment stress considered moderate and high reliability which are .680, .620, .842 and .806 respectively. According to table 3.2 in which presenting the reliability of past and actual study of Student Stress Inventory (SSI). As shown in the table, The actual study of whole scale Student Stress Inventory (SSI) demonstrates excellent internal consistency which is .952 while the four main subscales of SSI which are physical stress, interpersonal relationship, academic stress and environment stress demonstrates from excellent until acceptable Cronbach's Alpha which are .820, .791, .933 and .888.

According to Polit et al. (2007) where they stated that the Content Validity Index (CVI) should exceed .78 to be considered as good content validity. The validity for this instrument as a whole scale is .805, meanwhile the validity for each of the subscales which includes physical stress, interpersonal relationship, academic stress and environment stress

are .807, .789, .822 and .802 respectively. This instrument consisted of a total of 40 items.

This instrument comprises four different subscales and each subscales consist of 10 items.

This instrument consisted of 4 Likert scales from 1 = *Never*, 2 = *Somewhat frequent*, 3 =

Frequent and 4 = *Always*. The total score is computed by summing up all of the items in each

of the subscales and higher scores indicate higher levels of student stress in that particular

aspect.

Table 3.2 *Reliability of Student Stress Inventory*

Scale/Subscale	No. of Items	Cronbach Alpha	
		Past Study	Actual Study
Student Stress Inventory (SSI)	40	.857	.952
Physical	10	.680	.820
Interpersonal Relationship	10	.620	.791
Academic	10	.842	.933
Environmental	10	.806	.888

Arip et al. (2018) have proposed the two different categorizations such as calculating

SSI as whole or calculation of each subscales. The instruments of stress levels are divided

into three categories which consist of mild stress, moderate stress and severe stress. As a

whole calculation for SSI, the researcher suggested that the total score for mild stress should

be around 40-80, the total score for moderate stress is 81-121 and the total score of severe

stress should fall to 122-160. Meanwhile, each of the subscales is followed by these same

categories of evaluation as well. The total score for mild stress is 10-18, the total score for

moderate stress is 19-29 while the total score of severe stress is 30-40.

3.8 Data Analysis

In this study, SPSS version 23 has been used in this study to run the statistical analysis in order to answer the research question. There are few tests that has been conducted in order to determine the relationship between Psychological Well-being, Self-esteem on Stress among undergraduate students in Malaysia. The tests that has been conducted in this analysis including descriptive analysis, multiple regression analysis, multicollinearity, assumption of normality, Spearman's Rho correlation, histogram, PP-plot and outlier identification.

3.9 Conclusion

The research design which is a quantitative approach where cross-sectional research design will be used. Besides, sampling method would be a convenience sampling method on the targeted population which is Universiti Tunku Abdul Rahman University (UTAR) undergraduate students which involves approximately 177 participants in between the age range of 18 to 24 years old. The instruments that have been used in the study will be Rosenberg Self-esteem Scale, Shortened 18-item version of Psychological Well-being Scale and Student Stress Inventory. SPSS version 23 will be used in the data analysis part of the study.

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Chapter IV

Results

4.0 Introduction

In this chapter, the study will be focusing on interpretation of the results that will be conducted in order to answer to the research question and hypothesis. Descriptive statistics of demographic information and main variable will be conducted and test of normality will to ensure the data is in normal distribution. Besides, the study also undergoes several statistical test independent sample t-test, multicollinearity, Spearman's correlation and Multiple Linear Regression

4.1 Descriptive Statistics

The overall information of participants in this study were listed in the following tables. The description of the tables was stated below includes the participants demographic information such as gender, age, ethnicity and faculties.

Table 4.1 *Descriptive Statistics of Participant's Gender and Age*

Gender	n	%	Age	n	%
Male	71	40.1	19	1	.6
Female	106	59.9	20	7	4.0
			21	41	23.2
			22	98	55.4
			23	20	11.3
			24	10	5.6
Total	177	100		177	100

*Note: n = number of participants, % = percentage of participants

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Table 4.2 *Descriptive Statistics of Participant's Ethnicity*

Ethnic	n	&
Malay	2	1.1
Chinese	162	91.5
Indian	10	5.6
Others	3	1.7
Total	177	100

Table 4.1 and 4.2 shows the demographic information of the participants which includes gender, age and ethnicity. The total participants in this study is consisted of 177 respondents. Male participants consisted of 71 members (40.1%) while female participants consisted of 106 members (59.9%). Since the targeted participants in this study consisted of undergraduate students in UTAR. Hence, the average age for this study is from 19 years old to 24 years old. In this study, 1 member of participant falls under the category of 19 years old (0.6%), 7 participants are from 20 years old (4.0%), 41 participants are from 21 years old (23.2%), 98 participants are from 22 years old (55.4%), 20 participants are from 23 years old (11.3%) while 10 participants are consisted from 24 years old (5.6%). For the ethnicity counterpart, most of the respondents in this study mainly from Chinese ethnicity, which consisted of 162 respondents (91.5%), the respondents from Malay ethnicity is the least respondents in this study which is 2 respondents (1.1%), Indian ethnicity consisted of 10 respondents (5.6%) while others ethnicity in this study mainly consisted of minor ethnicity such as Punjabi and Orang Asli in Sabah and Sarawak consisted of 3 respondents (1.7%).

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Table 4.3 *Descriptive Statistics of Participant's Faculty*

Faculty	n	%
FEGT	9	5.1
FICT	12	6.8
FSC	12	6.8
FBF	31	17.5
FAS	111	62.7
ICS	2	1.1

Table 4.3 indicates the descriptive statistics of Faculty among undergraduate students in UTAR Kampar. Primarily, UTAR Kampar is consisted of six main faculties that consist of Faculty of Engineering and Green Technology (FEGT), Faculty of Information and Communication Technology (FICT), Faculty of Science (FSC), Faculty of Business and Finance (FBF), Faculty of Arts and Social Science (FAS) and Institute of Chinese Studies (ICS). As shown in table 3, the respondents from FEGT consists of 9 respondents (5.1%), the respondents from FICT consists of 12 respondents (6.8%), the respondents from FSC consists of 12 respondents (6.8%), the respondents from FBF consists of 31 respondents (17.5%), the respondents from FAS contributes most respondent in this study which consisting of 111 respondents (62.7%) while respondents from ICS have the least respondents in this study which consisting of 2 respondents (1.1%).

Table 4.4 *Descriptive Statistics of Main Variable*

Level of Stress	n	%
Mild Stress	103	58.2
Moderate Stress	72	40.7
Severe Stress	2	1.1

Table 4.4 shows the descriptive statistics of main variable which is Stress, the Student Stress Inventory (SSI) has been categorized into three different categories which are mild stress, moderate stress and severe stress. In this study, undergraduate students has reported that among 103 of them experiencing mild stress, 72 students experiencing moderate stress and 2 students reported with severe stress issue.

4.2 Test of Normality

In this subchapter we will discussing the assumption of normality in the way of graphically and statistically. The graphical representation to assess normality will be include histogram and P-P Plot, while the statistical tests that will be use to asses normality will be skewness and kurtosis. As referring to Appendix F, where the histogram of Self-Esteem, Psychological Well-Being and Stress has been presented. According on the shape of the distribution, the histogram of Self-Esteem, Psychological Well-Being and Stress has been found out that the shape for these three variables is normal which is bell-shaped curve. This indicates that these three variables present good normality. Furthermore, P-P Plot distribution of Self-Esteem and Psychological Well-Being has been found out that the score are slightly deviated from the diagonal line (refer Appendix G) while the scores for Stress variable has been found out that most of the scores falls under the diagonal line (refer Appendix G).

Table 4.5 *Normality of All Variable by using Skewness and Kurtosis (N = 177)*

Variable	SD	M	Skewness	Kurtosis
Self-Esteem	29.60	6.02	-.254	.029
Psychological Well-Being	83.27	8.67	.583	.125
Stress	74.08	21.33	.136	-.824

*Note: *M* = mean, *SD* = Standard Deviation

According to table 4.5 in which shows the skewness and kurtosis of Self-Esteem, Psychological Well-Being and Stress, the skewness and kurtosis for these three variables is significantly normal in this study. According to Kim (2013), where argued that the acceptable range for skewness and kurtosis is ± 2. The test of normality has found out that the skewness for Self-Esteem is negatively skewed (-.254) and the kurtosis of Stress variable is negatively skewed (-.824). Meanwhile, the others result for these three variables is positively skewed and does not violate the acceptable range.

4.3 Independent Sample T-Test

Table 4.6 *An independent sample T-Test of Gender Differences in Stress*

Variable	Group	M	SD	t-test	Sig.(2-tailed)
Stress	Male	72.662	22.635	-.725	.469
	Female	75.038	20.462		

*Note: M = mean, *SD* = Standard Deviation

Table 4.6 shows an independent sample t-test in assessing the variable stress among the differences between male and female. Based on the result, it shows that there was no significant difference between Male ($M = 72.662$, $SD = 22.635$) and Female ($M = 75.038$, $SD = 20.462$) for Stress; $t(177) = -.725$, $p = .469$. The mean differences of stress among male and female students in UTAR Kampar undergraduates is 2.376 and the results seems to be suggested that the gender differences does not have an impact on stress.

4.4 Test on Multicollinearity

Table 4.7 *Coefficient Among Variables*

		Collinearity Statistics	
Model		Tolerance	VIF
1	(Constant)		
	Self-Esteem	1.00	1.00
	Psychological Well-Being	1.00	1.00

As present in table 4.7, where the collinearity statistics stated that the tolerance and VIF value of these both variables show no violation. Shieh (2010) argued that all of the tolerance value exceeds .10 indicates that the assumption are met while the cut-off value general rule of VIF which suggested by Robinson & Schumacker (2009) should be less than 10.

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4.5 Test on Multivariate Outliers

Table 4.8 *Casewise Diagnostics for Stress*

Case Number	Std. Residual	Stress	Predicted Value	Residual
87	-3.073	41.00	91.2804	-50.28044

According to table 4.8, where case number 87 has been identified as outlier by using the regression method. Raj & Kannan (2017) stated that an outlier is identified when the residual value is large compared to other data set. Therefore, the outlier will be removed as the outlier might have an impact on affecting the regression model.

4.6 Spearman's Rho Correlation

Table 4.9 *Spearman's Rho correlation between Self-Esteem, Psychological Well-Being and Stress*

		Stress
Self-Esteem	Spearman's Rho Correlation	-.587**
	Sig. (2 tailed)	.000
	n	177
Psychological Well-Being	Spearman's Rho Correlation	.224**
	Sig. (2 tailed)	.003
	n	177

Note. ** correlation is significant at the 0.01 level (2-tailed), n = number of participants

Table 4.9 shows the Spearman's Rho correlation between Self-Esteem, Psychological Well-Being and Stress. The findings indicates that there is a strong negative relationship between self-esteem and stress which was statistically significant $r = -.587$, $p<.005$, $p = .000$.

Based on the Spearman's Rho interpretation from Dancey & Reidy (2004) where the authors suggested that the correlation in between .40 and .69 is considered as strong positive or negative relationship. Meanwhile, the result also seems to suggest that there is a weak positive relationship exists between psychological well-being and stress which was statistically significant $r = .224$, $p<.005$, $p = .003$. As a summary, the available evidence reported that there is a negative relationship between self-esteem and stress and there is a positive relationship between psychological well-being and stress.

4.7 Multiple Linear Regression (MLR) analysis

Table 4.10 *ANOVA Table for Regression Model*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	35880.635	2	17940.318	70.649	.000
	Residual	44185.094	174	253.937		
	Total	80065.729	176			

Table 4.11 *Model Summary for Regression Model*

Model	R	R Square	Adjusted R Square	Std.Error of Estimate
1	.669	.448	.442	15.93541

Table 4.12 *Regression Model of Stress among Undergraduate Students in Malaysia (N = 177)*

Variable	F	df	β	t	Sig.
	70.649	2			
Self-Esteem			-.638	-11.322	.000
Psychological Well-Being			.198	3.522	.001

Multiple Linear Regression (MLR) analysis was used in order to determine whether self-esteem and psychological well-being significantly predicts dependent variable which is stress. Table 4.10 shows that the regression model was statistically significant, $F(2, 174) = 70.649$, $p < .001$. Furthermore, according to model summary table of regression model, it shows that both of the independent variables which are self-esteem and psychological well-being together in explaining 44.8 per cent of the variance (R square = 0.669) on stress. According to Table 4.12, the findings shows that self-esteem ($\beta = -.638$, $p = .000$) and psychological well-being ($\beta = .198$, $p = .001$) were significantly predicted stress.

According to the hypothesis where the study stated that self-esteem and psychological well-being negatively predicts stress among undergraduate students in Malaysia. However, a closer look at the data indicates that self-esteem was found as a negative predictor of stress but psychological well-being was found as a positive predictor of stress. Therefore, H1 was supported in the study but H2 was rejected in this study.

4.8 Conclusion

In this chapter, the findings of this study seem to suggest that self-esteem negatively predicts stress and psychological well-being positively predicts stress. Further evidence supporting the H1 which is negative relationship between self-esteem and stress and discussion of evidence to against H2 which is negative relationship between psychological well-being and stress will be deeply discussed in the next chapter.

Chapter V

Discussion

5.0 Introduction

The objective of the study was to assess whether self-esteem and psychological well – being predicts stress among undergraduate students in Malaysia. The subsequent part analyze the results and provides implications, limitations, and recommendations of the current study.

5.1 H1: Self-esteem negatively predicts stress among undergraduate students in Malaysia

The present study showed that self-esteem negatively predicts stress among undergraduate students in Malaysia, indicates that with the increase of self-esteem, the stress of undergraduate student decrease. The result had supported the first hypothesis in which self-esteem negatively predicts stress. The finding was consistent with past research studies claiming that self-esteem negatively correlate with stress (Jin Kim & Moon, 2016; Edwards et al., 2010).

High self-esteem helps people to be confident and able to seek for positive changes in the surrounding while negative self-esteem affects the confidence of people and focus on negative thoughts only (Lima & Souza, 2019). Furthermore, self-esteem acts as an important role when facing difficulties as it boost the confidence of individual for owning the capability to solve it in an effective way (Eisenbarth, 2012). It seems like self-esteem helps individual to stay positive even when facing stressful event, which certainly helps as the individual able to stay calm and avoid panicking resulting in making the situation worst. As an individual has a higher level of self-esteem, the individual able to cut down the level of stress by seeking possibilities in hard situation (Edwards et al., 2010). The personality trait of self-esteem

influences a lot on how people able to deal with stress, strengthen the stand of self-esteem negatively predicts stress. Moreover, people with high self-esteem usually have high life satisfaction (Deniz, 2006). People with high self-esteem usually perceived their life is successful enough and the overall satisfaction of life makes them feel even more comfortable. From this point of view, surely people with high self-esteem has lower stress as their life satisfaction had been fulfilled to the point which they absolutely fine with it.

Other than that, self-esteem is perceived as one of the psychological resource in the coping strategy, resulting in the trait of self-esteem to become a protective barrier for mental health (Wongtongkam, 2019). Similar findings also stated that self-esteem is a strong protective factor due to a positive self-insight, making it as an effective source of coping strategies to go against stress (Karaca et al., 2019). Self-esteem helps people to build confidence and having a positive mindset so they able to use coping strategy effectively when reacting to stressful situation by taking actions to work on it (Wolf et al., 2015). It can be interpret as if someone who has high self-esteem facing stressful event, the individual chooses to use actions as the response towards current stressful situation rather than entering a self-blame situation or give up easily as the negative thoughts of unable to solve it, doubting self-competence. As self-esteem usually portrait as something good while stress is more on a negative side, it showed how self-esteem negative predicts stress even among undergraduate students.

The effect of stress is still need to be considered as it depends on how the individual reacts to it. People with high stress tend to have poor physical and mental health (Jenkins et al., 2021). University students should avoid these types of mental health issues to be able focusing on the academic performance while enjoying the life at the same time. A statement was made that stress has negative impact towards academic performance or achievement is something had to be concern (Frazier et al., 2018). On the other hand, it is interesting to know

that self-esteem has enough influence towards academic performance. Self-esteem has a positive correlation with academic performance which means that high self-esteem most likely to result in good academic performance (Arshad et al., 2015).

As self-esteem negatively predicts stress, it can be used as a cautions sign for people who have lower self-esteem as these people have a potential risk of having high stress. As stated that stress has certain negative impact towards university students, it should be taken seriously or at least give a certain degree of recognition towards self-esteem in order to help university students to enjoy their life.

5.2 H2: Psychological well-being negatively predicts stress among undergraduate students in Malaysia

The result of the study suggests that psychological well-being positively predicts with stress. The result has rejected the hypotheses in which was stated as psychological well-being negatively predicts stress among undergraduate students. In our study, students showed that high psychological well-being can lead to high stress level. Stress can be viewed in two perspectives: eustress and distress. A concept created by Selye in 1974, which was then analyzed by multiple researchers in the field (Selye, 1974). Eustress is dealing with stress in a positive way and distress means dealing in a negative way. Other researchers such as O'Sullivan (2010), have stated that eustress can be viewed as a way of positively dealing with stress and also having the end product that is positive. For an example, constantly putting in effort to maintain a relationship is a process and having a great relationship at the end based on the efforts is a product.

When people have high psychological well-being, they tend to look for personal growth, environmental mastery, autonomy, self-acceptance which can lead to having great purpose in life. These variables are fundamental dimensions of PWB. According to Schultze-

Lutter et al., (2016), personal growth means retrospectively seek for growth and expansion of self. Environmental mastery is the ability to regulate the environment to efficiently use it for individual beliefs and priorities. Autonomy means having the freedom of choice to act in a socially accepted way without being influenced by social pressures. Self-acceptance is when a person is able to acquire a positive opinion about themselves and embraces their positive and negative attributes. Lastly, purpose of life is having goals to reach for in the future which provide a sense of being in charge of their life. Based on the explanation above, it can be said that these elements are important to students as it regulates both academic, personal, and social life. When students are in high PWB, they will strive to achieve more. In academic wise, they tend to study well, manage their time to do all the course works and balance their needs and wants. This is a eustress process and at the end, they can get their expected grades, scholarships which are the product. According to Suldo et al., (2018), eustress can be associated with academic achievements which can be analysed based on the student's academic outcomes such as grades. Eustress also promotes self-efficacy among adolescence which can help them to look at challenges as positive stressors and seek for prospects in it (Branson et al., 2019).

The concept of eustress can be associated with theory of hardiness as the third component of this theory, which is challenge, proposes that looking at obstacles as challenge can enable them to seek for personal growth. Other than that, high psychological well-being can lead to positive thinking (Hussein Alkhatib, 2020). When they are approached with a problem, students when they have positive mindset, they are able to resolve the stressors without much problem as they have the mindset and believe that they will solve an issue in any way. It is an undeniable fact that academic life is very crucial for students. There can be many stressors that hinder the students' academic achievements. Research by Rudland et al., (2019) had stated that in academic field challenges are perceived to be positive and it can

help in acquiring new thought processes. However, seeing a stressor as a challenge rather than hindrance depends on few aspects of students which also include positive mindset. Hence, it can be proven that being psychologically well can create a positive mindset which can help a person to view stressors as eustress and overcome it effectively. On the opposite term, when distress is being associated with students, it can be said that they see stressful situation as an obstacle that inhibits them from moving forward. Unlike eustress, distress highly associated with negative emotions in students. According to Ribeiro et al., (2018), students who are highly distressed tend to have low quality of life, easily get burnout, and becomes depressed and stressed. This is because, when someone is constantly affected by negative emotions, their psychological well-being decreases. When that decreases, physical and mental health problems will arise thus leading to complications. Many students who are distressed can go to extreme level of negative psychological well-being which are in some cases, suicidal thoughts, and attempts (Eskin et al., 2016). Students should always be looking at positive and negative sides of life. However, dwelling in extreme level of stress, can be distress or eustress, can harm the person. It is crucial for students to be able to equalize the effects of both eustress and distress.

5.3 Implications

5.3.1 Practical Implication

In contract, the result obtained is beneficial to anyone who works in education industry, counselors, psychologist, mental health professions and parents as well. The findings give an insight on how self-esteem and psychological well-being predicts stress. It definitely helps in understanding on how self-esteem and psychological well-being work on stress as they possess different elements when it comes to dealing with stressful events.

When it comes to predicting stress, self-esteem and psychological well-being must take into consideration as well. It is widely known that students in tertiary education tend to face a lot of stress as they have to deal with a lot of thing not just academic stuff. For people who works in education industry such as lecturers able to gain insight of the importance of personality of students and make use as an intervention to enhance the teaching experience. Appropriate praise helps to boost students' self-esteem and psychological well-being to make them feel confidence which is important as to ensure students are on a healthy level for mental health.

For counselors or psychologist, it provides extra reference on making guidance for students to lessen the stress. Counseling session can provide some sort of confidence boost to help the students discover their own potential or self-worth to avoid frustration when dealing with stressful events. Eventually, a talk or workshop can be setup as well surrounding the topic of ways to deal with stress by making use of certain coping mechanism. Understanding the relationship between these variables able to assist to focus on the correct way to deal with stress which is always beneficial to people who came to ask for assist. Providing proper information helps the students to realize their current mental health level and the severity of having stress is enough to encourage them to seek help from professionals.

5.3.2 Theoretical Implication

Present study could contribute more data in the database about self-esteem, psychological well-being toward stress. These data provide extra information while become one of the sources to refer to. The data helps the society to understand and pay extra attention on the importance of self-esteem and psychological well-being of university students. Furthermore, by adding current research using Malaysian context helps to add diversity in the database for similar study.

Present study showed that self-esteem negatively predicts stress while psychological well-being does not negatively predicts stress. This result could be used as a reference when it comes to designing theory or program related to stress. Since stress is always an issue in modern society, research on investigating what predict stress is always beneficial as it provides a fundamental idea of using suitable variables to find out the reason results in stress. By doing so, it provides more ideas and ways to deal with stress in order to maintain the good mental health of the students.

The theory involved in this study is the theory of Hardiness. It means an individual's personality when facing stressful event while maintaining the level of health and competence. It also determines how an individual react to tough situation based on his or her own perspective. In this study, self-esteem negatively predicts stress means that people with high self-esteem able to respond to stress in their own way which is effective and resolve it. On the other hand, high psychological well-being also leads to high stress. The explanation given pointed out that eustress is also a way to deal with stress by perceiving stress as something positive and motivates the individual to solve it. Hence, the result was compatible with theory of Hardiness as a mechanism of how people deal with stress.

5.4 Limitations

The first limitation for the study would be, convenience sampling method which is a non-probability method was used to find participants. It initiates sampling bias whereby instead of representing whole Malaysian young adult's population, it represents a very small number of Malaysians. Moreover, we only focused on Utar students as participants from both Sungai Long and Kampar campus, so the majority of the participants were Chinese students (91.5%), followed by Indian students (5.6%), others (1.7%) and lastly Malay students (1.1%). This doesn't represent the Malaysian population at all because based on the Department of

Statistics Malaysia (2021), the Malay/Bumiputera composition was at 69.8 per cent, followed by 22.4 per cent Chinese population and lastly 6.8 per cent representing the Indian and others' population in the year 2021. Different races have different values and beliefs that exists within their culture. It is a necessity to evaluate the impact of cultural values in the study. For an example, individualistic cultures promote personal growth towards oneself, and collectivistic culture may see personal growth as interdepending their personal relationships and cultural values (Mehrotra et al., 2013).

Another limitation would be that as the survey was distributed online and it is self – report-based survey, there might be response bias from the participants. As the self-esteem, psychological well-being and stress are part of student's life, they might have altered their answers based on how they want to be perceived through the survey in a way of giving positive sense about themselves in the study. There are chances of the data being unreliable and not accurate based on this bias.

In terms of study design, cross sectional study was used in the research. As stress is inevitable, measuring it once at a convenient time period can lead to weaker results. The survey was distributed in the first few weeks of semester, which is when classes have just started and students are back from their semester break. There are not enough stressors at the moment for the participants. In a way, it is not able to monitor students during high stress periods. It is recommended to do longitudinal study design to have better understanding on stress among undergraduate students.

Despite the limitations, there are some strengths as well. This study can fill in the literature gap in both Malaysian and Western literature. The result of our study is very unique and different from previous research and can help in understanding the mental health, self-esteem, and stress among students. Moreover, the implementation of eustress is often ignored

by researchers in similar studies. Our study provides insight on positive stress as a reason for high stress level among students.

5.5 Recommendations

First recommendation would be to do longitudinal study in the future. This is because, stress can fluctuate at different time period depending on the situation. In order to get maximum understanding on stress, survey should be distributed at various part of semesters. For example, surveys can be distributed once before semester starts or first few weeks of commencement of study, once during course work periods (midterms, assignment submissions, quizzes, final examinations) and lastly once during posttest periods. The fluctuations in stress level can help understand stressors in students' life and able to regulate the stressors effectively.

Future researchers can study more into positive stress as part of student life. Eustress takes different viewpoint as compared to the typical distress and its effect on physical and mental health. It helps to maximize the effect of stress as a positive influence. Not all stress has negative affect on psychological well-being, physical health of people. Rather eustress promotes stressful situations as a motivating factor to excel in life.

Another recommendation for future research would be to include new variables to measure. Based on previous studies, many researchers have focused on other variables to study along with psychological well-being, self-esteem and stress which are resilience and self-efficacy. Resilience and self-efficacy are often used as research variables as many scholars believe that these elements can have an impact on stressors and can help student manage their well-being and stress levels (Schultze-Lutter et al., 2016; Tus, 2019; Mesurado et al., 2015).

Other than that, important demographic variables should also be considered such as socioeconomic status, gender, and cultural background of students. As mentioned before, cultural values and beliefs are different for each race in Malaysia. Studying this demographic information can help the current and future researchers to understand the importance of mental health and self-esteem and how stress is being coped in varies cultures. Gender differences are also very crucial in understanding these variables as male and female have different coping mechanisms, impact of stress and thought processes (Matud et al., 2019). Socioeconomic status of family on the other hand, can have an impact on self-esteem which can also be studied in research (Cheng et al., 2014).

5.6 Conclusion

In conclusion, the current study has found out that self-esteem negatively predicts stress while psychological does not negatively predicts stress among undergraduate students. The result of self-esteem negatively predicts stress is consistent with the past findings (Dixon & Kurpius, 2008; Jin Kim & Moon, 2016; Edwards et al., 2010). Meanwhile the hypothesis of psychological well-being negatively predicts stress has been rejected. Future research can be made around the topic of psychological well-being and stress to find out a more consistent result. The present study also revealed that the relationship in between gender differences and stress is not significant as well. Stress is one of the risk factor that leads to suicide (Lew et al., 2019). This lead to stress is always a topic to be concerned with. Students are valuable assets to the nation and will become part of the society structure in the future. It is important to find out the predictors os stress and resolve them one by one.

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SELF-ESTEEM, PSYCHOLOGICAL WELL-BEING AND STRESS

Appendices

Appendix A

Sample Size Calculation
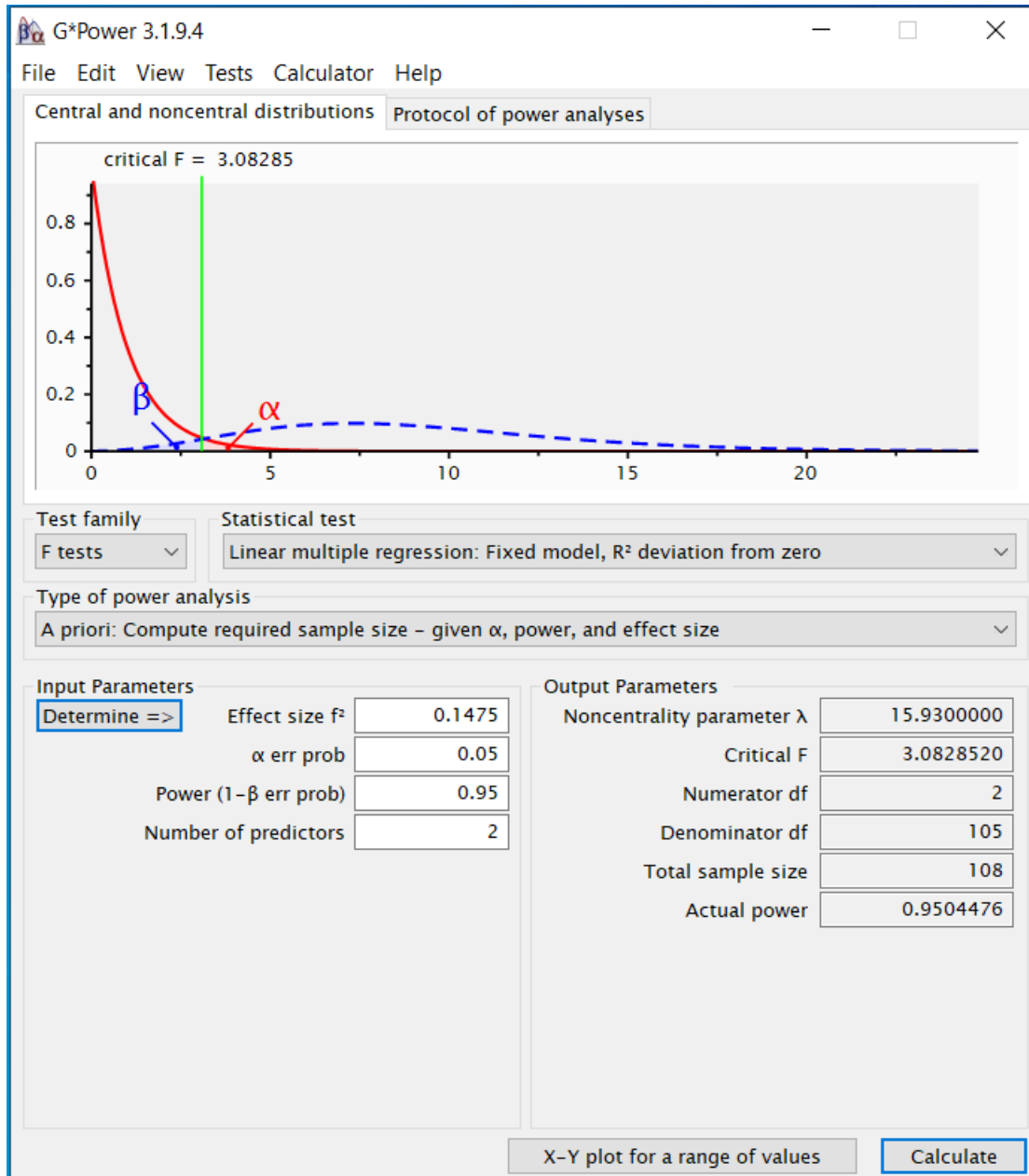
$$\text{Formula for effect size: } f^2 = \frac{R^2}{1-R^2}$$

Effect size of Self-esteem: -0.267

$$f^2 = \frac{(-0.267)^2}{1-(-0.267)^2}$$

=0.077

Effect size of Psychological Well-Being: -0.423

$$f^2 = \frac{(-0.423)^2}{1-(-0.423)^2}$$

=0.218

Average effect size of 2 predictors: $\frac{0.077+0.218}{2}$

= 0.1475

SELF-ESTEEM, PSYCHOLOGICAL WELL-BEING AND STRESS

Appendix B

Informed Consent

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

Consent Form for Research Participation and Personal Data Protection

Title of project: The relationship between self-esteem and psychological well-being on stress among undergraduate students in Malaysia.

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

I understand I have been asked to take part in the research project specified above by UTAR students for the purpose of their course assignment for UAPZ3023 Final Year Project II. I have had the project explained to me, and I have read the Explanatory Statement, which I keep for my records.

	Yes	No
I will be asked to complete a questionnaire about the relationship between self-esteem and psychological well-being on stress among undergraduate students in Malaysia	○	○
My participation is voluntary, that I can choose not to participate in part or all of the project, and that I can withdraw at any stage of the project without being penalised or disadvantaged in any way	○	○
I may ask at any time for my data to be withdrawn from the project	○	○
No information I have provided that could lead to the identification of any other individual will be disclosed in any reports on the project, or to any other party	○	○
I will remain anonymous at all times in any reports or publications from the project	○	○
It is my sole responsibility to look after my own safety for the above project. In the event of any misfortune or accidental injury involving me, whether or not due solely to personal negligence or otherwise, I hereby declare that UTAR shall not be held responsible.	○	○

Appendix C

Self-Esteem Questionnaire

ROSENBERG SELF-ESTEEM SCALE

Scale:

Instructions

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

Please indicate how strongly you agree or disagree with each statement.

1. On the whole, I am satisfied with myself.

Strongly Agree   Agree   Disagree   Strongly Disagree

2. At times I think I am no good at all.

Strongly Agree   Agree   Disagree   Strongly Disagree

3. I feel that I have a number of good qualities.

Strongly Agree   Agree   Disagree   Strongly Disagree

4. I am able to do things as well as most other people.

Strongly Agree   Agree   Disagree   Strongly Disagree

5. I feel I do not have much to be proud of.

Strongly Agree   Agree   Disagree   Strongly Disagree

6. I certainly feel useless at times.

Strongly Agree   Agree   Disagree   Strongly Disagree

7. I feel that I'm a person of worth, at least on an equal plane with others.

Strongly Agree   Agree   Disagree   Strongly Disagree

8. I wish I could have more respect for myself.

Strongly Agree   Agree   Disagree   Strongly Disagree

9. All in all, I am inclined to feel that I am a failure.

Strongly Agree   Agree   Disagree   Strongly Disagree

10. I take a positive attitude toward myself.

Strongly Agree   Agree   Disagree   Strongly Disagree

Appendix D

Psychological Well-being Questionnaire

Psychological Wellbeing (18 items)

Instructions: Circle one response below each statement to indicate how much you agree or disagree.

1. "I like most parts of my personality."

Strongly agree	Somewhat agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree

2. "When I look at the story of my life, I am pleased with how things have turned out so far."

Strongly agree	Somewhat agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree

3. "Some people wander aimlessly through life, but I am not one of them."

Strongly agree	Somewhat agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree

4. "The demands of everyday life often get me down."

Strongly agree	Somewhat agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree

5. "In many ways I feel disappointed about my achievements in life."

Strongly agree	Somewhat agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree

6. "Maintaining close relationships has been difficult and frustrating for me."

Strongly agree	Somewhat agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree

7. "I live life one day at a time and don't really think about the future."

Strongly agree	Somewhat agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree

8. "In general, I feel I am in charge of the situation in which I live."

Strongly agree	Somewhat agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree

9. "I am good at managing the responsibilities of daily life."

Strongly agree	Somewhat agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree

10. "I sometimes feel as if I've done all there is to do in life."

Strongly agree	Somewhat agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree

11. "For me, life has been a continuous process of learning, changing, and growth."

Strongly agree	Somewhat agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree

12. "I think it is important to have new experiences that challenge how I think about myself and the world."

Strongly agree	Somewhat agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree

SELF-ESTEEM, PSYCHOLOGICAL WELL-BEING AND STRESS

13. "People would describe me as a giving person, willing to share my time with others."

Strongly agree	Somewhat agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree

14. "I gave up trying to make big improvements or changes in my life a long time ago"

Strongly agree	Somewhat agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree

15. "I tend to be influenced by people with strong opinions"

Strongly agree	Somewhat agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree

16. "I have not experienced many warm and trusting relationships with others."

Strongly agree	Somewhat agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree

17. "I have confidence in my own opinions, even if they are different from the way most other people think."

Strongly agree	Somewhat agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree

18. "I judge myself by what I think is important, not by the values of what others think is important."

Strongly agree	Somewhat agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree

SELF-ESTEEM, PSYCHOLOGICAL WELL-BEING AND STRESS

Appendix E

Stress Questionnaire

STUDENT STRESS INVENTORY (SSI)

Directions: This inventory measures the stresses you have experienced in your study and everyday life in your campus. There are no right and wrong answers. Read each statement andcircle the best describes your experiences.

        1=Never (N)
        2=Somewhat frequent (SF)
        3=Frequent (F)
        4=Always (A)

Below is a list of the ways you may have felt or behaved over this semester. Please circle oneanswer in each box:

Subscale 1: Physical

No	Item	N	SF	F	A
1	Headaches	1	2	3	4
2	Back pain	1	2	3	4
3	Sleep problem	1	2	3	4
4	Difficulty breathing	1	2	3	4
5	Excessive worry	1	2	3	4
6	Stomach pain/nausea	1	2	3	4
7	Constant tiredness/fatigue	1	2	3	4
8	Sweating/sweaty hands	1	2	3	4
9	Frequent cold/flu/fever	1	2	3	4
10	Drastic weight loss	1	2	3	4

Subscale 2: Interpersonal Relationship

No	Item	N	SF	F	A
11	I find difficult to meet my high parent's expectation	1	2	3	4
12	My parents treat me as a helpless person	1	2	3	4
13	I feel guilty if I fail to fulfill my parent's hope	1	2	3	4
14	My parents wish only for my success	1	2	3	4
15	I find difficult to get along with groupmates in doing academic task	1	2	3	4
16	My friends did not care about me	1	2	3	4
17	I feel disturbed when having problem with my boyfriend/girlfriend	1	2	3	4

| 18 | My families are not supportive | 1 | 2 | 3 | 4 |
| 19 | My lecturers/ teachers are not supportive | 1 | 2 | 3 | 4 |

| 20 | I feel frustrated by the lack of faculty management | 1 | 2 | 3 | 4 |

Subscale 3: Academic

No	Item	N	SF	F	A
21	I have a financial problem because of the expenses of the university	1	2	3	4
22	I find difficult to juggle time between study and social activity	1	2	3	4
23	I feel nervous delivering the class presentation	1	2	3	4
24	I feel stressed as submission deadline neared	1	2	3	4
25	I feel stressed to sit for examination	1	2	3	4
26	I find difficult to juggle time between study and society involvement	1	2	3	4
27	I loss interest towards courses	1	2	3	4
28	I feel burden of academic workloads	1	2	3	4
29	I feel stressed dealing with difficult subject	1	2	3	4
30	I feel difficult in handling my academic problem	1	2	3	4

Subscale 4: Environmental

No	Item	N	SF	F	A
31	I have transportation problem	1	2	3	4
32	I feel stressed with bad living condition of hostel	1	2	3	4
33	Surrounding noise distracted me	1	2	3	4
34	Pollution make me uneasy	1	2	3	4
35	Hot weather make me avoid to go out	1	2	3	4
36	Messy living conditions distracted me	1	2	3	4
37	I feel frustrated of inadequate campus facilities	1	2	3	4
38	Crowding make me feel uneasy	1	2	3	4
39	Waited in a long line make me feel uneasy	1	2	3	4
40	I feel scared being at the insecure place	1	2	3	4

SELF-ESTEEM, PSYCHOLOGICAL WELL-BEING AND STRESS

Appendix F

Histogram for Self-esteem, Psychological Well-Being and Stress

SELF-ESTEEM, PSYCHOLOGICAL WELL-BEING AND STRESS
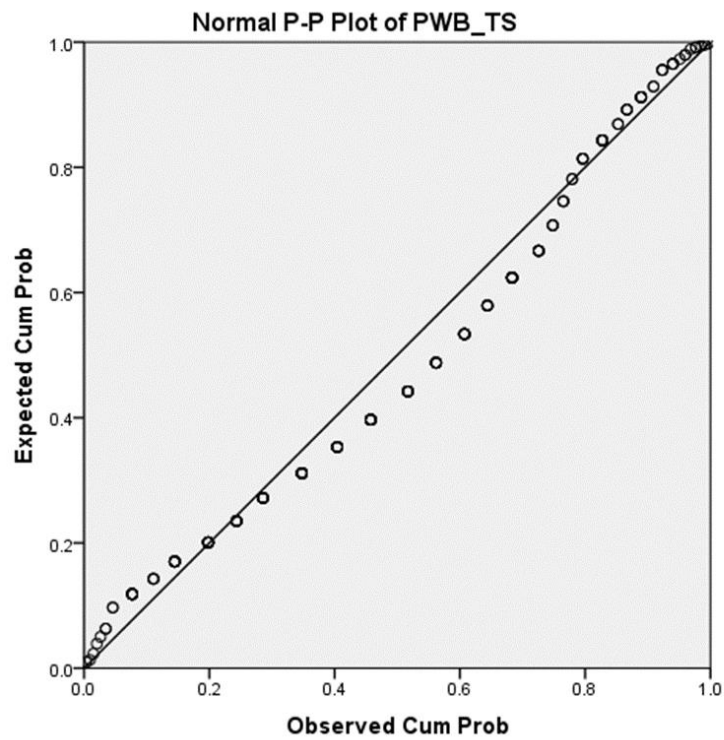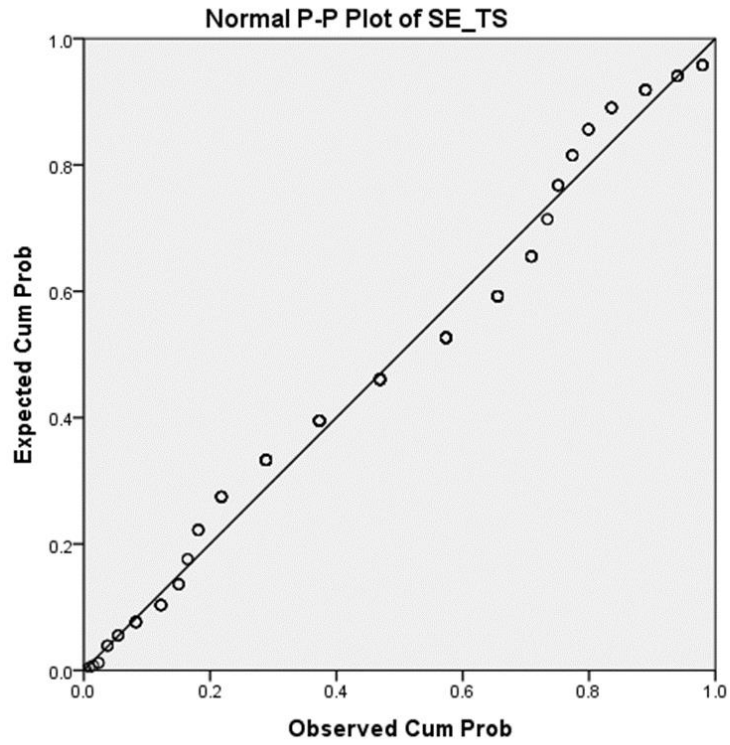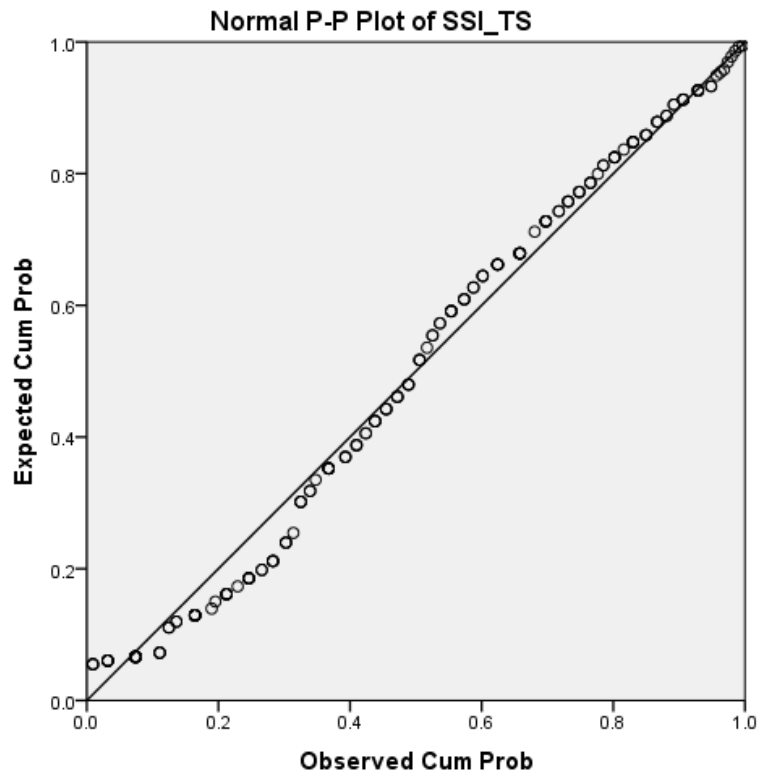
SELF-ESTEEM, PSYCHOLOGICAL WELL-BEING AND STRESS
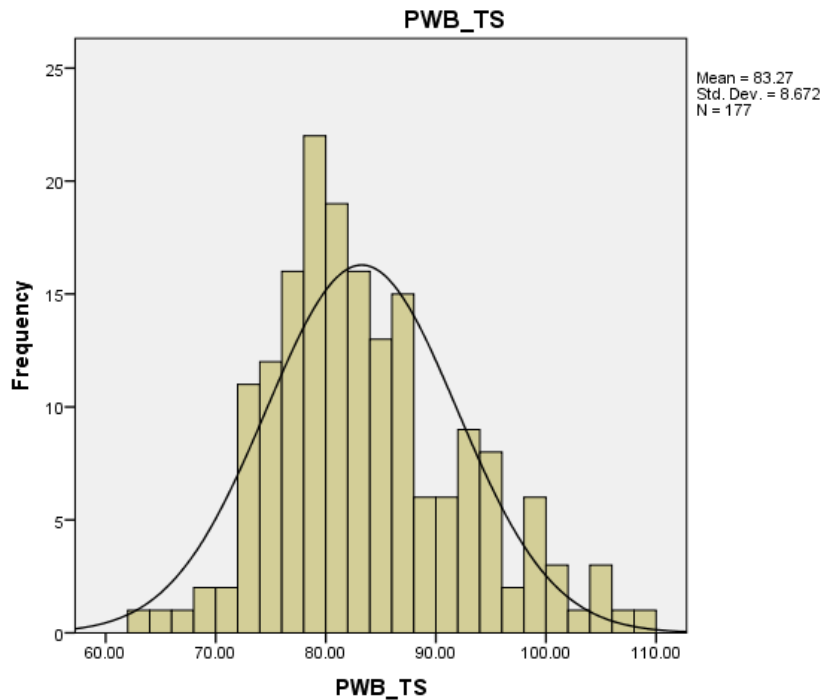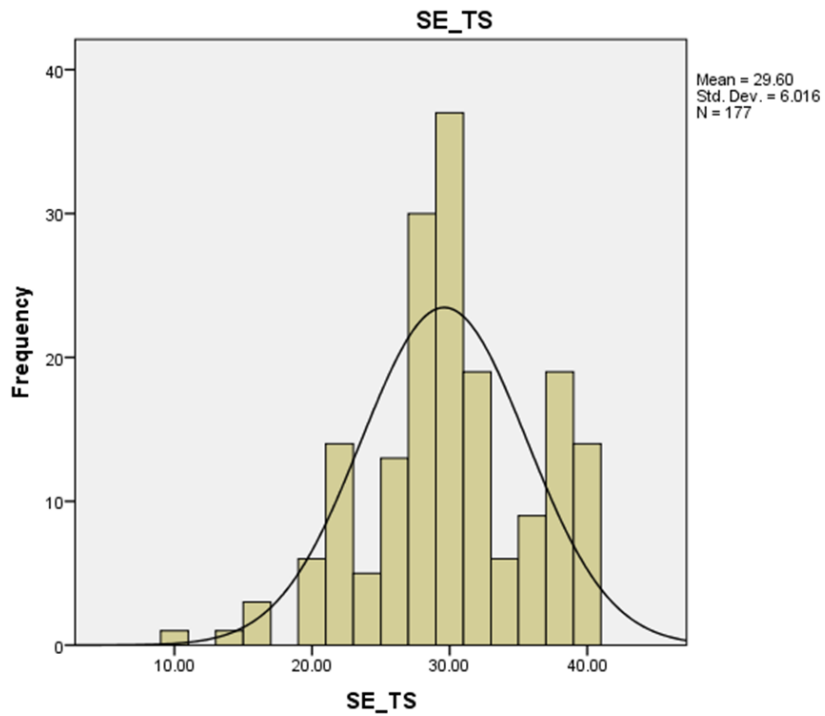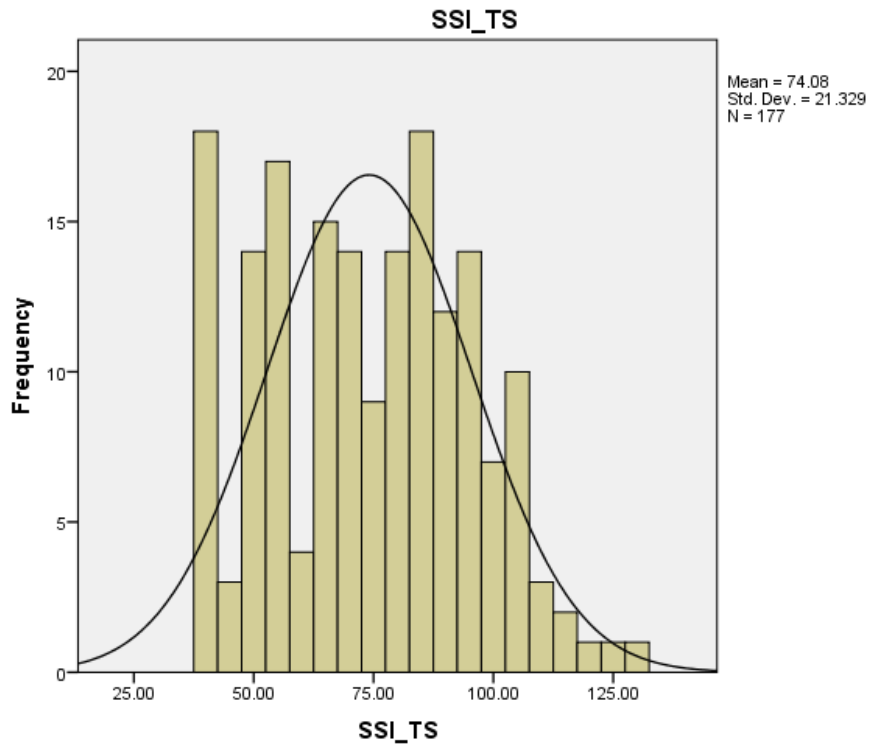
Appendix G

P-P Plot for Self-esteem, Psychological Well-Being and Stress

SELF-ESTEEM, PSYCHOLOGICAL WELL-BEING AND STRESS

Normal P-P Plot of SSI_TS

Appendix H

Ethical Approval Letter

UNIVERSITI TUNKU ABDUL RAHMAN
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Re: U/SERC/290/2021

17 December 2021

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 projects from Bachelor of Social Science (Hons) Psychology programme enrolled in course UAPZ3013/UAPZ3023. We are pleased to inform you that the application has been approved under Expedited Review.

The details of the research projects are as follows:

No	Research Title	Student's Name	Supervisor's Name	Approval Validity
1.	The Mediation Role of Academic Achievement in the Relationship between Religiosity and Pornography Addictiveness Among Undergraduate Students in Malaysia	1. Chan Wei Hung 2. Lee Jane 3. Lim Zhen Chin	Ms Natasha Amira binti Hushairi	
2.	The Mediating Role of Self-Efficacy Between Parent-Child Attachment and Romantic Relationship Among Undergraduate Students in Malaysia	1. Beh Zye Han 2. Hiew Yi Xin 3. Olivia Koh Shu Qi		
3.	The Relationship Between Self-esteem and Psychological Well-being on Stress Among Undergraduate Students in Malaysia	1. Foo Zyon Khang 2. Loh Zhi Yuan 3. Yugambegai Vijaya Kumaran	Ms Pavithra a/p Muniandy	17 December 2021 - 16 December 2022
4.	Relationship of Sleep Quality, Perceived Stress, and Creativity Among Undergraduates in Malaysia	1. Chiew Yong Nuo 2. Logish a/l Baskaran 3. Tan Wei Hou		
5.	The Relationship Between Self-efficacy, Perceived Social Support, and Subjective Wellbeing Among Undergraduate Students	1. Chiew Wei Chen 2. Deneshwaran Raj a/l Seeralan		
6.	The Study of Relationships Between Job Satisfaction, Co-worker's Relationships and Malaysian Worker's Psychological Wellbeing	1. Tan jia Jun 2. Tan Qi Xian	Ms Sarvarubini a/p Nainee	
7.	The Relationship Between Online Impulsive Buying Behaviour, Materialism, and Subjective Wellbeing Among Malaysian Young Adults	1. Foong Kai Jie 2. Chong Ka Yee 3. Lee Shun Yi		

SELF-ESTEEM, PSYCHOLOGICAL WELL-BEING AND STRESS

Appendix I

Turnitin Report

FYP 2 Group 1 Turnitin Submission

ORIGINALITY REPORT

9%	6%	3%	5%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	Submitted to Universiti Tunku Abdul Rahman Student Paper	2%
2	eprints.utar.edu.my Internet Source	2%
3	Submitted to HELP UNIVERSITY Student Paper	1%
4	link.springer.com Internet Source	<1%
5	Yu-Hsiu Chu, Yao-Chuen Li. "The Impact of Online Learning on Physical and Mental Health in University Students during the COVID-19 Pandemic", International Journal of Environmental Research and Public Health, 2022 Publication	<1%
6	Submitted to University of Wales Institute, Cardiff Student Paper	<1%
7	www.coursehero.com Internet Source	<1%