



THE RELATIONSHIP BETWEEN LOCUS OF CONTROL, COPING STRATEGIES AND
PROCRASTINATION AMONG UNDERGRADUATE STUDENTS IN MALAYSIA

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The Relationship Between Locus of Control, Coping Strategies and Procrastination Among

Undergraduate Student in Malaysia

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APPROVAL FORM

This research paper attached hereto, entitled “The Relationship between Locus of Control, Coping Strategies and Procrastination among Undergraduate Students in Malaysia” prepared and submitted by Ang Hui Qin, Chan Siew Man and Wong Ee Leng in partial fulfillment of the requirements for the Bachelor of Social Science (Hons) Psychology is hereby accepted.

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Abstract

Procrastination is a popular issue and has become an increasingly serious problem nowadays especially among the undergraduate students in Malaysia. The present study was aimed to explore the relationship between LOC, coping strategies such as problem solving, avoidance, positive thinking, and social support, as well as procrastination. This current study is also determined how the variables of LOC and coping strategies predict procrastination. A total of 150 participants were recruited through convenience sampling in UTAR, Kampar campus. This study was a quantitative and cross-sectional study. Data was collected by using the paper-and-pencil method. The Internal and External Locus of Control (Rotter, 1996), Brief COPE (Carver, 1997), Tuckman Procrastination Scale (Tuckman, 1991) were used as the measurements of this study. Results of Pearson Correlation depicted that there was no significant correlation between LOC and coping strategies, significant negative correlation between problem solving coping strategy and procrastination, significant positive correlation between avoidance coping strategy and procrastination while no significant correlation between positive thinking and social support coping strategies with procrastination. The result also showed that there was significant positive correlation between LOC and procrastination. Besides, the results of Stepwise Multiple Regression indicated that LOC predicted procrastination. However, LOC was unable to predict procrastination when there was presence of problem solving and avoidance coping strategies whereas these two strategies were able to predict procrastination. Implications and limitations of this research have been discussed and recommendations have been made for further research.

Keywords: LOC, coping strategies, problem solving, avoidance, positive thinking, social support, procrastination

DECLARATION

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

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List of Abbreviations

- LOC - Locus of Control
- UTAR - Universiti Tunku Abdul Rahman
- TPS - Tuckman Procrastination Scale

Chapter 1

Introduction

Background of Study

Rozental and Carlbring (2014) stated that when a person keeps postpone important task and had become a habit, it may perceive as stressful and this long-term behavioral model may interfere with a person's daily life. Academic procrastination is regarded as ordinary phenomena (Steel, 2007) and also happen in academic realm of current society (Jiao, DaRos-Voseles, Collins, & Onwuegbuzie, 2011; Solomon & Rothblum, 1984). A study in Germany revealed that procrastination happens most in younger people (14 to 29 years) and declines in older age group (Beutel et al., 2016). Saplavaska and Jerkunkova (2018) found that 48% of undergraduate students was having a high level of academic procrastination where students often finish the task at the last minute. Besides, He (2017) stated that students are well conscious about job task but they failed to complete before the due date and he found that 34% of undergraduate students, 43% of master students and 44% of PhD students suffered from academic procrastination. Hence, it can be seen that procrastination rooted among different population where this issue needs to be focused immediately especially among undergraduate students.

Several studies have stated the effects brought by procrastination. Procrastination was found to correlate with health issues (Reinecke et al., 2018; Sirois, van Eerde, & Argiropoulou, 2015; Steel, 2007), well-being problems (Balkis & Duru, 2015; Beutel et al., 2016; Eerde, 2003) and academic performance (Kim & Seo, 2015; Saplavaska & Jerkunkova, 2018). There is no denying the fact that procrastination has led to so much negative

consequences to procrastinators. Thus, further discussion will be explained at problem statement and literature review in order to discuss deeply about this issue.

According to Milgram and Tenne (2000), it was stated that locus of control (LOC) can affect a person's tendency to procrastinate. People with internal LOC tend to link their success and performance with his or her effort and that responsibilities reduce their potential of procrastination (Procházka, as cited in Prihadi, 2018). As support by Transactional Stress Coping Model, person belief will affect the way they choose the coping styles and hence influence the outcomes. However, LOC were less focused compared to Big-five personalities. Thus, present studies aim to focus on the relationship between LOC and procrastination.

According to Blunt and Pychyl (2000), procrastinators considered using avoidant coping technique for coping with undesirable task. Sirois and Kitner (2015) found that procrastinators used maladaptive coping strategies as their way of escaping from negative emotions in a short-term period of time. The above explanation could be supported by Sirois and Pychyl (2013) where procrastinators are best recognized by people who first emphasize short-term emotional regulation rather than long-term achievement. Therefore, the present study aims to focus on the relationship of coping strategies with procrastination among Malaysia undergraduate students.

There are numerous of procrastination related studies that examine whether the LOC and coping strategies will have significantly relationship with procrastination. Unfortunately, limited studies were conducted in Malaysia context from past studies. Besides, there was no study investigated the significant relationship among these three variables. Therefore, attention is focused by the current study to examine whether there is a significant relationship between LOC, coping strategies and procrastination among Malaysia's undergraduate students.

Problem Statement

According to Steel (2007), procrastination has become a common occurrence in nowadays societies, especially within the academic context. Undergraduates are often seen as a target group widely influenced by delays. Past studies have pointed out serious data about procrastination among university students from other countries (Kim & Seo, 2015; Mahasneh, Bataineh, & Al-Zoubi, 2016; Steel & Ferrari, 2012). Similarly, Bakar and Khan (2016) conducted a study among university students in Johor state of Malaysia revealed that 79% of them were categorized as procrastinators and severe procrastinators. From what has been mentioned above, it seems like university students in Malaysia are also facing a similar problem with other countries.

In order to highlight earnestness of this phenomenon, previous studies had reported that procrastination can be a major chronic academic problem like poor academic performances and behaviors among undergraduate students (Kim & Seo, 2015; Lay, Edwards, Parker, & Endler, 1989; Steel, 2007). According to Morris and Fritz (2015), university students with high procrastination level scored poor coursework marks. Moreover, Solomon and Rothblum (1984) found that over the three tasks which are delay in writing research paper, prolong to study for their exam and postpone to review their weekly assignment, 46%, 27.6%, 30.1% of results were stated respectively. Similar repetitive study conducted by Onwuegbuzie (2004) also found increasing percentage among these three tasks thus it can be said that overall percentage seem to be rising and will become a serious problem.

Besides, Beutel et al. (2016) revealed that procrastination shows negative relationship with psychological well-being and mental health such as increased stress and anxiety levels. This intentionally delaying action can create a feeling of discomfort and unease which may lead to procrastinators experienced continuously feel anxious, stress and tiredness (Beutel et

al., 2016). Besides, Rothblum, Solomon and Murakami (1986) also revealed that procrastinators reported to have a high level of anxiety throughout the semester, especially during the exam. This is because they procrastinate to study for exam have the tendency to perceive test as very difficult and more likely to experience state anxiety compared to non-procrastinators (Rothblum et al., 1986). This may also lead to show a negative influence to students' health.

Tice and Baumeister (1997) justified that procrastinators reported to have better health initially but may experience physical illness later and overall. Similarly, there is an evidence indicated that procrastination can be linked to stress-related acute health issues such as lack of sleep, headaches, having flu or poor digestive problems (Sirois, 2007). According to Sirois, van Eerde and Argiropoulou (2015), students with procrastination may experience poor sleep quality due to the fact that they feel uncomfortable upon waking and found it difficult to sleep again. Consequently, students will experience a feeling of unrested after waking in the morning due to the needness of continual waking from the whole night (Sirois et al, 2015). Besides, past studies also stated that students have the tendency to procrastinate for getting appropriate treatment or medical care for their existing health issues (Steel, 2007; Sirois, Melia-Gordon, & Pychyl, 2003). As a result, their health problem will become worse and increase health risk since they did not receive treatment immediately.

From what has been discussed above, procrastination has brought many negative consequences that influence the general daily life of a student. This phenomenon had strengthened the need to conduct the research among undergraduate students. However, most of the researchers involved students were from other countries such as Turkey, Australia, Canada, UK, Jordan and so on. There was still a lack of studies about procrastination in Malaysia's context. LOC and coping strategies need to be investigated to discover the root of the problem within undergraduate student. The nature of internal LOC may inhibit certain

tendency of a student in performing procrastination (Milgram & Tenne, 2000). Similarly, students' decision on their coping strategies to cope with negative feelings such as academic stress also have the potential to allow students in behaving procrastination behaviors (Blunt & Pychyl, 2000). Thus, the present study aims to understand the relationship between LOC, coping strategies and procrastination among undergraduate students in Malaysia.

Research Questions:

Based on the problem stated above, this study proposed few research questions as follows:

1. Is there any significant relationship between LOC and coping strategies among undergraduate students in Malaysia?
2. Is there any significant relationship between coping strategies and procrastination among undergraduate students in Malaysia?
3. Is there any significant relationship between LOC and procrastination among undergraduate students in Malaysia?
4. Are LOC and coping strategies significant predictors of procrastination among undergraduate students in Malaysia?

Research Objectives:

The main objective of this study is to investigate the relationship between LOC, coping strategies and procrastination among undergraduate students in Malaysia. Therefore, this study suggested few research objectives as below to reach the aim of the study:

1. To identify the relationship between LOC and coping strategies among undergraduate students in Malaysia.
2. To identify the relationship between coping strategies and procrastination among undergraduate students in Malaysia.

3. To identify the relationship between LOC and procrastination among undergraduate students in Malaysia.

Research Hypotheses:

1.1 Is there any significant relationship between internal LOC and problem solving coping strategies among undergraduate students in Malaysia?

H₀: There is no significant relationship between internal LOC and problem solving coping strategies among undergraduate students in Malaysia.

H₁: There is a significant relationship between internal LOC and problem solving coping strategies among undergraduate students in Malaysia.

1.2 Is there any significant relationship between internal LOC and avoidance coping strategies among undergraduate students in Malaysia?

H₀: There is no significant relationship between internal LOC and avoidance coping strategies among undergraduate students in Malaysia.

H₁: There is a significant relationship between internal LOC and avoidance coping strategies among undergraduate students in Malaysia.

1.3 Is there any significant relationship between internal LOC and positive thinking coping strategies among undergraduate students in Malaysia?

H₀: There is no significant relationship between internal LOC and positive thinking coping strategies among undergraduate students in Malaysia.

H₁: There is a significant relationship between internal LOC and positive thinking coping strategies among undergraduate students in Malaysia.

1.4 Is there any significant relationship between internal LOC and social support coping strategies among undergraduate students in Malaysia?

H₀: There is no significant relationship between internal LOC and social support coping strategies among undergraduate students in Malaysia.

H₁: There is a significant relationship between internal LOC and social support coping strategies among undergraduate students in Malaysia.

2.1 Is there any significant relationship between external LOC and problem solving coping strategies among undergraduate students in Malaysia?

H₀: There is no significant relationship between external LOC and problem solving coping strategies among undergraduate students in Malaysia.

H₁: There is a significant relationship between external LOC and problem solving coping strategies among undergraduate students in Malaysia.

2.2 Is there any significant relationship between external LOC and avoidance coping strategies among undergraduate students in Malaysia?

H₀: There is no significant relationship between external LOC and avoidance coping strategies among undergraduate students in Malaysia.

H₁: There is a significant relationship between external LOC and avoidance coping strategies among undergraduate students in Malaysia.

2.3 Is there any significant relationship between external LOC and positive thinking coping strategies among undergraduate students in Malaysia?

H₀: There is no significant relationship between external LOC and positive thinking coping strategies among undergraduate students in Malaysia.

H₁: There is a significant relationship between external LOC and positive thinking coping strategies among undergraduate students in Malaysia.

2.4 Is there any significant relationship between external LOC and social support coping strategies among undergraduate students in Malaysia?

H₀: There is no significant relationship between external LOC and social support coping strategies among undergraduate students in Malaysia.

H₁: There is a significant relationship between external LOC and social support coping strategies among undergraduate students in Malaysia.

3.1 Is there any significant relationship between internal LOC and procrastination among undergraduate students in Malaysia?

H₀: There is no significant relationship between internal LOC and procrastination among undergraduate students in Malaysia.

H₁: There is a significant relationship between internal LOC and procrastination among undergraduate students in Malaysia.

3.2 Is there any significant relationship between external LOC and procrastination among undergraduate students in Malaysia?

H₀: There is no significant relationship between external LOC and procrastination among undergraduate students in Malaysia.

H₁: There is a significant relationship between external LOC and procrastination among undergraduate students in Malaysia.

4.1 Is there any significant relationship between LOC, coping strategies and procrastination among undergraduate students in Malaysia?

H₀: There is no significant relationship between LOC, coping strategies and procrastination among undergraduate students in Malaysia.

H₁: There is a significant relationship between LOC, coping strategies and procrastination among undergraduate students in Malaysia.

5.1 Is LOC significantly predict procrastination among undergraduate students in Malaysia?

H₀: LOC is not significantly predicting procrastination among undergraduate students in Malaysia.

H₁: LOC is significantly predicting procrastination among undergraduate students in Malaysia.

5.2 Is coping strategies significantly predict procrastination among undergraduate students in Malaysia?

H₀: Coping strategies is not significantly predicting procrastination among undergraduate students in Malaysia.

H₁: Coping strategies is significantly predicting procrastination among undergraduate students in Malaysia.

Significance of Study

From this study, we hope to contribute the data collected can get into deep insight about the relationship between LOC, coping strategies, and procrastination among undergraduate students in Malaysia. As mentioned by previous background of study and problem statement above, procrastination is a well-known issue and getting worse nowadays.

However, limited intervention programs are recommended to current society. Thus, it is important for undergraduate students in Malaysia to realize the severity of procrastination could affect the general life and to prevent the practice of it.

To aid this concern in current society, the present study aims to investigate the relationship between LOC, coping strategies, and procrastination among undergraduate students. This study is able to help in procrastination prevention. Anxiety, stress, delay of studies and ignore responsibilities are only certain effects brought by procrastination. Therefore, it is suggested that the findings can contribute to all local university authorities and related departments to conduct seminars and trainings in order to reduce the rate of procrastination. The findings can also contribute to social media to promote the awareness of procrastination. Besides, the results of this study can be used by future researchers to further discuss the relationship between LOC, coping strategies, and procrastination in a deeper way.

Overall, the findings of this study could be a signal for society to pay attention on this issue and encourage the society or educational settings to establish intervention programs in order to lowering the occurrence of procrastination.

Definition of Terms

Locus of Control

Conceptual Definition: LOC introduced in Social Learning Theory by Rotter (1966) which means the belief that people have control over their life events.

Operational Definition: In this particular research, LOC refers to the result from Internal and External Locus of Control Scale (Rotter, 1966). This scale consists of 29 items with 6 filler items.

Coping Strategies

Conceptual Definition: According to Greenglass and Fiksenbaum (2009), coping strategies imply to what an individual can do to avoid the initiated stress or to become better to deal with the current stress.

Operational Definition: In this study, the frequency with which an individual implements various coping strategy is assessed by Brief COPE scale (Carver, 1997). Brief COPE scale comprises 28 items that assess 4-factor structure such as problem solving, avoidance, positive thinking, and social support (Baumstarck et al., 2017).

Procrastination

Conceptual Definition: Procrastination refers to voluntary, irrational delay of an intended course of actions without acknowledge that this postponement will bring along negatives' outcomes (Steel, 2007).

Operational Definition: In this research, procrastination was measured by the 16-item Tuckman Procrastination Scale (TPS) (Tuckman, 1991) which is a brief version. It determined to assess student's procrastination tendencies. Individual who scores high in this questionnaire shows high level of procrastination tendencies.

Chapter 2

Literature Review

Locus of Control

Locus of control (LOC) is introduced by Julian Rotter in social learning theory. LOC is the tendency to which people believe that they have control over their life episode throughout their whole life (Rotter, 1966). LOC seems to take an important part in the education realm (Atibuni, Ssenyonga, Oleva, & Kemeza, 2017). LOC has been specified into internal or external LOC where people with internal LOC believe that their own behaviors and actions mostly contribute to their life events whereas external LOC people have a tendency to believe that external factors such as fate, luck and people are contributing to their life events (Rotter, 1966).

Kurtovic, Vukovic and Gajic (2018) has conducted a research which recruited 418 university students from Croatia. Data was gained with the use of Rotter's I-E Scale (Rotter, 1966) and found that external LOC predicted psychological symptoms. This is because lack of control leads students to feel more anxious and helpless which result in decline of academic motivations.

Besides, LOC is also linked to attitude, motivation, emotion and behaviour in both academic and organizational settings (Spector & Fox, as cited in Atibuni et al., 2017). A study about LOC and academic attitude conducted by Atibuni et al. (2017) recruited 203 university students at a public university in Uganda. Internal and External Locus of Control Scale (Rotter, 1966) was used to measure students' LOC. They stated that internal LOC would lead to positive academic attitude and external LOC students are found to have negative academic attitude moderately.

According to Albert and Dahling (2016), their study found that among the 158 undergraduate students from college in U.S., students who possess higher internal LOC has link to stronger relation between learning goal orientation and academic self-concept. Furthermore, this study also found that academic self-concept leads to better academic performance.

Coping Strategies

Behaviour that defends people from psychological harm regarding tricky social experience, or a behaviour that significantly arbitrates the effect that brought by social is known as coping strategy (Pearlin & Schooler, 1978). According to Lazarus and Folkman (1984), coping strategies refer to cognitive and behavioral endeavors to regulate internal and external requirements that surpassing assessed personal resources. Pearlin and Schooler (1978) stated that protective function for coping is removing or altering the conditions that toward problem, perceptually managing the significance of experience in a way that equalizes its problematic characteristics, and keeping the emotional outcomes of a stressor when it arises.

There are some factors such as perceived controllability of the stressor, availability of adequate coping resources, and nature of the results will influence the effectiveness of coping strategies (Folkman & Moskowitz, 2000). According to Parker and Endler (1992), certain coping strategies able to mitigate stress and facilitate positive psychological consequences, while others aggravate stress and facilitate negative psychological consequences. In fact, there is no common agreement on which particular coping strategy is the most efficiently to result in the reduction of stress (Aldwin & Revenson, 1987).

Normally, coping strategies can be classified into adaptive and maladaptive coping strategies. Adaptive coping strategies are defined as implementing action and searching for

the resources to handle the issue (Lazarus & Folkman, 1984). Conversely, maladaptive coping strategies are used to escape from the negative sentiments immediately that initiated by the stressor as a method for recapturing control, without essentially addressing the origin of the stress (Lazarus & Folkman, 1984).

Coping strategies can be implemented to prevent harm from anxiety. There were 15 participants were recruited in the study of Sun et al. (2016) expressed that adaptive coping strategies will be adopted when they are stress and fatigue. Purposive sampling was used in this study and the data were collected through a semi-structured guide couple with deep interview. The findings showed that healthy coping strategies can be used to reduce the anxiety.

Besides, coping strategies are able to influence the quality of life and mood. A study conducted by Nipp et al. (2016) among 350 ambulatory patients with incurable cancer to investigate the relationship between coping strategies, mood and quality of life. Brief Cope was used in this study to assess the coping strategies that are used by the patients. The results showed that the use of maladaptive coping strategies negatively correlated with mood and quality of life.

Ferrari and Díaz-Morales (2014) conducted a research among 104 students from Spain university to examine the relationship between coping strategies and chronic procrastination. Spanish version of Adult Inventory of Procrastination (AIP) (Díaz-Morales, Ferrari, Diaz, & Argumedo, 2006) and the Spanish version of Self-Regulation Inventory-Short (SRI-S) (Grossarth-Maticek & Eysenck, 1995) were used as the measurements in this research. The findings of this research indicated that chronic procrastinators participate in less constructive and positive behaviours that might regulate their mental health coping styles and adjustment.

Procrastination

Solomon and Rothblum (1984) described procrastination as an unnecessary delay task behavior to certain point of experiencing subjective discomfort. Popoola (2005) pointed out that procrastination as a person's habit of putting their own responsibilities off to the last minute. Some researchers mentioned that procrastination can be considered as a failure of self-regulation (Chowdhury & Pychyl, 2018; Höcker, Engberding, Haferkamp, & Rist, 2012). Procrastinators tend to fail in monitoring and regulating their negative emotions and efforts when faced with important deadlines. A study about the relationship between afraid of failure, self-efficacy for self-regulation, self-esteem, and academic procrastination was investigated by Zhang et al. (2018) in China among 1184 undergraduate students. The results indicated that a person's self-regulation ability was negatively associated with academic procrastination and also became a mediator between self-esteem and procrastination among undergraduate students.

Besides, procrastination may also lead to several negative consequences such as low academic performance, negative affect, low academic life satisfaction and low well-being (Chow, 2011; Duru & Balkis, 2017; Steel, 2007). Balkis and Duru (2015) conducted a study in Turkey to investigate the unsuccessful self-regulation towards procrastination and the consequences of procrastination on life satisfaction of academic area and affective well-being. A total of 328 undergraduate students from Pamukkale University were recruited in the research with the use of Tuckman Procrastination Scale (TPS) (Tuckman, 1991). The results show that lack of self-regulation skills can lead to procrastinate and also showed that high level of procrastination can lead to have a high level of negative affect and low level of academic life satisfaction.

Duru and Balkis (2017) conducted another study to examine the united consequences of procrastination, self-esteem and well-being in academic achievement by collecting 348

undergraduate students in Turkey with the measurements of TPS (Tuckman, 1991) to measure the level of procrastination. The findings showed that students who procrastinate are more likely to have poor self-esteem, academic achievement and well-being.

Moreover, Kim, Fernandez and Terrier (2017) which has a sample of 178 university students in Switzerland by investigating the relationship between procrastination, personality traits and academic performance. The researchers collected the data by using TPS (Tuckman, 1991), Active Procrastination Scale (Choi & Moran, 2009) and International Personality Item Pool (IPIP-300) (Goldberg, 1999). Results show that students who procrastinate passively was negatively predict students' performance while active procrastination can enhance the academic achievement.

Locus of Control and Coping Strategies

LOC plays an important indicator on how people cope with stress and difficulty in daily life but there are still limited research studies about the relationship between these two variables among undergraduate students, especially in recent years. According to Demir, Demir, Bulut and Hisar (2014), a study about nursing students was conducted through the commencing of mentoring program where it helps to increase adaptability of students. They aimed to evaluate students' way of coping with stress and LOC. The Ways of Coping Inventory (WCI) by Folkman and Lazarus (1980) and The Locus of Control Scale (LCS) by Dag (2002) were used as the measurements in this study. Results showed that after entering mentoring program, external LOC was switched into internal LOC among nursing students. At the same time, problem-focused coping was also increased when students shifted from external to internal LOC.

Furthermore, Scott et al. (2010) also found the consistent result. There was 208 undergraduate students in Florida are investigated in this study with the use of The Rotter

Locus of Control Scale (Rotter, 1966) and The COPE Subscales (Carver, Scheier, & Weintraub, 1989). Participants that recruited used to experience hurricanes that happened around Florida in 2004. Results indicated that undergraduate students with external LOC is significantly positive correlated with higher level of avoidant coping behavior. This is because individuals may view hurricanes as unprepared and unexpected events. Due to uncontrollability natural disaster (hurricane) avoidant coping was used.

Similarly, a study conducted by Arslan, Dilmac and Hamarta (2009) recruited 514 Turkish university students with the use of Rotter Locus of Control Scale (Rotter, 1966) in this study. The findings stated that avoidant coping was used less among internal LOC undergraduate students while problem-focused coping was used more in internal LOC.

Another study investigated by Kazemi, Zandi and Torabi (2015) in Iran has recruited 130 volleyball young men with the use of Locus of Control Inventory (IPC) by Levenson (1981). This study aimed to find out the relationship between LOC and problem-focused, emotion-focused and avoidance coping. Results showed that internal LOC is significantly positive correlated with problem-focused coping among the volleyball young men. Besides, a study by Bjorklof et al. (2017) with 144 older depressed patients and 106 older people without depression was investigated. Results showed that patients with higher external LOC is significantly using less problem-focused coping strategies.

Coping Strategies and Procrastination

Students normally will implement many coping strategies for pursuing their academic by using either engagement coping and task-oriented coping or disengagement-oriented coping (Carver & Connor-Smith, 2010). A study conducted by Gareau, Chamandy, Kljajic and Gaudreau (2018) with a sample of 258 students from Canadian university by using

Coping Inventory for Academic Striving (Thompson, 2015) to assess the students' coping strategies. The results showed that disengagement-oriented coping strategies will be more likely to be used by the students with higher levels of academic procrastination and ultimately leads to lower levels of academic achievement.

Besides, Sirois and Kitner (2015) conducted a study among 1003 undergraduate students to examine the meta-analysis of the relationship between procrastination with adaptive and maladaptive coping. The researchers used Brief COPE scale (Carver, 1997) as the measurement and found that the procrastinators with greater perceived stress are those who implemented the maladaptive coping strategies. Procrastinators tend to use maladaptive coping strategies to cope with stress in order to get immediate relief from negative feelings.

Besides, students normally will implement avoidant coping strategies in order to cope with their academic duties and this results in procrastination (Burns, Dittmann, Nguyen, & Mitchelson, 2000). The result of the study that was conducted by Cao (2012) also showed that behaviour of avoiding studying and academic procrastination has the positive relation between them. Similarly, Kandemir, İlhan, Özpolat and Palancı (2014) conducted a study among 374 students from Kirikkale University in Turkey. The adapted version of Aitken Academic Procrastination Scale (Balkıs, 2007) and Coping with Stress Scale (Özbay & Şahin, 1997) were used in this research. The results showed that academic procrastination correlated negatively with self-esteem, active planning coping strategies, and academic self-efficacy, whereas academic procrastination correlated positively with biochemical avoidance strategies.

Moreover, Chun Chu and Choi (2005) indicated that task-oriented coping strategies decrease stress by concentrating on current issues. Emotional-oriented coping strategies are the actions to reduce the emotional distress that is prompted by the stressors. Avoidance-

oriented coping strategies include overlooking an issue or diverting oneself from it. Chun Chu and Choi (2005) conducted a research among 230 undergraduate students from three Canadian universities. Proactive Coping Inventory (Greenglass, Schwarzer, Jakubiec, Fiksenbaum, & Taubert, 1999) was used in this study. The result showed that task-oriented coping strategies will be implemented by non-procrastinators and active procrastinators, whereas emotion-oriented and avoidance-oriented coping strategies will be implemented by passive procrastinators.

In sum, there are limited studies conducted in Malaysia compared to foreign countries. There are various types of coping strategies used by procrastinators in order to cope with different stressors. However, the effectiveness of the coping strategies depends on individual differences and there is not a must that the particular coping strategies will be useful for certain people.

Locus of Control and Procrastination

LOC can be considered as a type of personality trait will affect one's tendency to procrastinate. Prihadi et al. (2018) proposed that the more internal of a person's LOC, they see themselves less negatively and tend to procrastinate less. The study involved 60 college students in Penang state of Malaysia were recruited and found that students who possessed enough internal control will not likely to perform procrastination. This is because when they believe that they are in control over their events, they will take more responsibilities for their task and tend to not procrastinate in their life.

Similarly, Carden, Bryant and Moss (2004) also stated that students who are more internally have the tendency to behave less procrastination and perform high academic achievement. The researchers conducted a study on a sample of 114 undergraduate students

from a private university in the southeast with the measurements of Rotter Locus of Control scale (Rotter, 1966) and TPS (Tuckman, 1991) to investigate the relationship between LOC and procrastination. It is notable that students who score high internal LOC will score low in procrastination than those external LOC students.

Besides, Janssen and Carton (1999) conducted a study to explore how the LOC and task difficulty show impact on procrastination. It involved a sample of 42 students from U.S. college. The researchers assigned the worksheet and article that is either easy or difficult to the students and they were instructed to return it as soon as they completed it. Procrastination was calculated by measuring the amount of time that the students began, until they return to the teaching assistant. The results show that students who are more internal will completed the task and return it quickly. Therefore, students with internal control procrastinate less than external control students.

In contrast, there are some studies show inconsistent results with above studies. Using the short version of Levenson Multidimensional Locus of Control Scale (Levenson, 1973) with Aitken Procrastination Inventory (API) (Aitken, 1982), Boysan and Kiral (2016) found out that there was no significant relationship between procrastination and LOC among the sample of 242 university students with an age range of 18 to 32 in Turkey. Similarly, Ferrari, Parker and Ware (1992) also revealed that no significant linkage between both variables among 319 college students in the northeast area. It could be said that LOC can come to a certain extent that it has no significant relationship with procrastination.

As mentioned above, there are limited studies about the relationship between LOC and procrastination. However, most of the studies is in agreement with the concept that internal LOC could lead to a person be less procrastinate. These inconsistent results may require more study to support this concept and discover more additional variable that may also influence the relationship between LOC and procrastination such as coping strategies.

Locus of Control, Coping Strategies and Procrastination

In our knowledge, there was no study investigated the relationship between LOC, coping strategies and procrastination. After reviewing and searching information from multiple gateway from UTAR library E-database, such as ScienceDirect, SAGEJournal, PsycArticle, Elsevier, we are unable to find the exact study about the relationship between these three variables. Besides, there is no study among these three variables from Google Scholar as we type the keywords of our study. Fortunately, we are able to find the relevant studies about only two important variables such as relationship between LOC with coping strategies, coping strategies with procrastination, and LOC with procrastination. Hence, this study will be conducted to investigate the relationship between these three variables which are LOC, coping strategies and procrastination.

Theoretical Framework

Transactional Stress Coping Model proposed by Lazarus and Folkman (1984) provided a framework about how a person interacts with an environment or situation will determine their behavior, either psychologically like emotions or using stress-related act such as avoidant (Lazarus, 1966). In this theory, stress act as the result of transaction of the person-environment interaction (Lazarus & Folkman, 1984). There have five components in this theory to explain the transaction process of person-environment interaction which started from influencing factors, primary and secondary evaluation, followed by coping strategies and outcomes.

First, influencing factors comprises personal and environmental factors. Personal factors can influence a person's way of perceiving the relationship between person and environment while environmental factors comprise originality, foresee abilities, time span

and forthcoming (Schuster, Hammitt, & Moore, 2003). Perception based on these influencing factors and environmental factors constitutes the basis for cognitive assessment whether the situation being stressful or not (Schuster et al., 2003).

Next, once a person encounters a potential challenging event, first appraisal will be initiated. According to Lazarus (1966), primary and secondary appraisal were suggested to evaluate the situation encountered by an individual. In primary appraisal, a person will evaluate the importance of the environment with his or her well-being. They may question themselves whether this problem encountered is related to them or not. If he or she perceives the environment as relevant, threat and stressful, a stressor is formed. Then, second appraisal is later engaging. However, if the environment is perceived harmless, there may no stressor formed in this process. When move to the second appraisal, an individual will evaluate the coping choices and measure the available resources in order to manage the threat and harm possessed to them (Lazarus & Folkman, 1984).

Two coping strategies that outlined in this model are problem-focused and emotion-focused coping. Individual will choose either one coping strategies to cope with stressors after second appraisal. Hence, the outcome may be influenced differently by using different coping strategies.

Based on the discussion mentioned above, this model is suitable to use in the present study to discuss about the relationship between locus of control, coping strategies and procrastination. An individual belief system will influence how they perceive their events in life that affect their choice of coping strategies. Stress could be the factor that produce the act of procrastination (Burka & Yuen, 2008). This could be explained by the fact that undergraduate students have different ways of perceiving their task difficulties that they might want to escape from academic duties and negative emotions like stress by using avoidance coping, thus cause them to procrastinate more in their study.

Conceptual Framework

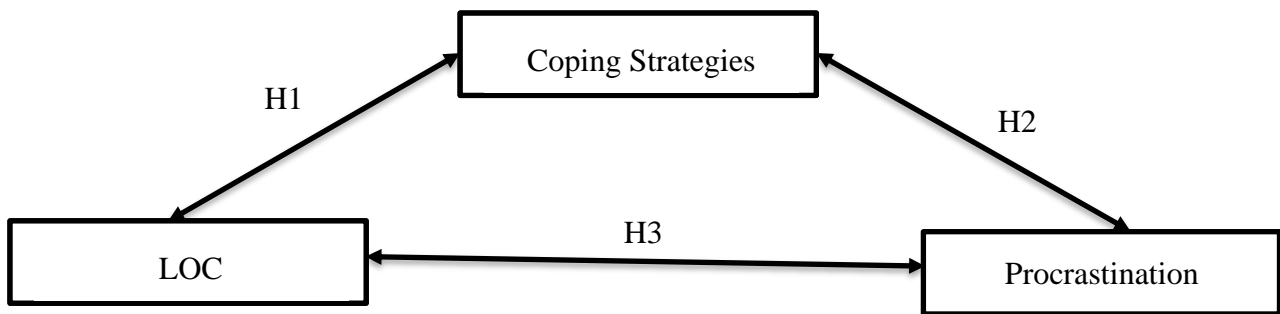


Figure 1. The Relationship between Locus of Control, Coping Strategies and Procrastination among Undergraduate Students in Malaysia.

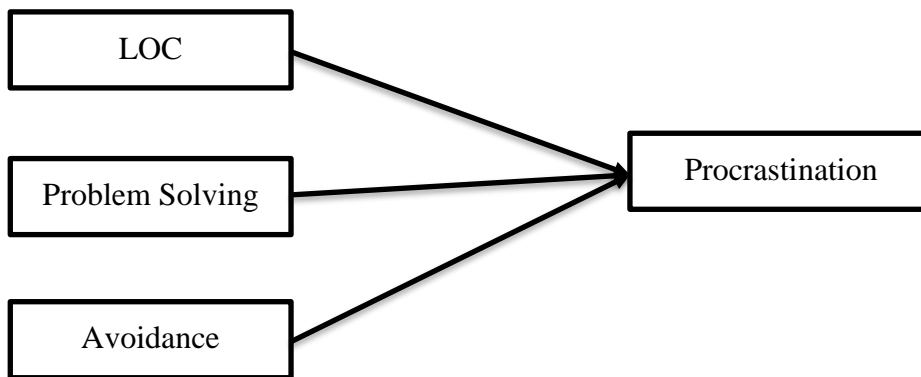


Figure 2. The Predictor Role of LOC, Problem Solving, and Avoidance Coping Strategies towards Procrastination among Undergraduate Students in Malaysia.

Two conceptual model of this study is shown in Figure 1 and 2. Based on the literature reviews, LOC has a significant relationship with coping strategies (Bjorklof et al., 2015; Kazemi et al., 2015). Coping strategies has a significant relationship with procrastination (Cao, 2012; Ferrari & Díaz-Morales, 2014). LOC has a significant relationship with procrastination (Carden et al., 2004; Janssen & Carton, 1999; Prihadi et al., 2018). Thus, the present study aimed to identify the relationship between LOC and coping strategies, coping strategies and procrastination, as well as LOC and procrastination. In

addition, based on figure 2, LOC, problem solving and avoidance coping strategies were measured to examine which variable is best predicting procrastination which answered the fourth research question stated above.

Chapter 3

Methodology

Research Design

The quantitative research method was used in this study by using questionnaires through the paper-and-pencil method to collect data. Quantitative study is a way of analyzing data by gathering numerical form of answers from participants that helps researchers to solve the problems (Apuke, 2017). Cross-sectional study is used to examine the relationship between LOC, coping strategies, and procrastination. According to Setia (2016), cross-sectional study was defined using a single time moment to gather data and then measure the outcomes of the study's participants. In the present study, a quantitative survey method was used to collect data from the population. Ponto (2015) stated that the survey method allows a variety of ways to collect data, gather targeted number of participants and could make use of different instrumentation. Survey method is a useful approach to gather and explore the interests of the population for researchers. Thus, survey method was implemented in this study. Since only a few months are available for the Final Year Project to be completed, this research design is suitable to be conducted.

Sample Techniques

Sample size. According to the calculation of G*power version 3.0, input parameters were adjusted into tails, effect size= .50 and power=. 80. The minimum number of 84 target participants were calculated. However, any missing data or incomplete answering of demographic information may occur, thus 150 samples are estimated to become the minimum target number of participants in this study.

Participant. 200 participants from UTAR, Kampar campus were recruited as respondents. The total valid sample was 150 after screening of data. The target sample included a total of 50 males (33.3%) and 100 females (66.7%) (refer to Table 1). The age range of respondents is between 19 to 27 years old.

Moreover, most of the respondents are Year 3 students (35.3%), followed by Year 2 students (31.3%), Year 1 students (30.7%), and finally Year 4 students (2.7%). The highest to the lowest percentages of the respondents' faculties are Faculty of Arts and Social Science (FAS) (44.7%), Faculty of Business and Finance (FBF) (24.0%), Faculty of Information and Communication Technology (FICT) (16.7%), Faculty of Science (FSC) (8.7%), Institute of Chinese Studies (ICS) (4.0%), and Faculty of Engineering and Green Technology (FEGT) (2.0%) (refer to Table 2).

Sampling methods. In this study, a non-probability sampling method was used. Convenience sampling method as one of the non-probability sampling methods was used in this study. According to Dörnyei (2007), convenience sampling is a non-probability sampling where participants meet certain requirements like easy to approach, high availability and geographical accessibility. Participants are mainly from UTAR, Kampar campus due to easy to approach and collect data. Participants must have to be Malaysian so that it fulfils the requirement of current study.

Research location. UTAR Kampar campus in Perak state of Malaysia was chosen as the research location of the present study. The student population in UTAR was estimated with more than 10,000 students in total (EasyUni, 2018). University as a society that comprises students who came from different states are suitable for current research study.

They are able to provide information about the relationship between locus of control, coping strategies and procrastination from all around the states in Malaysia.

Research Procedure

Paper-and-pencil method were used to collect data from undergraduate students in UTAR, Kampar campus. The paper-and-pencil questionnaires were distributed at lecture hall, tutorial room, cafeteria and library in UTAR, Kampar campus. The questionnaires consisted of five sections in the questionnaires. First, the purpose of the study will be introduced when participants first get the questionnaire followed by confidentiality, willingness to participate and contact information of researchers. Next, participants are requested to sign the informed consent form as the willingness to participate in the present study as they are clear about the details of this study. The questionnaire requires approximately 10 to 15 minutes to complete as there are 73 items in the questionnaire.

Research Instruments

Three measurements were used in this study to investigate the relationship between LOC, coping strategies and procrastination. These three measurements examine the types of LOC, various coping strategies used by individuals and the level of procrastination among undergraduate students in UTAR, Kampar campus. Besides, there have been four questions created to collect demographic information of participants.

Demographic information. Demographic information of target participants was collected before answering the questions of questionnaires. There are four closed ended questions in this study. First, the age of participants was being asked. Second, the faculty of participants was collected by giving a list of faculties for them to choose. Third, participants

need to fill in which year and semester they study in university. Fourth, gender was asked in the demographic part.

Internal and External Locus of Control (Rotter, 1966). Internal and External Locus of Control Scale, known as I-E scale is a forced-choice test with a total of 29-items (Rotter, 1966) to test the internal or external locus of control of an individual. The 6 filler items out of 29-items were aimed to make the purpose of the scale ambiguous. The items included “1(a) Children get into trouble because their parents punish them too much.” “1(b) The trouble with most children nowadays is that their parents are too easy with them.” There are two choices in each question to choose, they are either more internal-oriented or more external-oriented. The total sum scores from the 23-items indicated that higher scores are external locus of control person, on the other hand, lower scores individual are internal locus of control (Rotter, 1966). This I-E scale provides good internal reliability and discriminant validity (Rotter, 1966).

Brief COPE (Carver, 1997). Brief COPE (Carver, 1997) is a 28-item multidimensional scale to measure various coping strategies or regulate cognition for the stressors. It is a shortened version of 60-item COPE inventory (Carver, Scheier, & Weintraub, 1989) which incorporates items that evaluate the frequency with which a person implements various coping strategies. For example, “I’ve been using alcohol or other drugs to myself feel”, “I’ve been getting emotional support from others”, “I’ve been getting comfort and understanding from someone”. Each question is rated on the score of 4-point Likert scale which range from 1 (I haven't been doing this at all) to 4 (I've been doing this a lot). This 28-item of Brief COPE is divided into 4-factor structure which are 4 items of problem solving,

10 items of avoidance, 6 items of positive thinking, and 8 items of social support (Baumstarck et al., 2017).

Tuckman Procrastination Scale (Tuckman, 1991). This scale was developed by Tuckman (1991) It comprises 16-items to measure an individual's procrastination level. For example, "I needlessly delay finishing jobs, even when they are important", "I manage to find an excuse for not doing something" and "I am an incurable time waster". The items are measured using a 4-point Likert scale ("1=that's not me, for sure", "2 = that's not my tendency", "3=that's my tendency", "4= that's me for sure"). The Cronbach alpha reliability coefficient of this scale was 0.90 had been reported in a previous study (Tuckman,1991). This scale involves reversed items which are items 7,12,14,16. The final score is obtained through the summation of the scores of all items. In general, students' scores in between 57 to 64 are considered high, 50 to 56 are considered moderate and 35 to 49 are considered low.

Data Analysis Plan

Data analysis was proceeded after the data was finished collected. The data was then inserted into SPSS in order to run the analysis for examining the scale reliability and data screening. Screening of data was including assumption checking, descriptive statistics like the mean and standard deviation to determine the demographic information and total scores from I-E scales, Brief COPE and TPS. Based on inferential statistics, *Pearson Correlation* was used to investigate the relationship between LOC, coping strategies and procrastination to answer the first three research questions. Finally, stepwise multiple regression was performed to examine whether LOC or coping strategies were best to predict procrastination.

Chapter 4

Results

Descriptive statistics

Participants' demographic information were listed in the following tables by using the total number and percentage of participants. Gender, age, year of study and faculties of participants were stated below.

Table 1

Descriptive Statistic for Participant's Gender and Age

Gender	n	%	Age	n	%
Male	50	33.3	19	2	1.3
Female	100	66.7	20	38	25.3
			21	40	26.7
			22	38	25.3
			23	25	16.7
			24	3	2.0
			25	2	1.3
			26	1	0.7
			27	1	0.7

Note. n= number of participants, %= percentage of participants.

Table 2

Descriptive Statistic for Participants' Year of Study and Faculty

Year of Study	n	%	Faculty	n	%
1	46	30.7	FAS	67	44.7
2	47	31.3	FBF	36	24.0
3	53	35.3	FEGT	3	2.0
4	4	2.7	FICT	25	16.7
Missing	0		FSC	13	8.7
			ICS	6	4.0

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

Table 1 and 2 are showing the total number of 150 participants aged from 19 to 27 years old participating in this study which are totally from UTAR, Kampar campus. Number of females was doubled compared to the number of males in percentage of 66.7% and 33.3% respectively. Participants were mainly from Faculty of Arts and Social Science (FAS) (44.7%), followed by Faculty of Business and Finance (FBF) (24.0%), Faculty of Information and Communication Technology (FICT) (16.7%), Faculty of Science (FSC) (8.7%), Institute of Chinese (ICS) (4.0%), and Faculty of Engineering and Green Technology (FEGT) (2.0%).

Test of normality

Table 3

Normality for all variables using Skewness and Kurtosis (N=150)

Measure	SD	M	Skewness	Kurtosis
Internal and External Locus of Control (I-E scale)	1.00	11.91	-.066	-.323
Brief COPE - Problem Solving	.52	3.00	-.032	.056
Brief COPE - Avoidance	.41	2.16	-.048	-.493
Brief COPE - Positive Thinking	.48	2.80	-.108	-.206
Brief COPE - Social Support	.52	2.55	-.156	-.331
Tuckman Procrastination Scale (TPS)	.49	2.40	.107	.216

Note. *M* = mean, *SD* = standard deviation

Based on the Table 3, skewness and kurtosis of LOC, coping strategies (problem solving, avoidance, positive thinking, and social support), and procrastination were significantly normal. The value of the skewness for LOC was -.066, coping strategies such as problem solving coping strategy was -.032, avoidance coping strategy was -.048, positive thinking coping strategy was -.108, social support coping strategy was -.156, and procrastination was .107. The allocation of scores of kurtosis for LOC was negatively skewed

(-.323), coping strategies such as problem solving coping strategy was positively skewed (.056), avoidance coping strategy was negatively skewed (-.493), positive thinking coping strategy was negatively skewed (-.206) and the social support coping strategy was negatively skewed (-.331) whereas procrastination was positively skewed (.216). These results showed that LOC, coping strategies, and procrastination were normally distributed due to each of the skewness and kurtosis values was in the range between -2.0 and +2.0 (Kim, 2013).

Independent Sample T-Tests

Table 4

An Independent Sample T-test Showing Gender Differences in Procrastination

Variable	Group	M	SD	t-test	Sig.(2-tailed)
Procrastination	Men	2.36	.47	-.840	.402
	Female	2.43	.50		

Note. *M* = mean, *SD* = standard deviation

An independent sample t-test was conducted to compare differences between male and female toward procrastination. There was no significant difference between male ($M = 2.36$, $SD = .47$) and female ($M = 2.43$, $SD = .50$) for procrastination; $t(148) = -.840$, $p = .402$. The mean for procrastination in both male and female was 2.36 and 2.43 respectively. The difference between the male and female in Malaysia is 0.07. These results suggest that gender differences do not have an effect on procrastination.

Correlation Analysis between Age and Procrastination

Table 5

Result of Pearson's Correlation between Age and Procrastination

		Procrastination
	Pearson's correlation	-.152
Age	Sig. (2 tailed)	.063
	<i>n</i>	150

Note. *n* = number of participants.

As described in Table 5, the result of *Pearson's correlation* showed that there was no significant correlation between age and procrastination among undergraduate students, $r = -.152$, $n = 150$, $p = .063$. Thus, both age and procrastination were not related.

Inferential analysis

Table 6.1

Result of Pearson's Correlation Between LOC and Coping Strategies

		Problem Solving	Avoidance	Positive Thinking	Social Support
LOC	Pearson correlation	-.146	.107	-.120	-.087
	Sig. (2 tailed)	.074	.193	.145	.292

n 150 150 150 150

Note. n = number of participants.

RQ1: Is there any significant relationship between LOC and coping strategies among undergraduate students in Malaysia?

According to the table 6.1, it showed the relationship between LOC and coping strategies which included problem solving, avoidance, positive thinking, and social support. The findings of *Pearson's correlation* showed that there was no significant correlation between LOC and problem solving coping strategy among participants, $r(150) = -.146, p = .074$. Besides, there was no significant correlation between LOC and avoidance coping strategy among participants, $r(150) = .107, p = .193$. Moreover, there was no significant correlation between LOC and positive thinking coping strategy among participants, $r(150) = -.120, p = .145$. Last but not least, there was no significant correlation between LOC and social support coping strategy among participants, $r(150) = -.087, p = .292$.

Table 6.2

Result of Pearson's Correlation Between Coping Strategies and Procrastination.

		Procrastination
Problem Solving	Pearson correlation	-.258**
	Sig. (2 tailed)	.001
	n	150

Avoidance	Pearson correlation	.244**
	Sig. (2 tailed)	.003
	<i>n</i>	150
Positive Thinking	Pearson correlation	.012
	Sig. (2 tailed)	.885
	<i>n</i>	150
Social Support	Pearson correlation	.122
	Sig. (2 tailed)	.138
	<i>n</i>	150

Note. ** $p < .01$, n = number of participants.

RQ2: Is there any significant relationship between coping strategies and procrastination among undergraduate students in Malaysia?

Table 6.2 showed the correlation between problem solving, avoidance, positive thinking, and social support coping strategies with procrastination. The findings indicated that there was a significant negative correlation between problem solving coping strategy and procrastination among participants, $r(150) = -.258$, $p = .001$ and a significant positive correlation between avoidance strategy and procrastination among participants, $r(150) = .244$, $p = .003$. Besides, there was no significant correlation between positive thinking

coping strategy and procrastination among participants, $r(150) = .012, p = .885$. Lastly, there was no significant correlation between social support strategy and procrastination among participants, $r(150) = .122, p = .138$.

Table 6.3

Result of Pearson's Correlation Between LOC and Procrastination

		Procrastination
LOC	Pearson correlation	.168*
	Sig. (2 tailed)	.040
	<i>n</i>	150

Note. * $p < .05$, n = number of participants.

RQ3: Is there any significant relationship between LOC and procrastination among undergraduate students in Malaysia?

According to table 6.3, it showed the relationship between LOC and procrastination. The finding of *Pearson's correlation* showed that there was a significant positive correlation between LOC and procrastination among undergraduate students in UTAR, $r(150) = .168, p = .040$. Result showed that students with external LOC were more likely to procrastinate more in their life.

Stepwise Multiple Regression Analysis

Table 7

Results of Stepwise Multiple Regression Analysis in Prediction of Procrastination based on the Predictor Variables

Step	Predicted variables	β	t	p	F	df	R ²	VIF
1	Fixed	2.078	12.805		4.293	(1, 148)	.028	1.000
	LOC	.027	2.072	.040				
2	Fixed	2.255	6.248		6.903	(3, 146)	.124	
	LOC	.019	1.461	.146				1.030
	Problem Solving	-.202	-2.721	.007				1.036
	Avoidance	.246	2.591	.011				1.026

Note. $p < .05$

Multicollinearity Assumption

Variance Inflation Factor (VIF) was used to measure multicollinearity. In the first step, the score of VIF of LOC was 1.000. In the second step, the distribution score of VIF of LOC (1.030), coping strategies such as problem solving coping strategy (1.036) and avoidance coping strategy (1.026). The VIF scores in both steps were not ≥ 10 which indicated that the assumptions in both steps had been met (Yeo, Mohamed, Ismail, Rahman, & Shahid, 2018).

Stepwise Multiple Regression Analysis for LOC and Coping Strategies as Predictors of Procrastination

RQ4: Are LOC and coping strategies significant predictors of procrastination among undergraduate students in Malaysia?

Table 7 indicated the result of three predictors which are LOC, problem solving and avoidance coping strategies toward procrastination among undergraduate students in UTAR, Kampar campus. A stepwise multiple regression analysis was used to predict procrastination based on LOC and coping strategies. In the first step, the first variable that was entered into the analysis and remained was LOC. Procrastination accounted for a significance of 2.8% of the variance in the compliance, $R^2 = .028$, $F(1, 148) = 4.293$, $p = .040$. Results showed that LOC ($\beta = .027$, $t = 2.072$, $p = .040$) was significant in predicting procrastination.

In the second step, after the LOC variable, problem solving and avoidance coping strategies were entered into the analysis. Procrastination accounted for a significance of 12.4% of the variance in the compliance, $R^2 = .124$, $F(3, 146) = 6.903$, $p < .001$. Result indicated that problem solving coping strategy ($\beta = -.202$, $t = -2.721$, $p = .007$) and avoidance coping strategy ($\beta = .246$, $t = 2.591$, $p = .011$) appeared to be the significant predictors of procrastination. In contrast, LOC ($\beta = .019$, $t = 1.461$, $p = .146$) found insignificant in predicting procrastination when there is the presence of problem solving and avoidance coping strategies.

Chapter 5

Discussion and Conclusion

RQ1: The Correlation between LOC and Coping Strategies

The present study revealed that there was no significant correlation between LOC with the use of coping strategies and the null hypothesis was not rejected. The result indicated that neither internal nor external people will affect their use of coping strategies. The result was different from what had been found by previous researchers as majority of the studies claimed that internal people tend to use problem-focused coping strategy whereas external people prefer to use avoidance coping strategy (Arslan, Dilmac, & Hamarta, 2009; Demir et al., 2014; Kazemi et al., 2015; Scott et al., 2010).

The current finding was not consistent with previous study results, this might be due to the measurement of LOC. The Rotter I-E scale was found to not only tested for LOC dimensions but also political factors (Lange & Tiggemann, 1981) which contrasted with the unidimensional concept claimed by Rotter (1966). It can be said that this scale did not fully measure the LOC dimensions. In addition, measurement of LOC might not be the only reason as age can also be the factor that contributes changes in the LOC and coping relations. According to Blanchard-Fields and Irion (1988), younger aged groups who are internal-control oriented tend to use less mature emotional-focused coping strategies like avoidance or react hostile to the stressful condition compared to older aged groups. This probably because of the definition of the LOC perceived by younger and older individuals could have different meanings. In other words, it can be said that the relationship between LOC and coping strategies can be moderated by age. However, the present study did not consider age as the moderator. Thus, this might explain the reason for the non-significant relationship between LOC and coping strategies.

RQ2: The Correlation between Coping strategies and Procrastination

In the current study, a significant negative correlation has shown between the problem solving coping strategy and procrastination. This finding was consistent with the previous study of Yurtseven and Dogan (2019) which indicated that the students who have higher problem solving coping strategy inclined to procrastinate less. Moreover, the result of the current study also can be supported by the previous study of Shahram (2011) which stated that poor problem solving coping strategy is one of the reasons that lead to procrastination. This is because problem solving coping strategy is able to emphasize the value of a task, regulate the belief about successful tasks and reaching long-term goals with systemically achieving short term progress and hence reduce the likelihood of postponing among procrastinators (Farrington, 2012). Therefore, proper problem solving coping strategy is able to reduce procrastination due to ability to confront the problematic circumstances.

Furthermore, this study indicated that there was a significant positive correlation between avoidance coping strategy and procrastination. This result was consistent with the previous study of Chun Chu and Choi (2005) which stated that avoidance coping strategy will be implemented by passive procrastinators. This finding was also similar to the study of Kandemir et al. (2014) which showed that the students who use the avoidance coping strategy to cope with stress result in more academic procrastination. Besides, the finding was similar to previous studies (Burns et al., 2000; Cao, 2012). In other words, it can be said that students normally showed the behaviour of avoiding in their academics which leads to procrastination. Besides, Alexander and Onwuegbuzie (2007) stated that this behaviour is to prevent paying attention to the origin of a problem. D’Zurilla and Nezu (2010) also identified this as avoidance style, in which the people with poor problem solving skills prefer to escape from the problems instead of solving them at once, which results in as much as possible delay of the problem.

Procrastination also can be defined as avoiding negative feelings and thoughts concerned with finishing a necessary task (Sirois, 2004; Tice, Bratslavsky, & Baumeister, 2001). Thus, it can be concluded that procrastinators tend to have poor problem solving skills and are prone to use avoidance style to cope with problems which lead to procrastination.

Surprisingly, the findings of the current study showed that there was no significant relationship between positive thinking with procrastination. The previous study of Moradi, Rashidi, and Golmohammadian (2017) stated that the positive thinking coping strategy is able to result in less procrastination. Positive thinking helps students to emphasize on their own capability and reduce their view at their own weakness which assists them to accept their responsibilities thus procrastination was lessened (Moradi et al., 2017). However, there are limited studies examining the relationship between positive thinking coping strategy and procrastination in Asia context especially in Malaysia. Besides, according to Kuo (2010), different people suit for different coping mechanisms due to their cultural background and non-identical stressors perceived by the individual. Hence, based on personal perception in current study, positive thinking may be viewed differently in every culture therefore the relationship between positive thinking coping strategy and procrastination was not significant in current study.

Additionally, social support coping strategies also as coping strategies had been tested with procrastination in this study. The findings of insignificant relationship between these two variables was inconsistent with the finding of Tuasikal and Patria (2019) showed that social support has a negative correlation with procrastination. The possible explanation of the inconsistency is that social support could be remain controversial due to the fact that social support may be associated with problem-focused strategy (Greenglass, 1993), emotion-focused strategy (Lazarus & Folkman, 1984), and sometimes, it can be described as an external social

resource from which a person can benefit and not a full-fledged strategy for coping (Baumstarck et al., 2017). It seems like even if asking social sources of support, it does not seem possible to affect a person's procrastination. Thus, it is not surprising to see that social support does not significantly correlate with procrastination.

In addition to the previous explanation mentioned above, another reason exists which may also can be used to explain the insignificant correlation between positive thinking and social support coping strategies with procrastination. This could be explained by Baumstarck et al. (2017) mentioned that the 4-factor structures of Brief COPE may be more interesting to both medical and psychological professionals as well as researchers due to the less factors structure being more preferred compared to 14-factor structure. Besides, Baumstarck et al. (2017) also reported that the validation process of the 4-factor French version of Brief COPE in a French sample who are confronting a single life event like cancer, consists of patients and their caregivers. Thus, the measurement of Brief COPE was probably not suitable for assessing the undergraduate students' sample for current study. Besides, Brief COPE has issues of cultural validity where coping may be affected by both environmental and sociocultural factors when assessing in different contexts (Kimemia, Asner-Self, & Daire, 2011). Hence, positive thinking and social support coping strategies have no significant relationship with procrastination due to the cultural background of participants.

RQ3: The Correlation between LOC and Procrastination

The result of positive correlation between LOC and procrastination is .168 which indicated that external LOC undergraduate students in UTAR, Kampar campus were more likely to procrastinate in their life. This is consistent with the study by Prihadi et al. (2018) which stated that people with more internal LOC tend to procrastinate less because they take more responsibilities over their events and life. Similarly, study of Carden et al. (2004) also

showed that internal LOC persons procrastinate less compared to external LOC persons. According to Prihadi et al. (2018), students with LOC will blame themselves for any procrastination since they believe that everything is under their control. Thus, it could be explained that internal LOC people will procrastinate less in their life.

Besides, Gargari, Sabouri and Norzad (2011) stated that external LOC students have the tendency to attribute their outcome to the external factors such as luck or fate which made them more often postpone their academic task. The possible reason can be explained that those internal LOC students would like to link their academic accomplishment with their internal factors which can increase their sense of value and thus create favorable behavioral outcome such as less procrastination, whereas external LOC students who like to make external causal explanation such as task difficulty which become a self-protective factor for them (Gargari et al, 2011). In other words, external LOC students would like to postpone their academic tasks as a way to escape from failure and support their self-respect (Gargari et al., 2011). Therefore, it is understandable that external LOC students tend to procrastinate more.

RQ4: The Predictor Role of LOC and Coping Strategies towards Procrastination

In this study, the results of the research indicated that the best predictor of procrastination among all independent variables are, respectively, avoidance coping strategy, problem solving coping strategy and LOC. The most important predictor contributed to procrastination was avoidance coping strategy. In the stepwise multiple regression table, the result showed that LOC was a strong predictor with absence of other predictor variables. However, LOC became a non-significant predictor when presence of problem solving and avoidance coping strategies. Problem solving and avoidance coping strategies have become stronger predictors compared to LOC.

The most important variables that contribute to procrastination is avoidance coping strategies. The result matched with the previous study which claimed that avoidance coping strategy can be used to predict procrastination (Cao, 2012). Past researchers had been seen that procrastination acts as an avoiding strategy and a way to escape from self-awareness (Ferrari, Johnson, & McCown, 1995; Kaya & Kaya, 2014). Besides, Tice and Baumeister (1997) also explained that when a person behaves procrastinating, it means that the person is avoiding certain stress resources for some time. Therefore, it can be the possible reason to explain that academic duties and obligations could actually create stress to happen and may lead students to apply avoidance coping strategies to avoid those stresses (Mehmet, Tahsin, Ahmet, Zpolat, & Mehmet, 2014). In addition, a person will demonstrate avoiding styles and then soon procrastinate because they want to escape from hatred, feeling of aversion, stress and anxiety caused by the task which makes them to have insufficient time to finish (Díaz-Morales, Ferrari, & Cohen, 2008). Thus, it can be said that a person's use of avoidance coping strategy has an effect on procrastination.

According to the results of stepwise regression analysis, the second variable that contributed to procrastination was problem solving coping strategy. This was consistent with the previous study of Yurtseven and Dogan (2019) which showed that problem solving coping strategy was able to significantly predict procrastination. According to Alexander and Onwuegbuzie (2007), one of the main characteristics of procrastinators is to avoid focusing on the reason of procrastination. This can be due to the fact that procrastinators are having a lack of problem solving skills which lead them to tend to avoid their problems rather than facing them immediately as a result in delaying problems as much as possible (Yurtseven & Dogan, 2019). Besides, Burka and Yuen (2008) stated that procrastinators have the tendency not to know how to cope with their problems. This can be said that the procrastinators tend to

have limited problem solving skills compared to non-procrastinators. Therefore, it is possible to conclude that the current finding was consistent with previous studies.

On the other hand, LOC was the predictor of procrastination when other predictors are absent. This was supported by the previous study which claimed that LOC has significantly contributed to procrastination (Batubara, 2017; Zotova, 2018). Students with external LOC tend to capitulate their life to destiny and use less effort in their duty while an internal LOC person believes what they obtain is based on their hard work and effort (Batubara, 2017). An internal LOC person tends to have greater responsibility for their own achievement which is in contrast with the characteristic of a procrastinator who does not connect their actions and achievement together and views life as the result of luck (Zotova, 2018).

LOC was a significant predictor but became non-significant when the avoidance and problem solving strategies present. According to Batubara (2017), LOC has contributed in the amount of 2.7% on procrastination only because procrastination can still be caused by many other variables rather than LOC itself. LOC became insignificant predictor can also be explained that the Rotter I-E scale is not solely measured internal and external dimension but included political factors which affects its accuracy in measuring LOC (Lange & Tiggemann, 1981) which contrasted with the unidimensional concept claimed by Rotter (1966). In other words, avoidance and problem coping strategies might propose stronger influences on procrastination compared with LOC. Thus, it could be seen that avoidance and problem solving coping strategies were stronger predictors than LOC in predicting procrastination.

Implication

In the current study, sample was narrowed down and focused on undergraduate students compared to other samples because procrastination is now known as common phenomena that often happen in academic realm (Jiao et al., 2011; Solomon & Rothblum,

1984). The current results can become the sources of references for those undergraduate students to have better understanding about the underlying variables that may influence a person's procrastination. Current findings indicated that procrastination can stem from personality and influence by the use of coping strategies which can further guide students' behaviors when faced with academic tasks. Besides, the findings can provide insight for institutions from primary schools to universities to design soft skills workshops, talk, or any related activities since present study indicated that students' poor problem solving skills can lead them to engage in procrastination behavior. These are able to improve and strengthen students' problem solving skills in order to enhance their ability to cope with academic tasks which directly reduce their chance of procrastination.

Furthermore, the present study is also able to fill the literature gap in this field of study especially in Malaysia context. In our knowledge, there was little evidence to support the present study that was conducted in Malaysia context. Therefore, this study could contribute to the local settings which provide insight to understand that LOC and coping strategies can influence procrastination. Besides, it provides a basic foundation for future researchers to further explore other variables that are also related to procrastination. Lastly, the government also can be encouraged to provide sponsorship for the future researchers to explore more on this topic since the current topic is still fresh in Malaysia.

Limitation

There are a number of limitations found in this study like all other studies done by previous researchers. First, the participants of this study were based on convenience sampling, which the target sample was only undergraduate students from UTAR, Kampar campus. It is

difficult to obtain samples of undergraduate students from other universities in Malaysia due to limited time and transportation fee. Therefore, the generalization of current findings of undergraduate students from UTAR, Kampar campus may result in inaccurate results due to overgeneralization that will lead to the occurrence of prejudice which must be sternly avoided.

Secondly, the measurements of this study were self-report questionnaires which the participants need to fully answer the questionnaires solely by themselves. The behaviour of dishonesty might happen and researchers can only accept the participants' answers without the opportunities for accessing them in order to clarify their answers. In addition, participants may have difficulties to recall their actual perceptions and behaviours when answering the questionnaire which raise the issues of detachment from their assumptions and actual performance in real life. Therefore, the data may be biased due to the above reasons.

Thirdly, the measurement of Rotter's I-E Scale (Rotter, 1996) provided forced-choice questions which limit the participants' choices compared to the Likert-scale structure of Brief COPE (Carver, 1997) and Tuckman Procrastination Scale (Tuckman, 1991). Moreover, some participants reported that the questions of the measurement of Rotter's I-E Scale (Rotter, 1996) were too difficult to understand due to their limited English language skills which led them took a longer time to complete the questionnaire and have the potential to misunderstood the questions. In addition, since they consume too much time in the beginning part of the questionnaire, hence they might rush to answer the rest of the questions. Consequently, this will affect the accuracy of the result.

Recommendation

Some recommendations were suggested to improve in the future study. First of all, since target participants were mainly from UTAR which is located at Kampar, future researchers can expand the geographical region of the target sample to other universities in Malaysia. In conjunction with that, some of the demographic information such as race or states of undergraduate students can be considered in the future study. This is because students from different backgrounds hold different perceptions that may show impact on certain variables, such as LOC and the use of coping strategies. Therefore, this demographic information should be included as well to increase the validity and reliability of the study.

Furthermore, the current study have been show that LOC was not related to the use of coping strategies, thus future researchers was suggested to examine the underline moderating effect such as including age cohort different between these two variables as previous researchers had been prove the age can vary in LOC and coping strategies relation (Blanchard-Fields & Irion, 1988). Besides LOC, others personality factors such as Big Five personality or self-efficacy also were suggested to be included to examine the relationship with certain variables such as coping strategies and procrastination in the future study.

Lastly, the probability sampling method such as random sampling is suggested in order to collect data in future studies so that every person in the population is given equal opportunity to be selected in the study (Acharya, Prakash, Saxena, & Nigam, 2013). Thus, the bias can be minimized and improve the accuracy of the future studies to generalize the population.

Conclusion

The present study aims to examine the relationship between LOC, coping strategies and procrastination among 150 undergraduate students in UTAR at Kampar campus. Results showed that LOC was significantly positive correlated with procrastination, positive thinking and social support coping strategies were not significantly correlated with procrastination whereas problem solving coping strategy was significantly negative correlated with procrastination while avoidance coping strategy was significantly positive correlated with procrastination. Besides, LOC was able to predict procrastination, but unable to predict procrastination when there is the presence of problem solving and avoidance coping strategies. These findings are consistent or inconsistent with some previous studies. However, the findings of the present study are able to provide the foundation for future researchers to examine other variables such as age associated with coping strategies or other personality factors associated with procrastination. Besides, the findings of the present study can act as a guide for the undergraduate students to understand the possible factors which might affect them become procrastinate. Thus, undergraduate students are able to adopt suitable measures in order to reduce procrastination.

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Appendix A
Questionnaire (Paper and pencil survey)



UNIVERSITI TUNKU ABDUL RAHMAN
FACULTY OF ARTS AND SOCIAL SCIENCE
BACHELOR OF SOCIAL SCIENCE (HONS) PSYCHOLOGY

Introduction

This research is being conducted as the requirement for the subject **UAPZ3013 FINAL YEAR PROJECT 1**. The topic of this research is “The Relationship Between Locus of Control, Coping Strategies, and Procrastination Among Undergraduate Students in Malaysia”.

Procedures

This survey consists of **4 sections**. You are required to **complete all the question** in the 4 sections. Section A is the demographic information of the participants, Section B is Rotter’s Locus of Control Scale, Section C is Brief-COPE, and Section D is Tuckman Procrastination Scale. This survey consists of 73 items and will take approximately **10 – 15 minutes** to complete the survey.

Confidentiality

All information provided will remain as **private and confidential**. The information given will only be reported as group data with no identifying information and only use for academic purpose. All information will be kept in secure location where only the research team members have the access to it.

Participation

The participation in this research is completely voluntary. Participants have the right to quit or refuse to participate at any point of time without.

Contact information

Any enquiry regarding this survey can contact the research team at manman73@1utar.my (Chan Siew Man), eelengwong@1utar.my (Wong Ee Leng), huiqin0224@1utar.my (Ang Hui Qin).

Date: _____

SECTION A: Demographic Information

Please fill up the following information.

1. Age: _____

2. Centre for Foundation Studies

Faculty of Arts and Social Science

Faculty of Business and Finance

Faculty of Creative Industries

Faculty of Engineering And Green Technology

Faculty of Information and Communication Technology

Faculty of Science

Institute of Chinese Studies

3. Year/ Semester: _____/_____

4. Gender: Male

Female

SECTION B: How Do You Control Yourself?

For each question, select the statement that you **AGREE WITH THE MOST**. Please **CIRCLE** the alphabet that provided in front of each statement below.

1. a. Children get into trouble because their parents punish them too much.
 b. The trouble with most children nowadays is that their parents are too easy with them.
2. a. Many of the unhappy things in people's lives are partly due to bad luck.
 b. People's misfortunes result from the mistakes they make.
3. a. One of the major reasons why we have wars is because people don't take enough interest in politics.
 b. There will always be wars, no matter how hard people try to prevent them.
4. a. In the long run people get the respect they deserve in this world.
 b. Unfortunately, an individual's worth often passes unrecognized no matter how hard he tries.
5. a. The idea that teachers are unfair to students is nonsense.
 b. Most students don't realize the extent to which their grades are influenced by accidental happenings.
6. a. Without the right breaks one cannot be an effective leader.
 b. Capable people who fail to become leaders have not taken advantage of their opportunities.
7. a. No matter how hard you try some people just don't like you.
 b. People who can't get others to like them don't understand how to get along with others.
8. a. Heredity plays the major role in determining one's personality.
 b. It is one's experiences in life which determine what they're like.
9. a. I have often found that what is going to happen will happen.

- b. Trusting to fate has never turned out as well for me as making a decision to take a definite course of action.
10. a. In the case of the well prepared student there is rarely if ever such a thing as an unfair test.
b. Many times exam questions tend to be so unrelated to course work that studying in really useless.
11. a. Becoming a success is a matter of hard work, luck has little or nothing to do with it.
b. Getting a good job depends mainly on being in the right place at the right time.
12. a. The average citizen can have an influence in government decisions.
b. This world is run by the few people in power, and there is not much the little guy can do about it.
13. a. When I make plans, I am almost certain that I can make them work.
b. It is not always wise to plan too far ahead because many things turn out to- be a matter of good or bad fortune anyhow.
14. a. There are certain people who are just no good.
b. There is some good in everybody.
15. a. In my case getting what I want has little or nothing to do with luck.
b. Many times we might just as well decide what to do by flipping a coin.
16. a. Who gets to be the boss often depends on who was lucky enough to be in the right place first.
b. Getting people to do the right thing depends upon ability. Luck has little or nothing to do with it.
17. a. As far as world affairs are concerned, most of us are the victims of forces we can neither understand, nor control.
b. By taking an active part in political and social affairs the people can control world events.

18.
 - a. Most people don't realize the extent to which their lives are controlled by accidental happenings.
 - b. There really is no such thing as "luck."
19.
 - a. One should always be willing to admit mistakes.
 - b. It is usually best to cover up one's mistakes.
20.
 - a. It is hard to know whether or not a person really likes you.
 - b. How many friends you have depends upon how nice a person you are.
21.
 - a. In the long run the bad things that happen to us are balanced by the good ones.
 - b. Most misfortunes are the result of lack of ability, ignorance, laziness, or all three.
22.
 - a. With enough effort we can wipe out political corruption.
 - b. It is difficult for people to have much control over the things politicians do in office.
23.
 - a. Sometimes I can't understand how teachers arrive at the grades they give.
 - b. There is a direct connection between how hard I study and the grades I get.
24.
 - a. A good leader expects people to decide for themselves what they should do.
 - b. A good leader makes it clear to everybody what their jobs are.
25.
 - a. Many times I feel that I have little influence over the things that happen to me.
 - b. It is impossible for me to believe that chance or luck plays an important role in my life.
26.
 - a. People are lonely because they don't try to be friendly.
 - b. There's not much use in trying too hard to please people, if they like you, they like you.
27.
 - a. There is too much emphasis on athletics in high school.
 - b. Team sports are an excellent way to build character.
28.
 - a. What happens to me is my own doing.

b. Sometimes I feel that I don't have enough control over the direction my life is taking.

29. a. Most of the time I can't understand why politicians behave the way they do.
 b. In the long run the people are responsible for bad government on a national as well as on a local level.

SECTION C: How Do You Cope in Life?

Please choose the **BEST ANSWER** that best describe you. Please **CIRCLE** the correct number as matches to the description that stated bellow. There is no right and wrong for your answer.

	I haven't been doing this at all	I've been doing this a little bit	I've been doing a medium amount	I've been doing this a lot
1. I've been turning to work or other activities to take my mind off things.	1	2	3	4
2. I've been concentrating my efforts on doing something about the situation I'm in	1	2	3	4
3. I've been saying to myself "this isn't real".	1	2	3	4
4. I've been using alcohol or other drugs to myself feel better.	1	2	3	4
5. I've been getting emotional support from others.	1	2	3	4
6. I've been giving up trying to deal with it.	1	2	3	4
7. I've been taking action to try to make the situation better.	1	2	3	4

8. I've been refusing to believe that it has happened.	1	2	3	4
9. I've been saying things to let my unpleasant feeling escape.	1	2	3	4
10. I've been getting help and advice from other people.	1	2	3	4
11. I've been using alcohol or other drugs to help me get through it.	1	2	3	4
12. I've been trying to see it in a different light, to make it seem more positive.	1	2	3	4
13. I've been criticizing myself.	1	2	3	4
14. I've been trying to come up with a strategy about what to do.	1	2	3	4
15. I've been getting comfort and understanding from someone.	1	2	3	4
16. I've been giving up the attempt to cope.	1	2	3	4
17. I've been looking for something good in what is happening.	1	2	3	4
18. I've been making jokes about it.	1	2	3	4
19. I've been doing something to think about it less, such as going to movies, watching TV, reading, daydreaming, sleeping, or shopping.	1	2	3	4
20. I've been accepting the reality of the fact that it has happened.	1	2	3	4

21. I've been expressing my negative feelings.	1	2	3	4
22. I've been trying to find comfort in my religion or spiritual beliefs.	1	2	3	4
23. I've been trying to get advice or help from other people about what to do.	1	2	3	4
24. I've been learning to live with it.	1	2	3	4
25. I've been thinking hard about what steps to take.	1	2	3	4
26. I've been blaming myself for things that happened.	1	2	3	4
27. I've been praying or meditating.	1	2	3	4
28. I've been making fun of the situation.	1	2	3	4

SECTION D: Do You Often Procrastinate?

Please indicate how much each statement listed below describes you. Please **CIRCLE** the following number on the right of each statement indicating how much each statement describes you. Please be as honest as possible.

Item	That's not me for sure	That's not my tendency	That's my tendency	That's me for sure
1. I needlessly delay finishing jobs, even when they're important.	1	2	3	4
2. I postpone starting in on things I don't like to do.	1	2	3	4
3. When I have a deadline, I wait until the last minute.	1	2	3	4
4. I delay making tough decisions.	1	2	3	4
5. I keep putting off improving my work habits.	1	2	3	4
6. I manage to find an excuse for not doing something.	1	2	3	4

7. I put the necessary time into even boring tasks, like studying.	1	2	3	4
8. I am an incurable time waster.	1	2	3	4
9. I'm a time waster now but I can't seem to do anything about it.	1	2	3	4
10. When something's too tough to tackle, I believe in postponing it.	1	2	3	4
11. I promise myself I'll do something and then drag my feet.	1	2	3	4
12. Whenever I make a plan of action, I follow it.	1	2	3	4
13. Even though I hate myself if I don't get started, it doesn't get me going.	1	2	3	4
14. I always finish important jobs with time to spare.	1	2	3	4
15. I get stuck in neutral even though I know how important it is to get started.	1	2	3	4
16. Putting something off until tomorrow is not the way I do it.	1	2	3	4

Appendix B
Questionnaire (Qualtric)

Introduction

This research is being conducted as the requirement for the subject **UAPZ3013 FINAL YEAR PROJECT**. The topic of this research is "The Relationship Between Locus of Control, Coping Strategies, and Procrastination Among Undergraduate Students in Malaysia".

Procedure

This survey consists of **4 sections**. You are required to **complete all the question** in the 4 sections. Section A is the demographic information of the participants, Section B is Rotter's Locus of Control Scale, Section C is Brief-COPE, and Section D is Tuckman Procrastination Scale. This survey consists of **73 items** and will take approximately **10-15 minutes** to complete the survey.

Confidentiality

All information provided will remain as **private and confidential**. The information given will only be reported as group data with no identifying information and only use for academic purpose. All information will be kept in secure location where only the research team members have the access to it.

Participation

The participation in this research is completely voluntary. Participants have the right to quit or refuse to participate at any point of time without.

Contact information

Any enquiry regarding this survey can contact the research team at manman73@1utar.my (Chan Siew Man), eelengwong@1utar.my (Wong Ee Leng), huiqin0224@1utar.my (Ang Hui Qin). If you choose to participate in this project, please answer all the questions as honestly as possible and return the completed questionnaire promptly. By signing this informed consent form you are indicating that you understand the nature of the research study and your role in that research and that you agree to participate in the research.

By signing this form, I am stating that I am at least 18 years old and that I understand the above information and consent to participate in this study.

I consent, begin the study

I do not consent, I do not wish to participate

SECTION A : DEMOGRAPHIC INFORMATION

Instructions: Please fill up the following information.

1. Age :

2. University:

3. Faculty :

4. Year / Semesters : Y1S3

5. Gender :

Male

Female



SECTION B : HOW TO YOU CONTROL YOURSELF?

Instructions : For each questions, select the statement that you **AGREE WITH THE MOST**. Please **CLICK** the alphabet that provided in front of each statement below.

Number 1 :

- A. Children get into trouble because their parents punish them too much.
- B. The trouble with most children nowadays is that their parents are too easy with them.

Number 2 :

- A. Many of the unhappy things in people's lives are partly due to bad luck.
- B. People's misfortunes result from the mistakes they make.

Number 3 :

- A. One of the major reasons why we have wars is because people don't take enough interest in politics.
- B. There will always be wars, no matter how hard people try to prevent them.

Number 4 :

- A. In the long run people get the respect they deserve in this world.
- B. Unfortunately, an individual's worth often passes unrecognized no matter how hard he tries.

Number 5 :

A. The idea that teachers are unfair to students is nonsense.

B. Most students don't realize the extent to which their grades are influenced by accidental happenings.

Number 6 :

A. Without the right breaks one cannot be an effective leader.

B. Capable people who fail to become leaders have not taken advantage of their opportunities.

Number 7 :

A. No matter how hard you try some people just don't like you.

B. People who can't get others to like them don't understand how to get along with others.

Number 8 :

A. Heredity plays the major role in determining one's personality.

B. It is one's experiences in life which determine what they're like.

Number 9 :

A. I have often found that what is going to happen will happen.

B. Trusting to fate has never turned out as well for me as making a decision to take a definite course of action.

Number 10 :

A. In the case of the well prepared student there is rarely if ever such a thing as an unfair test.

B. Many times exam questions tend to be so unrelated to course work that studying is really useless.

Number 11 :

A. Becoming a success is a matter of hard work, luck has little or nothing to do with it.

B. Getting a good job depends mainly on being in the right place at the right time.

Number 12 :

A. The average citizen can have an influence in government decisions.

B. This world is run by the few people in power, and there is not much the little guy can do about it.

Number 13 :

A. When I make plans, I am almost certain that I can make them work.

B. It is not always wise to plan too far ahead because many things turn out to be a matter of good or bad fortune anyhow.

Number 14 :

A. There are certain people who are just no good.

B. There is some good in everybody.

Number 15 :

A. In my case getting what I want has little or nothing to do with luck.

B. Many times we might just as well decide what to do by flipping a coin.

Number 16 :

A. Who gets to be the boss often depends on who was lucky enough to be in the right place first.

B. Getting people to do the right thing depends upon ability. Luck has little or nothing to do with it.

Number 17 :

A. As far as world affairs are concerned, most of us are the victims of forces we can neither understand, nor control.

B. By taking an active part in political and social affairs the people can control world events.

Number 18 :

A. Most people don't realize the extent to which their lives are controlled by accidental happenings.

B. There really is no such thing as "luck."

Number 19 :

A. One should always be willing to admit mistakes.

B. It is usually best to cover up one's mistakes.

Number 20 :

A. It is hard to know whether or not a person really likes you.

B. How many friends you have depends upon how nice a person you are.

Number 21 :

A. In the long run the bad things that happen to us are balanced by the good ones.

B. Most misfortunes are the result of lack of ability, ignorance, laziness, or all three.

Number 22 :

A. With enough effort we can wipe out political corruption.

B. It is difficult for people to have much control over the things politicians do in office.

Number 23 :

A. Sometimes I can't understand how teachers arrive at the grades they give.

B. There is a direct connection between how hard I study and the grades I get.

Number 24 :

A. A good leader expects people to decide for themselves what they should do.

B. A good leader makes it clear to everybody what their jobs are.

Number 25 :

A. Many times I feel that I have little influence over the things that happen to me.

B. It is impossible for me to believe that chance or luck plays an important role in my life.

Number 26 :

A. People are lonely because they don't try to be friendly.

B. There's not much use in trying too hard to please people, if they like you, they like you.

Number 27 :

A. There is too much emphasis on athletics in high school.

B. Team sports are an excellent way to build character.

Number 28 :

A. What happens to me is my own doing.

B. Sometimes I feel that I don't have enough control over the direction my life is taking.

Number 29 :

A. Most of the time I can't understand why politicians behave the way they do.

B. In the long run the people are responsible for bad government on a national as well as on a local level.

SECTION C: How Do You Cope in Life?

Instructions: Please choose the **BEST ANSWER** that best describe you. Please **CLICK** the correct number as matches to the description that stated bellow. There is no right and wrong for your answer.

	1	2	3	4
	I haven't been doing this at all	I've been doing this a little bit	I've been doing a medium amount	I've been doing this a lot
1. I've been turning to work or other activities to take my mind off things.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. I've been concentrating my efforts on doing something about the situation I'm in.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. I've been saying to myself "this isn't real".	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. I've been using alcohol or other drugs to myself feel better.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. I've been getting emotional support from others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. I've been giving up trying to deal with it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. I've been taking action to try to make the situation better.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. I've been refusing to believe that it has happened.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. I've been saying things to let my unpleasant feeling escape.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. I've been getting help and advice from other people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. I've been using alcohol or other drugs to help me get through it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



12. I've been trying to see it in a different light, to make it seem more positive.

13. I've been criticizing myself.

14. I've been trying to come up with a strategy about what to do.

15. I've been getting comfort and understanding from someone.

16. I've been giving up the attempt to cope.

17. I've been looking for something good in what is happening.

18. I've been making jokes about it.

19. I've been doing something to think about it less, such as going to movies, watching TV, reading, daydreaming, sleeping, or shopping.

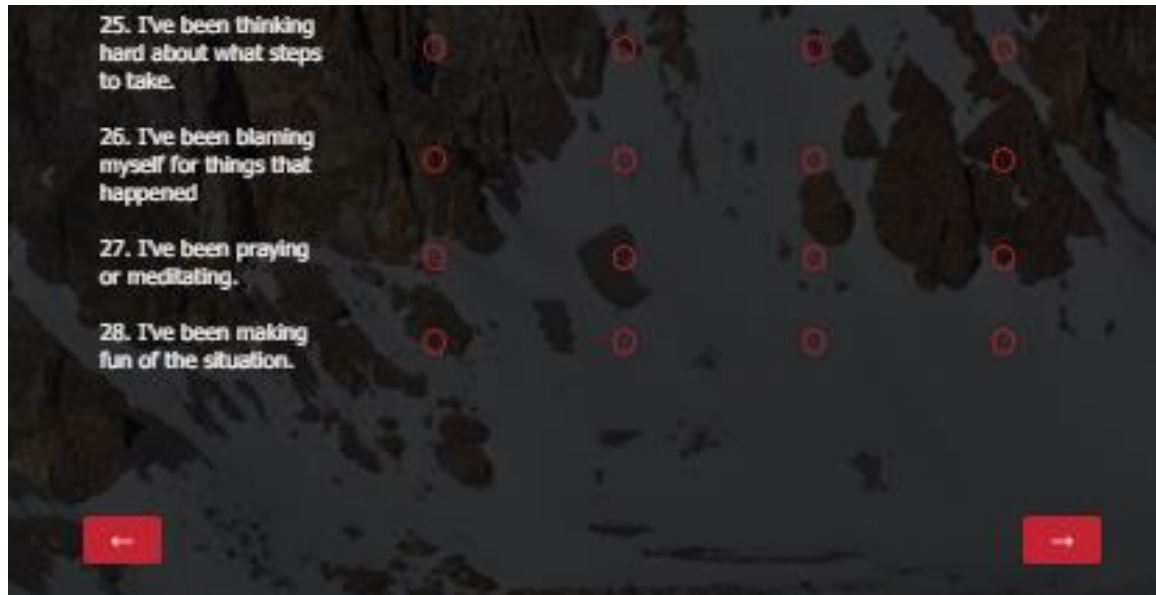
20. I've been accepting the reality of the fact that it has happened.

21. I've been expressing my negative feelings.

22. I've been trying to find comfort in my religion or spiritual beliefs.

23. I've been trying to get advice or help from other people about what to do.

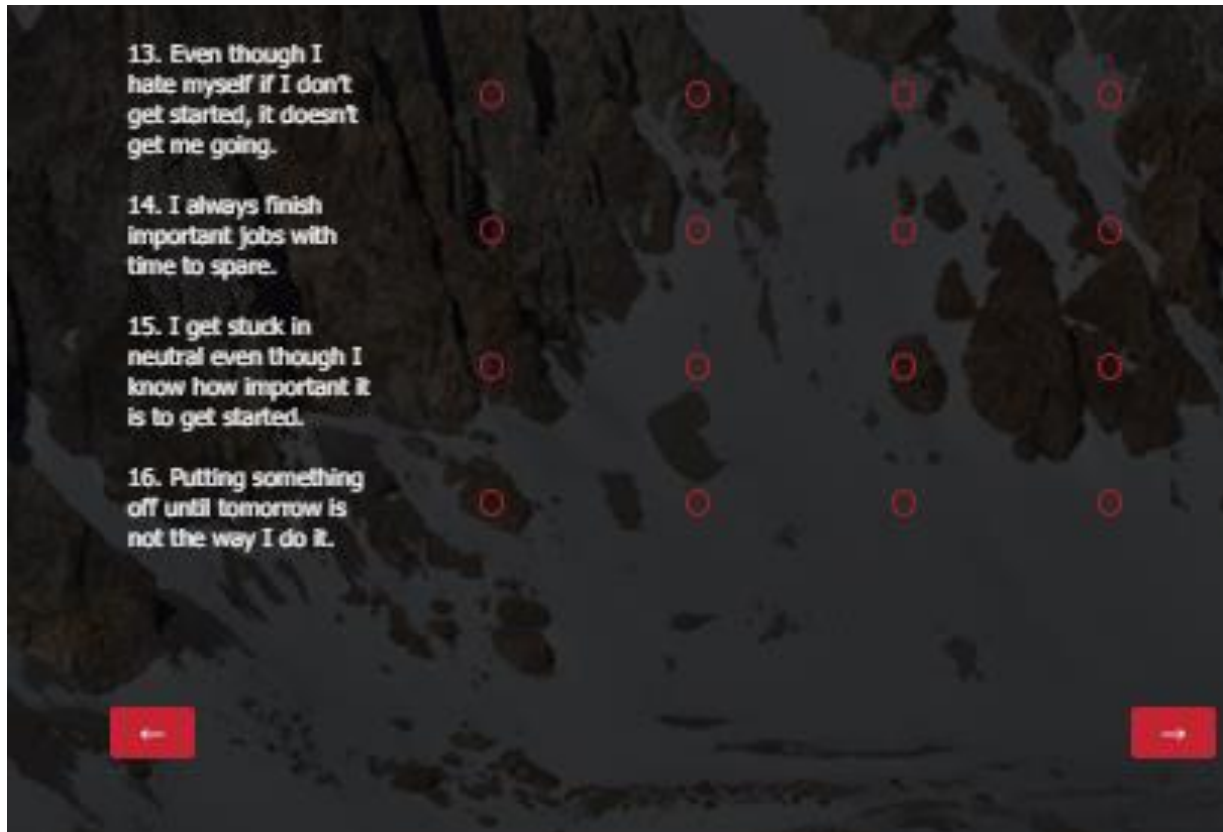
24. I've been learning to live with it.



SECTION D: Do You Often Procrastinate?

Instructions : Please indicate how much each statement listed below describes you. Please **CLICK** the following number on the right of each statement indicating how much each statement describes you. **Please be as honest as possible.**

	1 That's not me for sure	2 That's not my tendency	3 That's my tendency	4 That's me for sure
1. I needlessly delay finishing jobs, even when they're important.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. I postpone starting in on things I don't like to do.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. When I have a deadline, I wait until the last minute.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. I delay making tough decisions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. I keep putting off improving my work habits.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. I manage to find an excuse for not doing something.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. I put the necessary time into even boring tasks, like studying.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. I am an incurable time waster.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. I'm a time waster now but I can't seem to do anything about it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. When something's too tough to tackle, I believe in postponing it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. I promise myself I'll do something and then drag my feet.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. Whenever I make a plan of action, I follow it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Appendix C

SPSS Output: Cronbach's Alpha for Internal and External Locus of Control Scale

Case Processing Summary

		N	%
Cases	Valid	150	100.0
	Excluded ^a	0	.0
	Total	150	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha ^a	Cronbach's Alpha Based on Standardized Items ^a	N of Items
-.127	-.110	29

a. The value is negative due to a negative average covariance among items. This violates reliability model assumptions. You may want to check item codings.

Item Statistics

	Mean	Std. Deviation	N
a1	1.83	.374	150
a2	1.85	.355	150
a3	1.61	.489	150
a4	1.41	.494	150
a5	1.75	.436	150
a6	1.50	.502	150
a7	1.35	.480	150
a8	1.83	.380	150
a9	1.46	.500	150
a10	1.33	.473	150
a11	1.54	.500	150
a12	1.49	.502	150
a13	1.51	.502	150
a14	1.83	.380	150
a15	1.35	.478	150
a16	1.82	.385	150
a17	1.43	.496	150
a18	1.23	.420	150
a19	1.13	.341	150

a20	1.28	.451	150
a21	1.57	.497	150
a22	1.65	.478	150
a23	1.68	.468	150
a24	1.81	.391	150
a25	1.29	.454	150
a26	1.76	.429	150
a27	1.81	.391	150
a28	1.49	.502	150
a29	1.53	.501	150

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
a1	43.30	5.017	.084	.	-.163 ^a
a2	43.28	4.981	.120	.	-.175 ^a
a3	43.52	4.909	.069	.	-.169 ^a
a4	43.72	5.089	-.016	.	-.125 ^a
a5	43.39	5.219	-.056	.	-.107 ^a
a6	43.63	5.106	-.027	.	-.120 ^a
a7	43.78	5.381	-.141	.	-.065 ^a
a8	43.31	5.221	-.039	.	-.116 ^a
a9	43.67	4.839	.095	.	-.184 ^a
a10	43.80	5.342	-.123	.	-.074 ^a
a11	43.59	5.156	-.048	.	-.109 ^a
a12	43.64	5.091	-.020	.	-.123 ^a
a13	43.63	5.027	.008	.	-.138 ^a
a14	43.31	5.234	-.047	.	-.113 ^a
a15	43.79	5.390	-.145	.	-.063 ^a
a16	43.31	5.116	.019	.	-.138 ^a
a17	43.71	5.175	-.055	.	-.105 ^a
a18	43.91	5.226	-.055	.	-.108 ^a
a19	44.00	5.289	-.068	.	-.106 ^a
a20	43.85	5.092	.001	.	-.133 ^a
a21	43.57	4.999	.023	.	-.145 ^a
a22	43.48	4.963	.050	.	-.158 ^a
a23	43.45	5.229	-.070	.	-.099 ^a
a24	43.32	5.159	-.008	.	-.128 ^a
a25	43.85	5.097	-.003	.	-.131 ^a
a26	43.37	5.135	-.011	.	-.127 ^a

a27	43.32	5.186	-.023	.	-.122 ^a
a28	43.64	4.957	.040	.	-.154 ^a
a29	43.60	5.356	-.133	.	-.066 ^a

a. The value is negative due to a negative average covariance among items. This violates reliability model assumptions. You may want to check item codings.

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
45.13	5.298	2.302	29

Appendix D

SPSS Output: Cronbach's Alpha for Brief-COPE Subscale (Problem Solving)

Case Processing Summary

		N	%
Cases	Valid	150	100.0
	Excluded ^a	0	.0
	Total	150	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.673	.671	4

Item Statistics

	Mean	Std. Deviation	N
b7	3.10	.749	150
b2	2.99	.665	150
b14	2.96	.750	150
b25	2.95	.763	150

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
b7	8.90	2.641	.466	.226	.599
b2	9.01	3.020	.377	.143	.654
b14	9.04	2.562	.505	.260	.572
b25	9.05	2.595	.472	.224	.595

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
12.00	4.336	2.082	4

Appendix E

SPSS Output: Cronbach's Alpha for Brief-COPE Subscale (Avoidance)

Case Processing Summary

		N	%
Cases	Valid	150	100.0
	Excluded ^a	0	.0
	Total	150	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.651	.646	10

Item Statistics

	Mean	Std. Deviation	N
b11	1.33	.672	150
b4	1.33	.711	150
b13	2.49	.925	150
b26	2.44	.878	150
b8	2.03	.859	150
b3	1.95	.870	150
b19	3.09	.870	150
b16	2.01	.819	150
b1	2.73	.732	150
b6	2.18	.868	150

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
b11	20.26	14.489	.286	.454	.633
b4	20.26	15.106	.143	.501	.657
b13	19.10	12.668	.437	.291	.598
b26	19.15	13.903	.264	.272	.638
b8	19.57	12.999	.431	.326	.601

b3	19.64	13.480	.339	.284	.621
b19	18.50	14.534	.168	.125	.658
b16	19.58	13.171	.431	.336	.602
b1	18.87	14.694	.209	.168	.646
b6	19.41	12.982	.427	.349	.601

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
21.59	16.404	4.050	10

Appendix F

SPSS Output: Cronbach's Alpha for Brief-COPE Subscale (Positive Thinking)

Case Processing Summary

		N	%
Cases	Valid	150	100.0
	Excluded ^a	0	.0
	Total	150	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.603	.614	6

Item Statistics

	Mean	Std. Deviation	N
b18	2.46	.981	150
b28	2.20	.997	150
b24	3.00	.751	150
b12	2.89	.790	150
b17	3.09	.704	150
b20	3.15	.736	150

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
b18	14.32	5.749	.359	.346	.550
b28	14.58	5.856	.322	.350	.570
b24	13.78	6.401	.378	.220	.544
b12	13.89	6.364	.354	.230	.551
b17	13.69	6.603	.360	.288	.552
b20	13.63	6.811	.273	.103	.582

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
16.78	8.401	2.898	6

Appendix G

SPSS Output: Cronbach's Alpha for Brief-COPE Subscale (Social Support) Before Item

Deleted

Case Processing Summary

		N	%
Cases	Valid	150	100.0
	Excluded ^a	0	.0
	Total	150	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.641	.634	8

Item Statistics

	Mean	Std. Deviation	N
b15	2.90	.809	150
b10	2.86	.890	150
b9	2.43	.823	150
b5	2.61	.954	150
b14	2.96	.750	150
b21	2.42	.884	150
b27	2.29	.972	150
b22	2.33	1.028	150

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
b15	17.91	11.669	.397	.273	.594
b10	17.95	11.500	.369	.318	.600
b9	18.37	11.967	.330	.136	.611
b5	18.19	10.412	.519	.376	.554
b14	17.85	13.325	.115	.066	.658
b21	18.39	12.440	.208	.138	.642

b27	18.52	11.365	.337	.368	.609
b22	18.47	10.815	.392	.365	.593

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
20.81	14.519	3.810	8

Appendix H

SPSS Output: Cronbach's Alpha for Brief-COPE Subscale (Social Support) After Item

Deleted

Case Processing Summary

		N	%
Cases	Valid	150	100.0
	Excluded ^a	0	.0
	Total	150	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.658	.657	7

Item Statistics

	Mean	Std. Deviation	N
b15	2.90	.809	150
b10	2.86	.890	150
b9	2.43	.823	150
b5	2.61	.954	150
b21	2.42	.884	150
b27	2.29	.972	150
b22	2.33	1.028	150

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
b15	14.95	10.722	.368	.249	.622
b10	14.99	10.416	.368	.318	.621
b9	15.41	10.835	.335	.136	.631
b5	15.23	9.334	.529	.376	.569
b21	15.43	11.119	.242	.121	.657
b27	15.56	10.235	.345	.368	.629
b22	15.51	9.782	.387	.361	.616

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
17.85	13.325	3.650	7

Appendix I

SPSS Output: Cronbach's Alpha for Tuckman Procrastination Scale (TPS)

Case Processing Summary

		N	%
Cases	Valid	150	100.0
	Excluded ^a	0	.0
	Total	150	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.859	.856	16

Item Statistics

	Mean	Std. Deviation	N
c1	2.3200	.85389	150
c2	2.7867	.90921	150
c3	2.2267	.92792	150
c4	2.5400	.92417	150
c5	2.4267	.84620	150
c6	2.1467	.84652	150
c8	2.3333	.88740	150
c9	2.1867	.90773	150
c10	2.3200	.83802	150
c11	2.5000	.80059	150
c13	2.4800	.95341	150
c15	2.6200	.72971	150
Rc7	2.6600	.87339	150
Rc12	2.1467	.80591	150
Rc14	2.2333	.83880	150
Rc16	2.5333	.85661	150

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
c1	36.1400	53.812	.538	.428	.848
c2	35.6733	52.799	.580	.494	.846
c3	36.2333	51.683	.655	.535	.842
c4	35.9200	52.490	.593	.483	.845
c5	36.0333	55.657	.389	.297	.855
c6	36.3133	54.512	.484	.303	.851
c8	36.1267	51.615	.697	.579	.840
c9	36.2733	52.052	.642	.589	.842
c10	36.1400	53.665	.563	.454	.847
c11	35.9600	54.643	.507	.362	.850
c13	35.9800	52.852	.543	.385	.848
c15	35.8400	57.088	.332	.193	.857
Rc7	35.8000	58.886	.122	.172	.868
Rc12	36.3133	55.962	.388	.337	.855
Rc14	36.2267	55.962	.368	.360	.856
Rc16	35.9267	56.243	.335	.244	.858

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
38.4600	61.284	7.82839	16

Appendix J

SPSS Output: Frequency Table for Demographic Information

4. Year / Semesters

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Y1	46	30.7	30.7	30.7
	Y2	47	31.3	31.3	62.0
	Y3	53	35.3	35.3	97.3
	Y4	4	2.7	2.7	100.0
	Total	150	100.0	100.0	

1. Age :

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	19	2	1.3	1.3	1.3
	20	38	25.3	25.3	26.7
	21	40	26.7	26.7	53.3
	22	38	25.3	25.3	78.7
	23	25	16.7	16.7	95.3
	24	3	2.0	2.0	97.3
	25	2	1.3	1.3	98.7
	26	1	.7	.7	99.3
	27	1	.7	.7	100.0
	Total	150	100.0	100.0	

3. Faculty :

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	FAS	67	44.7	44.7	44.7
	FBF	36	24.0	24.0	68.7
	FEGT	3	2.0	2.0	70.7
	FICT	25	16.7	16.7	87.3
	FOS	13	8.7	8.7	96.0
	ICS	6	4.0	4.0	100.0
	Total	150	100.0	100.0	

5. Gender :

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	50	33.3	33.3	33.3
	Female	100	66.7	66.7	100.0
	Total	150	100.0	100.0	

Appendix L

SPSS Output: Correlations among Variables

		Correlations					
		LOC_mean	social_support	Problem_solving	avoidance	Positive_thinking	Procrastination
LOC_mean	Pearson Correlation	1	-.087	-.146	.107	-.120	.168*
	Sig. (2-tailed)		.292	.074	.193	.145	.040
	N	150	150	150	150	150	150
social_support	Pearson Correlation	-.087	1	.229**	.256**	.346**	.122
	Sig. (2-tailed)	.292		.005	.002	.000	.138
	N	150	150	150	150	150	150
Problem_solving	Pearson Correlation	-.146	.229**	1	-.132	.465**	-.258**
	Sig. (2-tailed)	.074	.005		.107	.000	.001
	N	150	150	150	150	150	150
avoidance	Pearson Correlation	.107	.256**	-.132	1	.125	.244**
	Sig. (2-tailed)	.193	.002	.107		.128	.003
	N	150	150	150	150	150	150
Positive_thinking	Pearson Correlation	-.120	.346**	.465**	.125	1	.012
	Sig. (2-tailed)	.145	.000	.000	.128		.885
	N	150	150	150	150	150	150
Procrastination	Pearson Correlation	.168*	.122	-.258**	.244**	.012	1
	Sig. (2-tailed)	.040	.138	.001	.003	.885	
	N	150	150	150	150	150	150

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Appendix M

SPSS Output: Stepwise Regression

Model Summary^c

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.168 ^a	.028	.022	.48396	.028	4.293	1	148	.040	
2	.352 ^b	.124	.106	.46256	.096	8.005	2	146	.001	2.087

a. Predictors: (Constant), LOC_mean

b. Predictors: (Constant), LOC_mean, avoidance, Problem_solving

c. Dependent Variable: Procrastination

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.005	1	1.005	4.293	.040 ^b
	Residual	34.664	148	.234		
	Total	35.669	149			
2	Regression	4.431	3	1.477	6.903	.000 ^c
	Residual	31.238	146	.214		
	Total	35.669	149			

a. Dependent Variable: Procrastination

b. Predictors: (Constant), LOC_mean

c. Predictors: (Constant), LOC_mean, avoidance, Problem_solving

Coefficient

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	2.078	.162		12.805	.000	1.757	2.398		
	LOC_mean	.027	.013	.168	2.072	.040	.001	.054	1.000	1.000
2	(Constant)	2.255	.361		6.248	.000	1.542	2.969		
	LOC_mean	.019	.013	.115	1.461	.146	-.007	.044	.971	1.030
	Problem_solving	-.202	.074	-.215	-2.721	.007	-.348	-.055	.965	1.036
	avoidance	.246	.095	.203	2.591	.011	.058	.433	.975	1.026

a. Dependent Variable: Procrastination

Collinearity Diagnostics^a

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions			
				(Constant)	LOC_mean	Problem_solving	avoidance
1	1	1.970	1.000	.02	.02		
	2	.030	8.089	.98	.98		
2	1	3.905	1.000	.00	.00	.00	.00
	2	.053	8.609	.01	.73	.16	.01
	3	.034	10.716	.00	.10	.24	.63
	4	.008	22.198	.99	.16	.61	.36

a. Dependent Variable: Procrastination

Appendix N

Turnitin Original Report for FYP I

The Relationship Between Locus of Control, Coping Strategies and Procrastination Among Undergraduate Students in Malaysia.

ORIGINALITY REPORT

16%	2%	7%	15%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	Submitted to UCSI University Student Paper	4%
2	Submitted to Segi University College Student Paper	2%
3	Submitted to Victoria University of Wellington Student Paper	1%
4	Submitted to Herricks High School Student Paper	1%
5	Murat Balkis, Erdinç Duru. "Procrastination, self-regulation failure, academic life satisfaction, and affective well-being: underregulation or misregulation form", European Journal of Psychology of Education, 2015 Publication	<1%
6	Submitted to Swansea Metropolitan University Student Paper	<1%
7	Submitted to University of Warwick Student Paper	<1%

8	Saeed Pahlevan Sharif, Jasmine Khanekharab. "External locus of control and quality of life among Malaysian breast cancer patients: The mediating role of coping strategies", Journal of Psychosocial Oncology, 2017 Publication	<1%
9	Submitted to Houston Baptist University Student Paper	<1%
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